Markets and Macroeconomics

Brown Socially Responsible Investment Fund
04/09/2020

Markets and Macro Overview

- **Equity Market (*****)**
  - S&P, Dow Jones, other equity market indices
  - Trends in recent equity market movement
  - Recent IPO activities
- **Credit Market (****)**
  - Fed Funds Rate, U.S. Treasury Yield, other credit indices
  - Recent activity of Fed and impact on credit market
  - Sentiment towards IG Bonds, Non-IG Bonds
  - Recent LBO activities, distressed/default in credits
- **Macroeconomics (*****)**
  - Overall economic outlook (impact of COVID-19)
  - Unemployment rates, manufacturing index, retail index, inflation, other macro indices
- **Other Types of Markets (**)**
  - Forex, Commodity, etc.
- *__International Market (**)__

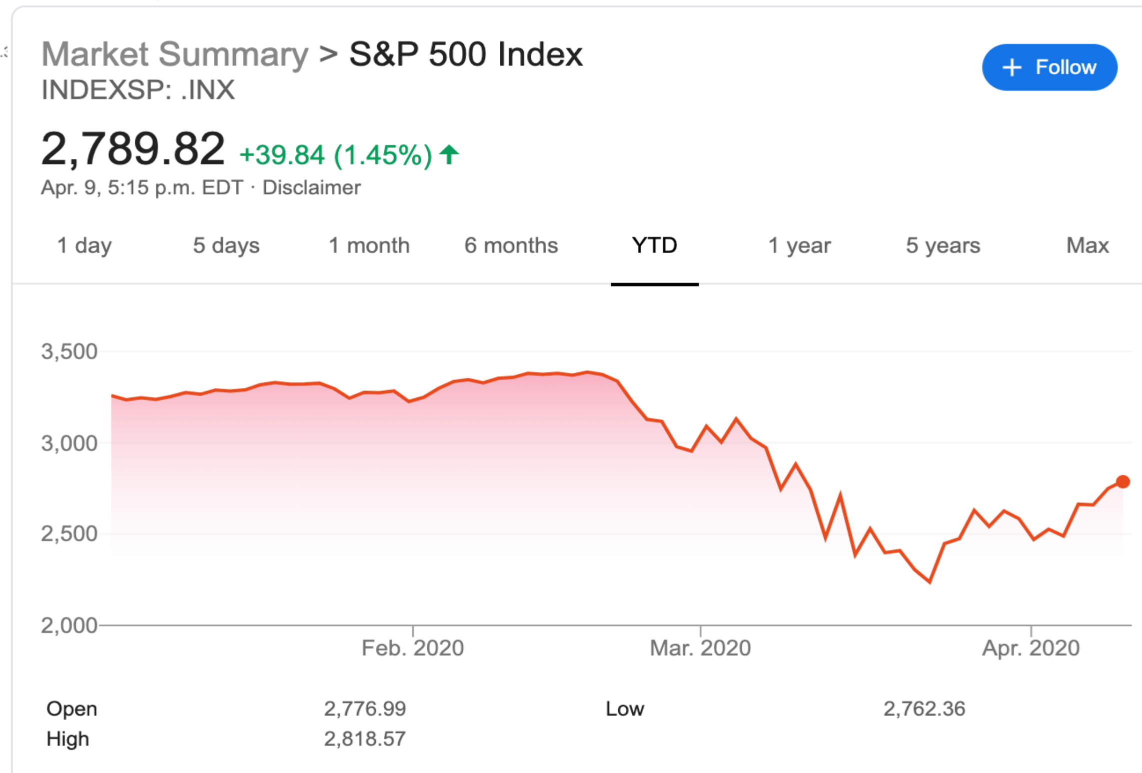
Equity Markets

- **S&P 500, Dow Jones**
  - Basic indicators of how equity markets are doing
  - Speak to their recent trends, and how they're doing relative to historic values
  - Be aware of any industry specific (technology, industrials, etc.) trends that may be affecting the greater economy or have an imbalance affect on these indices as a whole
- **IPOs**
  - Take note of any public offerings by well-known or otherwise interesting companies
  - Speak to the general IPO landscape

Equity Markets (Recent News)

- **S&P 500, Dow Jones**
  - Dow: Been on a steady downward trend since late February (peaked at 28.9K), saw a low of 18.6K on March 23, and has since regained some speed at 23.7K
  - S&P followed more or less the same behavior (with different intermediate values)
  - Influenced by initial reactions to COVID-19, and brought on upward trend by stimulus package and general regaining of consumer confidence
- **IPOs (https://www.iposcoop.com/last-100-ipos/)**
  - Activity very much slowed (only 6 IPOs since 2/28)
    - For some perspective, in 2019 there were 159 IPOs (average of 13.25 per month)
    - Of those 6, 4 were healthcare companies

Equity Markets (Recent News)



Credit Market

- The Important Numbers:
  - **Fed Funds Rate:** The overnight interest rate at which banks lend to each other; it sets the overall tone for other interest rates in the U.S. It is currently at 0.25% (1.75 a month ago)
  - **U.S. Treasury Yield**: The yield on U.S. Treasury Securities, often known as risk-free assets. Most commonly look at **3mon, 10yr, and 30yr** yields. This number reflects investors' appetite for riskless assets. General Rule: The lower the yield → the higher the demand → the more concerned investors are about risky assets. 10yr T-Bill Yield is at 0.72%
  - **LIBOR (London Interbank Offered Rate):** Another benchmark interest rate; before 2021, almost all floating rates are quoted at a spread to LIBOR. Current LIBOR at 1.04%, and if a revolver prices at L+300bps has an interest rate of 3.04%

Credit Market

LIBOR, other interest rate indexes

UPDATED: 04/07/2020

	THIS WEEK	MONTH AGO	YEAR AGO
Bond Buyer's 20 bond index	2.84	2.31	3.88
FNMA 30 yr Mtg Com del 60 days	2.52	2.46	3.76
1 Month LIBOR Rate	0.86	0.81	2.48
3 Month LIBOR Rate	1.32	0.78	2.58
6 Month LIBOR Rate	1.22	0.77	2.63
Call Money	2.00	3.00	4.25
1 Year LIBOR Rate	1.04	0.79	2.75

Credit Market

Basic Math/Relationship of Rates and Bonds

- When rates are high, lenders tend to lend more and borrow tend to borrow less
- When rates are low, borrowers tend to borrow more and lenders tend to lend less

- If rates go down then new bonds have lower coupon, so old ones have higher demand
- If rates go up then new bonds have higher coupon, so old bonds have lower demand

- Inverse relationship between bond prices and bond yields
- Bond prices is calculated as present value of future coupons + present value of par
  - If yield > coupon rate, bond is trading below par
  - If yield < coupon rate, bond is trading above par

Credit Market/Macroeconomic Data

Recent Fed Movements

- In order to fight COVID-19, Fed has **lowered interest rate to near 0** on March 15th and intends to keep it that low in the near term as way to stimulate critical business activities
    - Lower interest rate → cheaper to borrow → allows cheaper financing for businesses and hence more possibility for continuous operation in the current environment
- The Fed is issuing a **$2.3 trillion stimulus package** to strengthen the U.S. economy
    - $500bn in loans to states and municipalities
    - $600bn in loans through the Main Street Program
    - Unemployment benefits, student delay, healthcare package, etc.
- Fed also announced an u**nlimited quantitative easing plan**, which means it will now buy as much government debt as it thinks is needed
    - Higher QE package comparing the financial crisis
    - Increase money supply, provide more liquidity in the market, allows for cheaper borrowing in an already 0 zero interest environment → ultimate goal to further stimulate the economy

Overall Macroeconomics

Common economic data

- GDP (Gross National Product)/GDP Growth Rate: Big picture of the overall economy
- Unemployment Rate: reflect strength of labor market
- Inflation Rate: On track to meet expectation or behind schedule
- Manufacturing Index: Show strength of industrial activities, which comprise a large part of the workforce and economy
- Consumer Index/Discretionary Spending: Show trends in consumer behaviors

Overall Macroeconomics

Unemployment

- Total applicants to unemployment benefits surged to 17 million amid coronavirus pandemic
- Largely due to layoffs from business that suffered significant loss during the crisis, particularly in industries like restaurants and entertainment, leisure, hospitality, and transportation
- Pre-crisis, U.S. was at historical low of unemployment, signifying a strong labor market
- The current surge in unemployment might be relatively temporary, but it really depends on the duration of the virus and speed of recovery of U.S. economy

Overall Macroeconomics

Manufacturing

- Amid the crisis, global manufacturing activities have slowed down and even came to a halt; Global supply chain is largely disrupted
- March manufacturing data shows decline in almost all sectors.
- The key metric -- manufacturing PMI fell to 49.5, fell by 1% from the February data, representing a negative growth (with a PMI < 50)
- New orders were down by 7.6%
- Production was off by 2.6% and entered into contraction category

Overall Macroeconomics

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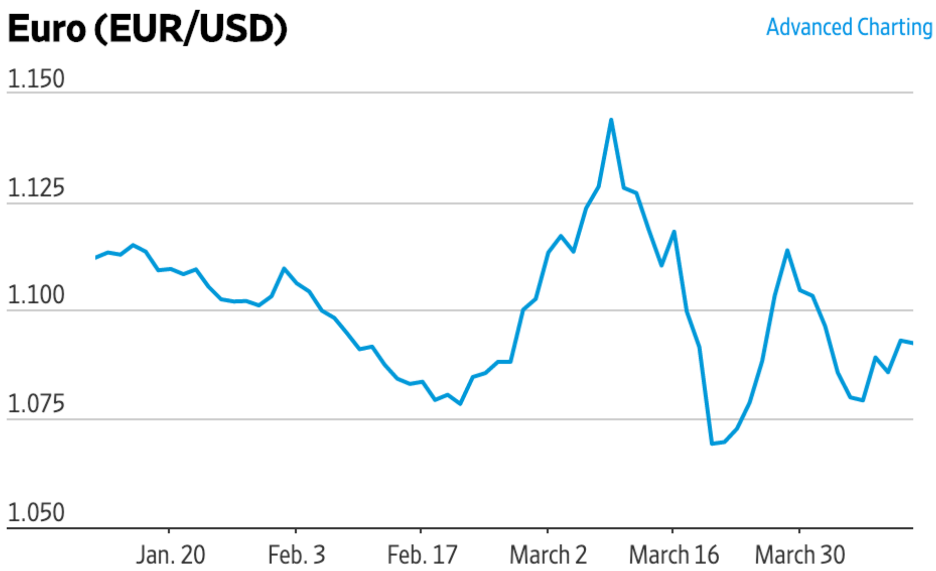
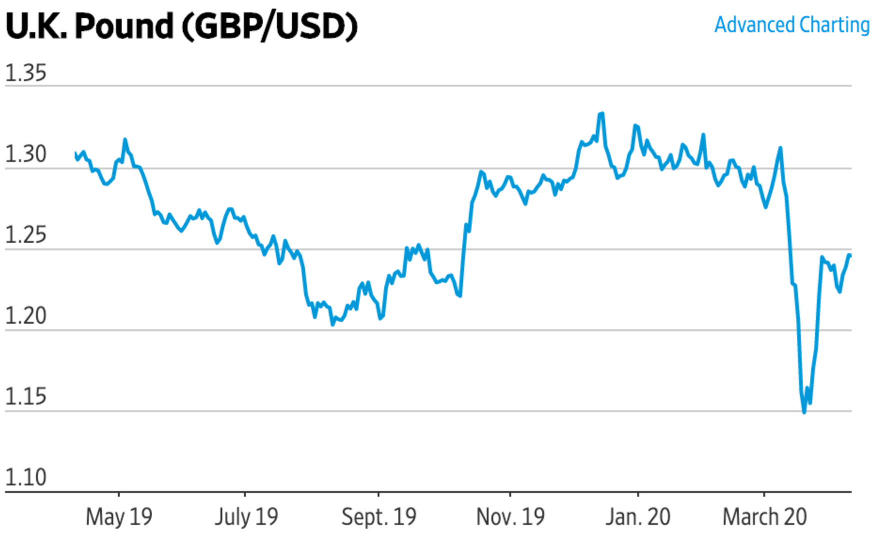
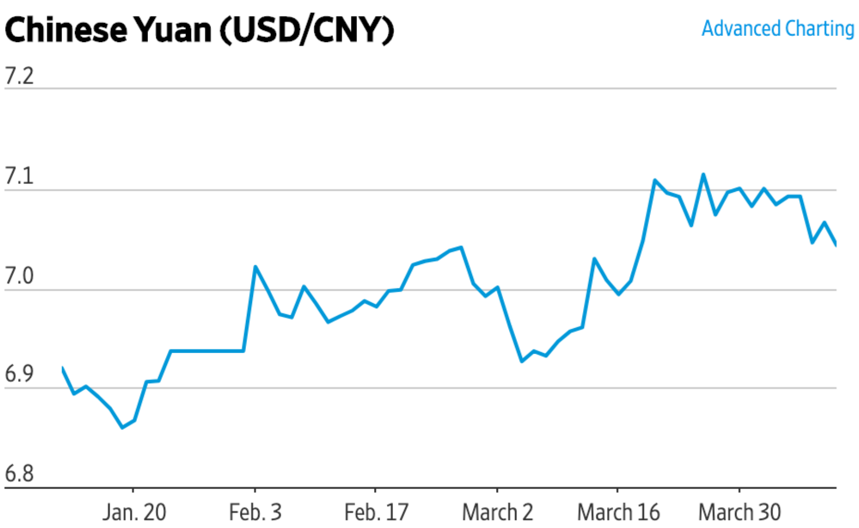
FOREX



Euro (EUR/USD)
Advanced Charting
1.150
1.125
1.100
1.075
1.050
Jan. 20
Feb. 3
Feb. 17
March 2
March 16
March 30

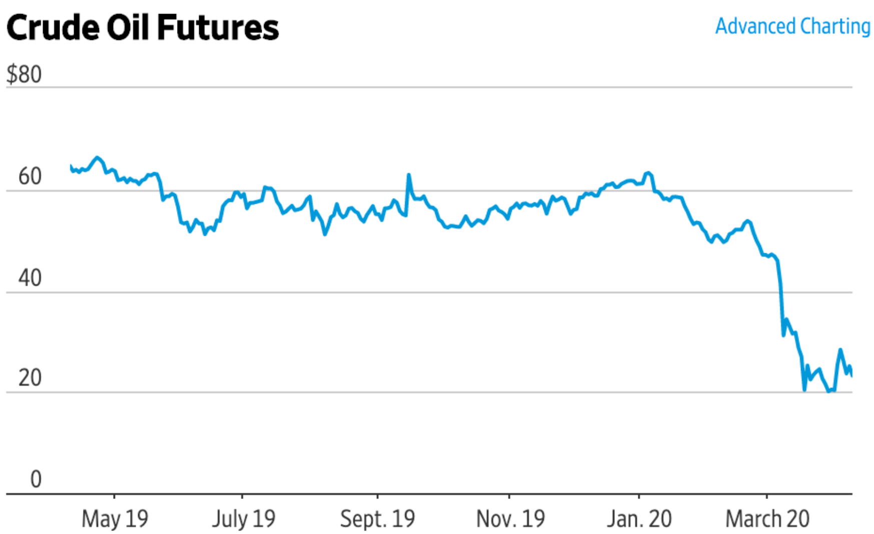


U.K. Pound (GBP/USD)
Advanced Charting
1.35
1.30
1.25
1.20
1.15
1.10
May 19
July 19
Sept. 19
Nov. 19
Jan. 20
March 20



Chinese Yuan (USD/CNY)
Advanced Charting
7.2
7.1
7.0
6.9
6.8
Jan. 20
Feb. 3
Feb. 17
March 2
March 16
March 30

Commodity


Crude Oil Futures
Advanced Charting
$80
60
40
20
0
May 19
July 19
Sept. 19
Nov. 19
Jan. 20
March 20


Copper Futures
Advanced Charting
$3.00
2.75
2.50
2.25
2.00
May 19
July 19
Sept. 19
Nov. 19
Jan. 20
March 20


Gold Futures
Advanced Charting
$1800
1600
1400
1200
May 19
July 19
Sept. 19
Nov. 19
Jan. 20
March 20