



March 2020

Market Update

(all values as of
02.28.2020)

Stock Indices:

Dow Jones	25,409
S&P 500	2,954
Nasdaq	8,567

Bond Sector Yields:

2 Yr Treasury	0.86%
10 Yr Treasury	1.13%
10 Yr Municipal	0.98%
High Yield	5.79%

YTD Market Returns:

Dow Jones	-10.96%
S&P 500	-8.56%
Nasdaq	-4.52%
MSCI-EAFE	-11.16%
MSCI-Europe	-11.82%
MSCI-Pacific	-10.14%
MSCI-Emg Mkt	-9.79%
US Agg Bond	3.76%
US Corp Bond	3.72%
US Gov't Bond	4.52%

Commodity Prices:

Gold	1,587
Silver	16.68
Oil (WTI)	45.26

Currencies:

Dollar / Euro	1.09
Dollar / Pound	1.28
Yen / Dollar	110.02
Dollar / Canadian	0.74

Macro Overview

Fear has been permeating capital markets worldwide as the impact of the (COVID-19) coronavirus continues to evolve. Global economic forecasts have been revised downward by the International Monetary Fund (IMF) and the World Bank as factory closures, quarantines, and travel bans continue to hinder numerous industries.

The Federal Reserve helped alleviate markets with a rate reduction announcement as a result of a rare emergency meeting. The rate cut was made in order to maintain liquidity and structure in an already stressed environment caused by the virus outbreak. Fed Chairman Jerome Powell said that "the fundamentals of the U.S. economy remain strong," yet the coronavirus may pose evolving risks for the economy. Yields on Treasuries fell to historical lows as funds migrated from equities to bonds, driving bond prices up.

U.S. equities registered their largest weekly losses since 2008, with \$3.6 trillion worth of stock values erased within the last week of February. The rapid decline was among the swiftest in market history, creating havoc in all sectors and industries. Global equity markets also saw similar losses as large capitalized international stocks and emerging market equities gave up gains. Global equity valuations retreated due to uncertainty surrounding the extent of the outbreak and its effects on the global economy. Analysts are closely following companies with supply chains tied to China, which has become a widespread concern.

The virus outbreak has affected financial markets differently relative to other more traditional disruptions. Supply chains tethered to China are creating a shortage of supplies and products, while demand had not been an issue until the virus outbreak. Should a vaccine emerge making the coronavirus outbreak a shorter term incident, then pent up demand could propel economic activity higher.

The National Center for Biotechnology Information reports that advancements in medical technology over the years has allowed the development and creation of new vaccines to combat viruses at a faster pace than decades ago.

The extent of the coronavirus can be put into perspective as related to influenza, also known as the flu, which currently affects over 32 million Americans. Flu-related deaths in the United States are

estimated to reach between 18,000 and 46,000 this flu season alone, as reported by the Centers for Disease Control. The center also estimates that as many as 45 million Americans will suffer flu-related symptoms and illnesses during this year's season. (Sources: IMF, World Bank, Fed, U.S. Treasury, NCBI, CDC)

CDC Estimates For 2019 Flu Season (October 1, 2019 - February 22, 2020)

Flu Illnesses	32 - 45 Million
Flu Medical Visits	14 - 21 Million
Flu Hospitalizations	310,000 - 560,000
Flu Deaths	18,000 - 46,000





Equities Slump As Concern Elevates – Stock Market Overview

February saw stock valuations retreat to where they were in July and August 2019. Analysts believe that the pullback has helped identify several overvalued stocks. Valuations are considered to be more in line with historical standards relative to where they were at the beginning of the year. The final week of February saw all equity indices fall substantially. The S&P 500 Index slumped 11.49%, the Dow Jones Industrial Index fell 13.6%, and the tech-heavy Nasdaq Index gave up 10.54%.

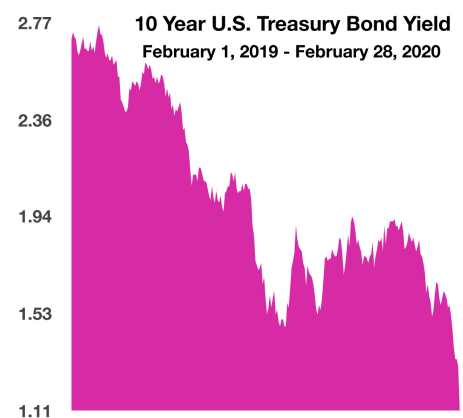
The pullback among all major equity indices has been one of the fiercest in market history, yet reigning in valuations that were considered lofty by many analysts. Fortunately, the stellar performance of the equity markets in 2019 is serving as a buffer for the dramatic pullback.

When U.S. equity markets fell 14% over two months in 2003 during the SARS outbreak, rates were much higher, with the 10-year Treasury yielding over 3.5%. The yield on the 10-year Treasury on Feb 28th at 1.13% is lower than the current S&P 500 Index yield for stock dividends at 1.97% on Feb 28th. Analysts view the yield difference as a benefit for stocks for yield seeking investors. (Sources: S&P, Dow Jones, Nasdaq, Bloomberg, U.S. Treasury)

Treasury Bond Yields Drop To Historic Lows – Fixed Income Update

Treasury bond yields traded at record low levels, driven by global investors seeking safe haven assets. All Treasury maturities yielded well below 2% at the end of February, lower than the Fed's inflation target of 2%. The dramatic drop in yields brought the 10-year Treasury bond yield to 1.13 % at the end of February, the lowest yield for the 10-year Treasury on record. An insatiable demand for global bonds brought yields lower across all bond sectors, elevating positive returns for bonds in nearly every sector thus far this year.

The Federal Reserve reduced the Fed Funds rate, a key monetary tool rate, following a rare emergency meeting. The rate reduction was made with hopes of stemming market uncertainty and shoring up liquidity for extended periods of volatility. The announcement triggered a drop in bond yields across various bond sectors. (Source: U.S. Treasury)



Economic Cost of The Flu – Domestic Economy

As a gauge of how a virus can affect the U.S. economy, the National Center for Biotechnology Information monitors and tracks the economic costs related to the flu every year.

The estimated average annual total economic burden of influenza, also known as the flu, to the healthcare system and society stands at \$11.2 billion, which includes medical expenses such as hospitalization, physician visits, and vaccines.

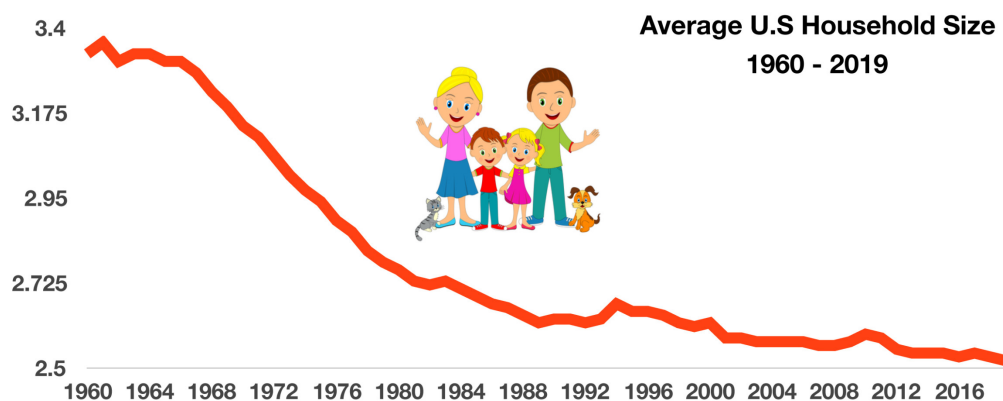
A present concern with the coronavirus is the productivity costs associated with the loss of employee attendance, business travel restrictions, and amplified preventive measures. The flu virus has for decades inflicted companies in all industries with heightened productivity costs. (Source: <https://www.ncbi.nlm.nih.gov/pubmed/29801998>)



U.S. Household Size Shrinks – Demographics

Family size is shrinking in the U.S., with only 2.52 members per household on average in 2019, making it the smallest size ever in the country's history. Historical data tracked by the U.S. Census Bureau showed an average family size of 5 in 1880, double by today's standards. The decline in family size is believed to be attributable to various economic and social changes over the decades.

Roughly 63% of households in the U.S. consist of two or fewer family members. The Census Bureau also tracks family size by state. Utah has the largest household size at 3.12 family members, while Maine has the lowest at 2.28 members.



Smaller households materialized over the past 60 years, with one-person households accounting for 28.4% of the U.S. total in 2019, up from 13.1% in 1960. Households of four or more decreased from 40.2% in 1960 to 22.1% in 2019, nearly dropping in half. (Sources: U.S. Census Bureau, Historical Statistics of the United States)

Past Pandemics & What Came Of Them – Health Overview

Over the decades, pandemics have evolved and lasted for varying periods of time, yet always culminating with the containment and/or elimination of a virus. Should history repeat itself, a vaccine will eventually emerge to combat the COVID-19 virus, thus alleviating the threat of further immediate contamination.

Even though scientists have not identified how to stop a virus outbreak before it starts, advancements in medical technology over the past 17 years have drastically reduced the time it takes to develop and implement a vaccine after a new virus emerges.

The current coronavirus outbreak has been preceded by two similar outbreaks since 2003, Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS). SARs originated out of China in 2002, spread worldwide and was contained within a few months. The World Health Organization (WHO) tracks deaths related to pandemics globally. The organization found that the SARs virus resulted in 774 deaths in 17 countries. MERS, also known as the camel flu, resulted in 862 deaths.

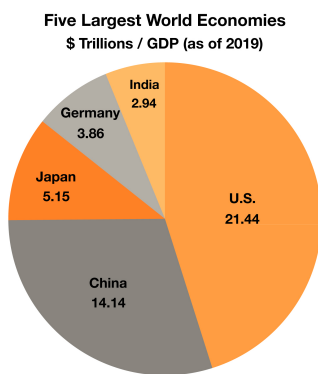
Joint efforts among international governments and nonprofit research entities have allowed extended research on emerging infectious diseases worldwide. Several groups and scientists from various countries are already underway trying to develop a vaccine for COVID-19. (Sources: The National Center for Biotechnology Information, WHO)



China's Share In The Global Economy – Global Trade

The global spread of the coronavirus has affected consumers in countries across the globe, curtailing demand for products mainly manufactured in China. It is expected that as worldwide demand for Chinese products decreases, the country's primary economic component, manufacturing, will abate, thus hindering the country's economic expansion.

Based on 2019 data, the top five economies in terms of GDP are the U.S., China, Japan, Germany, and India. These five alone account for 55% of total global GDP of \$86.31 trillion. China accounts for roughly 16.3% of



global GDP. China is referred to as “the world’s factory,” producing a broad range of items from shoes and socks to hammers and computers. The country’s enormous manufacturing base allows it to export massive volumes of goods globally, meeting demand from nearly every consumer in the world. China has experienced exponential growth over the past few decades, from a GDP of \$305 billion in 1980, to over \$14 trillion this past year, making it the second largest economy after the United States. The difference in GDP between the two nations’ economies has been shrinking over the years, as Chinese economic growth has consistently outpaced that of the United States. (Source: World Bank)

Sudden Drop In Mortgage Rates Spurs Housing Buffer – Housing Market Update

The abrupt drop in interest rates has brought about a boost to the housing market in the form of lower mortgage rates. The rate for a conforming 30-year loan fell to 3.45% at the end of February, nearly a full percentage point from a year earlier.

Falling interest rates have prompted an increase in mortgage activity as the cost to borrow for homebuyers has become less expensive. Mortgage rates fell in late February approaching the lows last seen in 2012, when the rate for a conforming 30-year loan was 3.37% in October 2012. The challenge for many homebuyers has been rising home prices and affordability throughout the country. Slow rising wages and stagnant incomes have, for the most part, not kept up with rising home prices. Even though mortgage rates have dropped, housing prices are still elevated to the levels that force many to wait or rent until housing prices drop.

Mortgages accounted for two-thirds of the \$14 trillion in U.S. household debt in the last quarter of 2019. Because they are typically paid off over decades, mortgage rates tend to be correlated with 10-year Treasury bond yields rather than with the short-term rates controlled by the Federal Reserve.

Sources: Federal Reserve Bank of St. Louis, Freddie Mac

