CASE STUDY

COVID-19 RECESSION

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PRE-RECESSION SITUATION

- Since the financial crisis of 2007–2008, there has been a large increase in corporate debt, rising from 84% of gross world product in 2009 to 92% in 2019, or about $72 trillion.
- During 2019, the IMF reported a "synchronized slowdown", with the world economy facing its slowest pace since the 2008 financial crisis.
- The world's total industrial output began to start a sustained decline in early 2018, which peaked in 2017.
- In April 2019, the U.S. yield curve inverted.
- U.S.-China trade war(2018-2020): The trade war brought struggles for farmers and manufacturers and higher prices for consumers, which resulted in the U.S. manufacturing industry entering into a "mild recession" during 2019.
- The inverted yield curve and U.S.-China trade war fears prompted a sell-off in global stock markets during March 2019.

- Uncertainty surrounding the UK's withdrawal from the EU (Brexit) contributed to trade losses and economic downturns in both the EU and the UK.
- After all these, came one of the biggest cause of recession, "COVID-19".
- The outbreak was identified in Wuhan, China, in December 2019, declared to be a Public Health Emergency of International Concern from 30 January 2020 to May 5, 2023, and recognized as a pandemic by the WHO on 11 March 2020.
- Situation(economically) was made even more worse by bringing lockdown.
- Russia–Saudi Arabia oil price war: A sharp decline in global travel and industrial activity lead to a significant drop in oil demand. This also caused a plunge in U.S. stocks.

All these conditions triggered the worst recession since the Great Depression, "COVID RECESSION".

MAJOR RECESSION INDICATOR ANALYSIS

1. Yield Curve:

- Yield curve plots the difference between the interest rates of 10-year and 2-year Treasury bonds; when the difference falls below zero, 2-year bonds have higher annualized returns, indicating inversion of yield curve.
- Generally, recession follows after such occurance.
- Day of first sustained inverted yield curve: May 23, 2019 (red marked in graph)

2. GDP:

- Two consecutive quarters of negative economic growth is a good rule of thumb to indicate a recession.
- When GDP is shrinking sharply and/or consistently, that usually means a recession is happening.
- The U.S. economy contracted 5% in the first quarter of 2020, then contracted a record 31.4% in the second quarter.

3. Stock Market:

Dow Jones Industrial Average

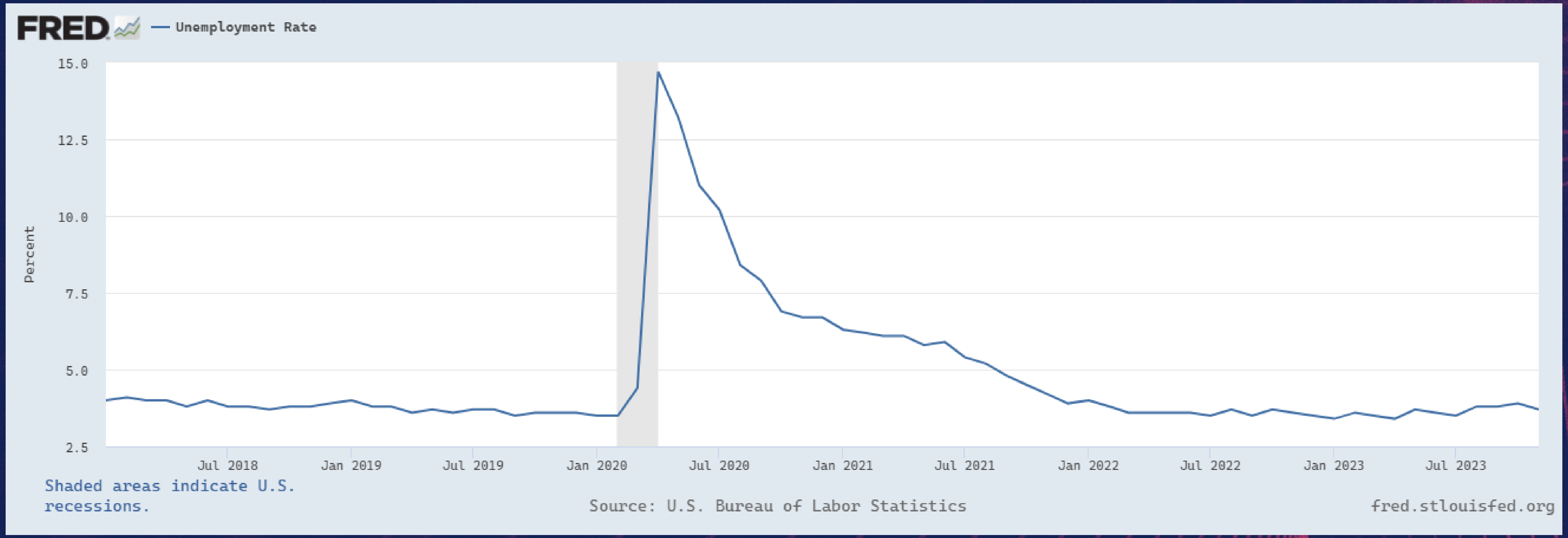
DJIA is price-weighted index of 30 the most traded stocks on the NYSE and the Nasdaq.

- As expected, during recession, stock market crashes as investors pull out their money because of fear of loss. Mostly, before recession, stock prices are at their peak.(here also it can be observed)

The S&P 500 is an market capitalization weighted index of 500 leading companies in U.S.

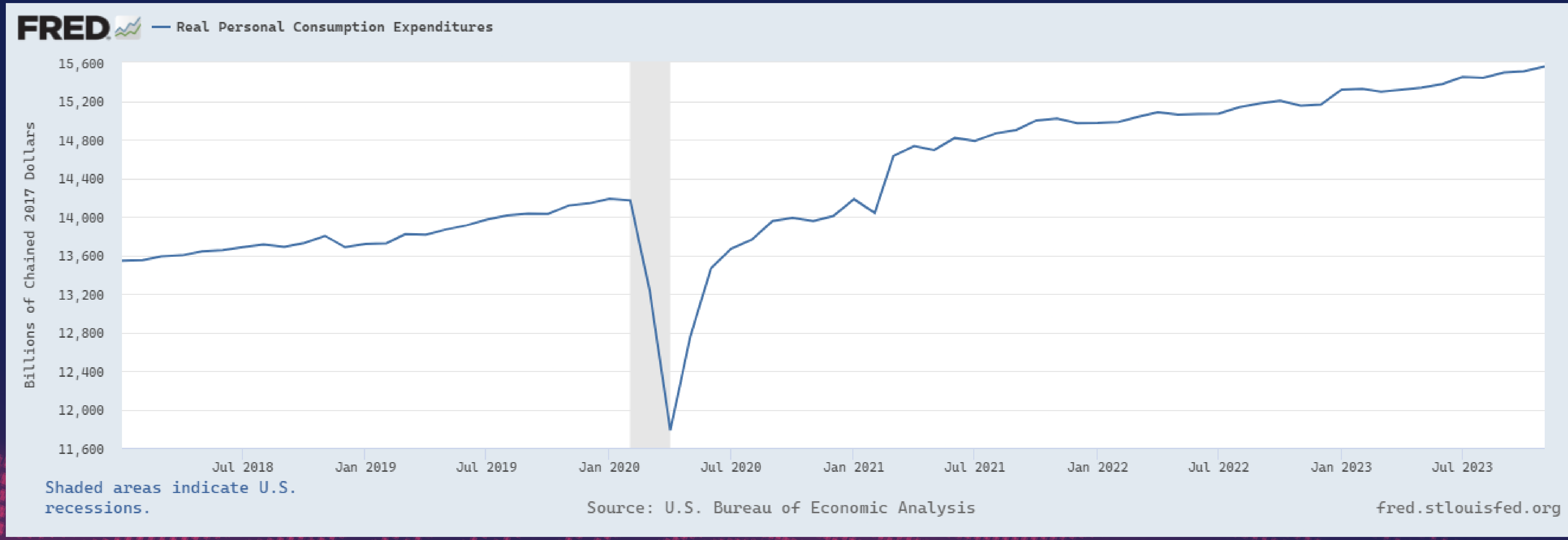
S&P 500

4. Unemployment rate:



- Unemployment is a powerful indicator but not in predicting recessions as job losses tend to happen mid-recession, not at the outset or in advance.
- In U.S., it started to increase from March 2020 (4.4%), peaked in April (14.7%) and returned to healthy rate (5%) in Aug 2021.
- Also, UR was minimum before recession since last 50 years suggesting that we are at peak position of economic cycle and a down trend might follow up.

5. Real Personal Consumption Expenditure:



- PCE is the primary measure of consumer spending on goods and services in the U.S. economy.
- Shutdowns and precautions happened abruptly, and consumers immediately reduced their retail spending and shopping, venturing out to buy little more than the essentials.
- Many consumers suffered a loss of income and feared it would be persistent, so spending shrank even further.

6. Manufacturing:

- The ISM Manufacturing Index is a leading economic indicator for the level of economic activity in the manufacturing sector in the United States.

- Judging of index.

- As seen from graph, during recession (red box), it went below 50 indicating contraction of manufacturing sector (economic downfall).

POST-RECESSION SITUATION

- The 2020 decline happened in just three months instead of the four years it took during the Depression.
- The economy grew 33.4% in the third quarter, but it was not enough to make up for earlier losses. In the fourth quarter, it grew just 4%, but kept increasing then.
- Unemployment rate returned to healthy rate (5%) in April 2021.
- Consumer spending also started increasing from Q3 2020.
- By the end of Q3 2020, ISM manufacturing PMI also went above 50, indicating manufacturing economy is expanding.
- By December 2020, retail sales had improved but were still not back to normal.
- On November 16, 2020, the Dow set a new high, closing at 29,950.44, indicating recovery in stock market.
- Several monetary and fiscal measures were taken in order to improve economic conditions.

- U.S. Monetary policies:
  - Fed cut the federal funds rate twice in March 2020: First by 0.50% to a range of 1% to 1.25%. Second by 1.00% to a range of 0% to 0.25%.
  - Discount rate also cut by 1.5% to 0.25% on March 15, 2020.
  - In response to recovery and rising inflation, the Fed made dramatic increases to the Federal Funds Rate in 2022 and 2023.
  - FED adopted Quantitative Erasing (form of monetary policy in which a central bank, purchases securities from the open market to reduce interest rates and increase the money supply).
  - Repo operations allowed the Fed to loan money to banks.
  - Repurchase agreements expanded by $1.5 trillion on March 12, 2020, and another $500 billion four days later.
  - The Fed set up several new lending programs, now discontinued, as part of the CARES Act using funds from the U.S. Treasury Department's Exchange Stabilization Fund (ESF) as seed capital and entirely on its own.

- U.S. Fiscal policies:
  - Throughout March and April of 2020, the U.S. government passed three main relief packages and one supplemental package.
  - CARES Act (March 27, 2020):
    - $2.2 trillion stimulus.
    - Direct payments, expanded unemployment, small business loans, healthcare funding.
  - Paycheck Protection Program and Health Care Enhancement Act (April 24, 2020):
    - $484 billion package.
    - Additional PPP funding, healthcare support, testing funds.
  - HEROES Act (Proposed May 15, 2020):
    - $3 trillion proposed relief.
    - Funding for state/local governments, hazard pay, additional direct payments.
  - Consolidated Appropriations Act, 2021 (December 27, 2020):
    - $900 billion relief.
    - Second direct payments, extended unemployment, small business support, vaccine distribution funds.

THE END