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An overview and
forecast of the
performance of
the DXY Index in
times of crisis

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**Market
Thieves**

Agenda



01 What is the DXY?

US Dollar strength and comparison to other strong currencies.

02 Financial Analysis

Trend of past recessions and our prediction for the rest of 2020.

03 Macroeconomic Analysis

A brief overview about the sectors that influence the Index.

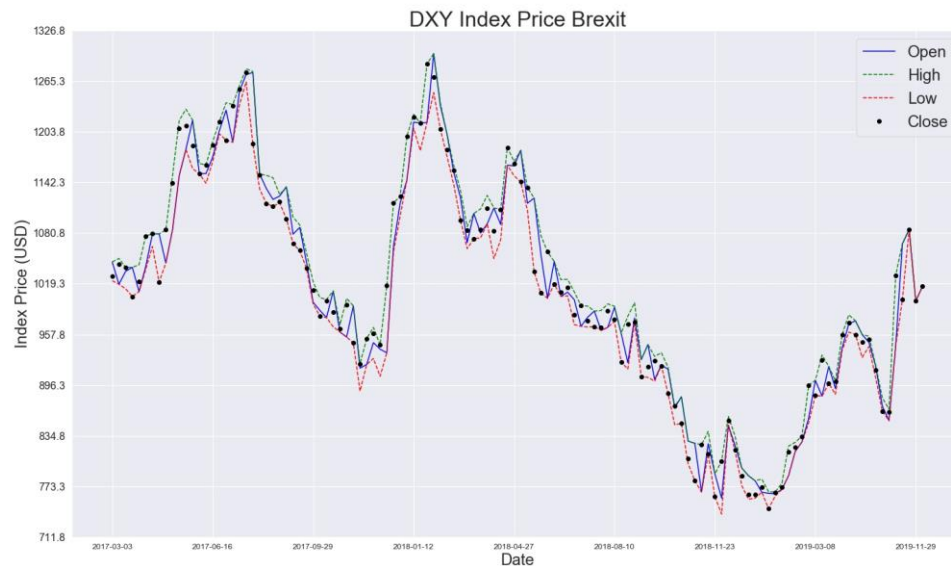
04 Sentimental Analysis

How does the consumer sees the market and what is the overall sentiment regarding the Index.

05 Technical Overview

The steps of the project development and tools used in the analysis of the Index.

Effects of previous crisis

**Analysis Maturity**

Two periods of two years of economical crisis, using weekly time spans to analyse the price.

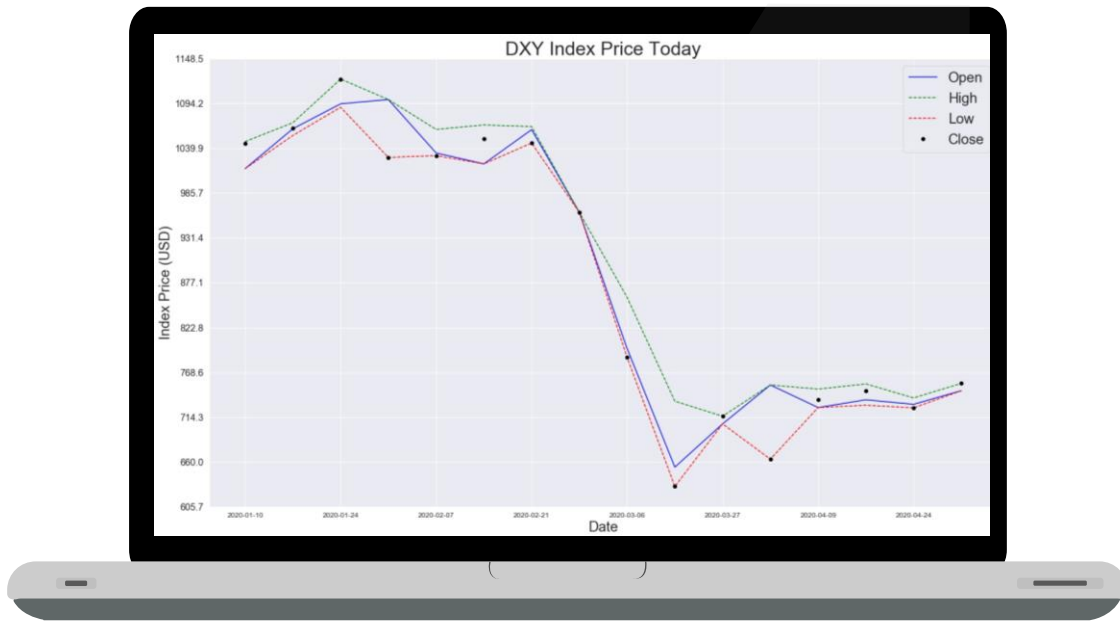
Behavior in periods of economical crisis

The price have an unusual performance. During the crisis, the value doesn't follow any price action patterns.

Bank intervention and social panic

In the beginning, the market is haunted by panic, that decrease after the banks intervention (FED) to salvage the economy. After this, people will realize that neither they or the banks have money making the price fall.

Effects of the Covid-19 pandemic



Same trend as the previous periods

The behavior of the index don't have a lot of volatility. When crisis hit, the Dollar loses value compared to other currencies and slowly makes the ground up again

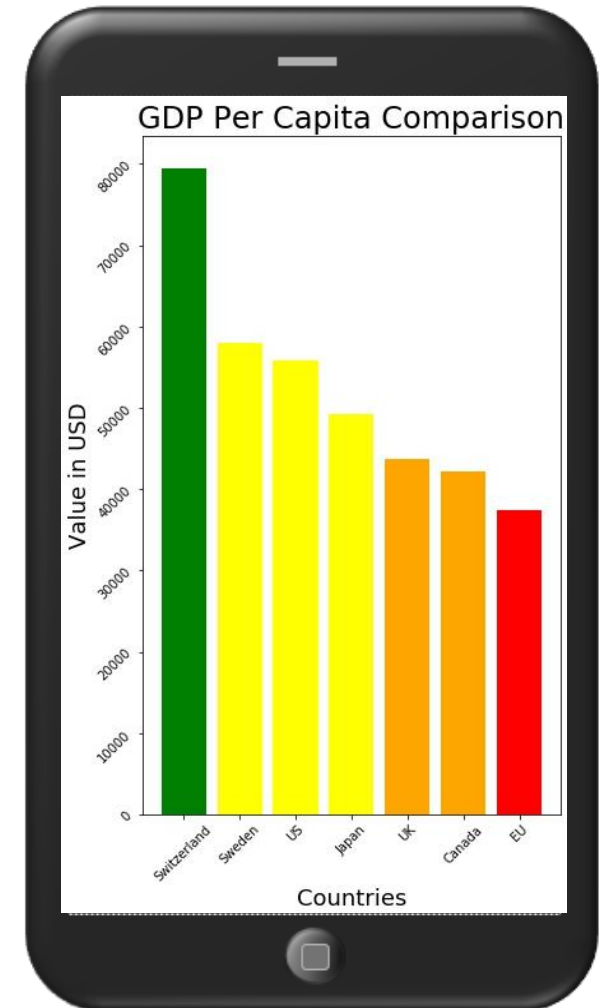
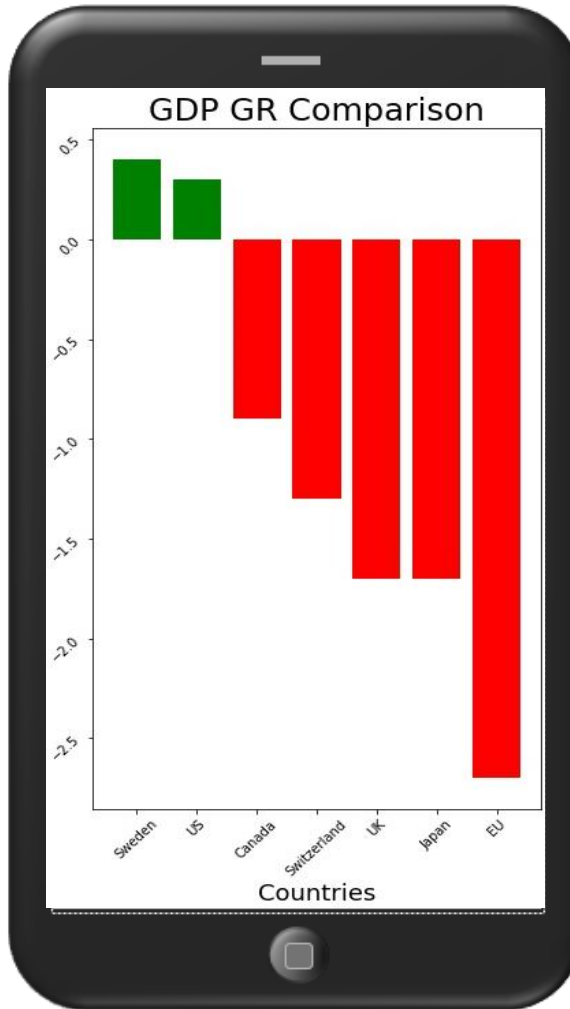
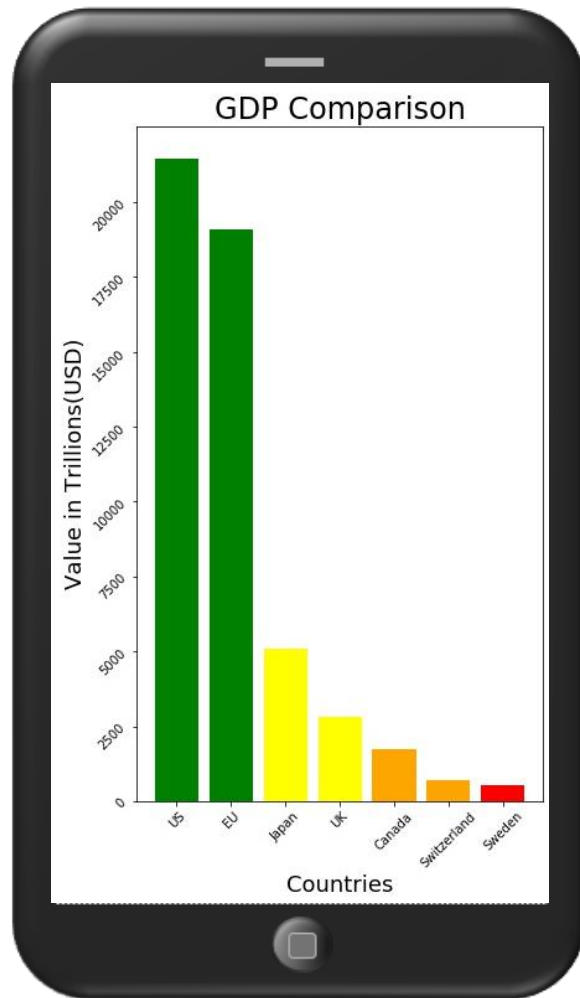
Downwards trend already over

After a sharp decrease in value the US Dollar will slowly increase the value – Good time to buy it ;)

It's all the way up now!

After the storm comes the calm. With a decrease in volatility the index will rise make the investors happy again

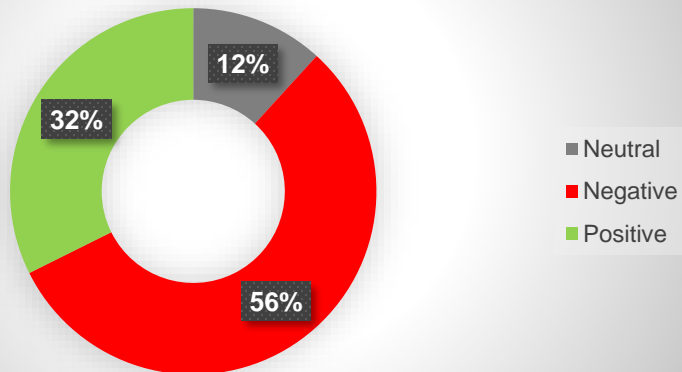
Gross Domestic Product



A social approach to DXY



Sentimental Analysis



What is the sentimental analysis

Sentimental analysis refer to use text analysis, NLP and computational linguistics to study affective states and subjective information.

The importance of the social layer

Collecting opinions from the community of traders and investors who regularly discuss financial market issues.

Bullish? Bearish? Neutral perhaps?

Collecting Bullish Bearish or Neutral opinions on the next short and long term market movements!

Development tools and sources

The logo for Trading Economics, featuring the words "TRADING" and "ECONOMICS" in white, uppercase, sans-serif font, stacked vertically on a dark gray rectangular background.

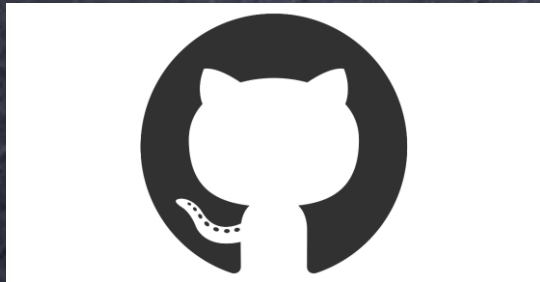
- Web Scrapping
- Language: Python
- Libraries used:
 - Pandas
 - Numpy
 - Matplotlib
 - Seaborn

The logo for Alpha Vantage, featuring a stylized gray line graph with a green dot at its peak, followed by the words "ALPHA" and "VANTAGE" in gray, uppercase, sans-serif font, separated by a vertical line.

- API Connection
- Language: Python
- Libraries used:
 - Pandas
 - Numpy
 - Requests
 - Matplotlib

The logo for Stocktwits, featuring a blue stylized arrow icon pointing right, followed by the word "Stocktwits" in a bold, black, sans-serif font.

- Streaming Data using Apache Spark with Stocktwits API
- Libraries used:
 - Pyspark
 - Stocktweepy
 - OAuth2client
 - Socket
 - TextBlob
 - Googletrans
 - Unicode



THANK YOU

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Ironhack Lisbon | Data Analysis Bootcamp

