PMC

Portfolio Management Club

Learning Session I - Spring 2023

Guilherme Bagulho & Rodrigo Baptista

X^th February 2023

NOVA SCHOOL OF BUSINESS & ECONOMICS

Agenda

What we are going to discuss

1. Information Sources

1. News

2. Market Analysis

3. Company Info

4. Company Analysis

5. Equity Screener

6. Podcasts

7. Books

News

How to get updated

1. News
2. Market Analysis
3. Company Info
4. Company Analysis
5. Equity Screener
6. Podcasts
7. Books

News

How to get updated

1. News

Bloomberg

- https://www.bloomberg.com/
- Factual and on-time
- Used to have access on Bloomberg Anywhere, now only a few free articles
- Can read on library terminals

Financial Times (FT)

- http://www.ft.com/home/europe
- Great news source with lots of opinion articles
- Free access with your Nova account
- Great iOS and Android apps.

The Economist

- https://www.economist.com/
- Great for longer stories
- Free access while at Nova
- Can also read the weekly magazine on the library

Finviz.com

- http://www.finviz.com/news.ashx
- Great news aggregator
- Combines news with blog articles
- Lots of other cool functionalities

CNBC

- http://www.cnbc.com/
- Great for US Market stories and data
- Most articles are free, some require a premium account

Jornal de Negócios

- https://www.jornaldenegocios.pt/
- The best for Portuguese market news
- Can also read the newspaper at the library

Note: You can subscribe to newsletters from most of these; and get daily/weekly updates by e-mail!

News

How to get updated

1. News

Newsletters

- Newsletters are also a great way of getting updated with market news
- Most news outlets and financial institutions will allow you to subscribe to their daily, weekly, monthly newsletters with markets updates and opportunities
- Suggestions:
  - Bloomberg daily newsletter (market recap)
  - MorningBrew (US focused)
  - Lykeion (Macro Focused)
  - Banco BiG (easy to read)
  - The MacroCompass (Macro focused)
  - SeekingAlpha
  - Weekly Syz Insights

Social Media

- Easy way to get continuously updated
- LinkedIn pages:
  - Eddie Gomez
  - Charles-Henry Monchau
  - The MacroCompass by Alfonso
  - James Wong
- Instagram pages:
  - Otávio Costa (@tavicostamacro – macro focused)
- Twitter pages:
  - Alf (@MacroAlf – macro focused)
- You can also follow the news accounts.

Note: Subscribing newsletter and following social media accounts will allow you to be updated at all times!

Market Analysis

Where to find reports

1. News
2. **Market Analysis**
3. Company Info
4. Company Analysis
5. Equity Screener
6. Podcasts
7. Books

Market Analysis

Looking into industries

2. Market (Macro) Analysis

Market Outlooks

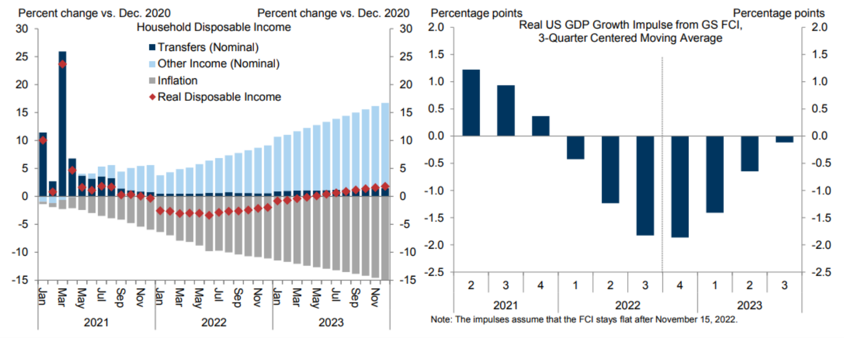
- Annual, Quarterly and Weekly Outlooks from leading investment banks
- 2023:
- Goldman S. https://lnkd.in/eKzF_2K4
- JP Morgan: https://lnkd.in/eHb6-622
- M. Stanley: https://lnkd.in/e2nAMjmM
- HSBC: https://lnkd.in/eNfBiJvH
- Barclays: https://lnkd.in/eRT4dsFY
- Citi: https://lnkd.in/eXwA-Y4X
- UBS: https://lnkd.in/exudCU6V

- Letters to investors from fund managers:
- Warren Buffett
- Bill Ackman
- …

What will you find here (ex. Goldman Sachs)

- Growth expectations:
  - Global growth slowed through 2022 on a diminishing reopening boost, fiscal and monetary tightening, China's Covid restrictions and property slump, and the Russia-Ukraine war. We expect global growth of just 1.8% in 2023, as US resilience contrasts with a European recession and a bumpy reopening in China.
- Relevant Graphs:

Exhibit 4: The Boost From the Rebound in Real Income vs. the Drag From Financial Conditions



Source: Goldman Sachs Global Investment Research

PMC

Market Analysis

Looking into industries

2. Market (Macro) Analysis

Industry Analysis

- **Statista:** https://www.statista.com/
  (free access through Nova account)

- **Consulting firms** (for larger industries):
- McKinsey, Deloitte, PwC, etc.

- **Market Reports:**
- The business research company: https://www.thebusinessresearchcompany.com/
- Fortune Business Insights: https://www.fortunebusinessinsights.com/
- CSI Market: https://csimarket.com/

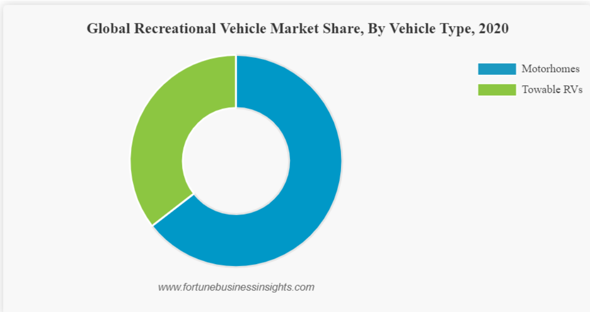
Note: these can be misleading and not the most accurate sometimes

What will you find here (Industry Report - RVs)

- Market Size & Growth:

The global recreational vehicle market size was USD 55.28 billion in 2020. The market is projected to grow from USD 55.90 billion in 2021 to USD 87.89 billion in 2028 at a CAGR of 6.7% in the 2021-2028 period. The global impact of novel coronavirus disease has been unprecedented and staggering, with recreational vehicle witnessing a negative demand shock across all regions amid the coronavirus crisis. Based on our analysis, the global market exhibited a decline of -5.9% in 2020. The rise in CAGR is attributable to this market's demand and growth, returning to pre-pandemic levels once the pandemic is over.

- Market Segmentation:



LIST OF KEY COMPANIES PROFILED:

- Winnebago Industries, Inc. (Iowa, U.S.)
- REV Group. (Indiana, U.S.)
- Forest River, Inc., (Indiana, U.S.)
- Thor Industries Inc. (Indiana, U.S.)
- NeXus RV (Indiana, U.S.)
- Triple E Recreational Vehicles (Winkler, Canada)
- Dethleffs GmbH & Co. KG (Baden-Wurttemberg, Germany)
- Bürstner GmbH & Co. KG (Baden-Wurttemberg, Germany)
- RAPIDO Motorhomes (Mayenne, France)
- Northwood Manufacturing Inc. (Oregon, U.S.)

PMC

Company Info

Where to get the info

1. News
2. Market Analysis
3. **Company Info**
4. Company Analysis
5. Equity Screener
6. Podcasts
7. Books

Company Info

Where to look for company-specific details

3. Company Info

Investors Relations (IR)

- Most trustworthy source for company data and relevant info
- Every listed company has an Investor Relations page where it publishes reports and communicates with and to investors

Presentation

- Probably the best way to get familiarized with the company
- Outlines current results and past performance, as well as future outlooks and growing strategy
- Explains business model and product & geography segmentation

Earnings Release

- Every company fills quarterly and annual earnings
- Here you will find the detailed financial statement and results for the period, both GAAP and non-GAAP
- Annual reports are more extensive and breakdown everything about the business

Transcript

- For every earnings release, the company has an event where it presents and explains its results to investors
- Here you will find guidance for the next quarters, as well as analysts main concerns (on the Q&A area) and the company explanation

Note: Often you can find investment banks' reports on some companies, and what their position is (once again, use it cautiously)

Company Info

Where to look for company-specific details

3. Company Info

Yahoo Finance (https://finance.yahoo.com/)

- One of the best open finance websites
- Aggregates lots of functionalities and info from different sources

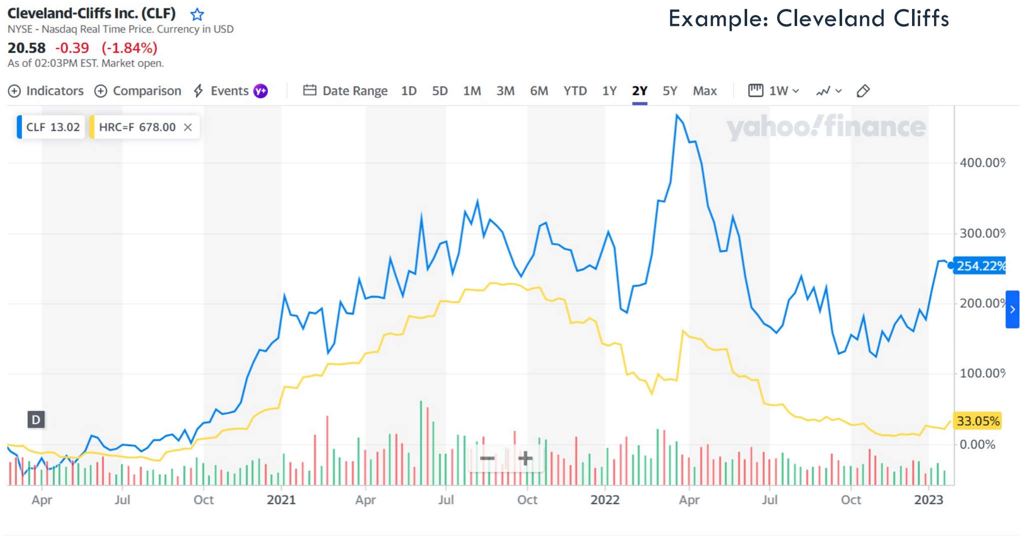
Summary

Summary | Chart | Conversations | Statistics | Historical Data

Previous Close	20.97	Market Cap	10.651B
Open	20.97	Beta (5Y Monthly)	2.17
Bid	20.61 x 1800	PE Ratio (TTM)	4.36
Ask	20.62 x 800	EPS (TTM)	4.74
Day's Range	20.42 - 21.02	Earnings Date	Feb 14, 2023
52 Week Range	11.83 - 34.04	Forward Dividend & Yield	N/A (N/A)
Volume	6,153,616	Ex-Dividend Date	Apr 02, 2020
Avg. Volume	13,520,637	1y Target Est	19.00

Chart

Example: Cleveland Cliffs



Company Info

Where to look for company-specific details

3. Company Info

Example: Cleveland Cliffs

Profile

Summary Chart Conversations Statistics Historical Data **Profile** Financials Analysis Options Holders Sustainability

Cleveland-Cliffs Inc.

200 Public Square
Suite 3300
Cleveland, OH 44114-2315
United States
216 694 5700
https://www.clevelandcliffs.com

Sector(s): **Basic Materials**
Industry: **Steel**
Full Time Employees: **27,000**

Description

Cleveland-Cliffs Inc. operates as a flat-rolled steel producer in North America. The company offers carbon steel products, such as hot-rolled, cold-rolled, electrogalvanized, hot-dip galvanized, hot-dip galvannealed, aluminized, enameling, and advanced high-strength steel products; stainless steel products; plates; and grain oriented and non-oriented electrical steel products. It also provides tubular components, including carbon steel, stainless steel, and electric resistance welded tubing. In addition, the company offers tinplate products, such as electrolytic tin coated and chrome coated sheet, and tin mill products; tooling and sampling; raw materials; ingots, rolled blooms, and cast blooms; and hot-briquetted iron products. Further, it owns five iron ore mines in Minnesota and Michigan. The company serves automotive, infrastructure and manufacturing, distributors and converters, and steel producers. Cleveland-Cliffs Inc. was formerly known as Cliffs Natural Resources Inc. and changed its name to Cleveland-Cliffs Inc. in August 2017. The company was founded in 1847 and is headquartered in Cleveland, Ohio.

- Here you can find a general description of the company’s operations and main business model
- There’s also the sector and industry of the company, as well as its website

Company Info

Where to look for company-specific details

3. Company Info

Example: Cleveland Cliffs

Financials

Show: **Income Statement** | Balance Sheet | Cash Flow   Annual | Quarterly

Income Statement

All numbers in thousands   Expand All

Breakdown	TTM	12/31/2021
> Total Revenue	23,291,000	20,444,000
Cost of Revenue	19,439,000	15,910,000
Gross Profit	3,852,000	4,534,000
> Operating Expense	592,000	502,000
Operating Income	3,260,000	4,032,000
> Net Non Operating Interest Inc...	-284,000	-337,000
> Other Income Expense	118,000	108,000
Pretax Income	3,094,000	3,803,000
Tax Provision	618,000	773,000
> Net Income Common Stockhold...	2,442,000	2,988,000
Diluted NI Available to Com Stock...	2,442,000	2,988,000
Basic EPS	-	5.63

Balance Sheet

All numbers in thousands

Breakdown	12/31/2021
> Total Assets	18,975,000
> Total Liabilities Net Minority Int...	13,201,000
> Total Equity Gross Minority Inte...	5,774,000
Total Capitalization	10,728,000
Common Stock Equity	5,490,000
Net Tangible Assets	4,374,000
Working Capital	4,092,000
Invested Capital	10,728,000
Tangible Book Value	4,374,000
Total Debt	5,238,000
Net Debt	5,190,000
Share Issued	506,833
Ordinary Shares Number	500,159
Treasury Shares Number	6,674

Cash Flow

All numbers in thousands

Breakdown	TTM
> Operating Cash Flow	3,071,000
> Investing Cash Flow	-1,692,000
> Financing Cash Flow	-1,365,000
Cash Flow from Discontinued Oper...	-
> End Cash Position	56,000
Capital Expenditure	-948,000
Issuance of Capital Stock	0
Issuance of Debt	6,259,000
Repayment of Debt	-7,279,000
Repurchase of Capital Stock	-210,000
Free Cash Flow	2,123,000

- Detailed financial statements per year and for the last twelve months, quarterly and annual

PMC

Company Info

Where to look for company-specific details

3. Company Info

Example: Cleveland Cliffs

Holders

Summary Chart Conversations Statistics Historical Data Profile Financials Analysis Options **Holders** Sustainability

Major Holders Insider Roster Insider Transactions

Major Holders

Breakdown

Currency in USD

1.41%	% of Shares Held by All Insider
67.64%	% of Shares Held by Institutions
68.60%	% of Float Held by Institutions
788	Number of Institutions Holding Shares

Top Institutional Holders

Holder	Shares	Date Reported	% Out	Value
Blackrock Inc.	54,108,703	Sep 29, 2022	10.50%	1,115,180,401
Vanguard Group, Inc. (The)	45,757,539	Sep 29, 2022	8.88%	943,062,906
FMR, LLC	22,704,153	Sep 29, 2022	4.41%	467,932,607
State Street Corporation	20,614,856	Sep 29, 2022	4.00%	424,872,194
Fisher Asset Management, LLC	10,407,941	Sep 29, 2022	2.02%	214,507,670

Insider Purchases Last 6 Months	Shares	Trans
Purchases	1,035,518	19
Sales	300	1
Net Shares Purchased (Sold)	1,035,218	20
Total Insider Shares Held	7.26M	N/A
% Net Shares Purchased (Sold)	16.60%	N/A

Net Institutional Purchases Prior Quarter to Latest Quarter	Shares
Net Shares Purchased (Sold)	N/A
% Change in Institutional Shares Held	N/A

- Info on major holder, top institutional holders and insider purchases

Company Info

Where to look for company-specific details

3. Company Info

Example: Cleveland Cliffs

Analysis

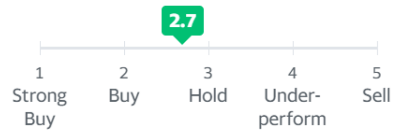
Summary | Chart | Conversations | Statistics | Historical Data | Profile | Financials | **Analysis** | Options | Holders | Sustainability

Currency in USD

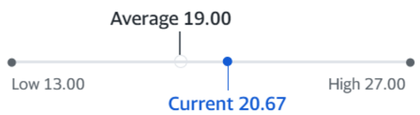
Earnings Estimate	Current Qtr. (Dec 2022)	Next Qtr. (Mar 2023)	Current Year (2022)	Next Year (2023)
No. of Analysts	7	5	7	9
Avg. Estimate	-0.25	0.07	2.87	1.7
Low Estimate	-0.44	-0.14	2.49	0.91
High Estimate	-0.03	0.25	3.73	2.6
Year Ago EPS	1.69	1.5	5.36	2.87

Revenue Estimate	Current Qtr. (Dec 2022)	Next Qtr. (Mar 2023)	Current Year (2022)	Next Year (2023)
No. of Analysts	6	4	9	9
Avg. Estimate	5.23B	5.02B	23.13B	20.1B
Low Estimate	4.99B	4.74B	22.92B	17.32B
High Estimate	5.53B	5.19B	23.48B	23.14B
Year Ago Sales	5.35B	5.96B	20.44B	23.13B

Recommendation Rating ›



Analyst Price Targets (11) ›



Upgrades & Downgrades ›

Maintains	Goldman Sachs: to Buy	1/18/2023
Upgrade	Morgan Stanley: Equal-Weight to Overweight	1/12/2023
Maintains	B. Riley Securities: to Buy	12/23/2022

- Earnings & Revenue Estimates ; Price targets and rating recommendations from analysts and banks

PMC

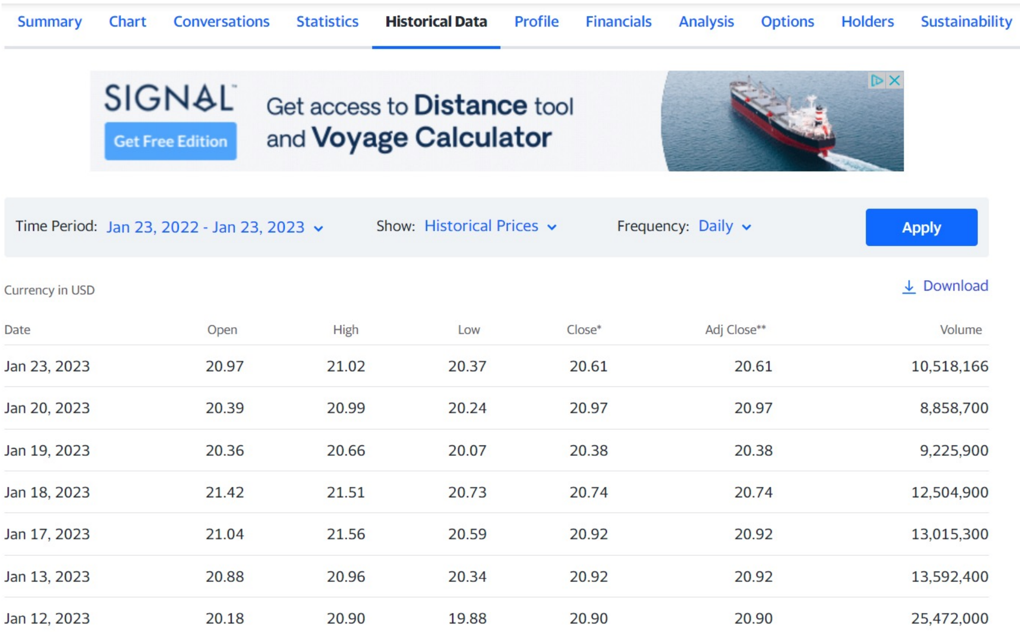
Company Info

Where to look for company-specific details

3. Company Info

Example: Cleveland Cliffs

Retrieve Data


Summary | Chart | Conversations | Statistics | **Historical Data** | Profile | Financials | Analysis | Options | Holders | Sustainability

Time Period: Jan 23, 2022 - Jan 23, 2023 | Show: Historical Prices | Frequency: Daily | Apply

Currency in USD | Download

Date	Open	High	Low	Close*	Adj Close**	Volume
Jan 23, 2023	20.97	21.02	20.37	20.61	20.61	10,518,166
Jan 20, 2023	20.39	20.99	20.24	20.97	20.97	8,858,700
Jan 19, 2023	20.36	20.66	20.07	20.38	20.38	9,225,900
Jan 18, 2023	21.42	21.51	20.73	20.74	20.74	12,504,900
Jan 17, 2023	21.04	21.56	20.59	20.92	20.92	13,015,300
Jan 13, 2023	20.88	20.96	20.34	20.92	20.92	13,592,400
Jan 12, 2023	20.18	20.90	19.88	20.90	20.90	25,472,000

- Yahoo! Finance allows you to retrieve historical data from any stock or issue since its inception / listing
- You can choose the time period you want to analyze and at which frequency
- You can either analyze it on the website, or you can click on "Download" and transfer the data to your computer, and use it on Excel for further analysis

Company Analysis

Where to find relevant analysis

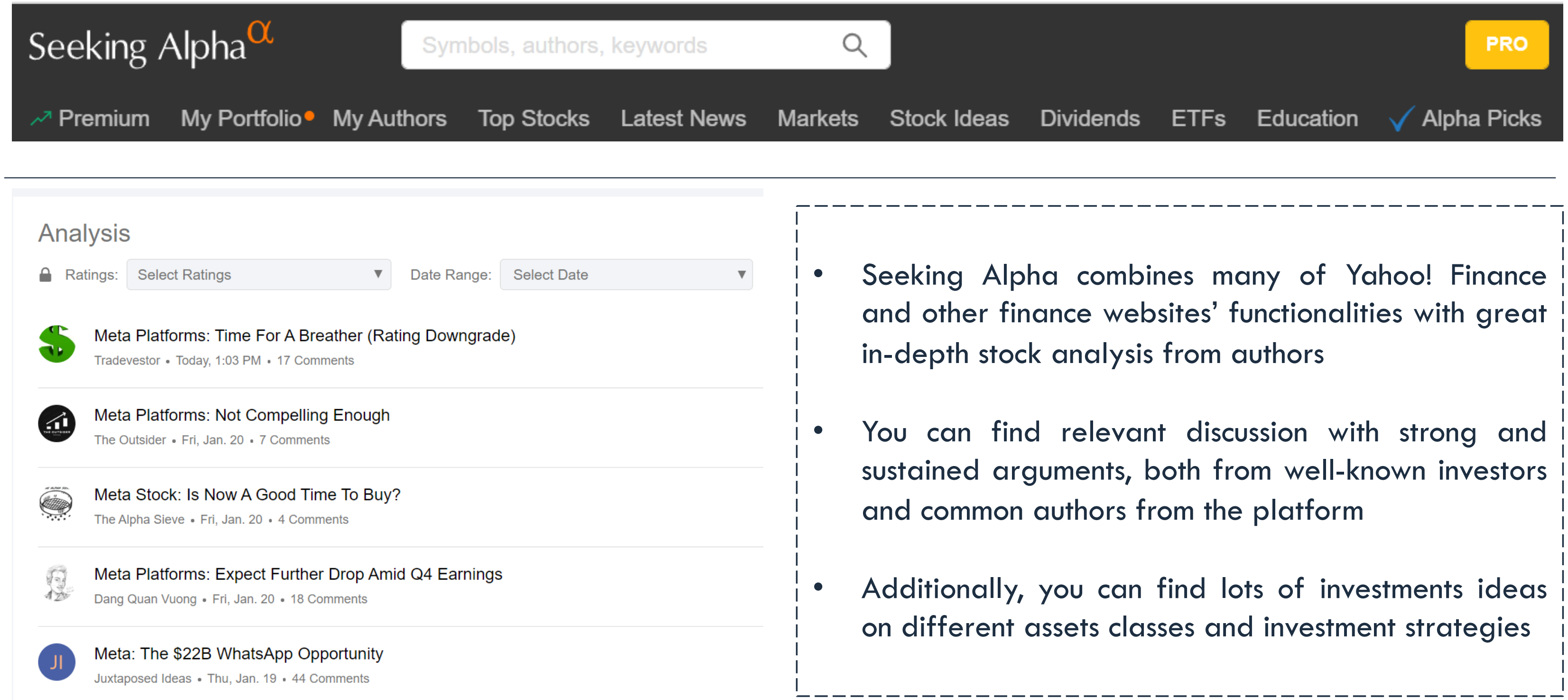
Company Analysis

Where to find relevant analysis

4. Company Analysis

Example: META

Seeking Alpha - https://seekingalpha.com/



- Seeking Alpha combines many of Yahoo! Finance and other finance websites' functionalities with great in-depth stock analysis from authors
- You can find relevant discussion with strong and sustained arguments, both from well-known investors and common authors from the platform
- Additionally, you can find lots of investments ideas on different assets classes and investment strategies

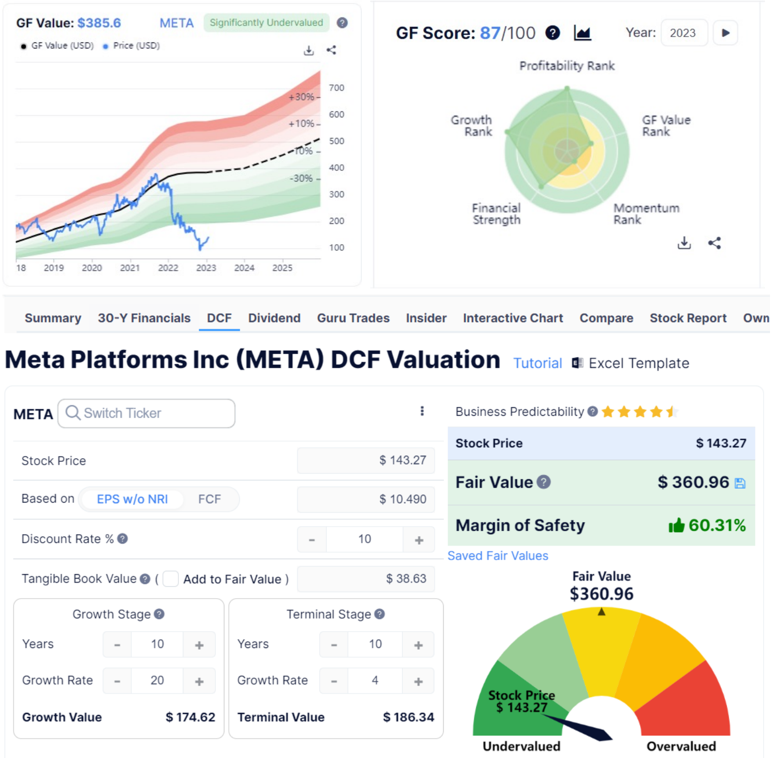
Company Analysis

Where to find relevant analysis

4. Company Analysis

Example: META

Guru Focus - https://www.gurufocus.com/



- Another great website that combines a lot of the relevant data for a lot of listed securities with a great deal of analysis

- Guru Focus has very interesting valuation metrics that you can use as guides, but that you can also play with

- Additionally, you will find a lot of screeners and investment ideas based on Gurus' strategies (Ben Graham, Warren Buffett, Bill Gates) or just stock lists that follow certain other criteria

- Once again, a free account will show you lots but you have to pay for the cooler stuff. 7-day free accounts will do the trick

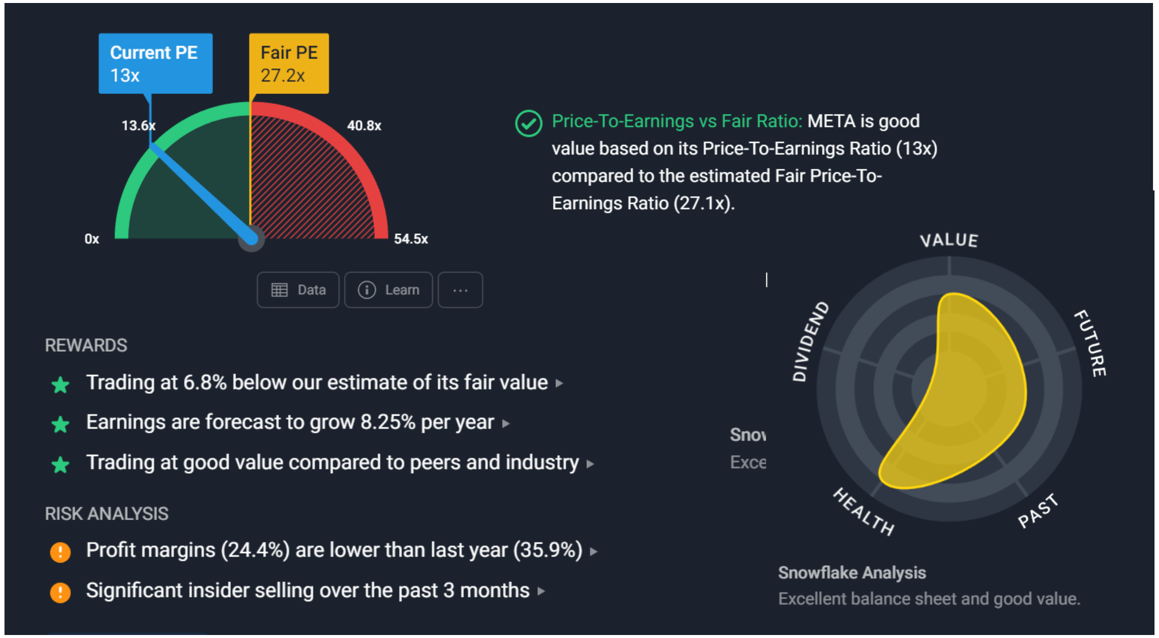
Company Analysis

Where to find relevant analysis

4. Company Analysis

Example: META

Simply Wall Street - https://simplywall.st/



- Here you will find a complete and detailed analysis on any given security
- Analysis will range from balance sheet, to peers, to valuation, growth, dividend & management
- Free website with lots o visuals, you'll have 5 free stocks p/ months
- Once again, use cautiously

PMC

Equity Screener

Best ways to find equities

1. News
2. Market Analysis
3. Company Info
4. Company Analysis
5. **Equity Screener**
6. Podcasts
7. Books

Equity Screener

Best ways to find equities

5. Equity Screener

What is an Equity Screener?

- Tool used by investors to find investment opportunities according to a given investment strategy
- Equity screeners allow investors to create a list of public-listed companies that follow certain criteria

Descriptive

- Descriptive categories such as:
  - Country
  - Stock Exchange
  - Industry
  - Sector
  - Market Cap
  - Volume

Fundamental

- Fundamental indicators such as:
  - P/E or EV/EBITDA
  - P/Book ratio
  - Profit / Operating margins
  - ROA / ROE / ROIC
  - Liquidity & Solvency ratios
  - Dividend Yield
  - EPS growth

Technical

- Technical indicators such as:
  - RSI
  - MACD
  - 20-day moving average
  - …

Note: This can be an initial stage of stock picking. It must be followed by a thorough and detailed analysis of the company and its business.

Equity Screener

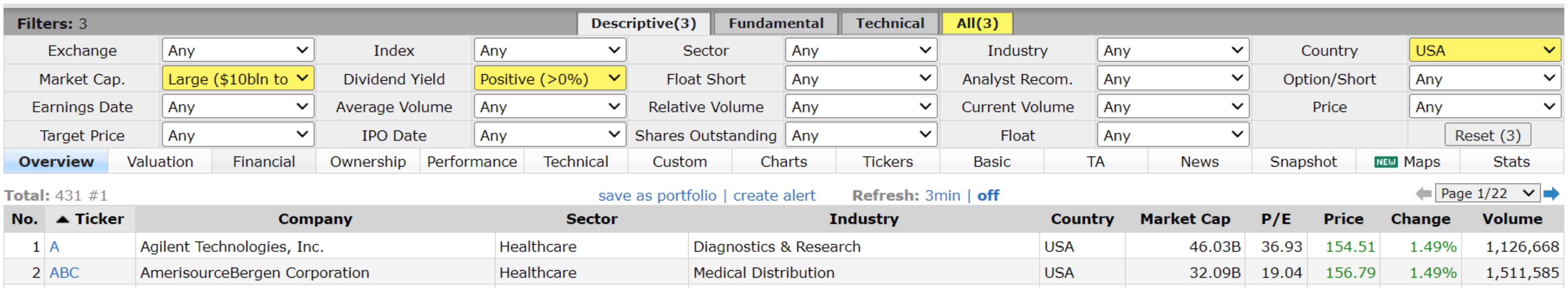
Best ways to find equities

5. Equity Screener

Example: Ben Graham

FinViz - https://finviz.com/screener.ashx

- Example: Ben Graham's equity screening criteria
- We want to find large US companies, with positive dividend yields, low P/E and P/B ratios and a healthy current ratio
- By adding the first 3 filters, our list returns 431 listed companies



No.	Ticker	Company	Sector	Industry	Country	Market Cap	P/E	Price	Change	Volume
1	A	Agilent Technologies, Inc.	Healthcare	Diagnostics & Research	USA	46.03B	36.93	154.51	1.49%	1,126,668
2	ABC	AmerisourceBergen Corporation	Healthcare	Medical Distribution	USA	32.09B	19.04	156.79	1.49%	1,511,585

Equity Screener

Best ways to find equities

5. Equity Screener

Example: Ben Graham

FinViz - https://finviz.com/screener.ashx

- By adding the last filters, we get to the final list of 10 companies that match our criteria. Now, it's time to analyze each of these companies, its sectors, financials, valuation, and so on.

Filters: 6 | Descriptive(3) | Fundamental(3) | Technical | All(6)

P/E	Under 15	Forward P/E	Any	PEG	Any	P/S	Any	P/B	Under 2
Price/Cash	Any	Price/Free Cash Flow	Any	EPS growth this year	Any	EPS growth next year	Any	EPS growth past 5 years	Any
EPS growth next 5 years	Any	Sales growth past 5 years	Any	EPS growth qtr over qtr	Any	Sales growth qtr over qtr	Any	Return on Assets	Any
Return on Equity	Any	Return on Investment	Any	Current Ratio	Over 1.5	Quick Ratio	Any	LT Debt/Equity	Any
Debt/Equity	Any	Gross Margin	Any	Operating Margin	Any	Net Profit Margin	Any	Payout Ratio	Any
Insider Ownership	Any	Insider Transactions	Any	Institutional Ownership	Any	Institutional Transactions	Any		Reset (6)

No.	▲ Ticker	Company	Sector	Industry	Country	Market Cap	P/E	Price	Change	Volume
1	ADM	Archer-Daniels-Midland Company	Consumer Defensive	Farm Products	USA	45.42B	10.73	82.66	0.12%	3,325,597
2	BG	Bunge Limited	Consumer Defensive	Farm Products	USA	14.92B	10.13	98.96	-0.62%	1,191,233
3	BWA	BorgWarner Inc.	Consumer Cyclical	Auto Parts	USA	11.22B	13.75	47.31	0.72%	2,652,555
4	CTRA	Coterra Energy Inc.	Energy	Oil & Gas E&P	USA	19.50B	4.94	24.26	1.89%	6,616,483
5	DINO	HF Sinclair Corporation	Energy	Oil & Gas Refining & Marketing	USA	11.15B	5.07	54.62	4.24%	1,777,426
6	INTC	Intel Corporation	Technology	Semiconductors	USA	119.66B	14.89	29.05	1.25%	50,531,657
7	KNX	Knight-Swift Transportation Holdings Inc.	Industrials	Trucking	USA	10.16B	13.14	62.04	1.59%	1,288,418
8	MU	Micron Technology, Inc.	Technology	Semiconductors	USA	68.62B	11.27	62.13	3.58%	12,703,038
9	TSN	Tyson Foods, Inc.	Consumer Defensive	Farm Products	USA	22.46B	6.89	61.41	0.54%	7,805,944
10	WLK	Westlake Corporation	Basic Materials	Specialty Chemicals	USA	15.72B	6.03	123.64	0.63%	379,296

Filters: cap:large fa_curratio:o1.5 fa_div:pos fa_pb:u2 fa_pe:u15 geo:usa

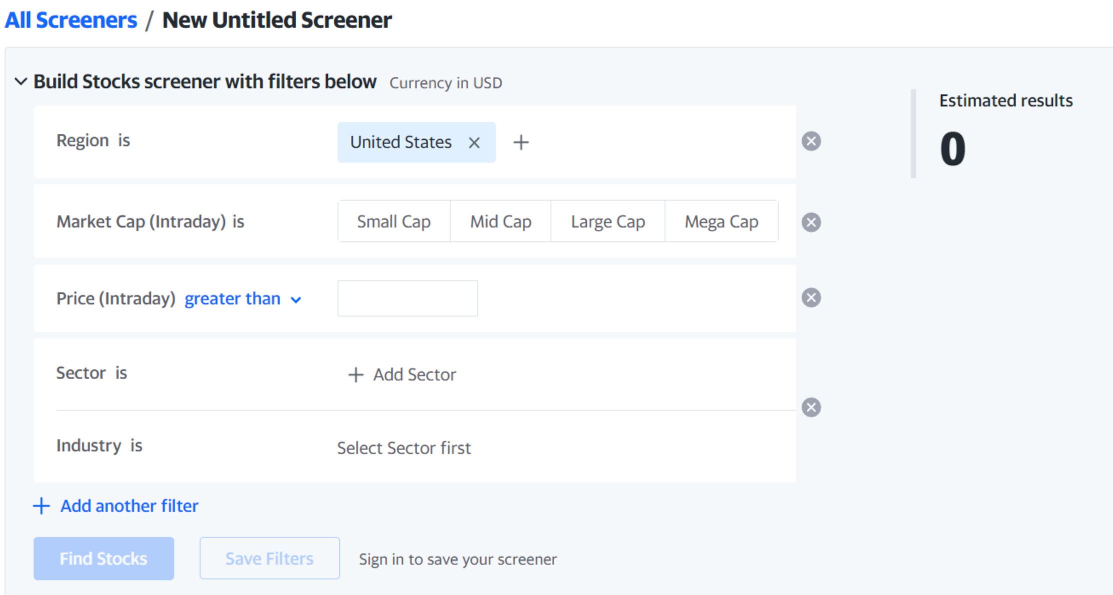
export

Equity Screener

Best ways to find equities

4. Company Analysis

Yahoo!Finance - https://finance.yahoo.com/screener/new



- **Yahoo!Finance** also allows you to create your own equity screener.
- Here you will have more freedom regarding which filters you want to use and specially regarding what values you want them to take.
- You will have the ability to save your screening criteria and check at different times which companies fit your strategy.

PMC

Podcasts

Info on the go

1. News
2. Market Analysis
3. Company Info
4. Company Analysis
5. Equity Screener
6. **Podcasts**
7. Books

Podcasts

Info on the go

6. Podcasts

FT - News Briefing

- Podcast from the Financial Times
- Great to update on news
- Daily

MS – Thoughts on the market

- Morgan Stanley's podcast
- Daily insights of different sectors, geographies and investment opportunities, among others

Exchanges

- Podcast from Goldman Sachs
- Weekly, longer recap and outlook of what's happening in the markets

Surveillance

- Bloomberg's Podcast
- Longer but still daily
- Discussion on market drivers

Note: This can all be found in your average podcast app. A great alternative to reading when you're going to or coming from Nova!

Podcasts

Info on the go

6. Podcasts

Money

- Podcast from the Motley Fool
- Great for stock picking ideas
- Bi-weekly

MS – Thoughts on the market

- Investor's Business Daily podcast
- Weekly 1-hour podcast
- Ideas for stock picking

TBOY
THE BEST ONE YET

Exchanges

- Daily podcast
- Which companies are on the news and why – stockpicking

Surveillance

- Podcast from a macroeconomics perspective
- Weekly episodes

Note: This can all be found in your average podcast app. A great alternative to reading when you're going to or coming from Nova!

Books

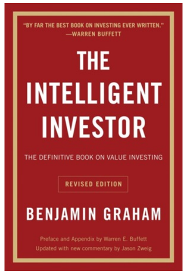
Top picks

1. News
2. Market Analysis
3. Company Info
4. Company Analysis
5. Equity Screener
6. Podcasts
7. **Books**

Books

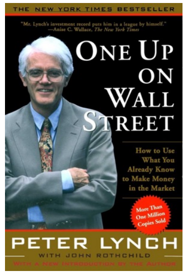
Do it the old fashion way

7. Books



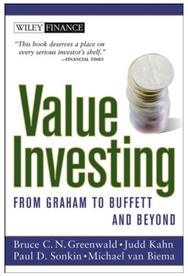
The Intelligent Investor

- Benjamin Graham
- The Bible of investing in the stock market



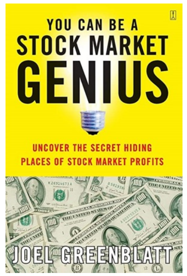
One Up on Wall Street

- Peter Lynch
- Great book on how to be successful in the stock market



Value Investing

- Warren Buffet and beyond
- Focused on value investing: how to find and value opportunities



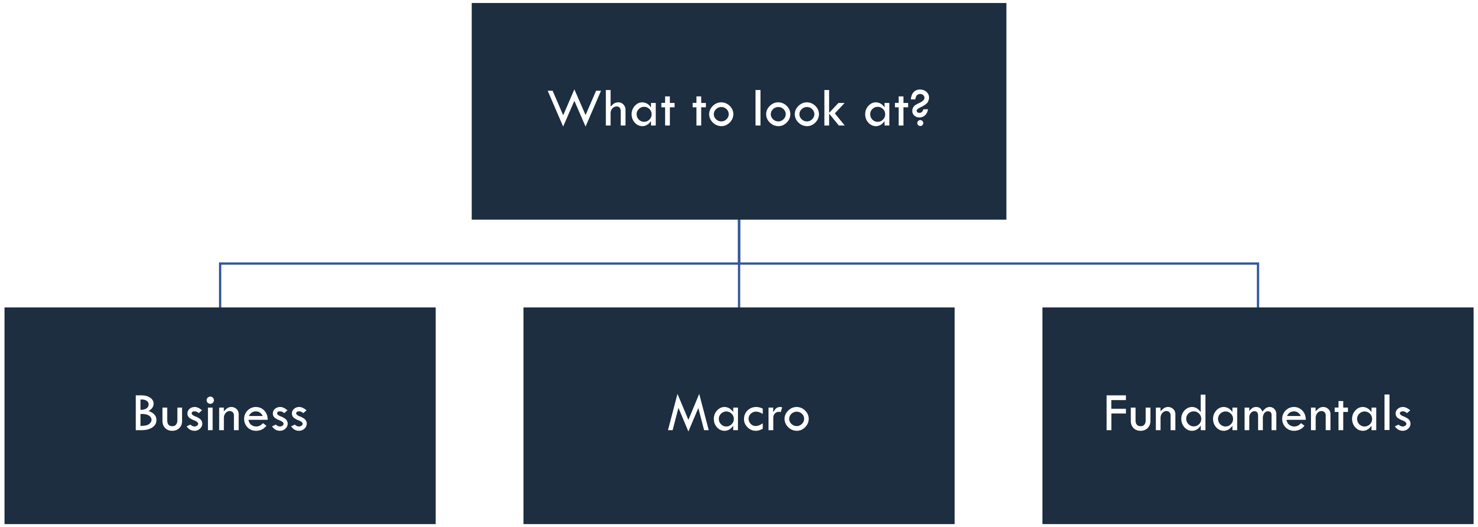
You Can be a Stock Market Genius

- Joel Greenblat
- Special situations: why they occur and how to deal with them

Note: These are some of the "beginner" stock market books. They'll help you in being successful both technically and psychologically

Where it all starts…

How to choose a firm?



Understanding the Business

Allows you to better capture a sense of how the firm works and what you might find in the Financial Statements

Key questions	Applied example – KB Home
Does it operate through a supply chain or is it just part of one?	Just delivers the house, not responsible for the construction material
Where does the firm operate?	Only in the United States, **dividing revenues** by US region
What kind of products/services does it provide?	Focuses on homebuilding and insurance for properties
What are the main segments, geographies or both?	Division of revenues per segment and geography
What has been new about the firm recently?	**Management Discussion –** re-sequencing construction
What has the firm done to stand out from competition?	Bargaining power to deal with suppliers, orders inventory in advance
What has been the current strategy of the firm?	The firm focuses on accelerating the delivery of houses due to Covid
Has the firm been paying any dividends or done stock buybacks?	The dividend yield of the firm is 1.7%
Does the firm have a good management team?	Some members have over 25 years of experience in the field
Has the firm completed recent Mergers or Acquisitions?	The last major acquisition occurred in 2003
What are the key shareholders of the firm?	Mostly institutional investors, including BlackRock, Vanguard, Fidelity

Understanding the Macro(economic) Environment

Allows you to understand what affects the business other than the business itself

Why does macro matter?

- Because the economic environment affects the way the firm performs
- Because macro also relates to other events such as geopolitical or pandemics, which also affects the market
- Because the firm operates in a geography or industry, affecting the outlook

Key things to look at

- The Macro Overview
- Central Bank decisions - local central bank, the ECB and the Fed
- Key macro data (consumer confidence, spending, government data, unemployment statistics, inflation reports, PMI, others)
- Key prices: housing market, commodities
- What you consider also depends on the industry/company

Applied example – KB Home

1. Inflation is still above the 2% target
2. The Fed raises interest rates by 75bps
3. This makes variable interest rate loans more expensive
4. And new loans more expensive as well
5. Most families need a mortgage to purchase a house
6. Higher interest rates can reduce demand for houses
7. KB Home focuses on housing construction
8. Collects revenue mostly from selling them
9. A fall in demand can reduce revenues
10. Or at least slow down the growth pace
11. This compromises the performance of the firm in the future
12. As the macro outlook worsens

Understanding the Company

Types of Company Analysis

Types of Company Analysis

Technical

Evaluates investments through price trends and patterns seen on charts. It assumes that past trading activity and price changes can be indicative of the security's future price movements.

Fundamental

Seeks to determine a stock's real or "fair market" value. Looks at the business and the financial statement analysis.

What we focus on at PMC

Source: Investopedia

PMC

Understanding the Company

Types of Fundamental Analysis

Types of Fundamental Analysis

- Absolute Valuation
  - Uses discounted cash flow analysis (DCF) to determine a company's financial worth.
  - **We use the DCF where we include our estimates of key captions of the firm such as revenues and costs.**
- Relative Valuation
  - A relative valuation model compares a firm's value to that of its competitors to determine the firm's financial worth. The most common ratio is the P/E (Price to Earnings ratio)
  - **We compare the firm with key industry peers by using ratios such as P/E and P/B.**

Source: Investopedia

Understanding the Company

Financial Statements – The Balance Sheet – Key Captions 1/2

Air Products provides industrial gases, related equipment, and applications expertise.

(Millions of U.S. Dollars, except for share and per share data)	**2022**	2021
Assets		
Current Assets		
Cash and cash items	**$2,711.0**	$4,468.9
Short-term investments	**590.7**	1,331.9
Trade receivables, net	**1,794.4**	1,451.3
Inventories	**514.2**	453.9
Prepaid expenses	**156.8**	119.4
Other receivables and current assets	**515.8**	550.9
Total Current Assets	**6,282.9**	8,376.3
Investment in net assets of and advances to equity affiliates	**3,353.8**	1,649.3
Plant and equipment, net	**14,160.5**	13,254.6
Goodwill, net	**823.0**	911.5
Intangible assets, net	**347.5**	420.7
Noncurrent lease receivables	**583.1**	740.3
Other noncurrent assets	**1,641.8**	1,506.5
Total Noncurrent Assets	**20,909.7**	18,482.9
Total Assets	**$27,192.6**	$26,859.2

These are generally the most liquid assets in the balance sheet, generally ordered from the most liquid to the least

These are the least liquid assets, which means that attempting to sell them in exchange for cash would be more difficult

Cash and Cash items	Very liquid and useful for business operations, but more is not necessarily best
Trade Receivables	The balance of outstanding debts from clients to the company
Inventories	Includes raw materials, finished products and others for the operations
Plant & Equipment	Fixed assets to be used in the operations and deliver goods and services
Intangible assets	Includes copyrights, patents and licenses to produce and sell products or others

Source: 2022 Air Products Annual Report

Understanding the Company

Financial Statements – The Balance Sheet – Key Captions 2/2

Air Products provides industrial gases, related equipment, and applications expertise.

Liabilities and Equity		
Current Liabilities		
Payables and accrued liabilities	**$2,771.6**	$2,218.3
Accrued income taxes	**135.2**	93.9
Short-term borrowings	**10.7**	2.4
Current portion of long-term debt	**548.3**	484.5
Total Current Liabilities	**3,465.8**	2,799.1
Long-term debt	**6,433.8**	6,875.7
Long-term debt – related party	**652.0**	274.6
Other noncurrent liabilities	**1,691.2**	1,640.9
Deferred income taxes	**1,247.4**	1,180.9
Total Noncurrent Liabilities	**10,024.4**	9,972.1
Total Liabilities	**13,490.2**	12,771.2
Commitments and Contingencies - See Note 16		
Air Products Shareholders' Equity		
Common stock (par value $1 per share; issued 2022 and 2021 - 249,455,584 shares)	**249.4**	249.4
Capital in excess of par value	**1,141.4**	1,115.8
Retained earnings	**16,520.3**	15,678.3
Accumulated other comprehensive loss	**(2,786.1)**	(1,515.9)
Treasury stock, at cost (2022 - 27,616,888 shares; 2021 - 28,058,829 shares)	**(1,981.0)**	(1,987.9)
Total Air Products Shareholders' Equity	**13,144.0**	13,539.7
Noncontrolling Interests	**558.4**	548.3
Total Equity	**13,702.4**	14,088.0
Total Liabilities and Equity	**$27,192.6**	$26,859.2

The accompanying notes are an integral part of these statements.

The current liabilities are those who are set to be paid under a period until 12 months.

The non-current liabilities are those who are set to be paid under a period of more than 12 months.

It is the "residual balance" of the Balance Sheet. The most important components are generally Retained Earnings and Share Capital (Common Stock in this case).

Payables	Debts mostly to suppliers and other non-financial creditors
Borrowings	Financial debt issued by banks, can be short or long-term
Lease Liabilities	Debt related with leasing contracts of property, for instance

In Summary:

The Balance Sheet provides an overview of the assets and commitments of the firm both in the short term and in the long term. It is informative of the financial position.

Source: 2022 Air Products Annual Report

Understanding the Company

Financial Statements – The Balance Sheet – Key Ratios (1/3)

It is important to understand the ability to meet its short-term obligations – Liquidity Analysis

(Millions of U.S. Dollars, except for share and per share data)	**2022**	2021
Assets		
Current Assets		
Cash and cash items	**$2,711.0**	$4,468.9
Short-term investments	**590.7**	1,331.9
Trade receivables, net	**1,794.4**	1,451.3
Inventories	**514.2**	453.9
Prepaid expenses	**156.8**	119.4
Other receivables and current assets	**515.8**	550.9
Total Current Assets	**6,282.9**	8,376.3
Liabilities and Equity		
Current Liabilities		
Payables and accrued liabilities	**$2,771.6**	$2,218.3
Accrued income taxes	**135.2**	93.9
Short-term borrowings	**10.7**	2.4
Current portion of long-term debt	**548.3**	484.5
Total Current Liabilities	**3,465.8**	2,799.1

Current Ratio

Firm's ability to pay all current liabilities with existing current assets

$$\frac{Current\ Assets}{Current\ Liabilities} = \frac{6\,282.9}{3\,465.8} = 1.81$$

Quick Ratio

Firm's ability to pay all current liabilities without selling inventory

$$\frac{Current\ Assets - Inventories}{Current\ Liabilities} = \frac{6\,282.9 - 514.2}{3\,465.8} = 1.66$$

Cash Ratio

Firm's ability to pay all current liabilities using cash only

$$\frac{Cash\ and\ cash\ items}{Current\ Liabilities} = \frac{2\,711}{3\,465.8} = 0.78$$

Key Notes

Current Ratio	Should be above 1 as a rule of thumb, but one needs to compare with peers to get a better perception
Quick Ratio	More demanding and more relevant for firms that depend on selling inventory
Cash Ratio	More interesting to compare with the industry, but no general rule. The most demanding of all ratios

Net Working Capital

What would be the amount of capital available after meeting all short-term obligations and transforming all current assets into cash

Current assets – Current liabilities =

= 6 282.9 – 3 465.8 = **2 817.1 million dollars**

Source: 2022 Air Products Annual Report

PMC

Understanding the Company

Financial Statements – The Balance Sheet – Key Ratios (2/3)

While the firm can have liquidity, it might struggle to generate cash flows in the future – Cash-Flow Management Analysis

(Millions of U.S. Dollars, except for share and per share data)	**2022**	2021
Assets		
Current Assets		
Cash and cash items	**$2,711.0**	$4,468.9
Short-term investments	**590.7**	1,331.9
Trade receivables, net	**1,794.4**	1,451.3
Inventories	**514.2**	453.9
Prepaid expenses	**156.8**	119.4
Other receivables and current assets	**515.8**	550.9
Total Current Assets	**6,282.9**	8,376.3
Liabilities and Equity		
Current Liabilities		
Payables and accrued liabilities	**$2,771.6**	$2,218.3
Accrued income taxes	**135.2**	93.9
Short-term borrowings	**10.7**	2.4
Current portion of long-term debt	**548.3**	484.5
Total Current Liabilities	**3,465.8**	2,799.1

(Millions of U.S. Dollars, except for share and per share data)	**2022**	2021	2020
Sales	**$12,698.6**	$10,323.0	$8,856.3
Cost of sales	**9,338.5**	7,186.1	5,858.1

Average Collection Period

How long it takes for the firm to get paid after selling the product

$$\frac{Trade\ Receivables}{Sales} * 365 = \frac{1\,794.4}{12\,698.6} * 365 = 52 \text{ days}$$

Average Holding Period

How long it takes for the firm to get rid of its inventory

$$\frac{Inventories}{Cost\ of\ sales} * 365 = \frac{514.2}{9\,338.5} * 365 = 20 \text{ days}$$

Average Payable Period

How long it takes for the firm to pay to the suppliers

$$\frac{Payables}{Cost\ of\ Sales} * 365 = \frac{2\,771.6}{9\,338.5} * 365 = 108 \text{ days}$$

Key Notes

Average Collection Period (ACP)	The higher, the longer it takes for the firm to get paid by its costumers, putting pressure on its liquidity position
Average Holding Period (AHP)	The higher, the longer it takes for the firm to get rid of its inventory, putting pressure on its liquidity position
Average Payable Period (APP)	The higher, the longer it takes for the firm to pay to its suppliers, reducing pressure on its liquidity position

The Cash Conversion Cycle

How long it takes for the firm to generate cash out of its operations:

ACP + AHP – APP = 52 + 20 – 108 = **- 36 days**

Suppliers are financing the firm's operations

PMC

Source: 2022 Air Products Annual Report

Understanding the Company

Financial Statements – The Balance Sheet – Key Ratios (3/3)

We need to understand what financing sources support the operations – Capital Structure and Debt Structure Analysis

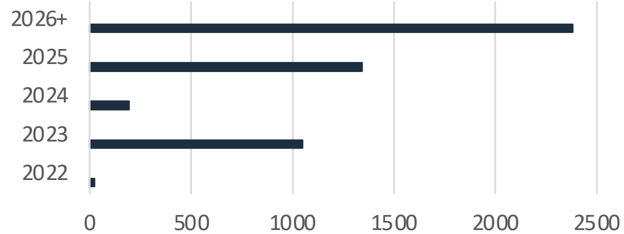
Net Debt/EBITDA	Determines how long it would take to repay the debt if EBITDA could be used as cash to fully repay it	$\frac{Net\ Debt}{EBITDA}$
EBITDA/Interest Expense	Analyses how does the operational result cover for the costs from the financial liabilities	$\frac{EBITDA}{Interest\ Expense}$
Debt/Equity	Evaluates the relative proportion of debt and equity as financing sources for the company	$\frac{Debt}{Equity}$
Solvency Ratio	Registers how much the assets exceed the liabilities, stating the ability of the firm to meet its commitment	$\frac{Assets}{Liabilities}$
Financial Autonomy Ratio	Determines the percentage of assets which are financed by equity	$\frac{Equity}{Assets}$
Altman's Z-Score	It's a measure of solvency. If below 1.8, the company might be headed for bankruptcy; if closer to 3, tends to be a solid company	*Please check the notes

Applied Example – Leidos Holdings

Leidos Holdings is a US provider of services and solutions in the defense, intelligence, civil and health markets.

	2021
Net Debt/EBITDA	3.09
EBITDA/Interest Expense	8.87
Debt/Equity	133.63
Solvency Ratio	1.49
Financial Autonomy Ratio	0.33
Altman's Z-Score	4.7

On the left, some examples of key financial stats applied to Leidos Holdings. On the right, the debt schedule of the firm for the coming years (2022-onwards)



Source: Bloomberg, Leidos Holdings Inc. 2021 Annual Report | Altman's Z-Score Formula: $\frac{1.2 * Working\ Capital + 1.4 * Retained\ Earnings + 3.3 * EBIT + 06 * Sales}{Assets} + \frac{Market\ Cap}{Liabilities}$

PMC

Understanding the Company

Financial Statements – The Income Statement – Key Captions

Walt Disney is a diversified entertainment company in the field of film making, themed parks and other media content.

	2021	2020	2019
Revenues:			
Services	$ 61,768	$ 59,265	$ 60,579
Products	5,650	6,123	9,028
Total revenues	67,418	65,388	69,607
Costs and expenses:			
Cost of services (exclusive of depreciation and amortization)	(41,129)	(39,406)	(36,493)
Cost of products (exclusive of depreciation and amortization)	(4,002)	(4,474)	(5,568)
Selling, general, administrative and other	(13,517)	(12,369)	(11,549)
Depreciation and amortization	(5,111)	(5,345)	(4,167)
Total costs and expenses	(63,759)	(61,594)	(57,777)
Restructuring and impairment charges	(654)	(5,735)	(1,183)
Other income, net	201	1,038	4,357
Interest expense, net	(1,406)	(1,491)	(978)
Equity in the income (loss) of investees	761	651	(103)
Income (loss) from continuing operations before income taxes	2,561	(1,743)	13,923
Income taxes on continuing operations	(25)	(699)	(3,026)
Net income (loss) from continuing operations	2,536	(2,442)	10,897
Income (loss) from discontinued operations, net of income tax benefit (expense) of $9, $10 and ($39), respectively	(29)	(32)	687
Net income (loss)	2,507	(2,474)	11,584
Net income from continuing operations attributable to noncontrolling and redeemable noncontrolling interests	(512)	(390)	(472)
Net income from discontinued operations attributable to noncontrolling interests	—	—	(58)
Net income (loss) attributable to The Walt Disney Company (Disney)	$ 1,995	$ (2,864)	$ 11,054

The presentation of revenues can be broken down also by geography and specific products/services

The cost structure depends on the industry and the also on the way the company is organized (SG&A). Some costs are just for accounting purposes (D&A)

Some additional items can be relevant depending on the amount and frequency. Here we have restructuring costs and income from subsidiaries

In Summary:

The Income Statement includes the compilation of all revenues and costs of the firm. It is mostly and indicator of profitability of the firm.

Source: 2021 Walt Disney Company Annual Report

PMC

Understanding the Company

Financial Statements – The Income Statement – Key Ratios & Analysis

We need to understand how profitable the firm is – Profitability Analysis

Return on Assets	Determines how much the firm profits per dollar unit of assets	$\frac{Net\ Income}{Assets}$
Return on Equity	Determines how much the firm profits per dollar unit of equity	$\frac{Net\ income}{Equity}$
Asset Turnover	Determines how much revenue the firm collects per dollar unit of assets	$\frac{Sales}{Assets}$
ROIC vs WACC	**The ROIC should be above the WACC for the firm to be creating value**	

Whenever possible, one should have an idea of the evolution and segmentation of revenues and costs

Revenue, by segment, in millions

Revenue 67 418

- Affiliate fees 17 766
- Advertising 12 429
- Subscription fees 12 020
- Parks and Resorts 6 549
- Licensing 9 784
- Others 8 870

Revenue, by geography, in millions

Revenue 67 418

- Americas 54 157
- Europe 6 690
- Asia Pacific 6571

PMC

Understanding the Company

Financial Statements – The Cash-Flow Statement – Key Captions

Metro do Porto is a public sector enterprise and the subway of the city of Porto, in Portugal.

Item	Note:	2021	2020
Cash Flows from Operating Activities			
Received from clients		48 786 412	40 577 675
Payments to suppliers		(57 461 931)	(55 395 199)
Payments to staff		(4 530 315)	(5 025 794)
Payments of transfers and subsidies		0	(72 500)
Cash generated by Operations		(13 205 834)	(19 915 818)
Other receivables/payables	4	10 697 673	10 902 235
Cash Flows from Operating Activities (a)		(2 508 161)	(9 013 583)
Cash Flows from Investments			
Payments referring to:			
Tangible Fixed Assets		(93 262)	(268 935)
Intangible Assets		(49 219 235)	(5 138 175)
Financial investments		(14 305 674)	(469 567)
Receivables from:			
Tangible Fixed Assets		0	0
Intangible Assets		81 121	11 736
Investment grants		111 965 934	42 021 903
Cash Flows from Investments (b)		48 428 884	36 156 962
Cash Flows from Financing:			
Receivables from:			
Loans obtained	18.7	541 163 114	165 460 630
Capital increases and other equity instruments		1 017 540	0
Payments referring to:			
Loans obtained	18.7	(422 850 360)	(73 186 614)
Interest and similar expenses	7	(122 638 499)	(95 011 855)
Cash Flows from Financing Activities (c)		(3 308 205)	(2 737 838)
Variation in cash and cash equivalents (a + b + c)		42 612 518	24 405 540
Cash and cash equivalents at beginning of period	4	63 760 475	39 354 934
Cash and cash equivalents at end of period	1.6	106 372 993	63 760 475

The Operating Cash-Flows include all cash-flows which are a direct result of the operations of the firm. In this case, the firm generates a negative OCF.

The Investing Cash-Flows relate with investments or sale of assets/investments in the firm. They can include financial products, property, plant or equipment. In this case, the firm uses the sale of assets to finance its operations.

The Financing Cash-Flows relate to financing sources of the firm, either through equity or debt. It also includes repayment of debt or issuance of debt or equity.

The balance of the statement is the variation of the cash position of the firm.

Source: 2021 Metro do Porto Annual Report

PMC

Finding Risks & Mitigants

It is always important to put our analysis in context

Fact	Risk	Company	Mitigant
Current ratio is 1.41 but inventories account for 79% of all current assets	The firm might not be able to meet obligations as easily as one thought	JCPenney	No mitigant, it went bankrupt
Current ratio is 0.88, below the reference value of 1	The firm might not be able to meet its short-term obligations		The firm has a solid market position and easy access to financing
Shareholders' Equity is negative	Assets are not enough to meet the obligations of the firm		Relates to their franchise business and the way the company finances itself
D/E is 5.64 and most of the debt is variable interest debt	The company is excessively indebted and expose to a downturn	Albertsons	Sales have managed to recover fast after the pandemic, near 2019 levels
The TV segment has lost revenue and the Parks' revenue have stagnated	The firm might be headed for a path of stagnation	Disney	There has been a change in the business, focusing on Disney+
There has been a sharp increase in litigation-related costs	The firm's profitability has been severely affected	PG&E	The firm has managed to successfully reduce its losses through restructuring
The investing cash flows of the firm are positive	This signals that the firm does not have capital and needs to sell assets		The firm might simply going through a restructuring process

Putting it all together – The Valuation

Types of Valuation

- Types of Valuation
  - Intrinsic/Absolute Valuation
    - Determining the intrinsic value of a company can be done by developing a Discounted Cash-Flow model, including many of the captions mentioned earlier
  - Relative Valuation
    - Mechanism to determine the value of a company based on its peers' ratios within the industry. This measures if the firm is properly valued based on peers, but does not determine if the industry is properly valued

Source: Investopedia

Putting it all together – The Valuation

Absolute Valuation

Fundamentals

- Collect data on the financial statements, preferably over a period of at least 5 years.
- Project the future key captions such as costs, revenues, CAPEX and Net Working Capital.

Cash-Flows and Methodology

- Assess the cash-flows generated by the company, in particular the Free Cash Flow (includes operational cash-flow, Net Working Capital and Capex).
- One can use the perpetuity method to evaluate future growth of cash-flow based on a specific terminal value (common growth rate of 2% assumed, just as the long-term modern growth rate of the economy).
- Can also used EBITDA exit multiple through the EV/EBITDA ratio of the industry, for example, for value the company.

Risk

- The Cash-Flows should be discounted under the appropriate discount rate, one often considered is the Weighted Average Cost of Capital (WACC) .

Sensitivity

- The valuation techniques should be tested according to different changes in key variables such as interest rates, for instance, in order to assess how credible the final valuation is.

Putting it all together – The Valuation

Relative Valuation

The Relative Valuation uses industry median/average ratios of key metrics to assess the valuation of the company.

Public Storage is a REIT that primarily acquires, develops, owns and operates self-storage facilities.

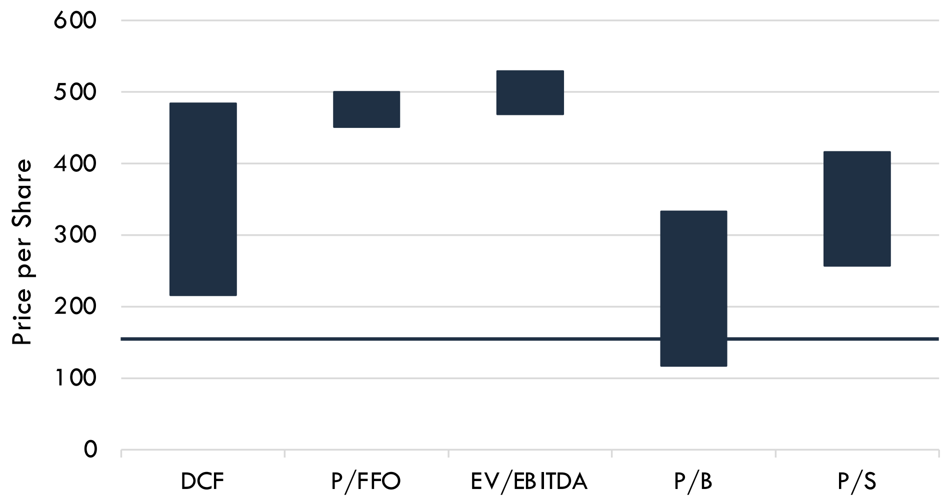
Key Peer Comparison Metrics

Company Name	Market Cap	FFO/Share	P/FFO	EV/EBITDA	P/B	P/E	P/S
Median	***9.1B***	***5.08***	***30.15***	***32.16***	***4.44***	***48.32***	***15.23***
Public Storage	**51.95B**	**13.36**	**28.04**	**32.15**	**12.53**	**38.25**	**19.17**
National Storage Affiliates	4.85B	2.24	30.89	26.88	4.05	70.61	9.59
Extra Space Storage	20.90B	6.91	32.81	33.58	9.74	44.02	19.17
CubeSmart	9.14B	1.93	29.49	32.16	4.44	55.27	14.10
Life Storage Inc	9.03B	5.08	30.15	32.50	3.79	48.32	15.23

Relative Valuation

Relative Valuation	P/FFO	EV/EBITDA	P/B	P/E	P/S
1st Quartile	451.32	469.07	117.17	613.32	256.92
2nd Quartile	473.05	514.15	132.71	720.45	330.34
3rd Quartile	499.73	529.15	332.83	938.44	415.80

Football Field



Applied example – Public storage and P/S

1) Find the median industry value of the ratio (P/S = 15.23) → 2) Determine the company sales (21.69 billion) → 3) Multiply the Sales by the industry median value of the ratio → 4) Get the price P=15.23*21.69=3 330.34 → 5) Compare with the current stock price ($PSA = 289.10) → 6) Conclude the company is undervalued under this scenario

PMC

Making our Case – The Investment Thesis

Explains why a certain security is a good investment opportunity

Some aspects to consider when developing the Investment Thesis

- Why should we invest in this security?
- Why is this security special, why does it stand out from the crowd?
- What are key strengthens that the firm has?
- What is the role the security can play in the PMC's portfolio?
- How does the security fit into the club's goals?
- What are the macro conditions that are particularly favoring the company at the moment?
- What is the value added that the stock can create and how does that compare with the other securities of the existing portfolio?
- What are any particular events that are influencing the outlook of the company (political, economical, social, etc.)?
- Is the valuation relevant for this pitch, or is there a greater focus on the macro context?
- Any other factors which might be relevant to convince the audience

Wrapping it up – The Recommendation

It provides a more specific detail on what we should do

Some aspects to consider when developing the Recommendation

- What should we buy?
- How much should we buy (in percentage of the overall portfolio)?
- What are the funding sources (sell from other securities, use cash, a mix of both)?
- What is the price range that we see fit (stop-losses and take profit)?
- What is the potential upside/downside?
- When should we enact the transaction in the case of approval?
- What information should we be aware of that might force us to act quickly?
- Any another relevant information for the audience.

Collecting the Information – Bloomberg Codes

This is an index of codes that can facilitate the research of a security on Bloomberg (1/8)

Economic Indicators

Code	Description
ECO	Economic Calendar
ECSU	Economic Surprise Monitor
CRP	Country's risk premium
WIRP	Interest rates incorporate in the market valuation
IFMO	Inflation monitor
FDTR Index	Fed Interest Rates historical data
FXFC	Forex Forecasts
GEW	Major economic aggregates
ECFC	Economic data for each country
FOMC	FOMC meetings result
GC3D	3D Graph of the Yield Curve
BYFC	Yields Forecast

Collecting the Information – Bloomberg Codes

This is an index of codes that can facilitate the research of a security on Bloomberg (2/8)

Company Data

Code	Description
DES	Description of the company
RSKC	Description of the company and risk analysis
MGMT	Management team of the company
AGGD	Major creditors of the company
DRSK	Bloomberg default risk of the company
DRAM	Evolution of DRSK
PIB	Bloomberg company report
BICO	Analysis on the industry and the company
BRC	Major company headlines
KI	Key company insights
ESG	ESG information of the company
EVT	Calendar Events for the company
SPLC	Company's supply chain and clients

Collecting the Information – Bloomberg Codes

This is an index of codes that can facilitate the research of a security on Bloomberg (3/8)

Company Data (cont.)

Code	Description
DVD	Dividends and Splits information
CF	Company Fillings
DDIS	Debt Distribution of the firm
CAST	Detailed Capital Structure of the company
CRPR	Credit Ratings of the company
CL	Company's litigations
ANR	Analyst Recommendations
TRA	Total Return of the Stock with dividends
OWN	Ownership summary

Collecting the Information – Bloomberg Codes

This is an index of codes that can facilitate the research of a security on Bloomberg (4/8)

Absolute Valuation Tools

Code	Description
EEG	Price versus EPS performance
WACC	WACC of the company
FA	Financial Analysis with data on balance sheet, income statement, cash-flows and ratios
EM	Earnings Trends of the company (past and future)
CCB	Revenue breakdown

Relative Valuation Tools

Code	Description
PEBD	Price and EPS bands
RV	Relative Valuation
RVC	Graphical comparison of RV
EQRV	Equity Relative Valuation
WEI	World Equity Indicators

Collecting the Information – Bloomberg Codes

This is an index of codes that can facilitate the research of a security on Bloomberg (5/8)

Relative Valuation Tools (cont.)

Code	Description
HS	Spread analysis vs S&P500
PBAR	Relative valuation of companies
COMP	Comparative performance of securities and the S&P500
RVRD	Relative debt analysis

Technical Analysis Tools

Code	Description
TECH	Technical analysis
BTST	Back testing tool
BT	Optimization platform for back testing

Collecting the Information – Bloomberg Codes

This is an index of codes that can facilitate the research of a security on Bloomberg (6/8)

Directories

Code	Description
WATC	Stock directory based on criteria
ICS	Stock by sector
MEMB	Stocks in an index
MRR	Stocks by returns
EQS	Equity research based on criteria
SRCH	Bond directory
WB	Sovereign bond directory
GLCO	Commodities directory

General Information

Code	Description
BI	Bloomberg Intelligence

Collecting the Information – Bloomberg Codes

This is an index of codes that can facilitate the research of a security on Bloomberg (7/8)

Currencies

Code	Description
FXCA	Currency converter
FXC	Currency matrix
WCRS MAC	*Valuation* of currency

Bonds

Code	Description
DEBT	Sovereign debt ownership
YAS	Computation of bond yield
WCDM	Outstanding government debt
CSDR	Sovereign bond rates
SOVR	Risk of default in CDS terms for sovereigns

Collecting the Information – Bloomberg Codes

This is an index of codes that can facilitate the research of a security on Bloomberg (8/8)

Portfolio Management

Code	Description
PRTU	Creates a portfolio in the Bloomberg platform
PORT	Manages the portfolio created in PRTU
EQBT	Equity back testing tool

Commodities

Code	Description
OPEC	Monthly oil production
NTBK	Profitability of the refining business

ETFs and Options

Code	Description
FFLO	ETF outflows and inflows
OMON	Options for a specific firm
OVME	Specific data on the options

Presenters

Guilherme Bagulho

Investment Team Head

+351 939 209 790

www.linkedin.com/in/guilhermebagulho/