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Speaker:
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Lecturer at the University of Greenwich -

Lecture: The Macrotrends & The role of Central Banks. The impact on the Asset Classes

Agenda

1. Economic Cycle & Asset Classes
2. Inflation & its effects on the Economy
3. The role and objectives of Central Banks
4. Monetary Policies: the “QE” and the “QT”
5. Their effects in the Investment Environment for the Bond, Equity & FX Market

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Economic Cycle

The Economic Cycle: it represents the fluctuating state of an economy from periods of economic expansion to periods of contraction

- It is measured with **the Gross Domestic Product (GDP)** of a country or region
- The **GDP** computes the aggregate value of goods and services and is used to depict the overall wealth of an economy
- It was introduced by the President of the US **Roosevelt** only after the Great Depression of **1929**
- A **Higher GDP** usually relates with more well-off citizens

Economic Cycle (2)

- There are **other important elements** used to measure the economic activity such as:
  a) Employment Rates
  b) Inflation
  c) Interest Rates
  d) Consumer Spending
  e) Industrial Production
  f) Consumer Sentiment
  g) Level of productivity

Economic Cycle (3)

There are usually 4 Economic Cycles:

1. **Expansion:** During this phase, an economy will experience strong growth, and interest rates will generally be lower in order to stimulate investment. The overall production level increases, and inflation rates begin to rise as the expansion matures

Economic Cycle (4)

2. **Peak:** The peak is reached when the growth of an economy reaches a plateau or maximum rate. It is usually characterized by **higher inflation** that needs to be addressed by Central Bank to avoid price instability that could have long lasting negative effects

Economic Cycle (5)

3. **Contraction:** The correction occurs through the contraction phase, wherein the growth of the economy slows, unemployment rates rise, and inflation tapers off following a tightening monetary policy by Central Banks or exogenous events (Pandemic in 2020, Twin Towers attack in 2001)

Economic Cycle (6)

3. **Trough:** it is characterized as a low point in the economy from which it can re-enter an expansionary phase. It could be caused by wrong decision by policy makers (hiking interest rates too soon or too much) or protectionist government policies (imposing tariffs & quota)

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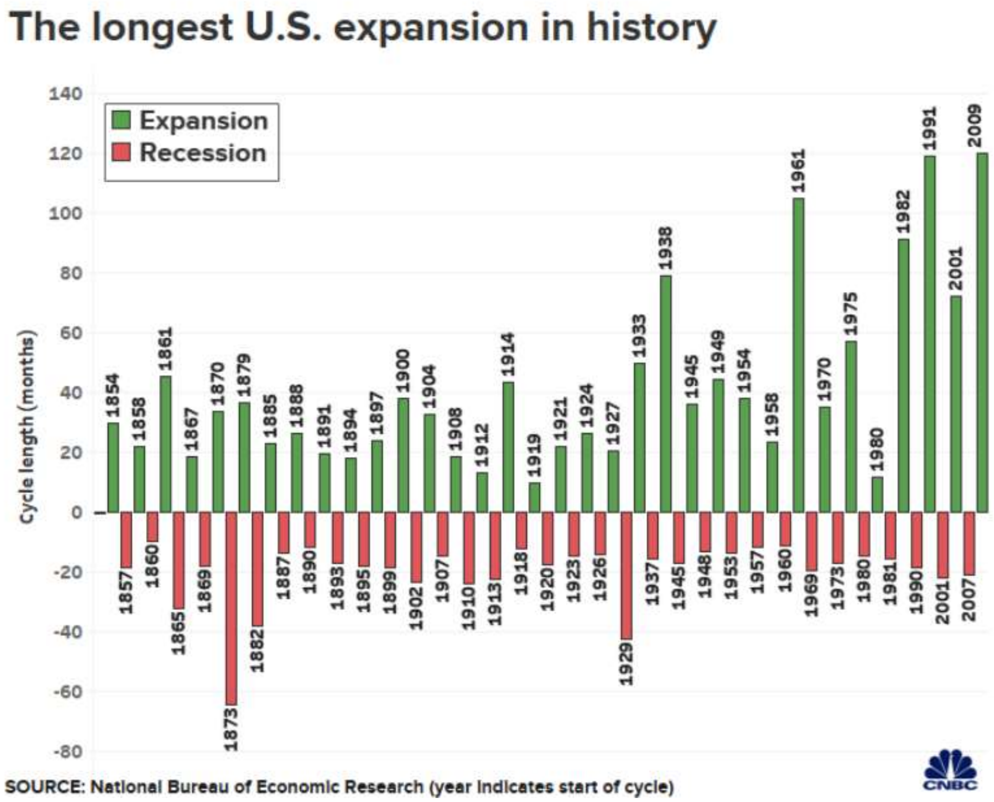
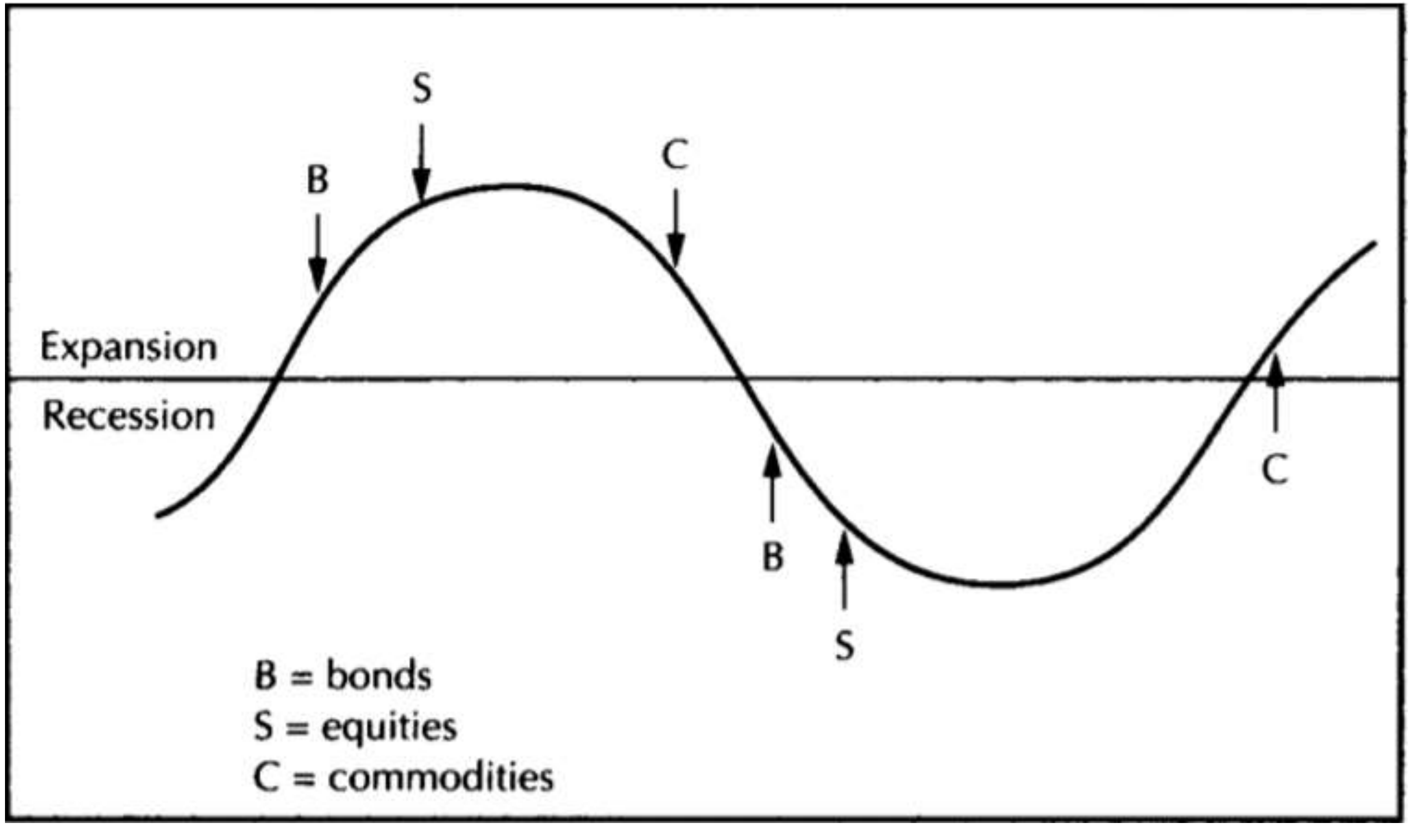
Economic Cycle (7)

Growth Cycles lasts usually **4/5 years** whereas **Recession Phases** only **12/18 months**



Economic Cycle & Asset Classes

This chart shows how **Asset Classes** would behave in a normal **Economic Cycle:**



Economic Cycle & Asset Classes (2)

The previous chart explains **the following Trend** of the Asset Classes during an Economic Cycle:

a) After a strong acceleration of the economy, **Bonds** are the first to come off (and the Yield to spike high) due to the inflation pressures and the increase in the interest rates by the Central Banks to cool off the economy from overheating

b) The rise in rates will weight negatively on **Stocks** that will start losing ground (especially the Tech Sector) even though the Energy, Financials and Industrial will fare better

Economic Cycle & Asset Classes (3)

c) **Commodities** will keep raising as a potential shield from inflation (in particular Oil & Gas), but eventually will pan out due to a weakening economy

d) At this point all the 3 Asset Classes will decline as economy enters a **correction** or even worse a recession phase

e) At this stage the Central Banks will cut interest rates to stimulate the economy and **a new cycle begins**

The importance of Bonds

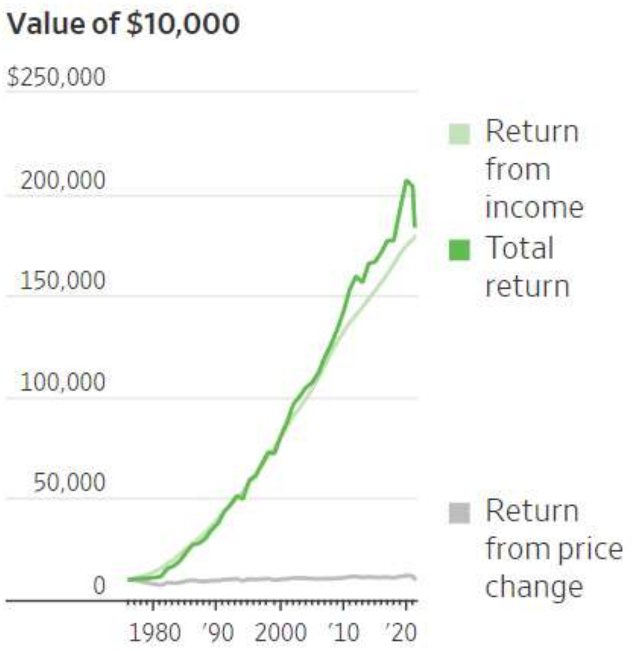
Why Bonds are so important for the Financial Markets and for the Economy as whole?

https://www.wsj.com/articles/april-extends-bond-investors-woes-11651370124

Sovereign US Bonds

Fat Returns generated by Bonds since the 1980s

Returns on U.S. bonds*

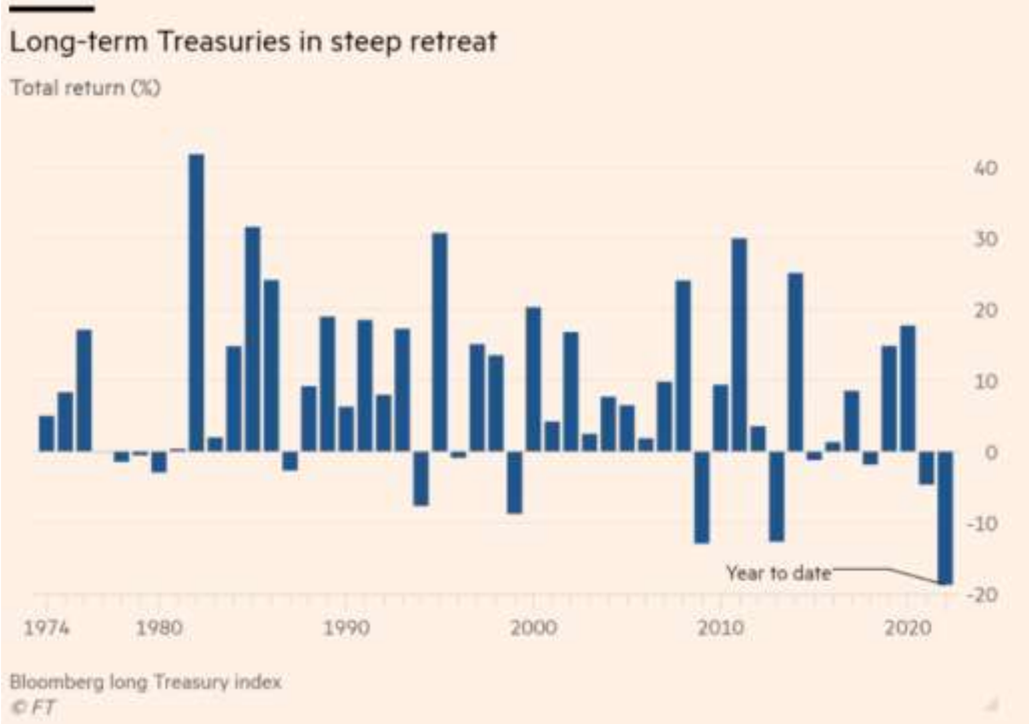


*Bloomberg U.S. Aggregate Bond Index
Note: Return from income includes reinvested coupons and other items such as paydowns; 2022 through April 30
Sources: Baird Advisors; T. Rowe Price

Sovereign US Bonds

Bonds in 2022: Retreat ! The worst since 1842

https://www.wsj.com/articles/its-the-worst-bond-market-since-1842-thats-the-good-news-11651849380#:~:text=How%20much%20more%20of%20a,sharpest%20increase%20in%2022%20years

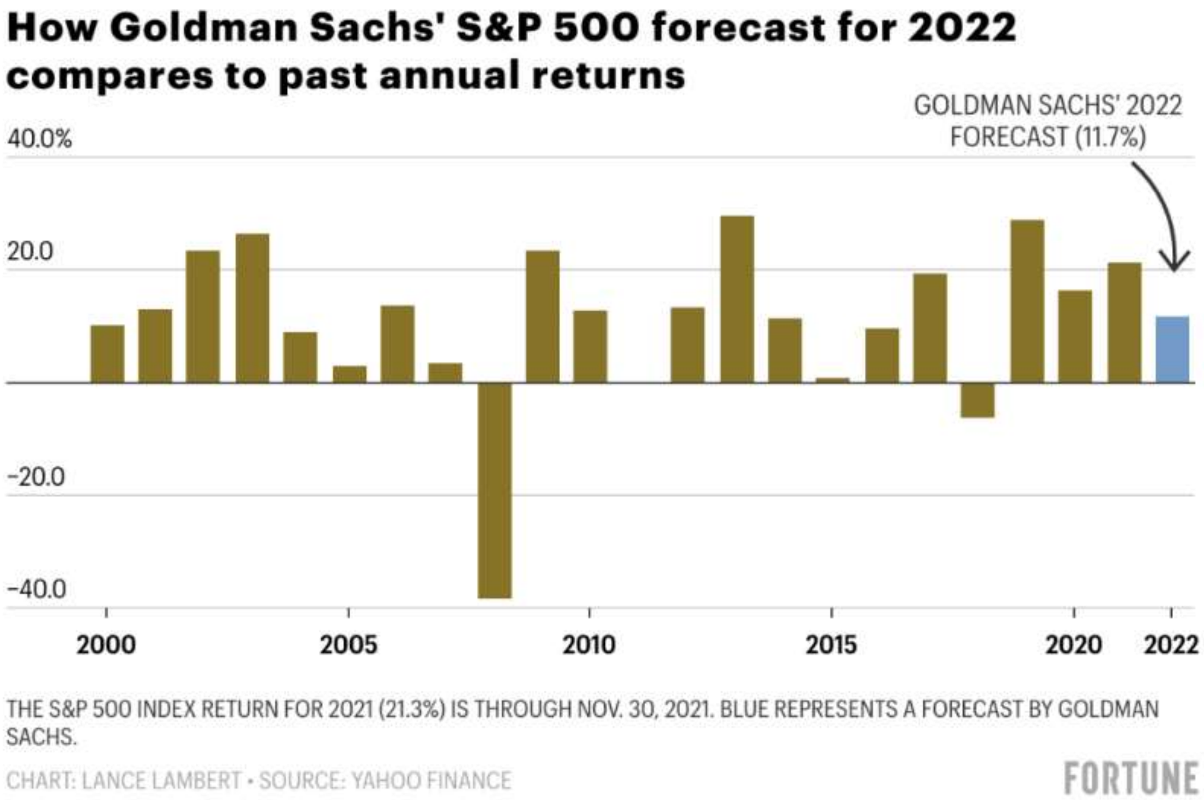


EU Corporate Bonds

Corporate Bonds shared a same destiny the Sovereign Bonds

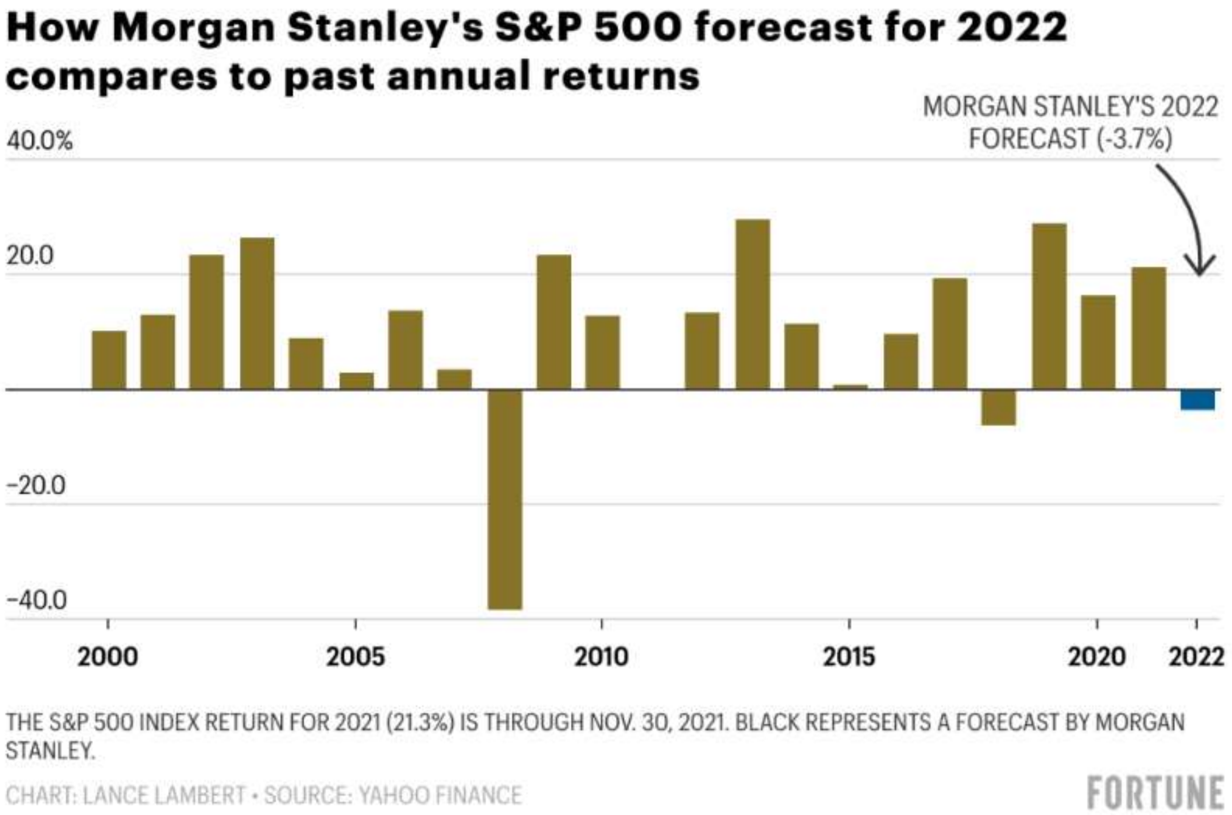
Stocks Expectations

What to expect from the stock market in 2022, according to leading forecast models*: Goldman Sach



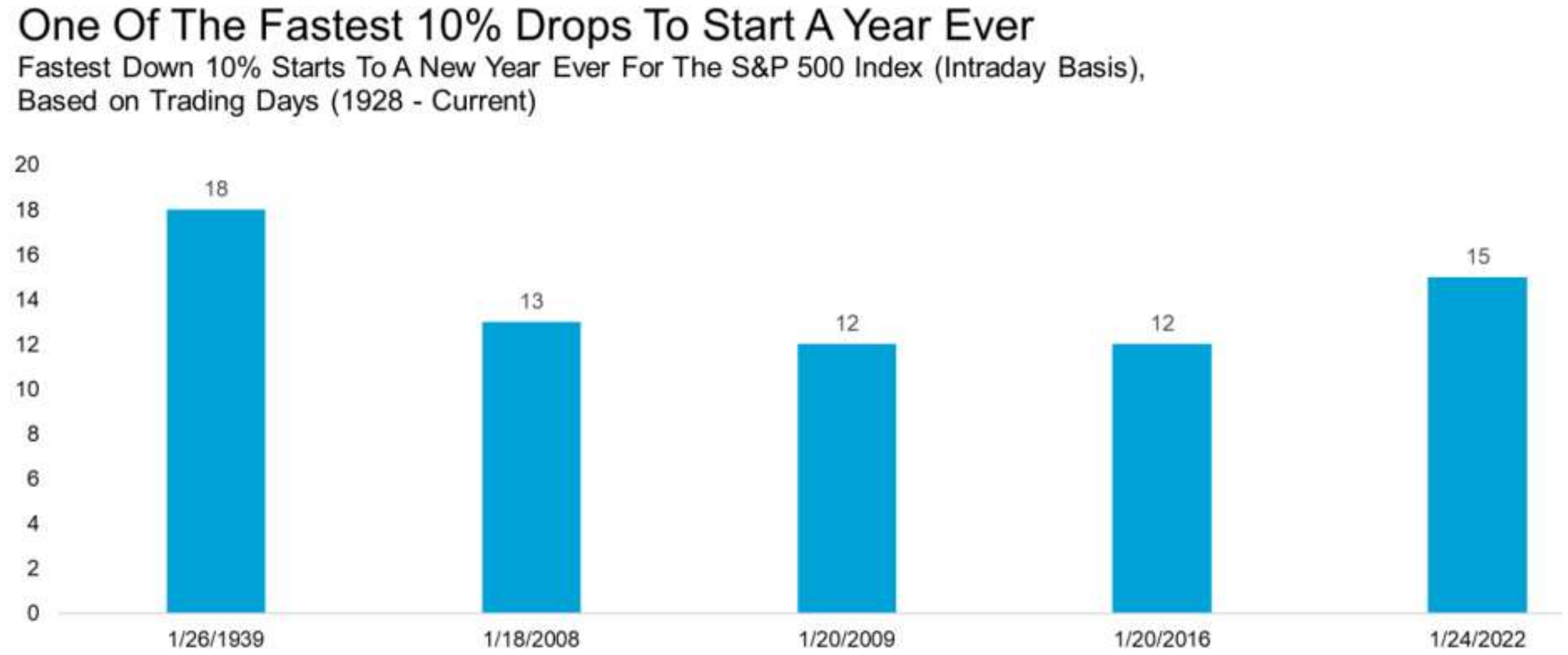
Stocks Expectations (2)

What to expect from the stock market in 2022, according to leading forecast models*: Morgan Stanley



S&P 500 - January 2022

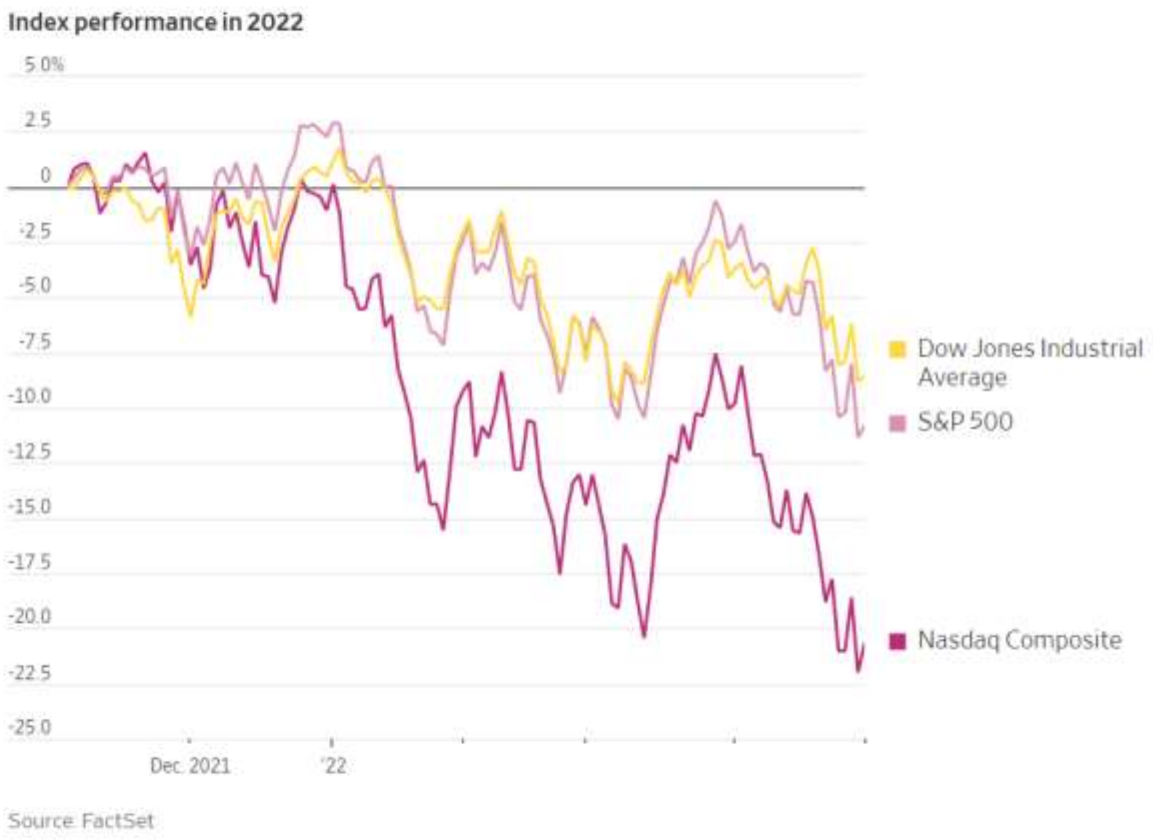
Dream vs Reality



Source: LPL Research, FactSet 01/24/2022
All indexes are unmanaged and cannot be invested into directly. Past performance is no guarantee of future results.
The modern design of the S&P 500 Index was first launched in 1957. Performance before that incorporates the performance of its predecessor index, the S&P 90.

Performance of Stocks as of May 2022-

S&P Performance as of May 2022



Economic Cycle & Interest Rates

Interest Rates are extremely important in understanding the health of the economy and how the different asset classes might perform:

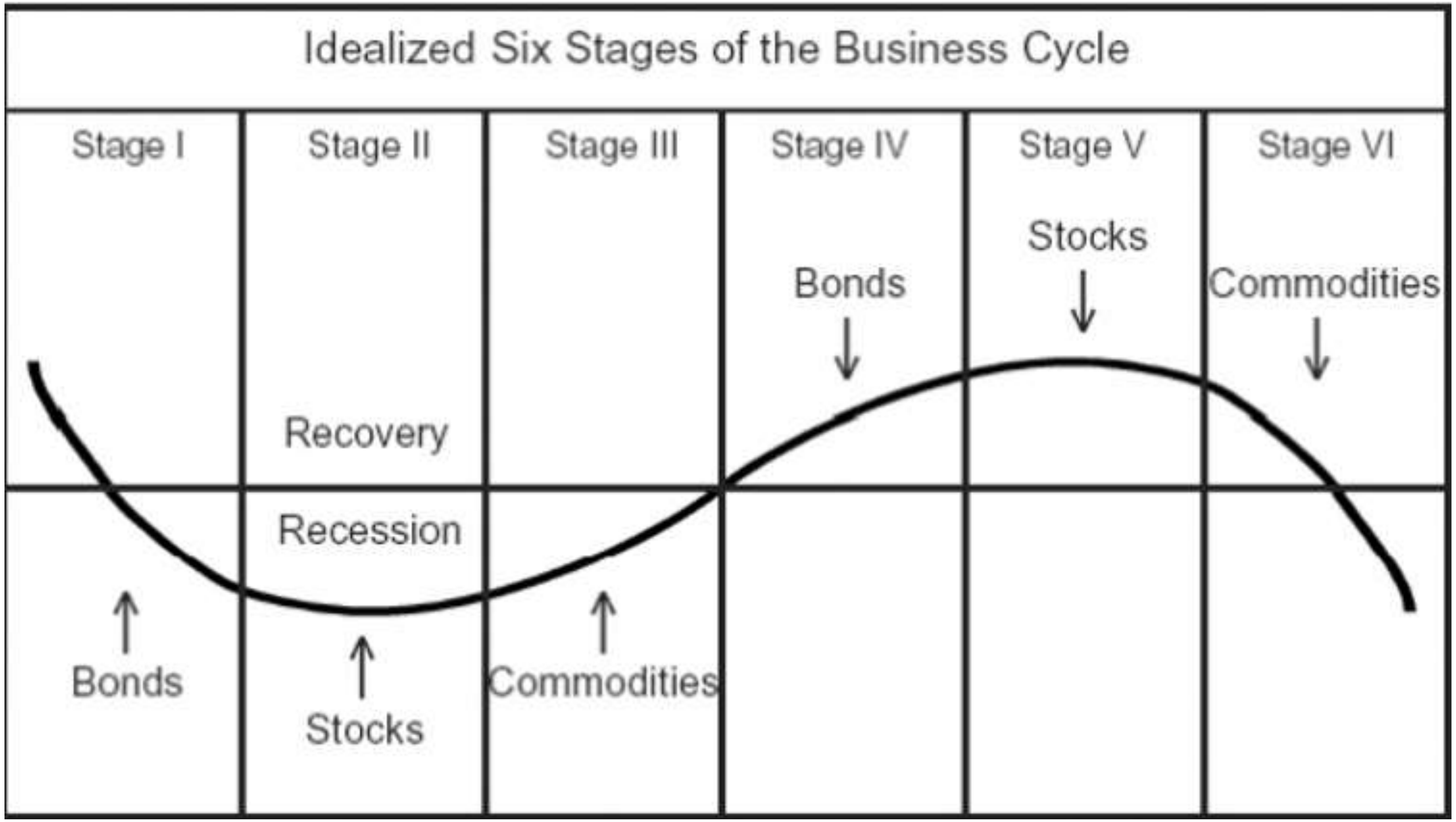
1. **Expansion Phase:** During this situation inflation will overheat and Central Bank needs to intervene by raising interest rates to avoid price instability
   a) **BONDS** will fall and **YIELDS** will rise
   b) **STOCKS** will rise
   c) **COMMODITIES** will rise

Economic Cycle & Interest Rates (2)

2. **Contraction Phase:** High level of interest rates will eventually lower the aggregate demand and cause a contraction or a possible recession of the economy that will bring down also the prices and the inflation
   a) **BONDS** will rise and **YIELDS** will fall
   b) **STOCKS** will correct
   c) **COMMODITIES** will fall

Business & Market Cycles

A table of the Business & Market Cycles



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Economic Cycle & Interest Rates (2)

1. **Phase 1:** Economic Contraction: Bonds ↑ Stocks ↓ Commodities ↓
2. **Phase 2:** Recession becomes stronger: Bonds ↑ Stocks ↓ Commodities ↓
3. **Phase 3:** Economy starts picking up: Bonds ↑ Stocks ↑ Commodities ↑
4. **Phase 4:** Economy becomes stronger: Bonds ↓ Stocks ↑ Commodities ↑
5. **Phase 5:** Economy reaches its pick: Bonds ↓ Stocks ↓ Commodities ↑
6. **Phase 6:** Economy starts declining: Bonds ↓ Stocks ↓ Commodities ↓

The importance of Inflation

Inflation refers to a general rise in the level of prices in the economy; it measures how much more expensive a set of goods and services has become over a certain period, usually a year. It is caused by:

a) **Internal Factors:** excess in public spending by the State or excessive money supply by the Central Bank

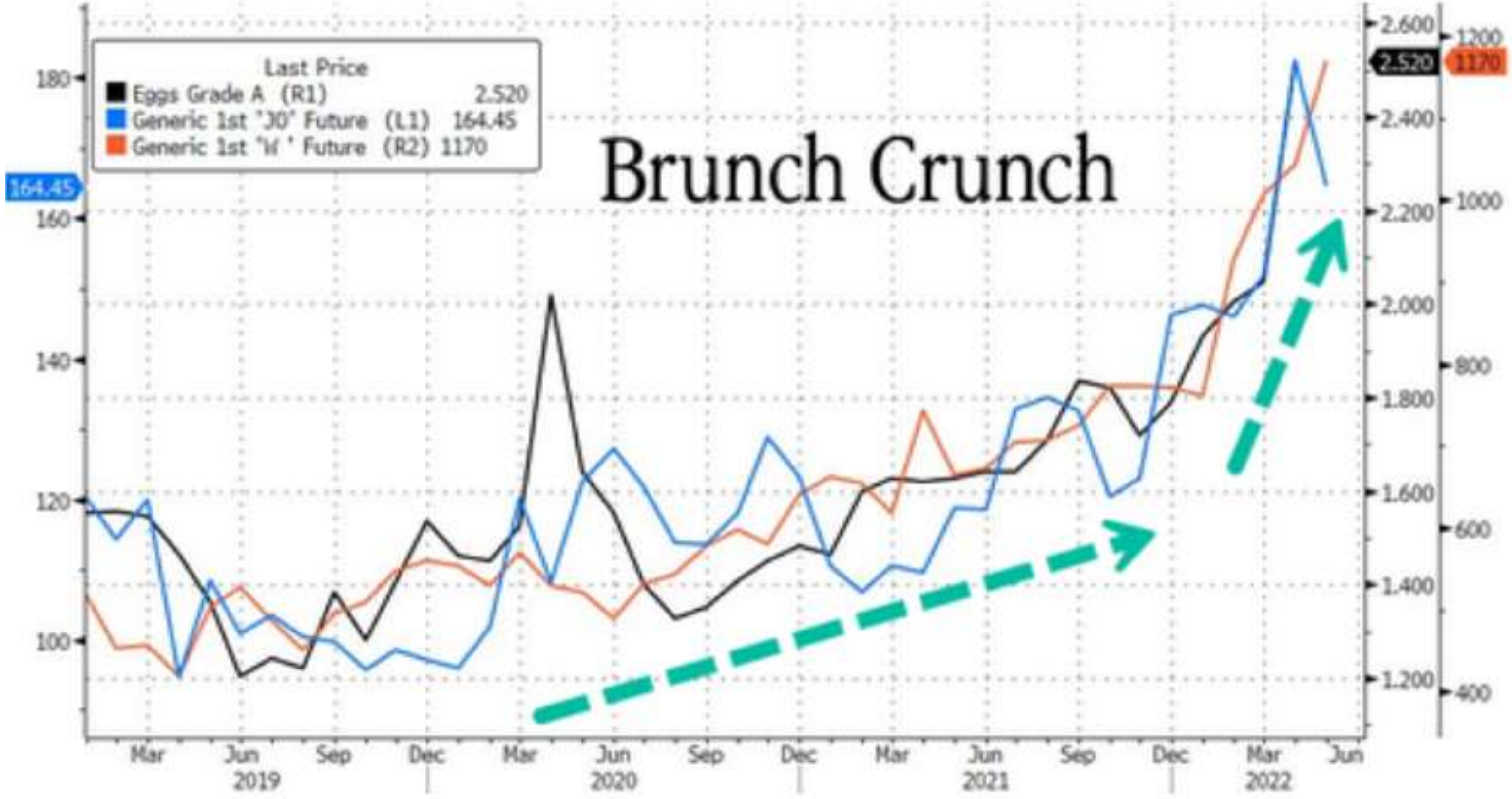
b) **External Factors**: excess demand for goods and services compared to supply or an increase in production costs, especially related to commodities and wages

The Egg's Inflation

Do you like eggs? Here you go **the Egg Inflation**

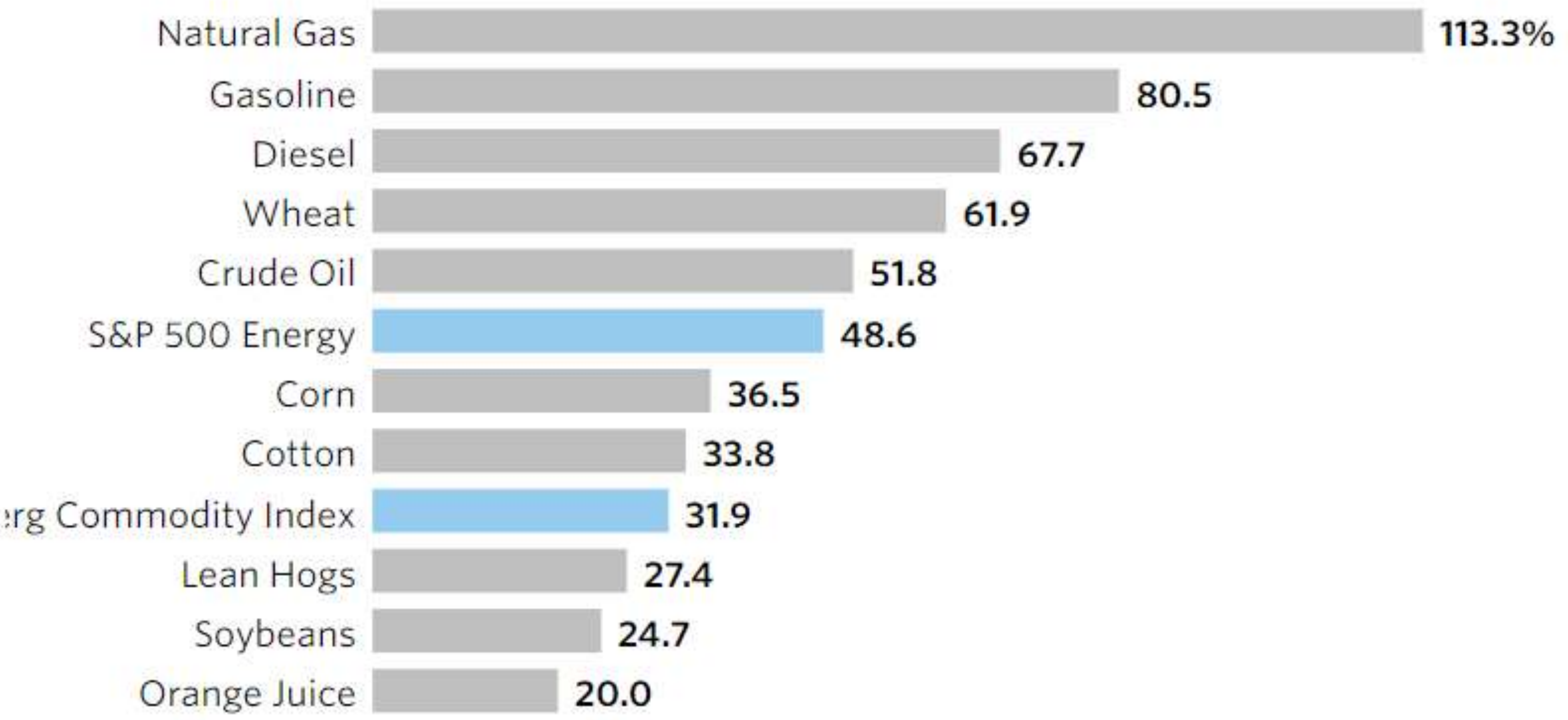
Costly Brunch

And what about **Breakfast**?



Energy ? Powerful Energy

Not to mention the **Energy Sector**?



The importance of Inflation (2)

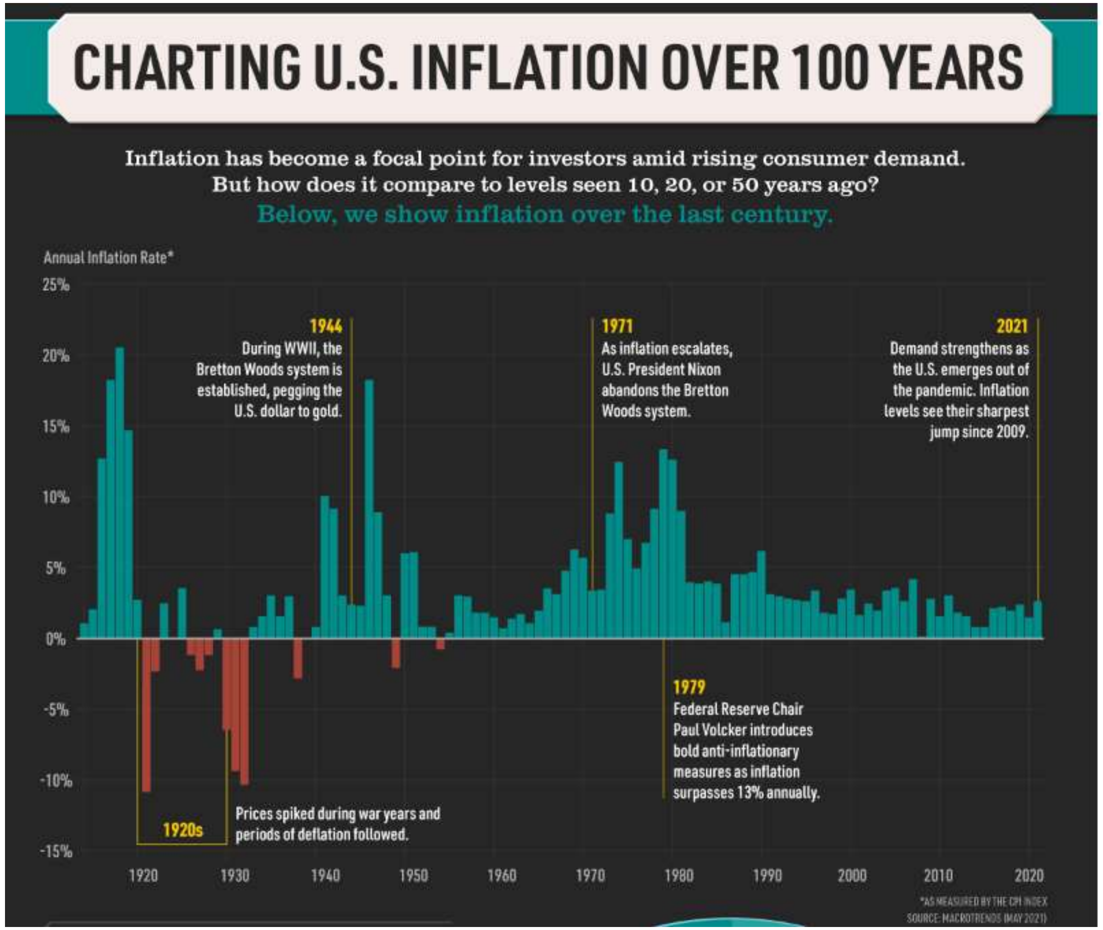
- **Inflation** has been, at least until modern times, **one of the main causes of recessions (Oil Price according to others):** price stability is the mantra preached by all central banks and to achieve it they are willing to raise interest rates (which in turn cause slowdowns growth and, sometimes event strong recessions)

- It is **a Tax** to which everyone is subject because it erodes the purchasing power of every single citizen

- **The Bond Holders** are those who pay the greatest consequences because they receive fixed payments over time (in addition to the fact that the price of the Bonds tends to fall)

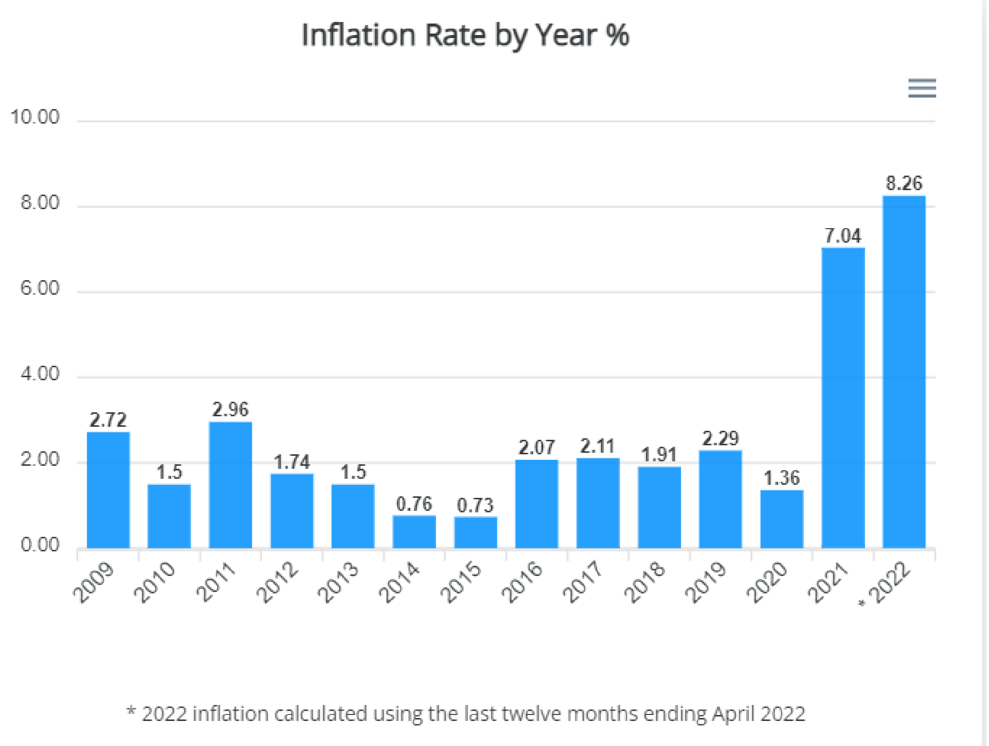
The importance of Inflation (3)

The Inflation Chart of the last 100 Years



The importance of Inflation (4)

Inflation has played a marginal role and has not raised many concerns in the last decade, due to **globalization and technological innovation** that kept prices and wages in check



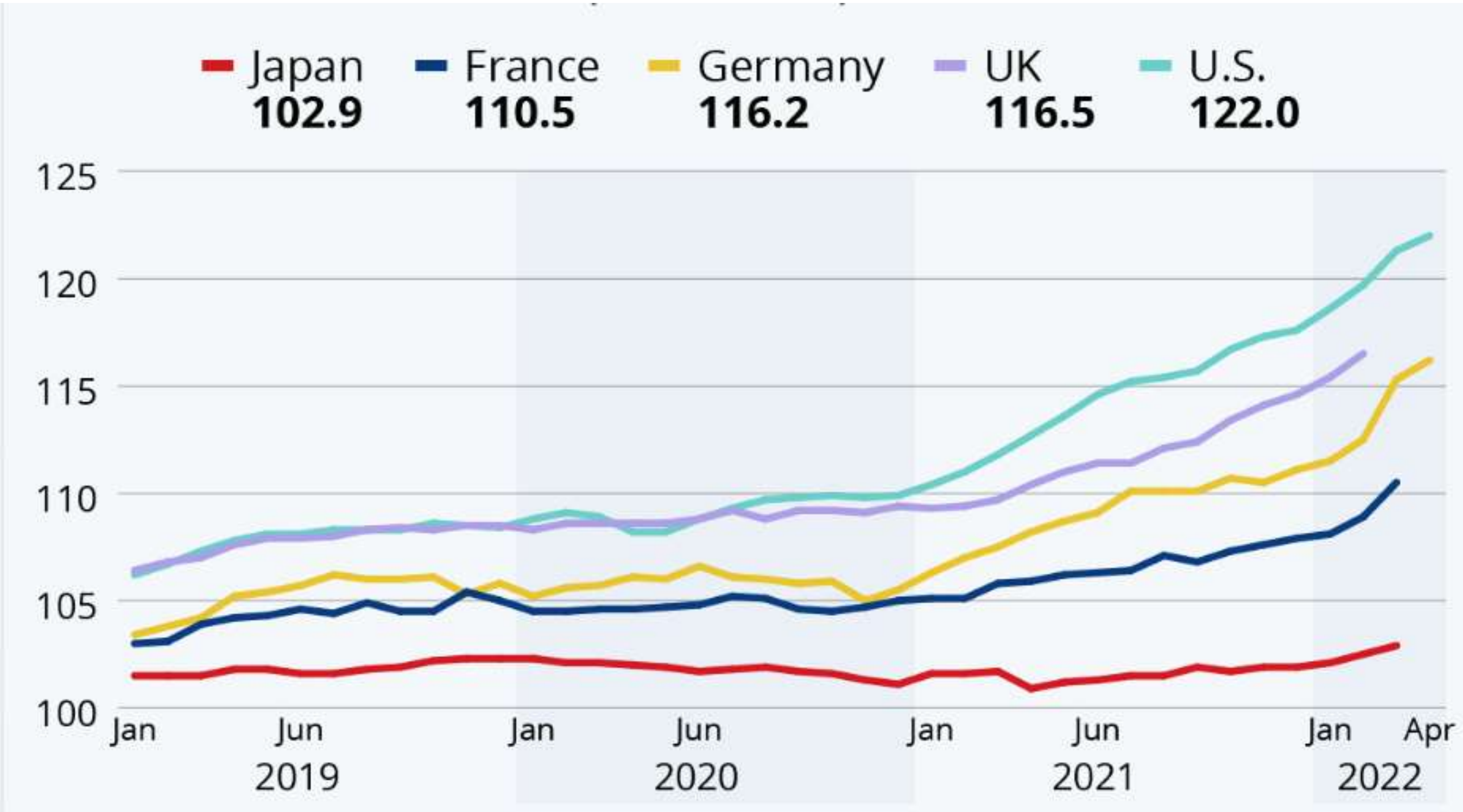
The importance of Inflation (4)

- Things have changed since March 2020: **the Expansionary Policies implemented by Governments** (Fiscal Policy and MMT, helicopter money, right?) **and Central Banks** (QE ad infinitum) around the World to fight the Pandemic Crisis are generating inflationary pressures

- In **2022 Inflation** has reached so far levels not seen in the last decades in the US, the UK and the EU area as measured by the CPI (Consumer Price Index)

Inflation at beginning of 2022

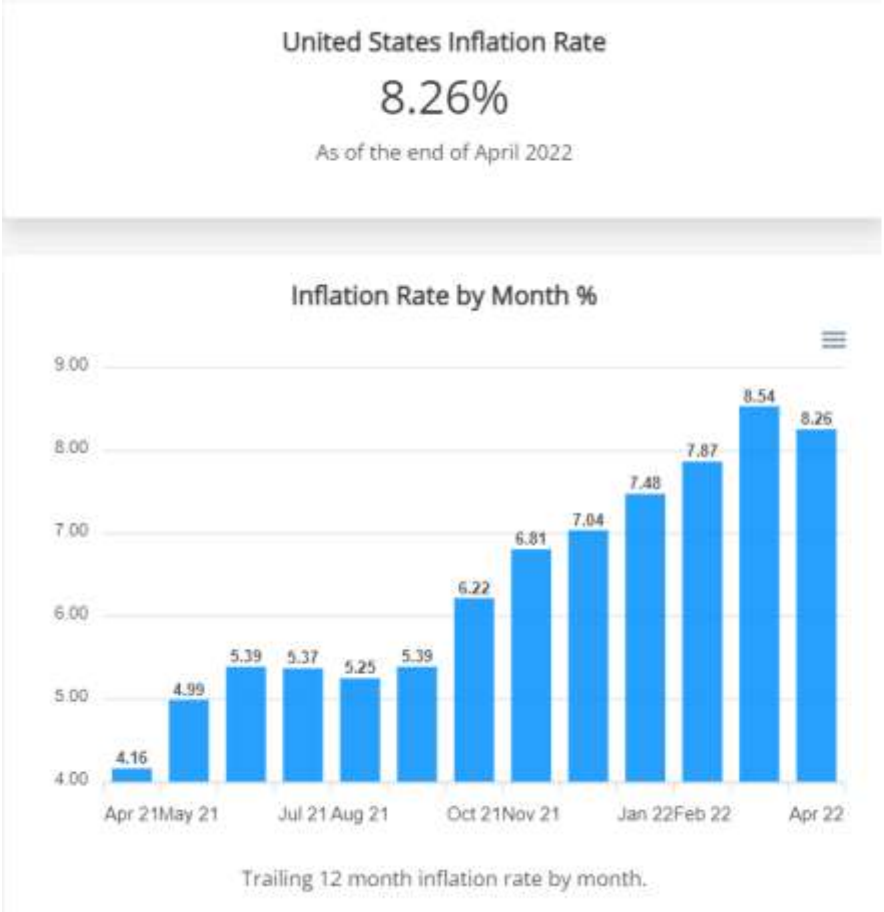
Highest Level of Inflation in the last 40 years in many Countries



2015 prices=100. All items, latest available.
Source: OECD

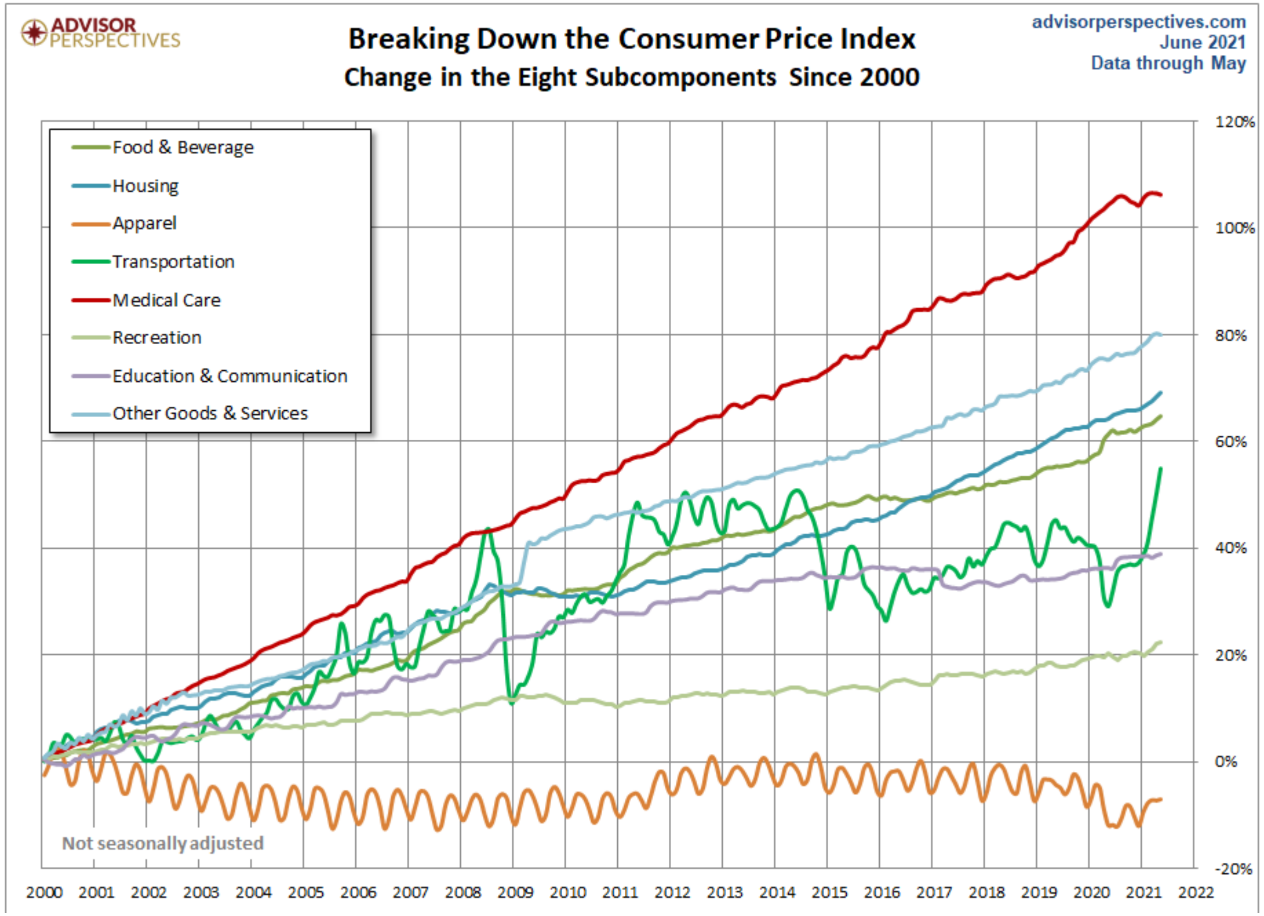
Inflation in the US

Inflation hit particularly bad the US



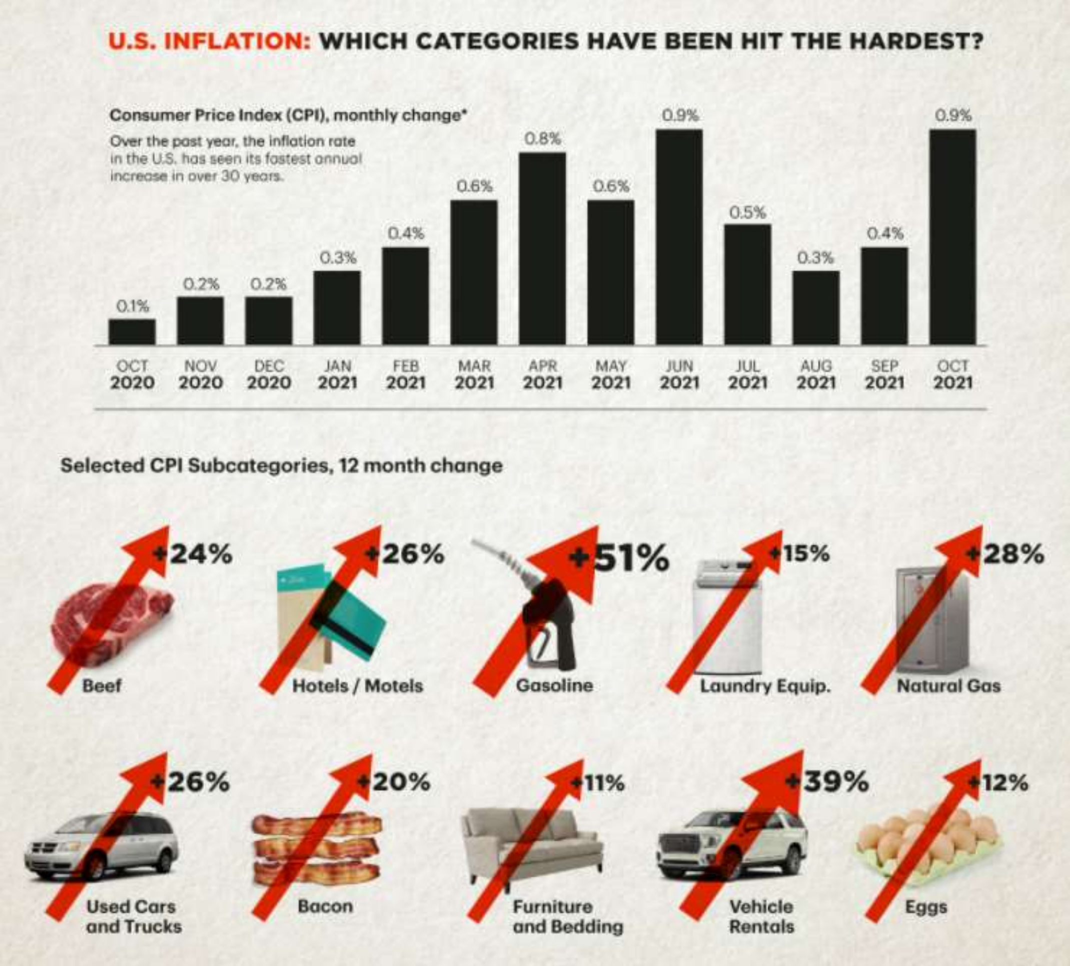
The composition of Inflation

Breakdown of the CPI since 2000



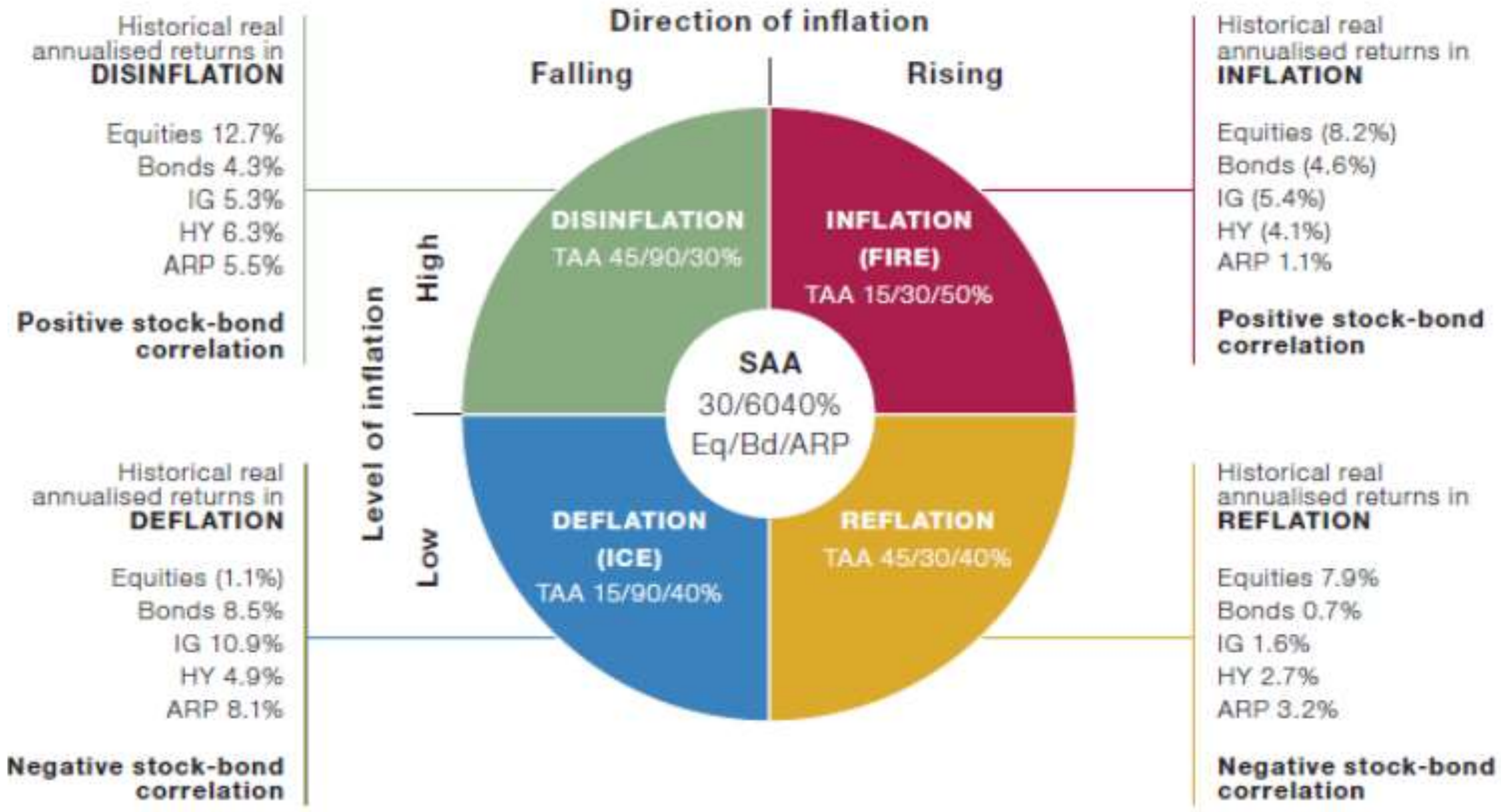
The composition of Inflation (2)

Sectors that have been hit the hardest at the end of 2021



Inflation and Asset Classes

The Prism to understand the **relationship between Inflation and the Asset Classes performance** over time



Monetary Policy

Monetary Policy: strictly speaking it is the management of money and interest rate:

- **Central Banks** (together with the Government) have the role to create the perfect conditions for economies to grow at a constant rate without risking to get into an inflation spiral (or getting into deflation) that creates uncertainty and constraints

- They look like a **greenhouse**: too much water and plants will suffer (an aggressive rise in the interest rate and economy growth might be negatively affected) too little and plants will die (inflation will get out of control hitting very badly the economy)

Monetary Base

The Monetary Base: it is the quantity of notes and coins in private hands held by the banking system

- **Overnight interbank interest rate**: it is the interest rate on loans of reserves from one bank to another
- **The Official Interest Rate:** it is called the Main Refinancing Rate in the euro area, the Bank Rate in the UK and the Federal Funds Rate target in the US
- **The Overnight Bank Rate**: it is called SONIA in the UK, the Federal Funds Rate (FFR) in the US and EONIA in Europe – euro overnight index average

Price Stability

Price stability: It is the low and stable inflation and it is increasingly viewed as the most important goal of monetary policy

Why is it so important ?

1. **It improves transparency of relative prices** which facilitates the efficient allocation of resources
2. **It makes easier for people to plan the future**
3. It helps **redistribute wealth and income** in a more fair way

Price Stability (2)

There are other important effects related to **Stability in Price:**

4. **Reducing distortions of tax and social security systems**: taxes are usually not indexed, meaning that even though someone's real income has not increased he will still have to pay tax
5. **Preventing arbitrary redistribution of wealth and income**: high inflation is associated with high uncertainty which leads to unintended wealth transfers between creditors and debtors
6. **Reducing inflation risk premia in interest rates**: If investors are uncertain about the general price development, they will ask for an inflation-risk premium to compensate

Central Banks Goals

Central Banks, other than ensuring stability in prices, have also other Goals:

1. **Full employment** (the FED)
2. **Interest Rate Stability**
3. Economic Growth
4. Stability of Financial Markets
5. Stability in Foreign Exchange Markets

Ultimate Role of Central Banks

The ultimate role of Central Banks:

- The long-run plan is to have a **stable policy aimed at keeping inflation low** (and indirectly foster economic growth and low unemployment)
- In the short run it might be tempting instead to **implement expansionary policies** such as new Quantitative Easing (or flooding markets with cheap money) to stimulate the economy
- ----------→ However, this attitude might lead to future unintended consequences that can lead to big economic shocks with massive social impact

Central Banks in the World

The most important Central Banks in the world

1. The Federal Reserve (FED)

- It was created on December 23, 1913, with the Federal Reserve Act, after several financial crisis pushed the Us Government to create a central control of the monetary system
- Structure of the Federal Reserve System (Fed): it is made out of 12 Federal Reserve Banks (**FRBs**), a Board of Governors (**BG**) and a Federal Open Market Committee (**FOMC**). The President is Jay Powell, chosen by Trump

Central Banks in the World (2)

The FED has 3 main duties:

a. **Keep stable prices:** it means an inflation close to 2% "when consumers and businesses don't have to worry about rising or falling prices when making plans, or when borrowing or lending for long periods"

b. **Promote full employment**: it means using in the most efficient way all the available labor resources; in reality an unemployment rate between 3%/4% is very close to full employment (it is important also to consider the participation rate)

c. **Moderate long-term interest rates:** it means keeping interest rate at neutral level according to the economic situation

Central Banks in the World (3)

The FED can achieve its goals using:

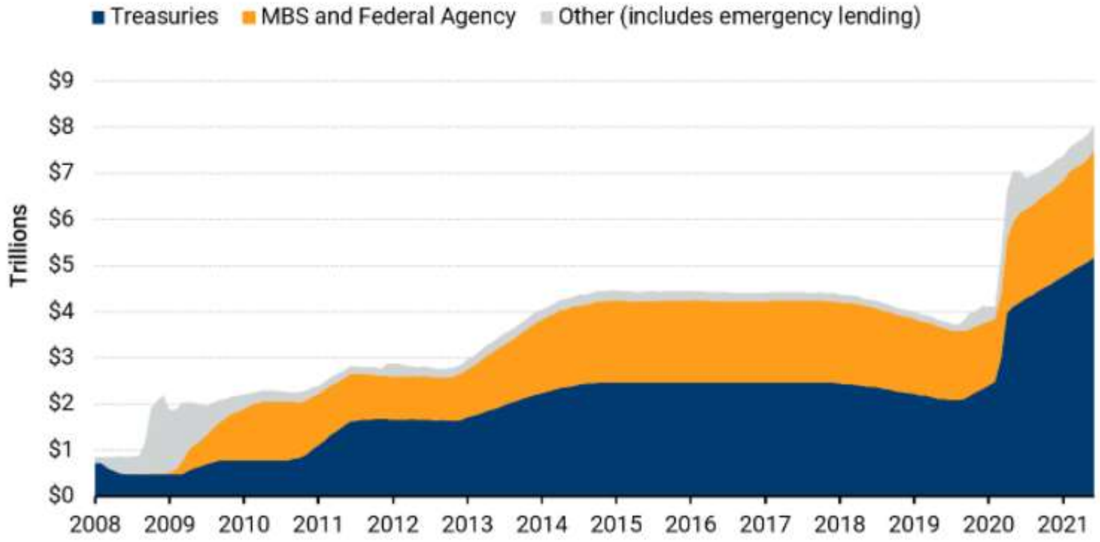
a. Open Market Operations
b. the Discount Rate
c. the Reserve Requirements

The FED and the QE

The FED embarked in an aggressive QE Programme in **March 2020** to counter balance the negative effect of the Pandemic induced recession. It has been buying $120 Billions of Asset every month

FIGURE 1

Federal Reserve Balance Sheet: Assets

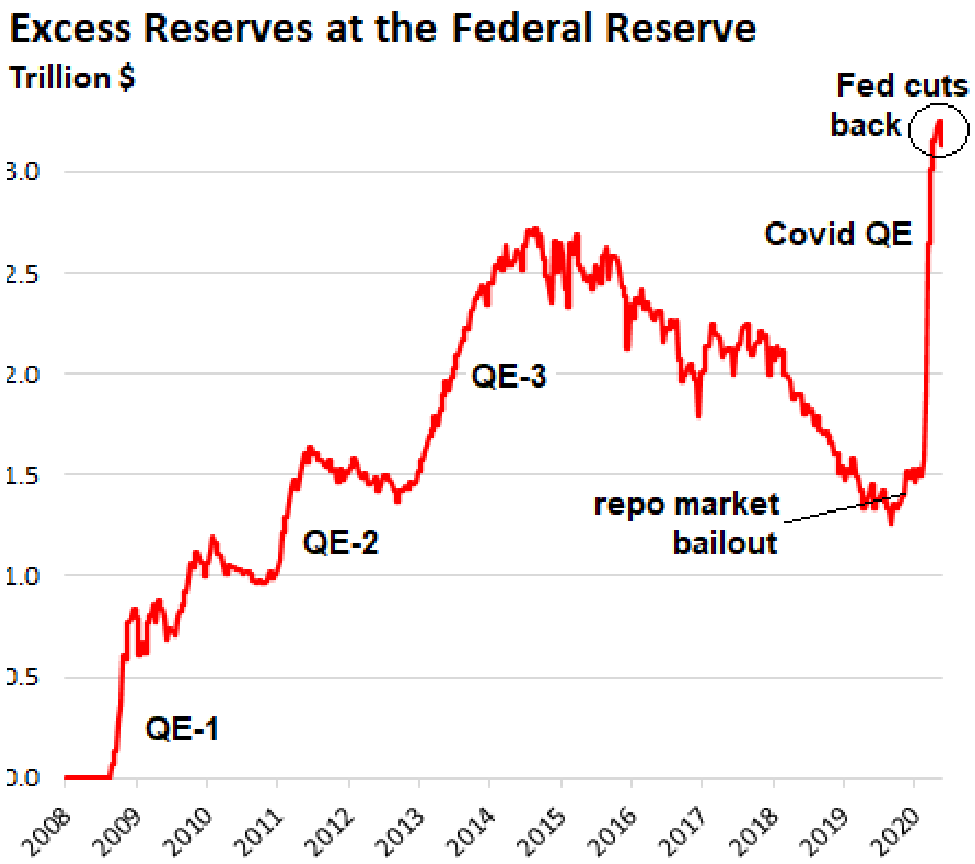


Source: Federal Reserve H.4.1 via Haver Analytics

Hutchins Center on Fiscal & Monetary Policy at BROOKINGS

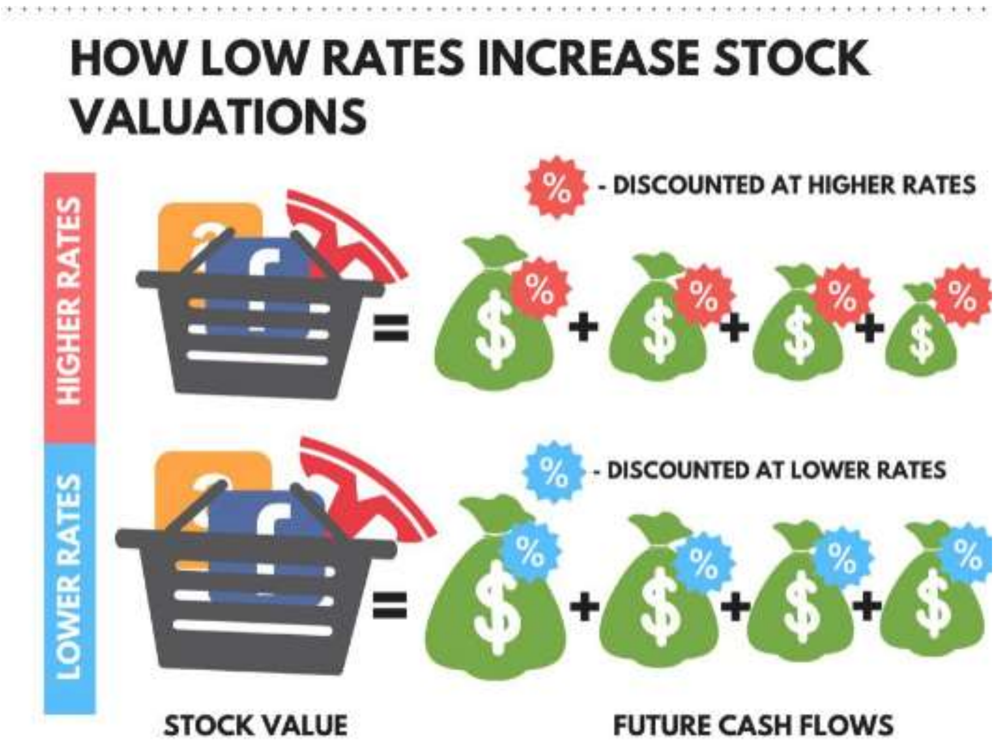
QE and the Economic Phases

The several QE in the last decade and the different economic phases



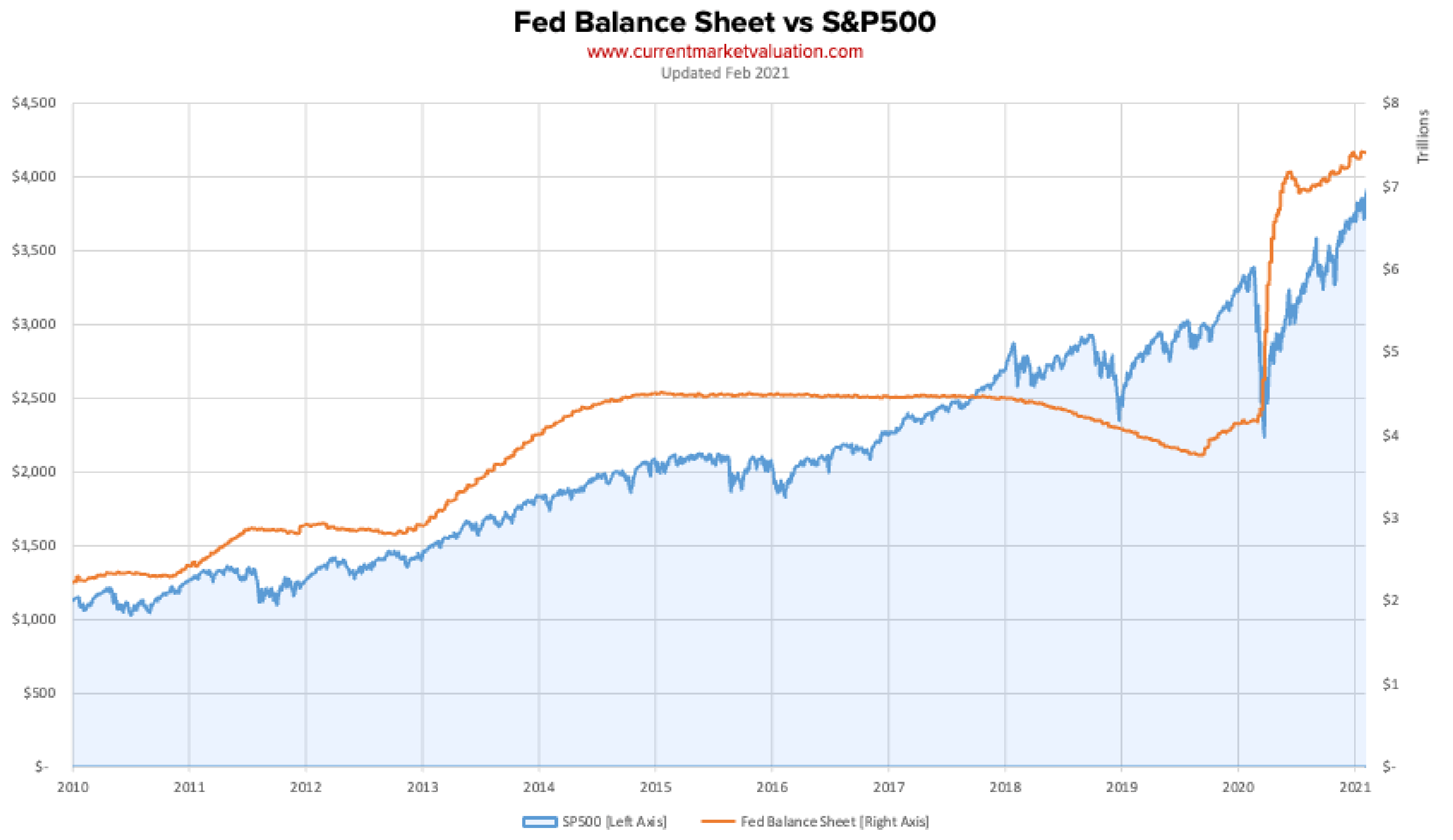
Lower Yields and Higher Stock Prices

The most remarkable effect of the QE is **to lower the Yields of the long term bond** so that companies and individuals are more keen to take “free money” and invest. That’s good for stocks



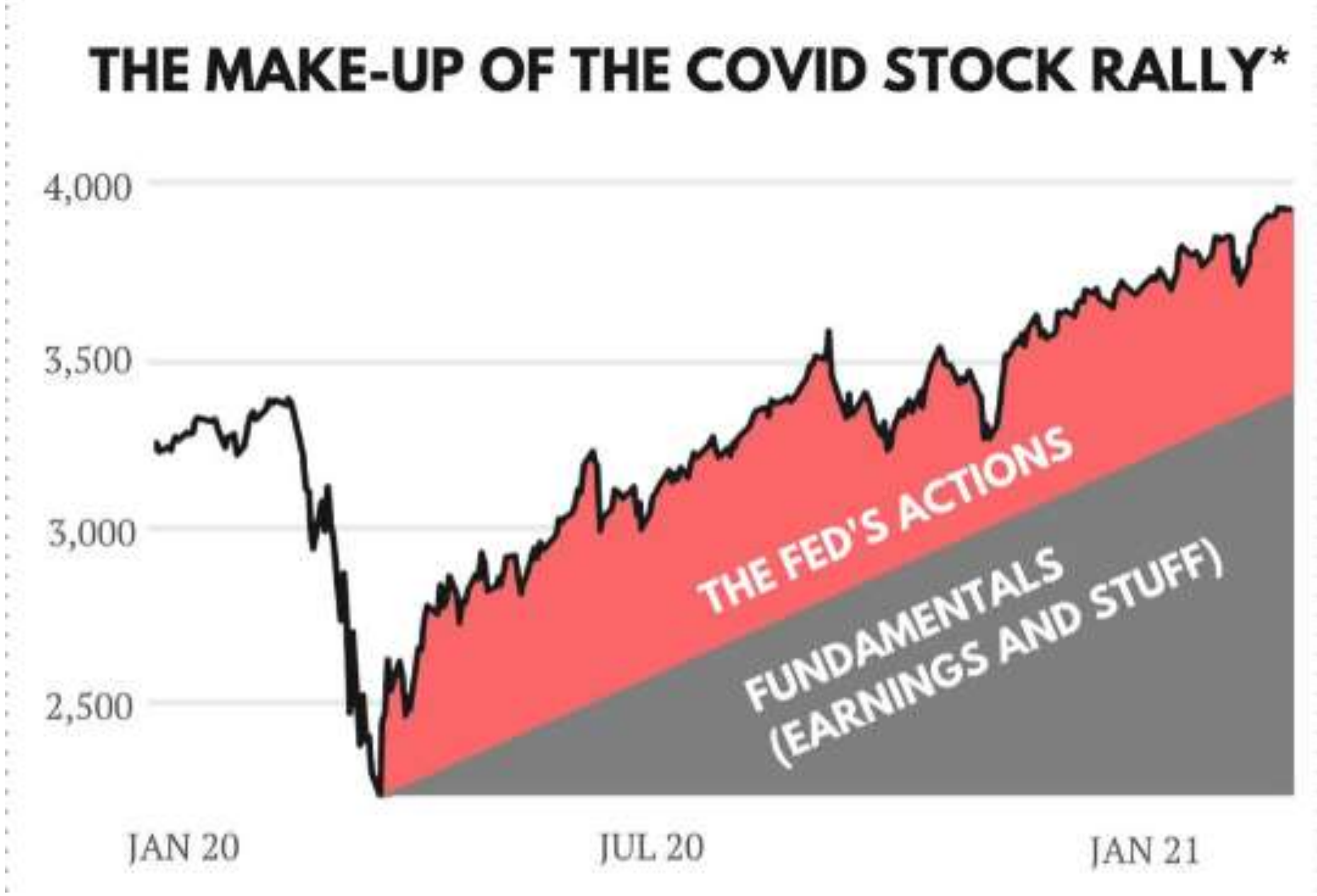
S&P 500 & QE

Do you spot any similarities here ?



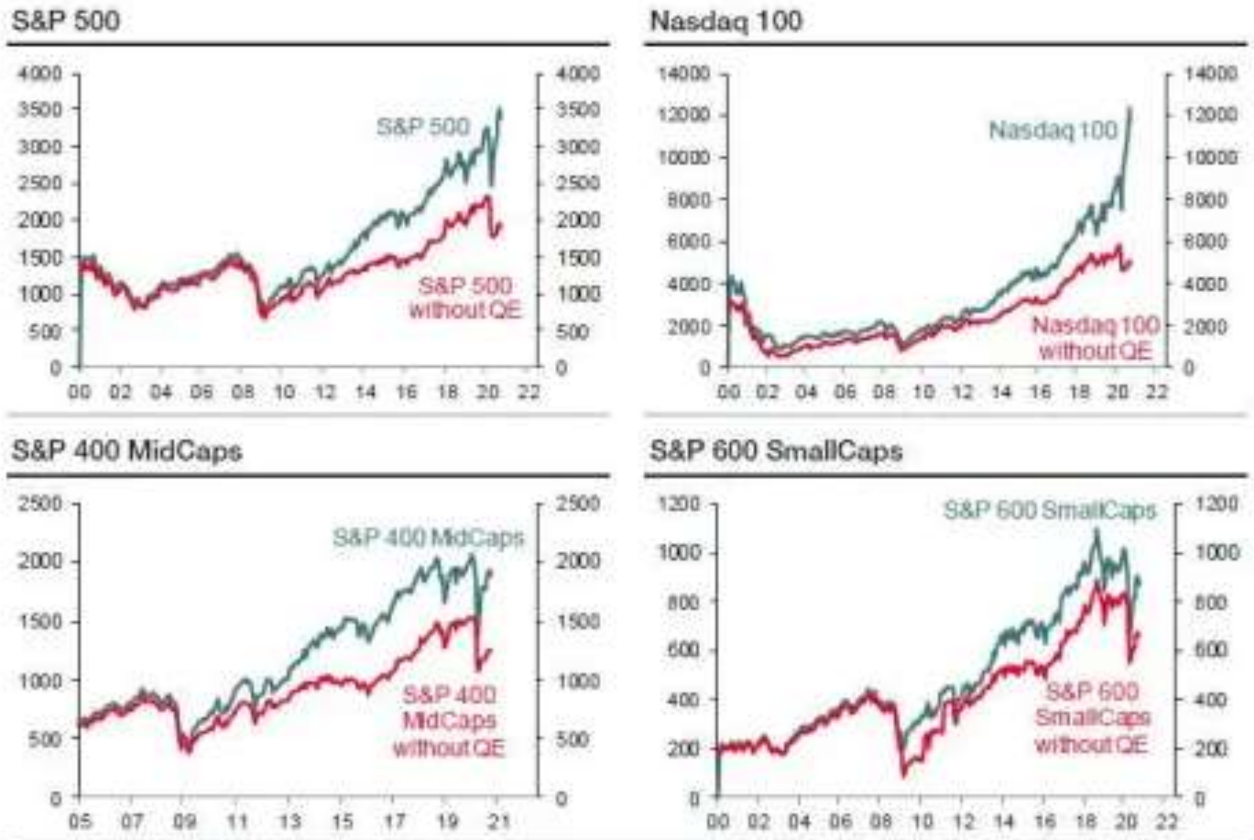
The Covid Rally

Correlation among QE and S&P 500 during the Pandemic is even stronger



Central Banks in the World (4)

What has been the impact of the QE on the US Indices?



As of October 2020. Please contact us for more information on the methodology. Source: Bloomberg, Datastream, IBES, SG Cross Asset Research/US Equity Strategy

QE and American Indices

Which are the Indices that have benefit the most from the QE?

As of October 2020. Please contact us for more information on the methodology. Source: Bloomberg, Datastream, IBES, SG Cross Asset Research/US Equity Strategy

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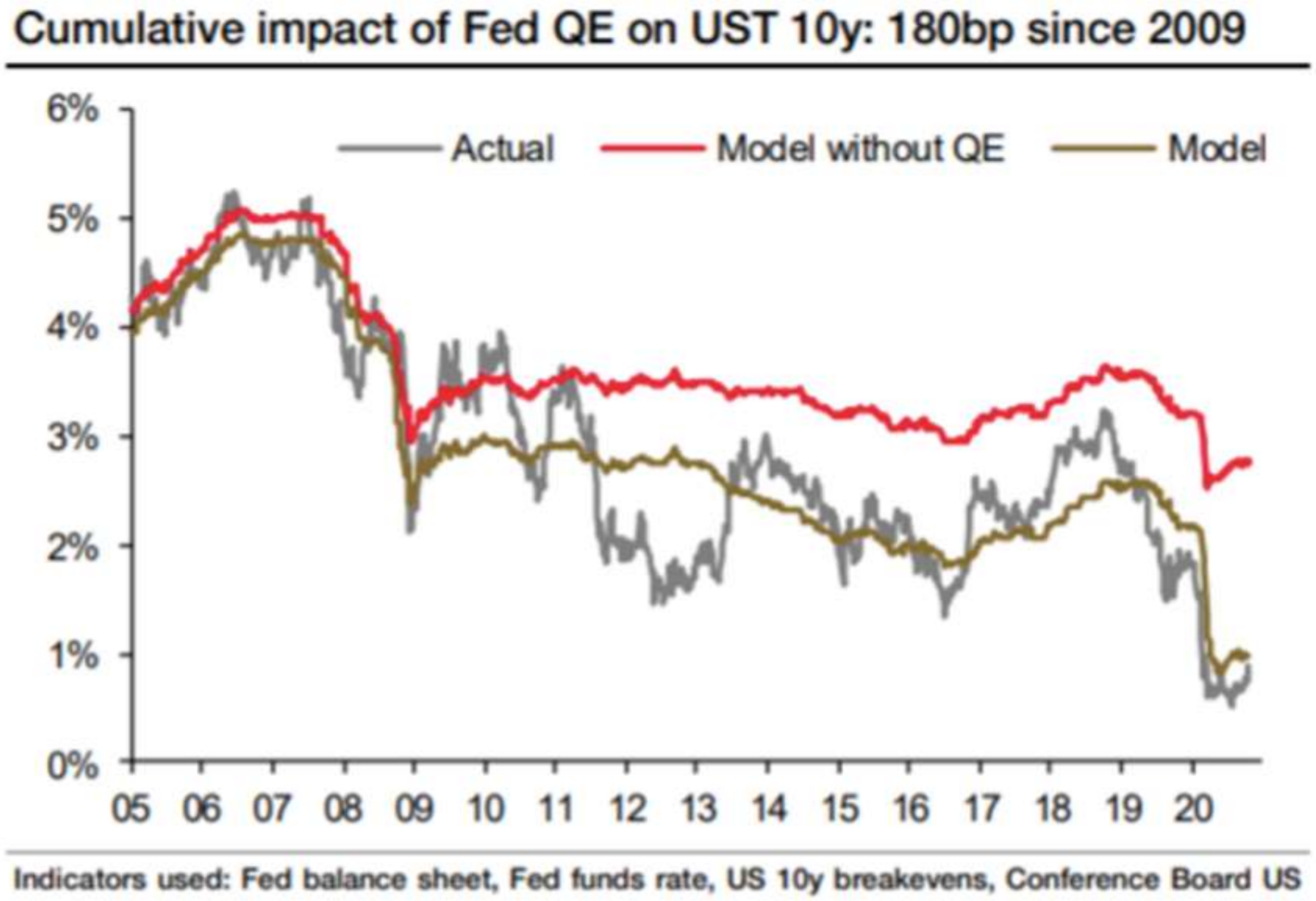
QE & Bond Yields

QE had the effect to lower extensively the Yield of the US Bonds in the short run

Treasury Notes and QE

What are the effects of the QE on the American Bonds?



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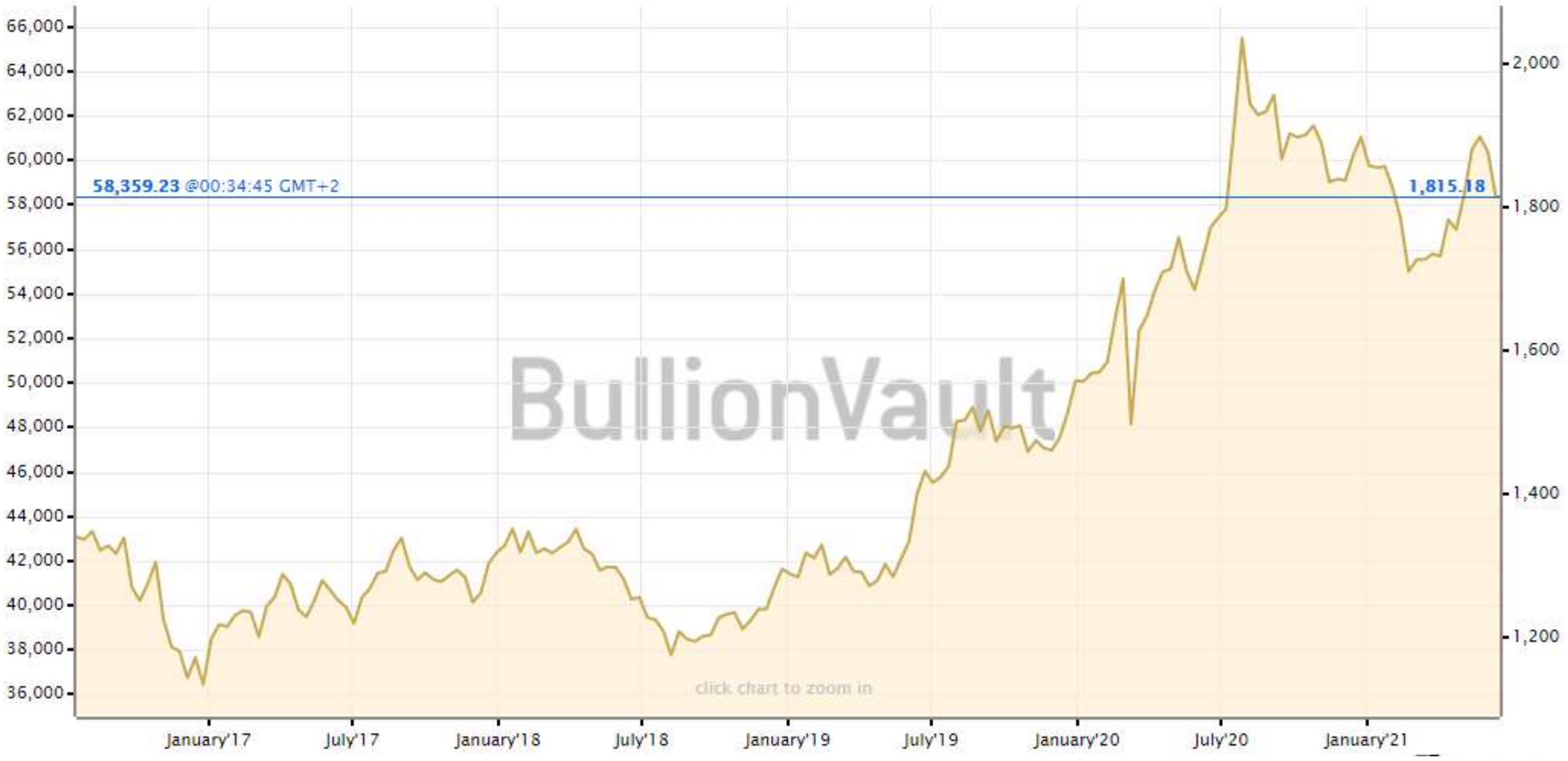
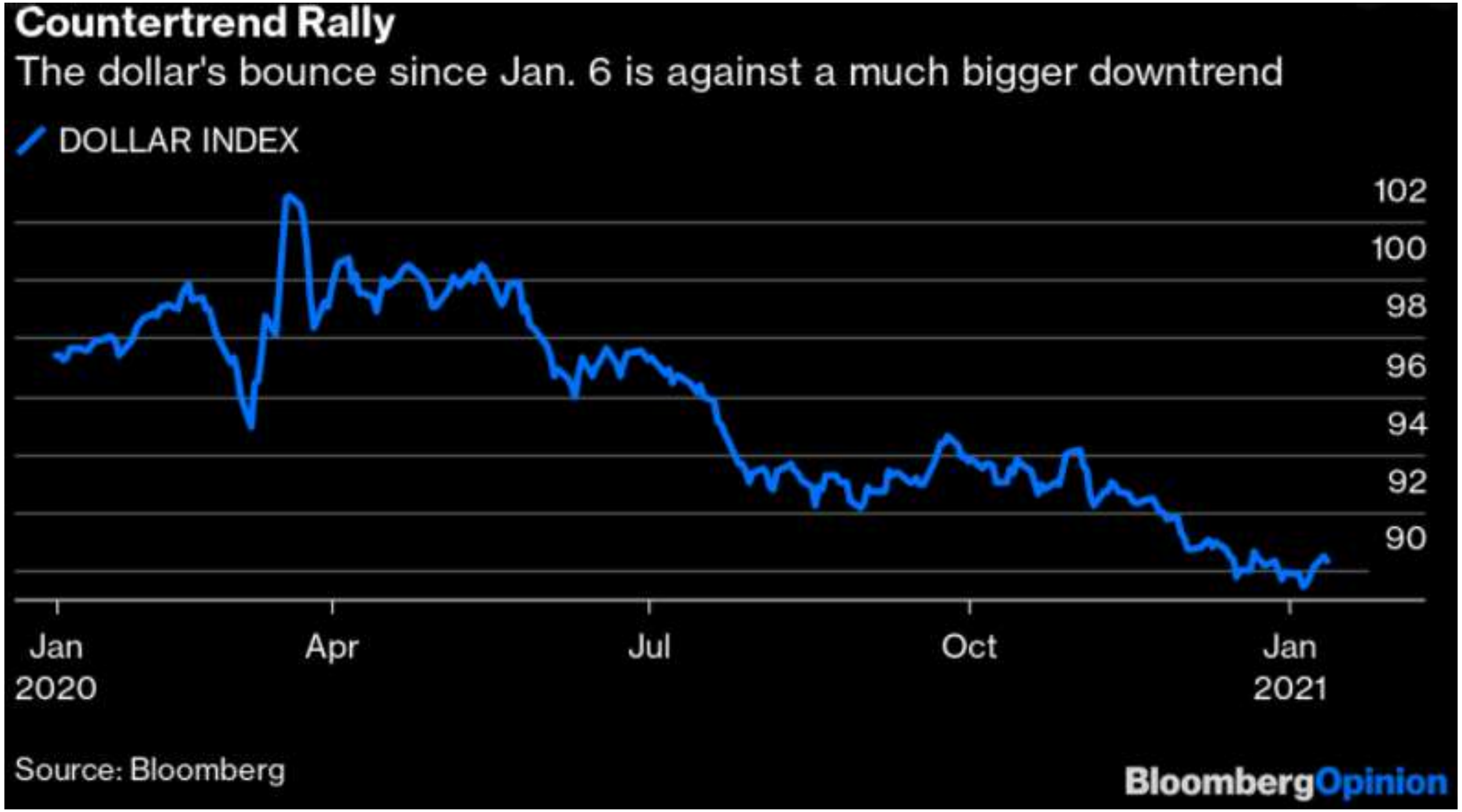
QE and Gold

The deflation effect of the Pandemic and the collapse in the Yield of the Bonds have pushed investors towards Gold



QE and its effect on the USD

The consequences of the last QE on the USD



USD & Emerging Markets

A lower USD means higher returns for the Emerging Markets

Central Banks in the World – the ECB -

2. The European Central Bank (ECB)

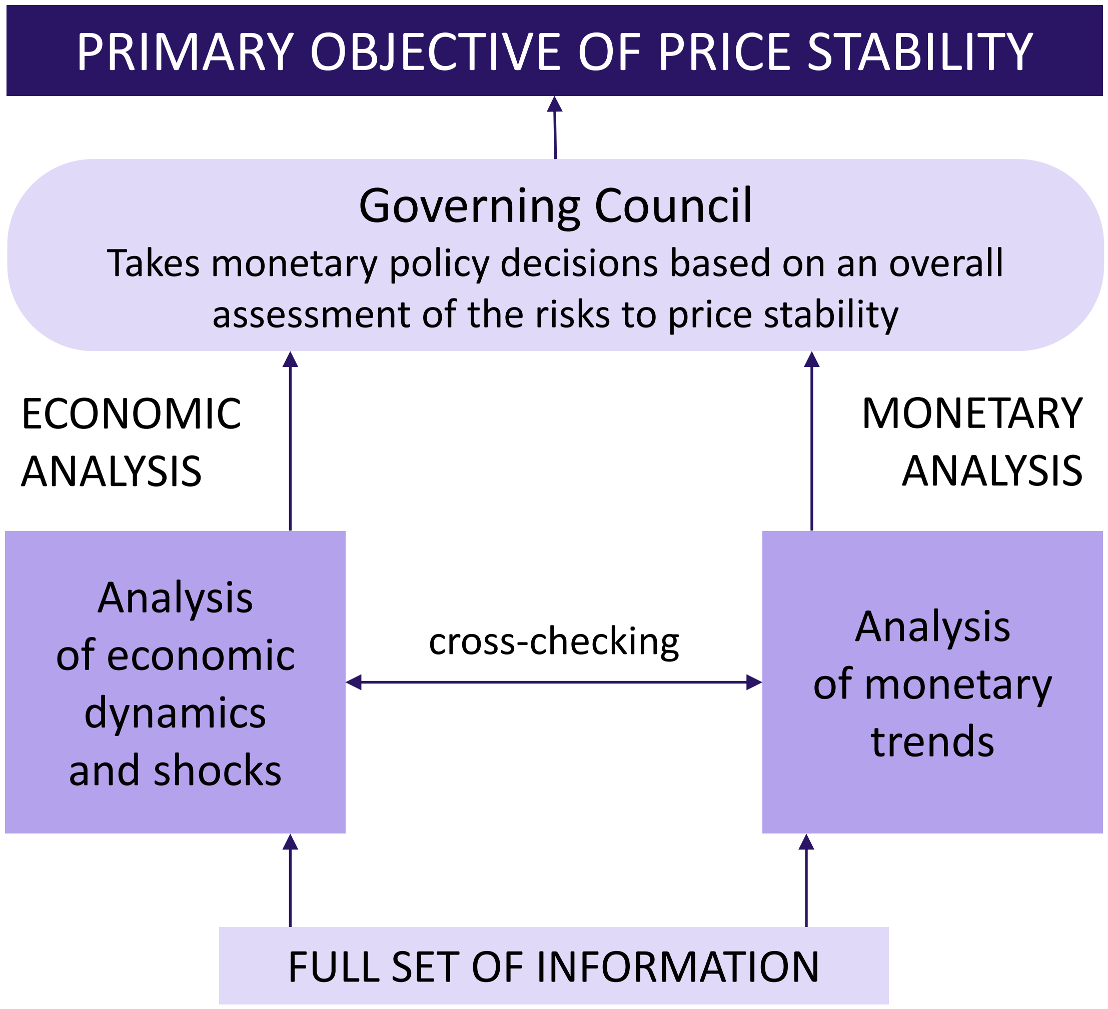
- Structure of the ECB Is similar to that of the Fed. The European system of central banks includes the ECB plus the 28 EU countries National central banks
- It usually operates by consensus even though it is not always unanimous
- The new president is **Christine Lagarde** (since 1 Nov 2019) and has replaced **Mario Draghi (The man of “whatever it takes”)**

Central Banks in the World – the ECB (2) -

The duties of the ECB:

- It tries to maintain inflation in the Euro Area "below or close to 2%" but recently under Lagarde there is a "Review" taking place that might bring to a band of 1.5% to 2%
- It also must support the economies of the member States via ordinary and sometimes extraordinary monetary policy measures, as well as conduct, if necessary, Forex Exchange operations

Central Banks in the World – the ECB (3) -



Central Banks in the World – the BOE -

3. The Bank of England (BOE):

- It was founded in **1694** and it is one of the oldest in the whole world
- It aims at "Promoting the good of the people of the United Kingdom by maintaining monetary and financial stability"
- The main decision-making body is the Monetary Policy Committee (MPC) which meets monthly and consists of 9 members whom decide on monetary policy by voting
- The current Governor is **Andrew Baily** that replaced Mark Carney since March 2020

Central Banks in the World – the BOJ -

4. The Bank of Japan (BOJ)

- It is based in Tokyo and was founded in 1882 and it is owned by the Government of Japan (which has 55% but 100% of voting rights, and 45% is floating)
- Monetary Policy is decided by a board of 9 members that composed the Monetary Policy Board
- The Governor of the Bank of Japan has a huge influence on the economic policy of the Japanese government
- The Governor of the Bank of Japan is **Haruiko Kuroda** who took the helm in March 2013 and became famous for the implementation of the Reflation Policy (it is a monetary policy designed to increase output, stimulate spending, and limit the effects of deflation)

Tools of Monetary Policy

The Tools of Monetary Policy:

1. **Setting the level of Interest Rates:** It means deciding what should be the right interest rates in the economy
   A. <u>When economy is running fast and it risks overheating</u>, Central Banks intervene by **raising the interest rates** to cool it off and keep inflation in check
   B. <u>when economy is shrinking towards recession</u>, Central Banks **lower interest rates** in order to stimulate investment and push economy out of the negative path

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Tools of Monetary Policy (2)

The Tools of Monetary Policy:

2. **Open Market Operations:** they are the primary determinants of changes in interest rates and the monetary base so as the main source of fluctuations in the money supply

- <u>Open market sales</u> shrink reserves and the monetary base, decreasing the money supply and raising short-term interest rates
- There are <u>two types of OMOs</u>:
  - A. **Outright** – outright purchase of sale of securities, permanently adding or draining reserve balances
  - B. **Temporary** – with repurchase agreements/repos the effect is shorter (in practice giving out cash and receiving Treasuries as collateral)

Tools of Monetary Policy (3)

The Tools of Monetary Policy:

3. **Reserve Requirements**: Central Banks can increase or decrease the reserve requirements that commercial banks need to hold
   A. In case Central Banks decide that banks need to hold higher reserve of cash, banks will have less amount of money available to lend. The knock-on effect for the economy is an increase of interest rates, money supply will decrease and consequently lowering consumer spending and investments.
   B. The opposite happens in case Central Banks decrease the reserve requirements.

Tools of Monetary Policy – Explained -

Standing facilities

Deposit facility

(Rates generally lower than market rates)

Marginal lending facility

(Rates generally higher than market rates)

Open markets operations

Main refinancing operations

(Maturity: one week)

Longer-term refinancing operations

(Maturity: three months)

Fine-tuning operations

Structural operations

Reserve requirements

RESERVE BASE
Deposits, debt securities and money market paper

RESERVE RATIO
2% for the majority of the items to which the reserve base applies

REMUNERATION
Reserve holdings will be remunerated at the Euro system's rate on its main refinancing operations

The Effect of Monetary Policy – Bond

Effects of Monetary Policy on Bonds:

A. **Raising interest rates**:

- Central Bank increases interest rates in case it believes that economy is overheating, to avoid a surge in inflation and an ongoing asset bubble
- That means that economy is performing well and therefore bond prices tend to fall and their yields to increase
- **There is a negative correlation between bond prices and their yields:**

Price ↑ Yield ↓

Price ↓ Yield ↑

The Effect of Monetary Policy – Bond (2)

Effects of Monetary Policy on Bonds:

B. Lowering interest rates:

- In this case, as we have experienced in the last decade in Europe and till 2015 in the US (and back since last year) <u>bond prices tend to raise continuously and their yields slowly decrease and even sometimes go negative</u> (e.g., It was estimated in the summer of 2020, that as much as 35% of the global government bond market as well as some corporate bonds, was trading on a negative yield)
- Again the "<u>rational Hypothesis</u>" (according to which investors behave in the most rational manner has been contradicted) as even *the 30-Year (!!!) German Government Bond reached a negative yield...*

The Effect of Monetary Policy - Equity

Effects of Monetary Policy on Equities:

A. **Raising interest rates:**

- <u>At the beginning of the cycle a gradual increase in interest rates can be positive for the equity markets</u>, because it means that economy is gradually improving from a previous negative phase (and therefore corporations should show better earning results)
- <u>At a later stage increasing interest rates has a negative effect on stocks</u>, because companies will see their monthly mortgage and loan payments increasing (and as a consequence eating on their profits).
- Also, investments will fall as the cost of money has increased and it is not convenient to explore other business opportunities unless very valuable

The Effect of Monetary Policy – Equity (2)

Effects of Monetary Policy on Equities:

B. Decreasing interest rates:

- This scenario usually already prices in <u>an economy which is slowly losing steam and see contracting the GDP</u> from the recent peaks (as well as low inflation and reducing investments)
- <u>Corporates will see their profit margins decreasing</u> due to a weak demand and the overall market should lose value
- <u>This situation will keep running till recession ends and a new economic cycle eventually begins</u> (that happens when after interest rates touch the minimum which can be also negative as we are experience now in some countries such as Germany or Switzerland)

The Effect of Monetary Policy – Commodities

Effects of Monetary Policy on Commodities:

A. Raising interest rates:

- Theoretically, it should **NOT** have a direct impact on commodities because their prices are based on the supply and demand
- However, since they are linked to the overall economic situation they will eventually follow the Equity Market
- In case there is inflation, commodities should perform better that other assets (especially Gold that is considered a shield towards inflation)

B. Decreasing interest rates:

- In this situation with a shrinking economy, commodities should perform poorly as the overall demand might fall (look in particular at the Chinese situation)

The Effect of Monetary Policy – Forex

Effects of Monetary Policy on Forex:

A. Raising interest rates:

- In the FX market the effect is straight forwards: the currency whose interest rates has been increased will overperform the others (carry trade, do you remember?)
  - Example EUR/USD: in the last year, the EUR has overperformed other currencies and the USD in particular due a very "dovish stance" of the FED that slashed interest rates to 0% and started an aggressive QE campaign (more than $4 Trillion in few months)

B. Decreasing interest rates:

- Again, the currency involved will depreciated against the others, in particular against those that have a big interest rate differential

The Effect of Monetary Policy – Forex (2)

Effects of Monetary Policy on Forex: Don't forget that the USD is of particular importance

- Since many emerging countries have their debt pegged to the US and several companies do take loans in the US, the FED is particular sensitive to all its decisions as they might have ramifications across the entire globe

- An aggressive Monetary Policy pursued by the Fed, for instance, might have the unwanted effect to depress economies of the emerging markets that are closely related to the USD (and eventually create a crisis that will hurt the US as well)

Other Important Features

Other important features:

- The FED usually meets 8 times a year, approximately once every six weeks. These meetings are very important as they give an understanding of the future attitude of the Monetary Policy
- The ECB meets every six weeks and after 45 mins of the interest rates decision there is a press conference, usually at 13:30 UK Time
- Dovish Central Banks Members are more focused on growth and jobs whilst those that are hawkish are focused more on inflation (and therefore prefer a more aggressive stance on interest rates)
- Have the Central Banks in the last decade become the “**BFF**” (Best Forever Friends) for the Markets?

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Central Banks

Tools of the central bank

- Open market operations
- Standing facilities
- Reserve requirements

→

Policy instruments

- Reserve aggregates
- Interest rates

(short-term such as overnight interbank rates)

→

Intermediate targets

- Monetary aggregates

(M1, M2, M3)

- Interest rates

(short-term and long-teem)

→

Goals

- Price stability
- High employment
- Economic growth
- Financial market stability
- Interest-rate stability
- Foreign exchange market stability

The FED and the QT

The FED decided to stop this Buying Spree and started instead the QT, that is the Quantitative Tightening, meaning reducing the size of its enormous balance sheet while at the same time increasing interest rates

- The FED raised interest rates by **50bps in March** and it is supposed to increase it another 50bps in the next 2 meetings and 25bps thereafter till it hit **2.7%/2.8%** by the end of 2022

- The hike was the biggest since the beginning of 2000s and the tightening cycle will "**cause some pain**" (Jerome Powell)

Yields of the 10 Y T-Note

This change in the Monetary Policy had massive effects across the board: **Yields went up to the roof in few months**

Price of the 10 Y T-Note

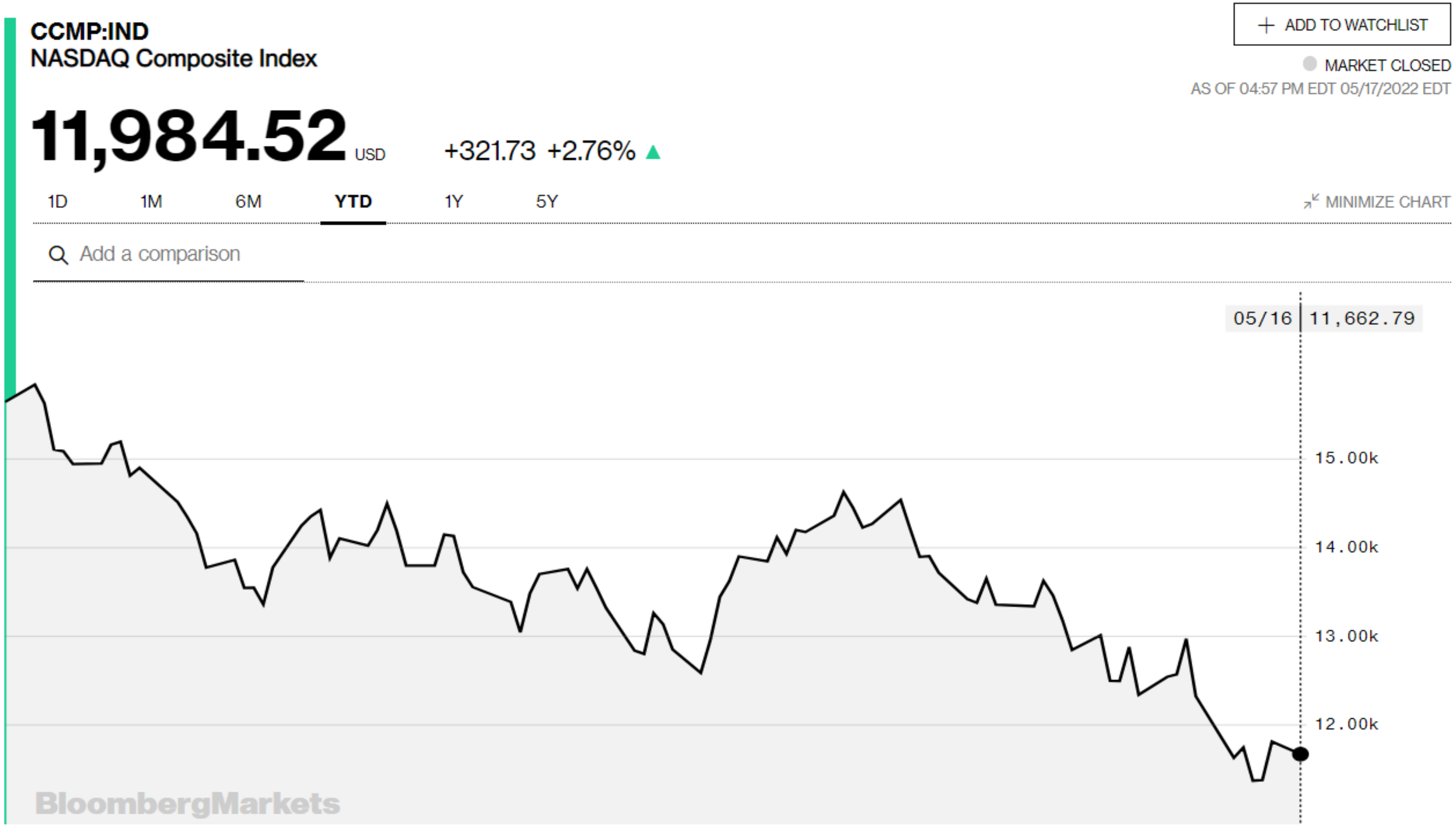
That means Bonds' Prices crasched

S&P 500 Performance

There is no Place to Hide: Wall Street slides in 2022 by 14%/15%

NASDAQ

There is no Place to Hide: NASDAQ craters in 2022 by 24%/25%



The Tech Wreck

And the Tech wrecked has been pretty hard

The USD Index

And the winner (for now) of the 2022 Competition is: the USD !!

Oil

Well actually, Oil is the current real winner in 2022: +51%

Gas

Yes, right.. Gas is the true King: + 113%

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Conclusions

- While analyzing the Markets, the most important element is **the attitude of the Central Banks:** their policies do and will affect all the Market movements across the different Asset Classes
- Since the last Crisis of 2008, the Central Banks in the world have dramatically **increased the Balance Sheets** to stimulate the economy and **they are now running in reverse**
- The results have been to **lower the long-term yields of the bonds** and push the risk assets higher; now **the winding down is happing**

Conclusions (2)

- That was possible because Inflation has been mute for most of the last decades, but it is coming back with revenge in 2022 recording **8.2%, the highest level in the last 40 years in the US**

- This will complicate the job of the FED when economy is already slowing down and there has been already a strong repricing of all the Asset Classes around the world with **a big sell off in the Bond & Equity Markets at the same time**

Conclusions (3)

- Food for Thought: Is **Stagflation** coming (at least in Europe) ? A nice combination of stubborn Inflation, a low growth between 0% and 1% and a rising unemployment ?

- Or is **Recession** pure and simple coming in the US? The answer is, very likely, **WHEN not IF** according to **Carmen Reinhart, Chief Economist at the WB**

CHANGE
STARTS
HERE

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INTERNATIONAL BUSINES AND ECONOMICS DEPARTMENT

THANK YOU