First Quarter 2021
Investment Environment
As of January 9, 2021

This document highlights:

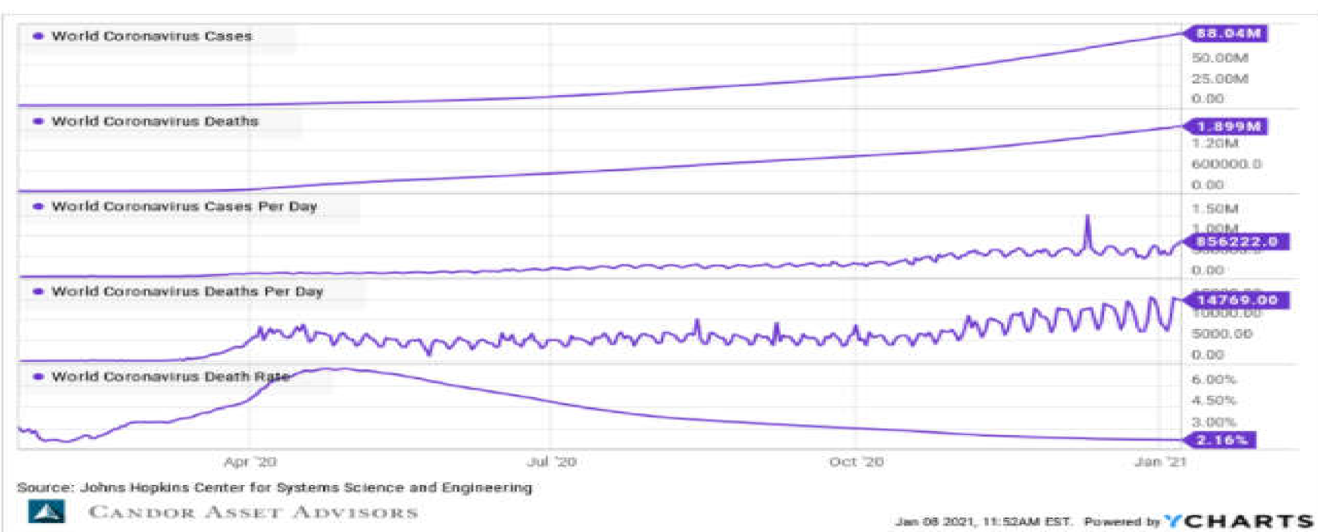
- COVID-19
- The Economic Environment
- Government Monetary and Fiscal Stimulus Activity
- Recessions, Stock Market Corrections, Bear Markets and Recoveries
- Closing Thoughts

Note, we will provide our quarterly investment strategy commentaries in January to February 2021. The commentaries will highlight our strategies' performance, portfolio positioning and areas of opportunity.

## COVID-19

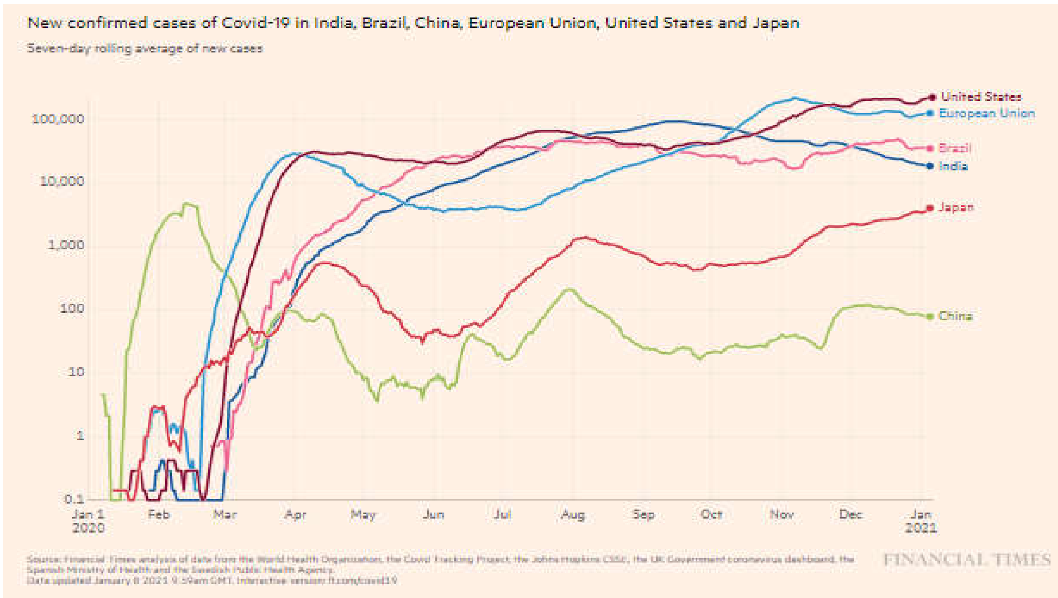
COVID-19, otherwise known as the coronavirus, has had a huge negative impact on the world. The first cases of COVID-19 occurred in China in late 2019. COVID-19 spread to Japan, South Korea and Italy and the rest of the world thereafter.

World COVID-19 statistics are presented below[1]. Since July 1, 2020 world cases are up from 10.67 million to 88.0 million, deaths are up from 516,237 to 1,899,000, and new cases per day are up from 217,689 to 856,222. Worldwide deaths per day have grown from 5,011 to 14,769. The percentage of individuals that die from COVID-19 complications has fallen from 4.85% to 2.16%. Worth noting, health experts believe the actual number of COVID-19 cases is higher due to the lack of testing and the number of reported deaths is understated due to reporting inconsistencies around causes of death.




[1] (YCharts, 2021)

The *Financial Times* has been doing a good job tracking the virus. New case activity increased or was relatively flat in most regions except India in the fourth quarter of 2020[2].




Government-related shutdowns have played a significant role in reducing economic activity[3]. Government-related closures generally peaked in April and declined in the second and third quarter. Government-related shutdowns generally escalated in developed countries in the fourth quarter while trends were mixed in emerging markets.

| | Jan-20 | Feb-20 | Mar-20 | Apr-20 | May-20 | Jun-20 | Jul-20 | Aug-20 | Sep-20 | Oct-20 | Nov-20 | Dec-20 | Jan-21 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| United States | - | 5.4 | 45.8 | 72.7 | 72.7 | 70.7 | 68.3 | 67.1 | 64.2 | 64.1 | 69.6 | 71.9 | 71.8 |
| United Kingdom | 2.2 | 11.0 | 36.6 | 79.6 | 74.2 | 70.9 | 65.4 | 67.6 | 65.6 | 67.9 | 71.7 | 71.2 | 71.3 |
| France | 3.0 | 12.3 | 65.7 | 88.0 | 80.1 | 66.2 | 48.1 | 47.4 | 48.4 | 50.2 | 78.3 | 70.3 | 63.9 |
| Italy | 1.5 | 32.5 | 84.1 | 92.6 | 66.6 | 52.0 | 56.0 | 52.1 | 50.4 | 55.8 | 77.1 | 81.5 | 88.0 |
| Germany | 1.4 | 10.2 | 48.8 | 76.9 | 63.8 | 61.3 | 56.8 | 57.9 | 50.5 | 55.2 | 64.0 | 75.2 | 83.3 |
| Japan | 2.2 | 21.8 | 41.2 | 45.7 | 41.9 | 27.8 | 28.0 | 32.7 | 35.6 | 36.7 | 38.9 | 50.2 | 51.9 |
| Canada | 0.9 | 2.8 | 39.1 | 72.9 | 71.4 | 70.3 | 67.6 | 65.1 | 61.5 | 60.7 | 62.3 | 64.4 | 64.4 |
| South Korea | 0.1 | 36.6 | 62.6 | 66.6 | 43.6 | 53.7 | 47.2 | 47.8 | 51.0 | 52.6 | 45.2 | 56.7 | 61.7 |
| | | | | | | | | | | | | | |
| China | 21.6 | 77.0 | 79.5 | 60.2 | 74.7 | 78.5 | 78.2 | 78.2 | 60.1 | 63.1 | 69.5 | 79.1 | 78.2 |
| India | 2.2 | 10.2 | 54.5 | 98.6 | 82.1 | 76.3 | 76.7 | 79.8 | 79.1 | 68.1 | 64.0 | 69.0 | N/A |
| Brazil | 0.5 | 5.6 | 44.0 | 75.0 | 80.5 | 77.3 | 80.0 | 72.0 | 69.2 | 62.7 | 55.4 | 59.0 | N/A |
| Russia | 0.5 | 8.3 | 47.0 | 85.5 | 80.7 | 73.6 | 69.3 | 63.1 | 39.4 | 45.8 | 46.2 | 47.7 | 47.7 |

Source: Oxford University Coronavirus Government Response Tracker

According to Wikipedia, "by mid-December 2020, 57 vaccine candidates were in clinical trials including 40 phase I and II trials and 17 phase II and III trials. National regulatory authorities have approved six vaccines for public use." Consensus forecasts anticipate several additional vaccines will get approved in the US and Europe in the next few quarters. Vaccines are expected to be widely distributed by the second half of 2021 to 2022.

[2] (FT Visual & Data Journalism Team, 2021)

[3] (University of Oxford, 2020)

CANDOR ASSET ADVISORS

## The Economic Environment

COVID-19's spread continues to confound economists and investors. The IMF summed it up well on March 4, 20: "Under any scenario, global growth in 2020 will drop below last year's level. How far it will fall, and for how long, is difficult to predict, and would depend on the epidemic, but also on the timeliness and effectiveness of our actions.[4]"

The global economy is slowly improving from recent lows. Government fiscal and monetary stimulus, which will be discussed in detail later, remain supportive of economic activity. Inflation remains subdued in developed markets. Manufacturing activity is supportive of economic growth. Service activity and retail sales have been mixed. Unemployment remains a sore spot in select countries[5].

**World Economic Statistics**

| | GDP Annualized YoY Growth | | | | | Inflation YoY Growth | | | | | Short Term Interest Rate | | | | | % of World | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Last Report | Current | Previous | Change | Freq. | Last Report | Current | Previous | Change | Freq. | Last Report | Current | Previous | Change | Freq. | GDP | Population |
| US | Sep-20 | 33.4% | -31.4% | 64.8% | Q | Nov-20 | 1.2% | 1.2% | 0.0% | M | Dec-20 | 0.25% | 0.25% | 0.00% | D | 24.5% | 4.2% |
| Euro Area | Sep-20 | 12.5% | -11.7% | 24.2% | Q | Dec-20 | -0.3% | -0.3% | 0.0% | M | Dec-20 | 0.00% | 0.00% | 0.00% | D | 21.4% | 5.7% |
| Japan | Sep-20 | 5.3% | -8.3% | 13.6% | Q | Nov-20 | -0.9% | -0.4% | -0.5% | M | Dec-20 | -0.10% | -0.10% | 0.00% | D | 5.8% | 1.6% |
| Canada | Sep-20 | 8.9% | -11.3% | 20.2% | Q | Nov-20 | 1.0% | 0.7% | 0.3% | M | Dec-20 | 0.25% | 0.25% | 0.00% | D | 1.9% | 0.5% |
| South Korea | Sep-20 | 2.1% | -3.2% | 5.3% | Q | Dec-20 | 0.5% | 0.6% | -0.1% | M | Dec-20 | 0.50% | 0.50% | 0.00% | D | 1.8% | 0.7% |
| China | Sep-20 | 2.7% | 11.7% | -9.0% | Q | Nov-20 | -0.5% | 0.5% | -1.0% | M | Jan-21 | 3.85% | 3.85% | 0.00% | D | 16.2% | 18.5% |
| India | Sep-20 | 21.9% | -25.2% | 47.1% | S | Nov-20 | 6.9% | 7.6% | -0.7% | M | Dec-20 | 4.00% | 4.00% | 0.00% | D | 3.3% | 17.7% |
| Brazil | Sep-20 | 7.7% | -9.6% | 17.3% | S | Nov-20 | 4.3% | 3.9% | 0.4% | M | Dec-20 | 2.00% | 2.00% | 0.00% | D | 2.1% | 2.7% |
| Russia | Jun-20 | -3.2% | -0.9% | -2.3% | Q | Dec-20 | 4.9% | 4.4% | 0.5% | M | Dec-20 | 4.25% | 4.25% | 0.00% | D | 1.8% | 1.9% |

| | Manufacturing PMI | | | | | Service PMI | | | | | Unemployment Rate | | | | | Retail Sales YoY Growth | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Last Report | Current | Previous | Change | Freq. | Last Report | Current | Previous | Change | Freq. | Last Report | Current | Previous | Change | Freq. | Last Report | Current | Previous | Change | Freq. |
| US | Dec-20 | 57.1 | 56.7 | 0.4 | M | Dec-20 | 54.8 | 58.4 | -3.6 | M | Dec-20 | 6.7% | 6.7% | 0.0% | M | Nov-20 | 4.1% | 5.5% | -1.4% | M |
| Euro Area | Dec-20 | 55.2 | 53.8 | 1.4 | M | Dec-20 | 46.4 | 41.7 | 4.7 | M | Dec-20 | 8.3% | 8.4% | -0.1% | M | Nov-20 | -2.9% | 4.2% | -7.1% | M |
| Japan | Dec-20 | 50.0 | 49.0 | 1.0 | M | Dec-20 | 47.7 | 47.8 | -0.1 | M | Dec-20 | 2.9% | 3.1% | -0.2% | M | Nov-20 | 0.7% | 6.4% | -5.7% | M |
| Canada | Dec-20 | 57.9 | 55.8 | 2.1 | M | | NA | NA | | | Dec-20 | 8.6% | 8.5% | 0.1% | M | Oct-20 | 7.5% | 5.6% | 1.9% | M |
| South Korea | Dec-20 | 52.9 | 52.9 | 0.0 | M | | NA | NA | | | Nov-20 | 4.1% | 4.2% | -0.1% | M | Nov-20 | -1.5% | -0.1% | -1.4% | M |
| China | Dec-20 | 53.0 | 54.9 | -1.9 | M | Dec-20 | 56.3 | 57.8 | -1.5 | M | Nov-20 | 5.2% | 5.3% | -0.1% | Q | Nov-20 | 5.0% | 4.3% | 0.7% | M |
| India | Dec-20 | 56.4 | 56.3 | 0.1 | M | Dec-20 | 52.3 | 53.7 | -1.4 | M | Nov-20 | 6.5% | 7.0% | -0.5% | M | | NA | NA | | |
| Brazil | Dec-20 | 61.5 | 64.0 | -2.5 | M | Dec-20 | 51.1 | 50.9 | 0.2 | M | Oct-20 | 14.3% | 14.6% | -0.3% | M | Oct-20 | 8.3% | 7.3% | 1.0% | M |
| Russia | Dec-20 | 49.7 | 46.3 | 3.4 | M | Dec-20 | 48.0 | 48.2 | -0.2 | M | Nov-20 | 6.1% | 6.3% | -0.2% | M | Nov-20 | -3.1% | -1.4% | -1.7% | M |

Freq. = Reporting Frequency, M = Monthly, Q = Quarterly, S = Semi Annual, Y = Yearly
NA = Not Available

Source: Economic Stats- Trading Economics 1/8/21, Population - Worldometers.info, GDP - Wikipedia.org

Our analysis suggests:

- The US, Europe, and China are the most important markets to watch as they account for 64% of world GDP[6]. India and China are important emerging markets to watch as they represent 35% of the world's population[7].
- The economic impact of COVID-19 has been felt across the global economy. COVID-19 is impacting demand (e.g., travel, eating out, entertainment, retail, online shopping, home-related spending) and supply (e.g., services, manufacturing, supply chains, transportation).
- Most 3Q 20 GDP growth figures reflect easy economic growth comparisons associated with COVID-19.
- Inflation has been benign in developed economies and reasonable in most emerging economies. Developed economies have leeway to implement accommodative fiscal and monetary policies.

---

[4] (Georgieva, Potential Impact of the Coronavirus Epidemic: What We Know and What We Can Do, 2020)
[5] (Trading Economics, 2021)
[6] (Wikipedia, 2019)
[7] (Wikipedia, 2019)

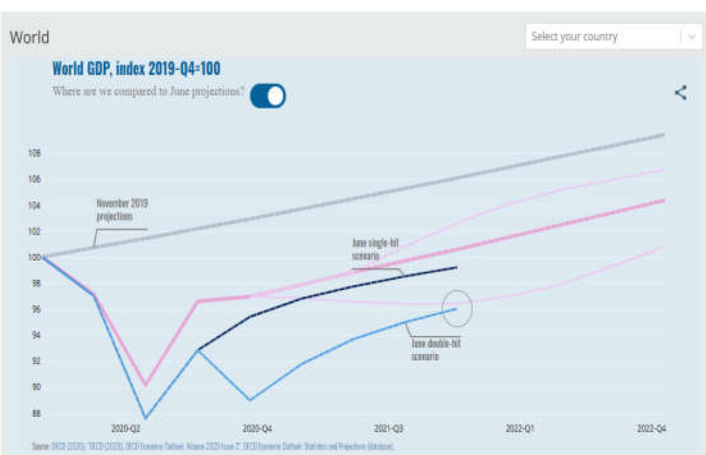
- Interest rates are extremely low in developed economies and low in emerging economies.
- Manufacturing purchasing manager activity has improved in 6 of 9 areas and suggests an expanding manufacturing sector.
- Service purchasing manager activity remains relatively weak versus manufacturing. Service activity is expanding in the US, China, India and Brazil.
- Unemployment remains a sore spot in the Euro Area, Canada, and Brazil. Trends are flat to improving in most countries surveyed.
- Retail sales growth is lackluster in half the areas surveyed. COVID-19 is impacting travel, shopping and eating away from home. In 5 of 8 areas surveyed retail sales have fallen sequentially due to increased government shutdowns.

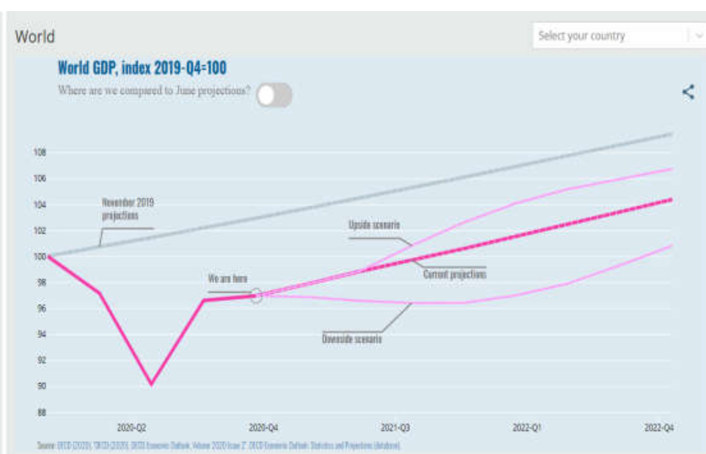
Key questions going forward are: how long will the recession last and what will the earnings picture look like?

According to data compiled by JP Morgan Asset Management, US real GDP declined 10.1% from the fourth quarter of 2019 through the second quarter of 2020. The percentage decline represents the third largest percentage decline since 1929[8]. The current recession is anticipated to last 3-4 quarters. Worth referencing, US recessions have lasted 17.5 months on average since 1854 and 11 months on average since 1945[9].

Many believe economic activity will only sustainably improve after COVID-19 vaccines are widely distributed to the population. Consensus forecasts generally expect this occur between the second half of 2021 and the first half of 2022.

Economic forecasts were lowered from 4Q 19 to 2Q 20 and have modestly improved since then. According to The Organization of Economic Development (OECD), the double economic hit scenario is no longer probable. A slightly stronger economic recovery now appears increasingly likely. The graph on the left below highlights the June 2020 projections (blue lines) versus the December 2020 projections (pink lines)[10]. The graph on the right below highlights the December 2020 economic scenarios (upside, current and downside).




---

8 (J.P. Morgan Asset Management )
9 (The National Bureau of Economic Research, 2021)
10 (OECD, 2020)

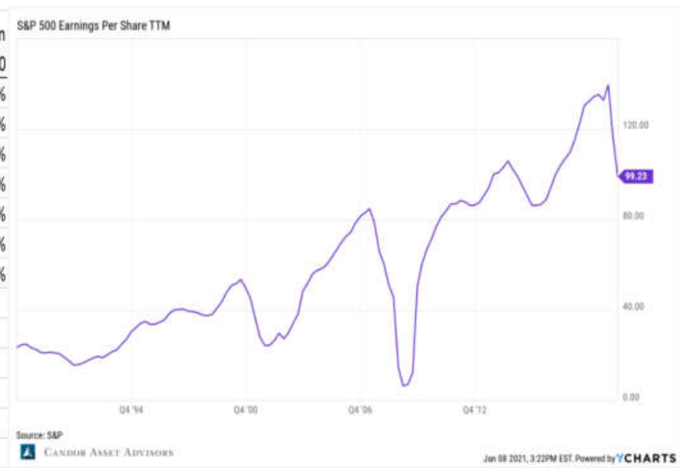
The OECD believes economic growth will resume on a year-over-year basis in 2021. Also, the OECD believes emerging markets will experience a more rapid recovery in 2021 and 2022[11].

**OECD December 2020 Economic Outlook Projections**

| Real GDP Growth YoY | 2020 | 2021 | 2022 | % of World's GDP |
|---|---|---|---|---|
| US | -3.7% | 3.2% | 3.5% | 24.5% |
| Euro Area | -7.5% | 3.6% | 3.3% | 21.4% |
| Japan | -5.3% | 2.3% | 1.5% | 5.8% |
| Canada | -5.4% | 3.5% | 2.0% | 1.9% |
| South Korea | -1.1% | 2.8% | 3.4% | 1.8% |
| **Developed Countries Weighted Average** | **-5.3%** | **3.3%** | **3.2%** | **55.6%** |
| | | | | |
| China | 1.8% | 8.0% | 4.9% | 16.2% |
| India | -9.9% | 7.9% | 4.8% | 3.3% |
| Brazil | -6.0% | 2.6% | 2.2% | 2.1% |
| Russia | -4.3% | 2.8% | 2.2% | 1.8% |
| **Emerging Countries Weighted Average** | **-1.0%** | **7.1%** | **4.4%** | **23.4%** |

According to data compiled by the S&P, S&P 500 earnings are expected to bottom out in the second half of 2020[12] [13]. Earnings are expected to rebound to pre-COVID levels by the second half of 2021. Earning visibility remains poor, and earnings estimates have modestly improved over the last 90 days.

| Quarter End | Twelve Month Reported Earnings | Year-over-year growth | Reported Earnings Revision from October 2020 |
|---|---|---|---|
| 12/31/2021 | 149.63 | 57.5% | 4.9% |
| 9/30/2021 | 141.85 | 44.4% | 5.6% |
| 6/30/2021 | 135.50 | 36.6% | 8.5% |
| 3/30/2021 | 116.74 | 0.4% | 9.2% |
| 12/31/2020 | 95.00 | -31.9% | 8.8% |
| 9/30/2020 | 98.22 | -26.1% | 5.6% |
| 6/30/2020 | 99.23 | -26.6% | 0.0% |
| 3/31/2020 | 116.33 | -13.4% | |
| 12/31/2019 | 139.47 | 5.3% | |
| 9/30/2019 | 132.90 | | |
| 6/30/2019 | 135.27 | | |
| 3/31/2019 | 134.39 | | |
| 12/31/2018 | 132.39 | | |

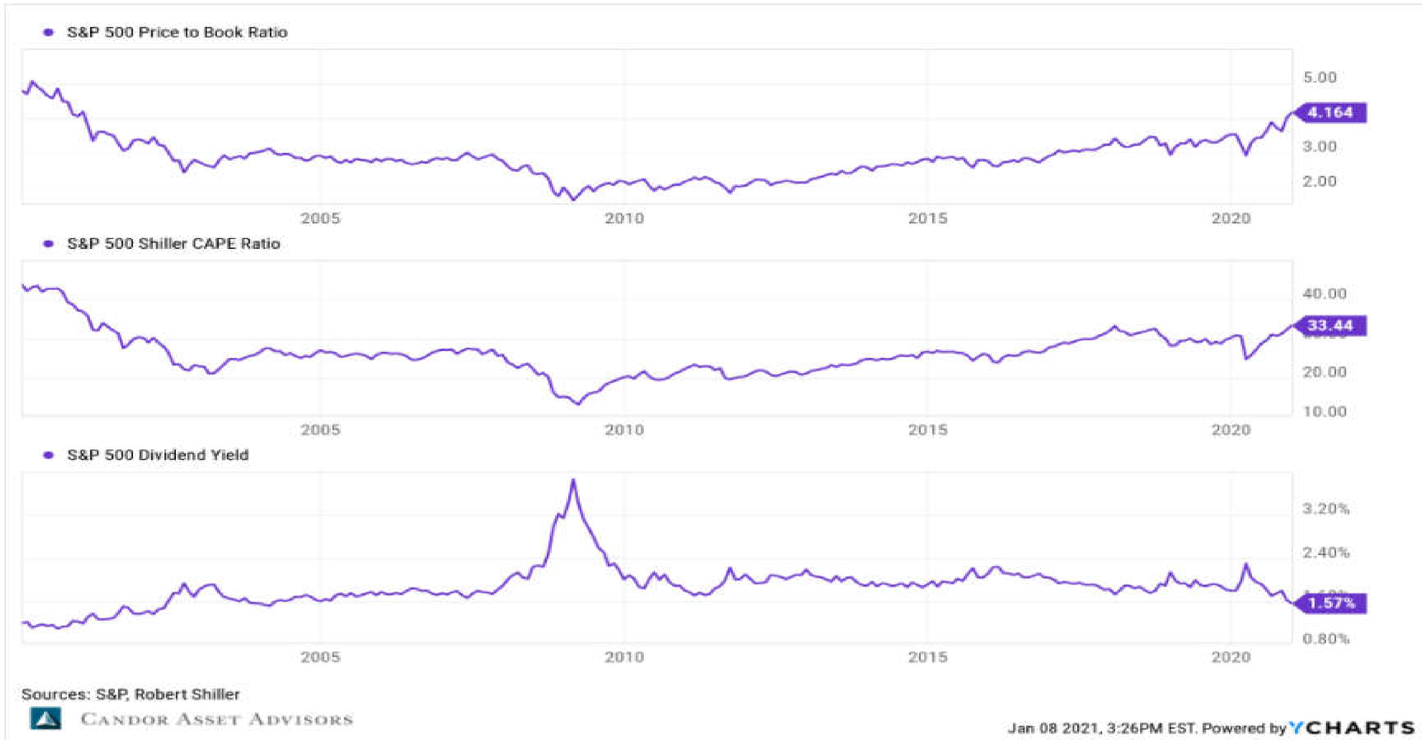



So how has the US stock market responded? The stock market's response is summarized below[14] [15]. The stock market's quick and substantial rise since March 2020 in the face of the pandemic stands out.

| Phase | Time Period | Developments | S&P Move |
|---|---|---|---|
| Denial | 11/17/19- 2/19/20 | Belief COVID-19 will remain contained and/or the economic impact will be minimal | 8.5% |
| Fear | 2/20/20-3/23/20 | Fear COVID-19 will spread globally and cause significant economic damage | -33.9% |
| Hope | 3/23/20-Present | Hope new cases will moderate, government easing business restrictions will help, government stimulus will prove effective, and/or medical break throughs will occur | 70.6% |
| | | | |
| Inspired by: Robert Shiller 'Understanding the Pandemic Stock Market', *Project Syndicate* , 7/7/20 | | | |

[11] (OECD, 2020)
[12] (Silverblatt, S&P Indices.Com, 2020)
[13] (YCharts, 2021)
[14] (Shiller, 2020)
[15] (YCharts, 2021)

The US stock market appears to have priced in a recession and a recovery. Supporting this thesis, the US stock market has recovered to above average levels relative to dividends, book value and 10-year inflation adjusted earnings[16].




It is worth reviewing the US stock market versus international stock markets. The latest relative growth data suggest international and emerging market earnings growth comparisons to the US are expected to improve[17]. 2020 earnings growth estimates have modestly improved around the world.

| | 2019A | 2020E | 2021E |
|---|---|---|---|
| **Revenues** | | | |
| United States | 4.6% | -1.7% | 8.1% |
| International Developed Markets | 0.2% | -9.1% | 6.7% |
| International Emerging Markets | 5.4% | -0.7% | 11.4% |
| | | | |
| **Earnings** | | | |
| United States | 1.6% | -10.8% | 20.5% |
| International Developed Markets | -8.9% | -25.4% | 36.7% |
| International Emerging Markets | -4.3% | -4.1% | 33.9% |
| | | | |
| Source: Yardeni Research MSCI Revenue and Earnings Growth 1/6/21 | | | |

[16] (YCharts, 2021)

[17] (Yardeni, Performance Derby: MSCI Regions/Countries Earnings & Revenue Growth 2021E/ 2020E / 2019A, 2021)

Chinese stocks have outperformed the rest of the world year-to-date as investors have recognized China was the first to go through and address the negative impacts of COVID-19[18]. Today US forward price-to-earnings ratios look elevated versus history and the world[19].

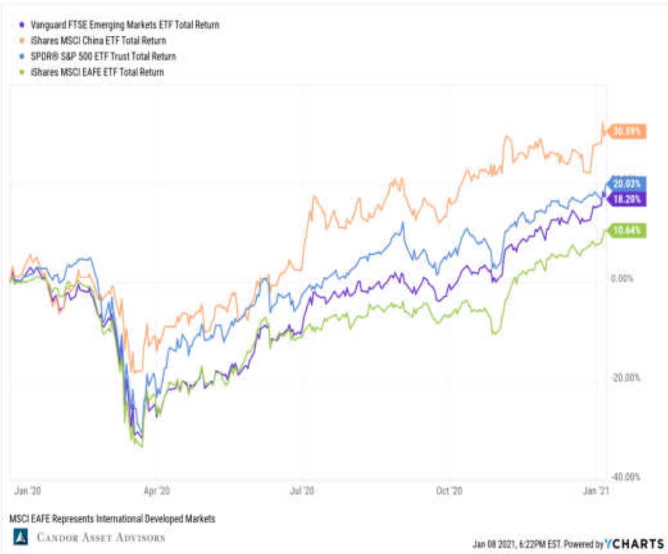
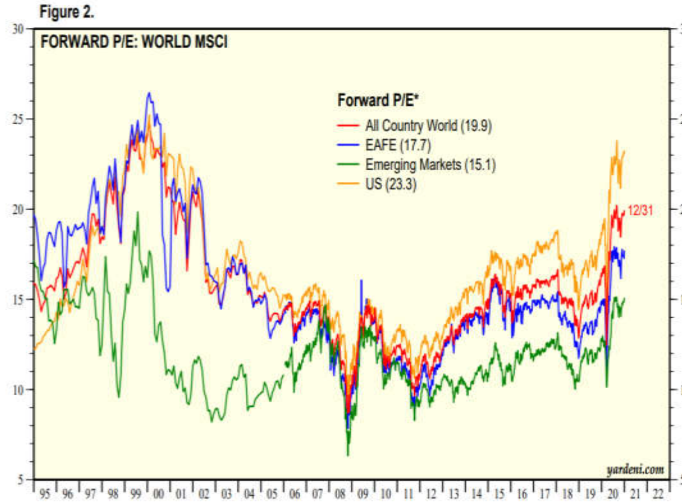



Figure 2.

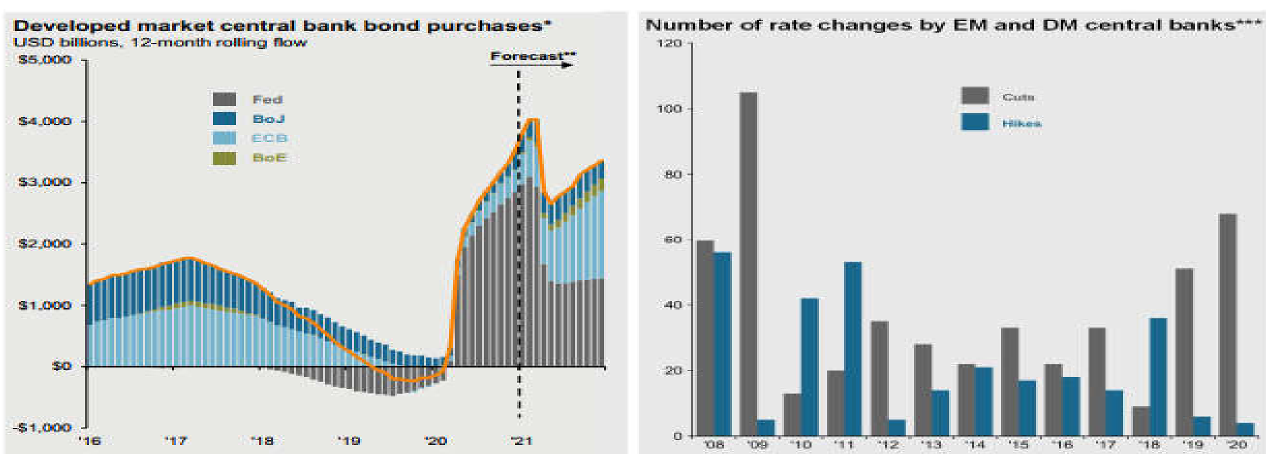



* Price divided by 12-month forward consensus expected operating earnings per share. Monthly through December 2005, weekly thereafter.
Source: I/B/E/S data by Refinitiv.

In general, we see better stock investment return prospects abroad. For more information on investment strategy performance, positioning and opportunities please refer to our portfolio commentaries.

## Government Monetary and Fiscal Stimulus Activity

Central banks have increased monetary stimulus through asset purchases and lowering interest rates[20].




Source: J.P. Morgan Asset Management; (Left) Bank of England, Bank of Japan, European Central Bank, FactSet, Federal Reserve System, J.P. Morgan Global Economic Research; (Right) Bloomberg. *Includes the Bank of Japan (BoJ), Bank of England (BoE), European Central Bank (ECB) and Federal Reserve. **Bond purchase forecast assumes $150bn GBP in net purchases from BoE through December 2021; BoJ QE of $30trn JPY ann. for 2021; $1,165trn EUR in net purchases from the ECB through December 2021; and the Federal Reserve to purchase $960bn of Treasuries, $480bn of agency MBS through December 2021. Fed assumptions are based on December 2020 policy announcement. ***Central banks include Australia, Brazil, Canada, Chile, China, Colombia, Denmark, euro area, Hong Kong SAR, Indonesia, India, Japan, Korea, Malaysia, Mexico, Norway, Peru, Philippines, Poland, Russia, Saudi Arabia, South Africa, Sweden, Switzerland, Thailand, Turkey, United Kingdom and the United States. *Guide to the Markets – U.S.* Data are as of December 31, 2020.

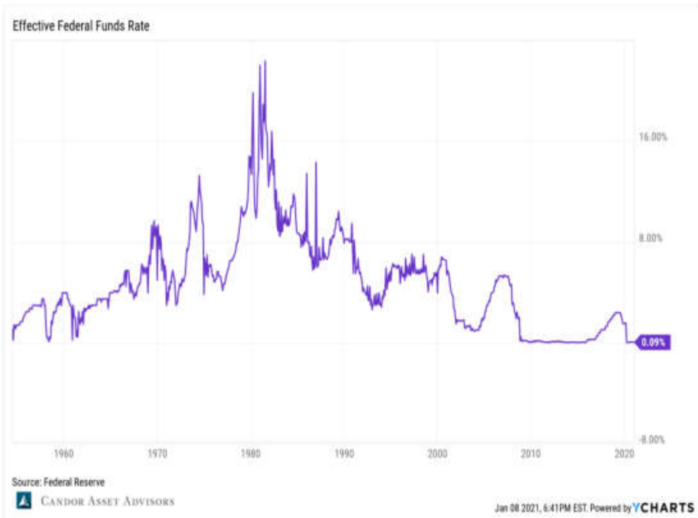
J.P.Morgan Asset Management

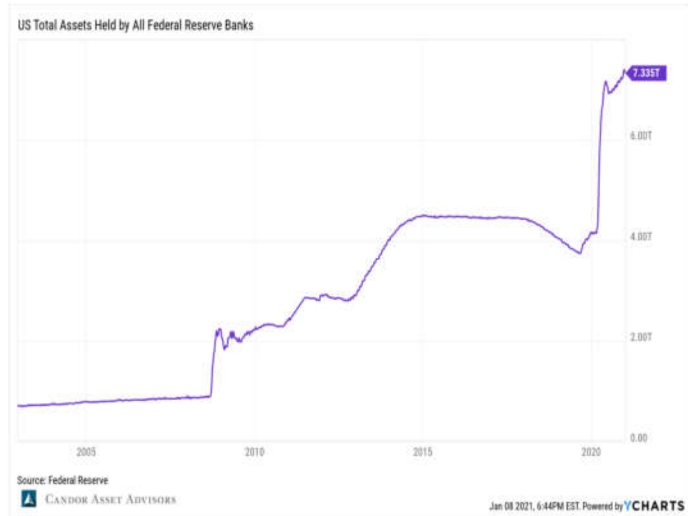
[18] (YCharts, 2021)

[19] (Yardeni, Global Index Briefing: MSCI Forward P/Es, 2021)

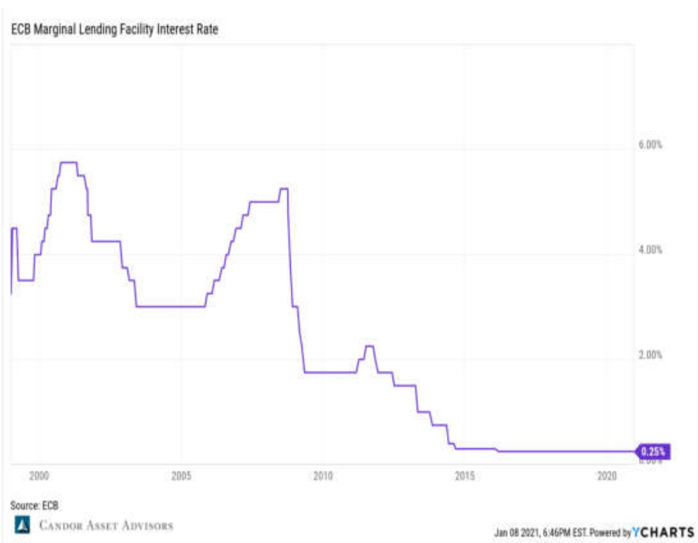
[20] (J.P. Morgan Asset Management )

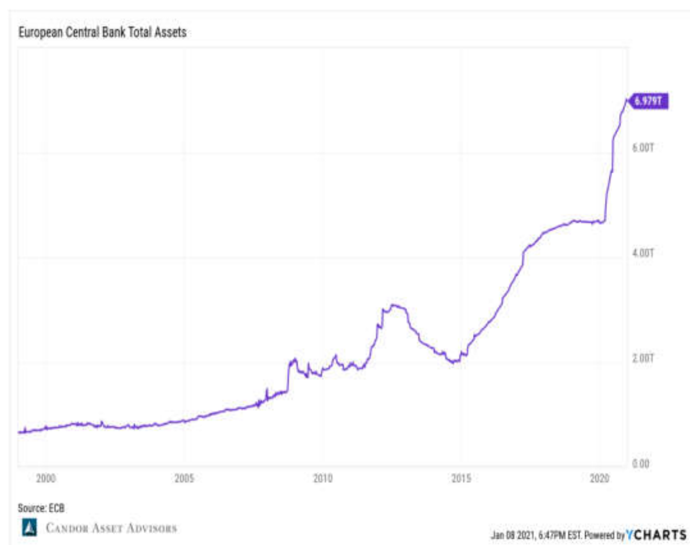
The US Federal Reserve became more cautious about the economy starting in late 2018. In response the Federal Reserve cut the fed funds rate to stimulate economic activity. Today the fed funds rate remains near record lows[21]. The latest Federal Open Market Committee (FOMC) projections call for the fed funds rate to be 0.1% in 2021, 0.1-0.6% in 2022, 0.1-1.1% in 2023 and 2-3% over the long run[22]. Consistent with adopting less restrictive monetary policy, the Federal Reserve has increasingly used the balance sheet to support economic growth[23].




Looking outside the US, the European Central Bank (ECB) has also engaged in monetary stimulus in recent years. Like the US Federal Reserve, the ECB has lowered rate expectations and expanded the balance sheet[24].



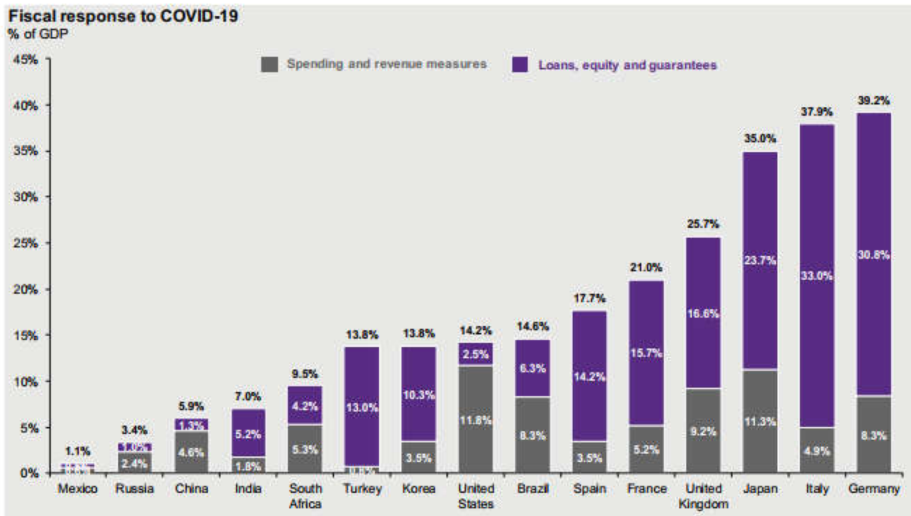




It is worth noting that Federal Reserve and the ECB short-term interest rates are at such low levels today that further rate cuts should prove less useful in stimulating economic demand.

---

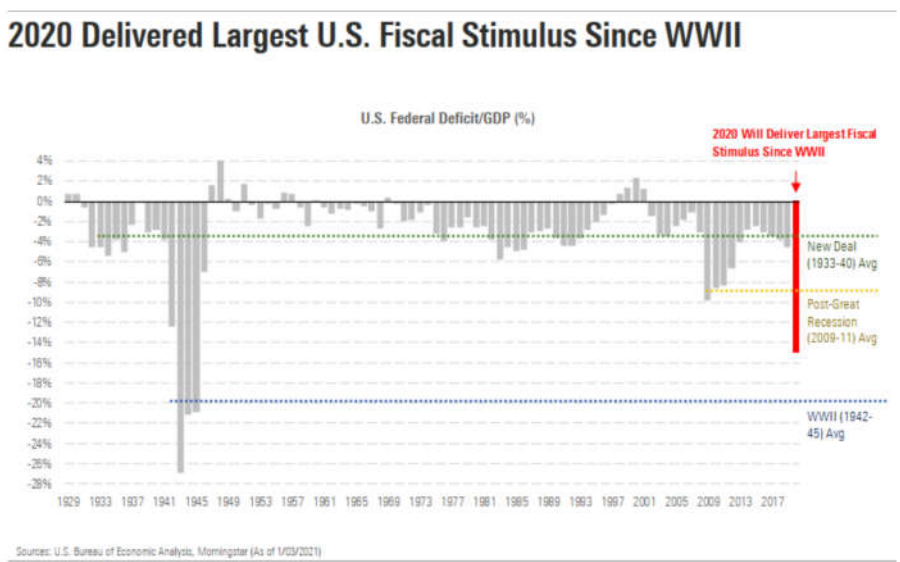
[21] (YCharts, 2021)
[22] (Federal Reserve, 2020)
[23] (YCharts, 2021)
[24] (YCharts, 2021)

Governments throughout the world have engaged in fiscal stimulus to support economic activity. JP Morgan highlights Germany, Italy, Japan and the UK have been the most active[25]. Investors have generally cheered this government support. In the interim, government fiscal policy will have to play a greater role in supporting the economic recovery.




Source: IMF Fiscal Monitor, J.P. Morgan Asset Management.
Fiscal measures are estimates from the IMF's October 2020 Fiscal Monitor.
*Guide to the Markets – U.S.* Data are as of December 31, 2020.

Of note, the US fiscal stimulus has been significant and represents the largest in % terms since World War II[26].




The recent fiscal stimulus will accelerate the US' growing debt issue. According to the Congressional Budget Office, the US' debt to GDP ratio is expected to grow by 9% to 107% by 2023. The 107% ratio will represent the largest percentage in US history. Observers argue greater debt service payments will eventually serve as an anchor on economic activity[27].

[25] (J.P. Morgan Asset Management )
[26] (Morningstar, 2021)
[27] (Congressional Budget Office United States, 2020)

## Recessions, Stock Market Corrections, Bear Markets, and Recoveries

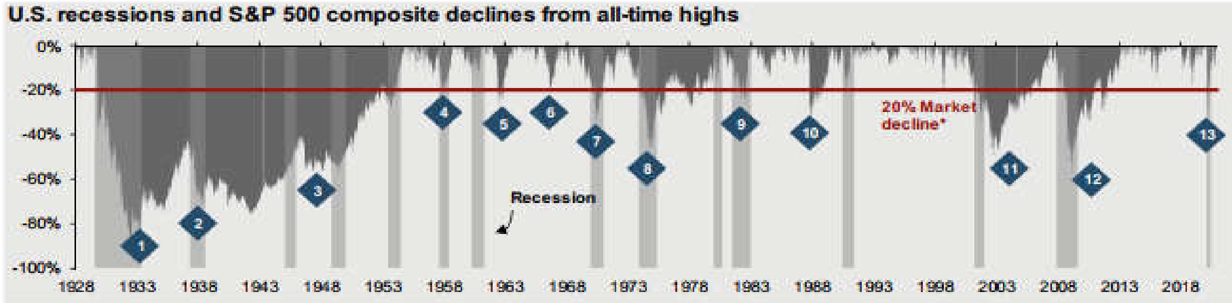
- A recession according to National Bureau of Economic Research (NBER), which is the official arbiter in characterizing business cycles, defines an economic recession as "a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales." In practice this means a recession can represent a slowdown in economic growth over a few quarters rather an actual decline in economic statistics. Business cycles since 1854 are noted below[28].

| Business Cycle Reference Dates | | | | | | Contraction | Expansion | Cycle | |
|---|---|---|---|---|---|---|---|---|---|
| Peak Month | Peak Year | Peak Quarter | Trough Month | Trough Year | Trough Quarter | Peak to Trough (Months) | Previous Trough to this Peak (Months) | Trough from Previous Trough (Months) | Peak from Previous Peak (Months) |
| - | - | - | December | 1854 | 4 | - | - | - | - |
| June | 1857 | 2 | December | 1858 | 4 | 18 | 30 | 48 | - |
| October | 1860 | 3 | June | 1861 | 3 | 8 | 22 | 30 | 40 |
| April | 1865 | 1 | December | 1867 | 1 | 32 | 46 | 78 | 54 |
| June | 1869 | 2 | December | 1870 | 4 | 18 | 18 | 36 | 50 |
| October | 1873 | 3 | March | 1879 | 1 | 65 | 34 | 99 | 52 |
| March | 1882 | 1 | May | 1885 | 2 | 38 | 36 | 74 | 101 |
| March | 1887 | 2 | April | 1888 | 1 | 13 | 22 | 35 | 60 |
| July | 1890 | 3 | May | 1891 | 2 | 10 | 27 | 37 | 40 |
| January | 1893 | 1 | June | 1894 | 2 | 17 | 20 | 37 | 30 |
| December | 1895 | 4 | June | 1897 | 2 | 18 | 18 | 36 | 35 |
| June | 1899 | 3 | December | 1900 | 4 | 18 | 24 | 42 | 42 |
| September | 1902 | 4 | August | 1904 | 3 | 23 | 21 | 44 | 39 |
| May | 1907 | 2 | June | 1908 | 2 | 13 | 33 | 46 | 56 |
| January | 1910 | 1 | January | 1912 | 4 | 24 | 19 | 43 | 32 |
| January | 1913 | 1 | December | 1914 | 4 | 23 | 12 | 35 | 36 |
| August | 1918 | 3 | March | 1919 | 1 | 7 | 44 | 51 | 67 |
| January | 1920 | 1 | July | 1921 | 3 | 18 | 10 | 28 | 17 |
| May | 1923 | 2 | July | 1924 | 3 | 14 | 22 | 36 | 40 |
| October | 1926 | 3 | November | 1927 | 4 | 13 | 27 | 40 | 41 |
| August | 1929 | 3 | March | 1933 | 1 | 43 | 21 | 64 | 34 |
| May | 1937 | 2 | June | 1938 | 2 | 13 | 50 | 63 | 93 |
| February | 1945 | 1 | October | 1945 | 4 | 8 | 80 | 88 | 93 |
| November | 1948 | 4 | October | 1949 | 4 | 11 | 37 | 48 | 45 |
| July | 1953 | 2 | May | 1954 | 2 | 10 | 45 | 55 | 56 |
| August | 1957 | 3 | April | 1958 | 2 | 8 | 39 | 47 | 49 |
| April | 1960 | 2 | February | 1961 | 1 | 10 | 24 | 34 | 32 |
| December | 1969 | 4 | November | 1970 | 4 | 11 | 106 | 117 | 116 |
| November | 1973 | 4 | March | 1975 | 1 | 16 | 36 | 52 | 47 |
| January | 1980 | 1 | July | 1980 | 3 | 6 | 58 | 64 | 74 |
| July | 1981 | 3 | November | 1982 | 4 | 16 | 12 | 28 | 18 |
| July | 1990 | 3 | March | 1991 | 1 | 8 | 92 | 100 | 108 |
| March | 2001 | 1 | November | 2001 | 4 | 8 | 120 | 128 | 128 |
| December | 2007 | 4 | June | 2009 | 2 | 18 | 73 | 91 | 8 |
| February | 2020 | - | - | - | - | - | 128 | - | 146 |
| **Averages** | | | **# of Cycles** | | | | | | |
| **All Periods** | | | **34** | | **2.6** | **17.5** | **41.4** | **56.2** | **56.9** |
| **1854-1919** | | | **17** | | **2.6** | **21.6** | **26.6** | **48.2** | **48.9** |
| **1920-1945** | | | **6** | | **2.8** | **18.2** | **35.0** | **53.2** | **53.0** |
| **1946-Present** | | | **11** | | **2.5** | **11.1** | **64.2** | **69.5** | **68.9** |

- NBER announced in June 2020 that the US entered a recession starting in February 2020[29].
- From the table above[30]:
  - The average recession since 1854 is 18 months and since 1946 is 11 months.
  - The longest recession since 1854 is 65 months from 1873 through 1879.
  - The average economic expansion is 56 months since 1854 and 70 months since World War II.
  - The June 2009 through February 2020 economic expansion was the longest since 1854.

[28] (The National Bureau of Economic Research, 2021)
[29] (the National Bureau of Economic Research, 2021)
[30] (the National Bureau of Economic Research, 2021)

## U.S. recessions and S&P 500 composite declines from all-time highs




## Characteristics of bull and bear markets

| | Market correction | Bear Market | | | Macro environment | | | | Bull markets | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Market peak | Bear return* | Duration (months)* | Recession | Commodity Spike | Aggressive Fed | Extreme Valuation | Bull begin date | Bull return | Duration (months) |
| 1 | Crash of 1929 - Excessive leverage, irrational exuberance | Sep 1929 | -86% | 32 | ◆ | | | ◆ | Jul 1926 | 152% | 37 |
| 2 | 1937 Fed Tightening - Premature policy tightening | Mar 1937 | -60% | 61 | ◆ | | ◆ | | Mar 1935 | 129% | 23 |
| 3 | Post WWII Crash - Post-war demobilization, recession fears | May 1946 | -30% | 36 | ◆ | | | ◆ | Apr 1942 | 158% | 49 |
| 4 | Eisenhower Recession - Worldwide recession | Aug 1956 | -22% | 14 | ◆ | | ◆ | ◆ | Jun 1949 | 267% | 85 |
| 5 | Flash Crash of 1962 - Flash crash, Cuban Missile Crisis | Dec 1961 | -28% | 6 | | | | ◆ | Oct 1960 | 39% | 13 |
| 6 | 1966 Financial Crisis - Credit crunch | Feb 1966 | -22% | 7 | | | ◆ | ◆ | Oct 1962 | 76% | 39 |
| 7 | Tech Crash of 1970 - Economic overheating, civil unrest | Nov 1968 | -36% | 17 | ◆ | ◆ | ◆ | | Oct 1966 | 48% | 25 |
| 8 | Stagflation - OPEC oil embargo | Jan 1973 | -48% | 20 | ◆ | ◆ | | | May 1970 | 74% | 31 |
| 9 | Volcker Tightening - Whip Inflation Now | Nov 1980 | -27% | 20 | ◆ | ◆ | ◆ | | Mar 1978 | 62% | 32 |
| 10 | 1987 Crash - Program trading, overheating markets | Aug 1987 | -34% | 3 | | | | ◆ | Aug 1982 | 229% | 60 |
| 11 | Tech Bubble - Extreme valuations, .com boom/bust | Mar 2000 | -49% | 30 | ◆ | | | ◆ | Oct 1990 | 417% | 113 |
| 12 | Global Financial Crisis - Leverage/housing, Lehman collapse | Oct 2007 | -57% | 17 | ◆ | ◆ | ◆ | | Oct 2002 | 101% | 60 |
| 13 | Global Slowdown - COVID-19, oil price war | Feb 2020 | -34% | 1 | ◆ | | | | Mar 2009 | 401% | 141 |
| | Averages | - | -42% | 22 | | | | | - | 166% | 54 |

Source: FactSet, NBER, Robert Shiller, Standard & Poor's, J.P. Morgan Asset Management.
*A bear market is defined as a 20% or more decline from the previous market high. The related market return is the peak to trough return over the cycle. Periods of "Recession" are defined using NBER business cycle dates. "Commodity spikes" are defined as movement in oil prices of over 100% over an 18-month period. Periods of "Extreme Valuations" are those where S&P 500 last 12-months P/E levels were approximately two standard deviations above long-run averages, or time periods where equity market valuations appeared expensive given the broader macroeconomic environment. "Aggressive Fed Tightening" is defined as Federal Reserve monetary tightening that was unexpected and/or significant in magnitude. Bear and bull returns are price returns.
*Guide to the Markets – U.S.* Data are as of December 31, 2020.

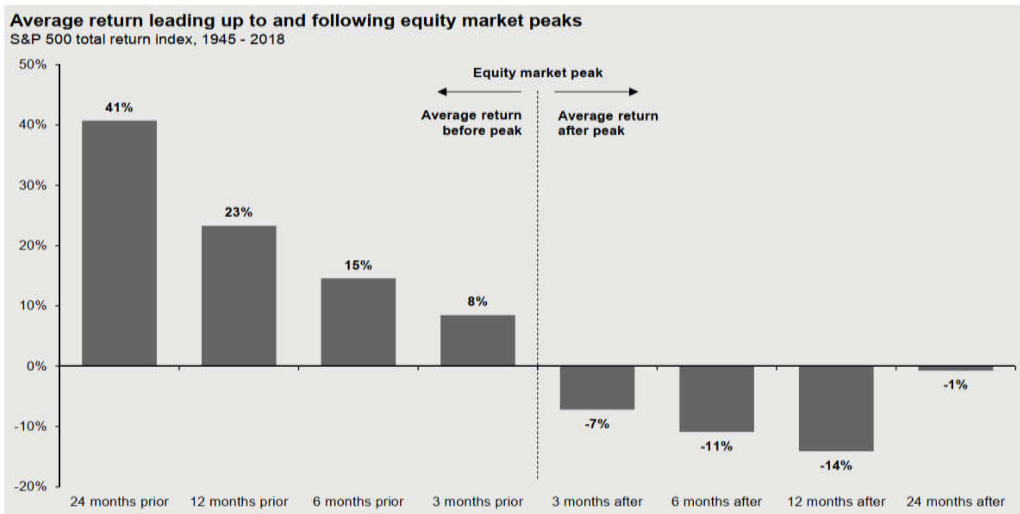
J.P.Morgan Asset Management

- Stock market corrections are defined as a 10-20% drop in stock prices[31]. Corrections usually occur every one to three years[32].
- Bear markets are defined as a drop of 20% or more in stock prices[33].
- In late 2018 the S&P dropped 19.8%[34]. The decline fell just short of being called a bear market and represented a correction.
- From the chart above[35]:
  - 75% of bear markets have occurred around recessions.
  - Since 1929, the average bear market decline is 42% with the maximum bear market decline registering 86% in 1929.
  - Most bear markets last less than three years, and the average bear market lasts 22 months.
  - The recent March 2009 - February 2020 bull market was the longest ever, and the S&P grew 401%.
  - The February 2020 bear market lasted only one month when the S&P 500 fell 34%.
  - The previous bear market occurred in 2007 and lasted 17 months. The S&P fell 57% over the period.
  - The 41% rally from March 23, 2020 through June 24, 2020 was the fastest in history[36].

---

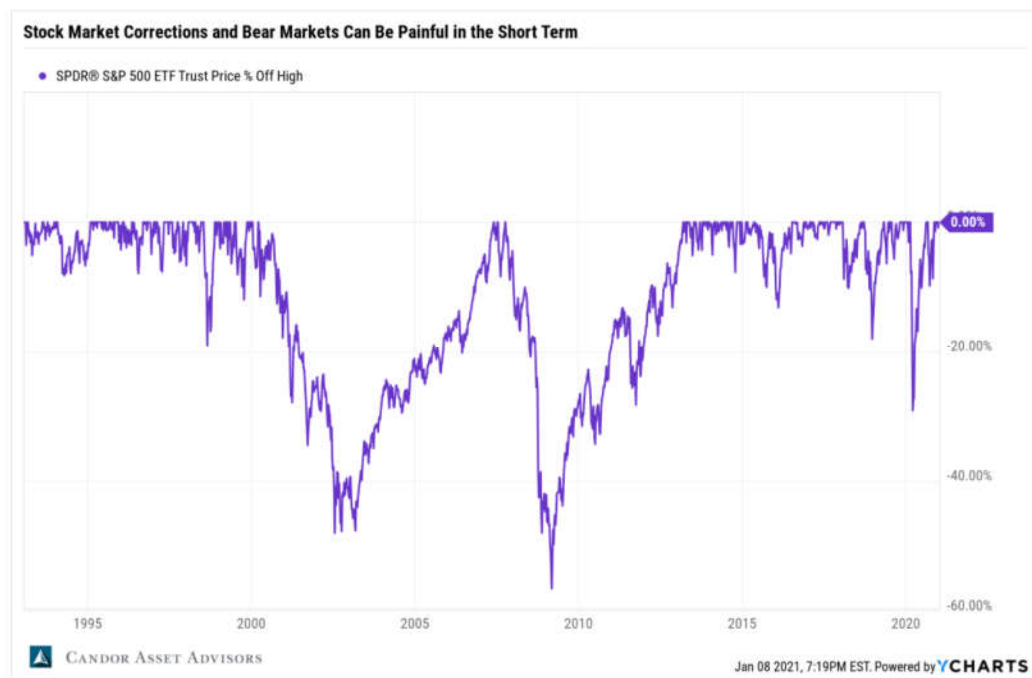
[31] (Investopedia, n.d.)
[32] (YCharts, 2021)
[33] (Investopedia, n.d.)
[34] (YCharts, 2021)
[35] (J.P. Morgan Asset Management )
[36] (Khan, 2020)

- Since 1945 equity returns two years after a market peak have been roughly flat[37].



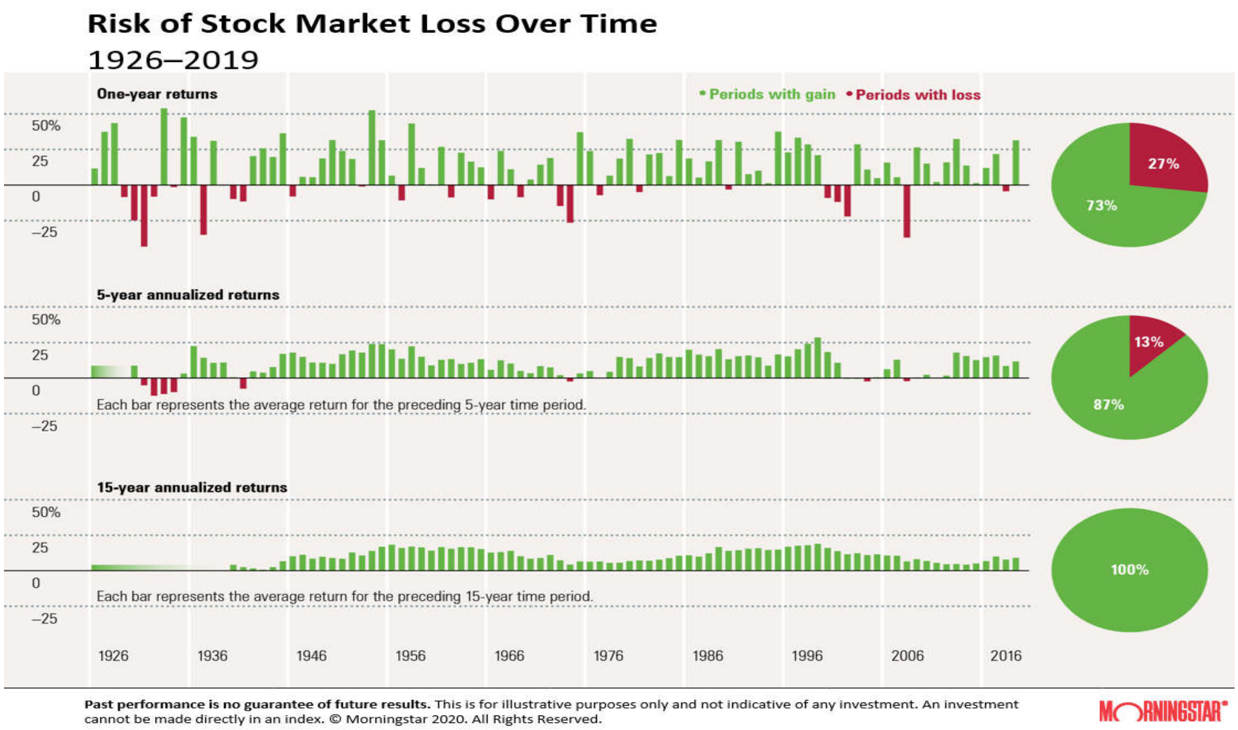

Source: FactSet, Robert Shiller, Standard & Poor's, J.P. Morgan Asset Management.
Chart is based on return data from 11 bear markets since 1945. A bear market is defined as a decline of 20% or more in the S&P 500 benchmark.
Monthly total return data from 1945 to 1970 is from the S&P Shiller Composite index. From 1970 to present, return data is from Standard & Poor's.
*Guide to the Markets – U.S.* Data are as of March 31, 2019.

- Stock market declines can be painful in the short run. We endured this in the first quarter of 2020[38].




[37] (J.P. Morgan Asset Management )
[38] (YCharts, 2021)

It is important to have a long-term horizon when you invest in stocks. The table below highlights the risk of negative returns falls as your time horizon grows. The Ibbotson large cap index is referenced in the chart below[39].




History suggests most stock market timing strategies have failed, so we should not panic during market declines[40] [41].

US stock return studies since the mid 1950s suggest the same thing. Remaining fully invested generated significantly higher returns over the long run.

### 1954-1994 Return Study

- S&P earned a 11.4% annual return
- If you were out of the market during the best performing days
  - 2% of the time you earned a 8.3% annual return
  - 4% of the time you earned a 6.1% annual return
  - 8% of the time you earned a 2.7% annual return

### 1998-2017 Return Study

- S&P earned a 7.2% annual return
- If you were out of the market during the
  - Top 10 days 3.5% annual return
  - Top 30 days -.9% annual return
  - Top 50 days -4.4% annual return
  - Top 100 days -11.2% annual return

Past performance is not a guarantee or predictor of future performance. Charts are for illustrative purposes only and do not represent an actual investment or performance of any specific investment. The S&P 500 is an unmanaged index of 500 stocks that is generally representative of the performance of larger US companies. An investor can not invest directly in an index. Unmanaged index returns do not reflect any fees, expenses or sales charges. Dividends are subject to reinvestment.

[39] (Morningstar, 2020)
[40] (Lynch, 2000)
[41] (Legg Mason, n.d.)

## Closing Thoughts

To sum up, COVID-19 continues to have a damaging impact to our economy. We entered a recession in February 2020, and no one knows for certain when we will come out of it. The stock market is forward looking however, and investors have already bid up shares in the anticipation of an economic recovery.

When investing, it's important to keep a long-term perspective as study after study suggests market timing is a fool's errand. The global stock market has persisted over time through wars (e.g., World War I, World War II, etc.), health events (e.g., 1918 Spanish flu, SARS, MERS), shocks (e.g., 9/11, Cuban Missile Crisis), bear markets (e.g., 1930s, 1973-74, 2001, 2008/9), and recessions (e.g., Great Depression, 2008/2009 financial crisis)[42].

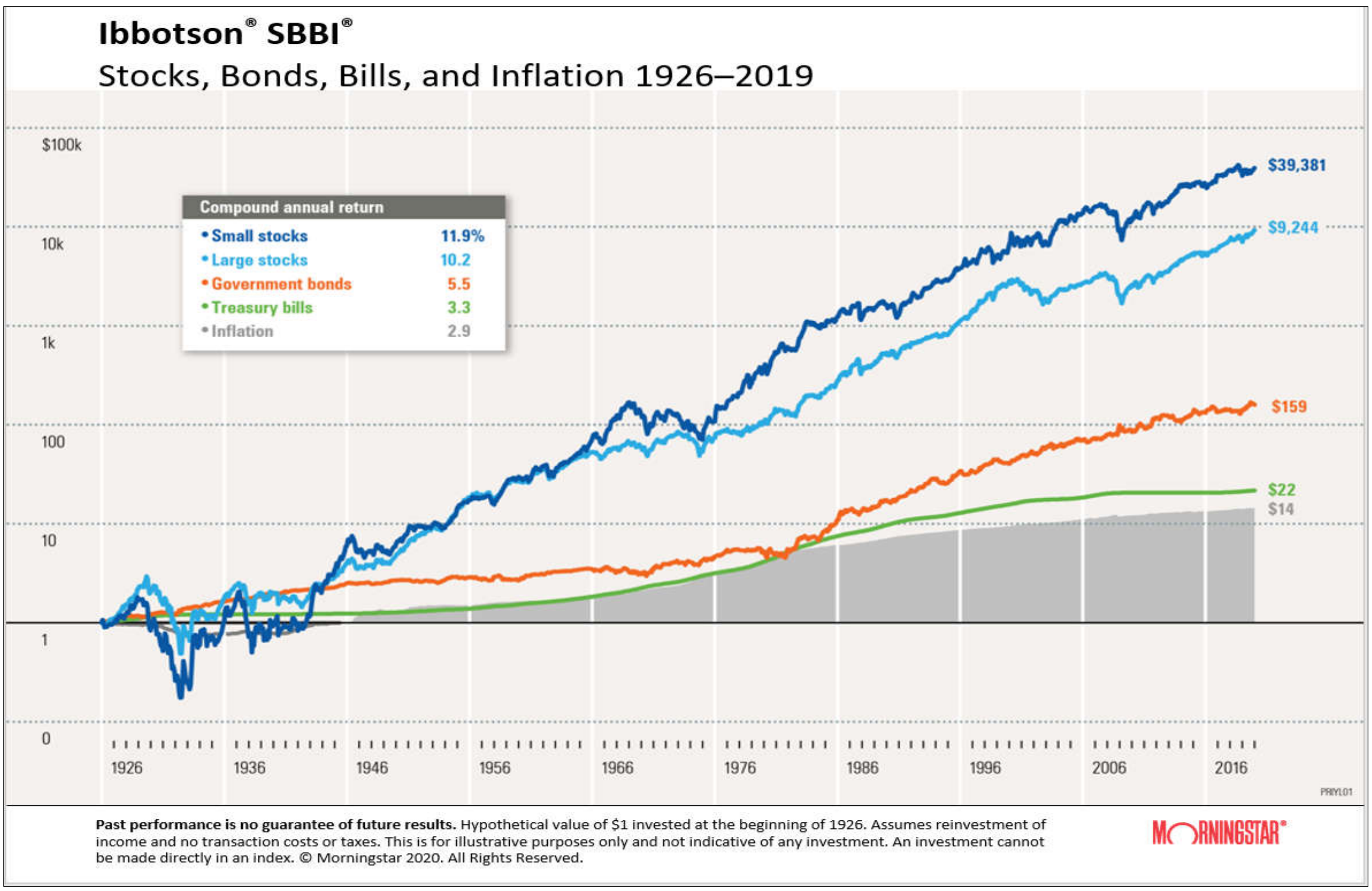



Chart: Small stocks in this example are represented by the Ibbotson Small Company Stock Index. Large stocks are represented by the Ibbotson Large Company Stock Index. Government bonds are represented by the 20-year U.S. government bond, Treasury bills by the 30-day U.S. Treasury bill, and inflation by the Consumer Price Index. Source: Ibbotson

[42] (Morningstar, 2020)

Regarding your financial situation and proper asset allocation, please consider the following:

- Your liquidity needs – Make sure you set aside the proper amount of money to pay your bills, plan for near and intermediate term large purchases and address emergency events (e.g., job change/loss, medical, auto, home). An emergency fund should usually be allocated with a shorter-term time horizon.
- Your financial plan and investment time horizon – The time period usually corresponds with your life expectancy adjusted for estate planning considerations. Regarding life expectancy, studies suggest if you are healthy and have an average family healthy history you should probably plan on living until at least your mid 80s to mid 90s[43]. This observation suggests if you are:
    - Age 30-40 your financial plan time horizon is likely 45+ years
    - Age 40-50 your financial plan time horizon is likely 35+ years
    - Age 50-60 your financial plan time horizon is likely 25+ years
    - Age 60-70 your financial plan time horizon is likely 15+ years
    - Age 70-80 your financial plan time horizon is likely 5-15+ years
- Your risk capacity – How much you should allocate to stocks and fixed income usually reflects the goals of maximizing your wealth, providing for loved ones or charities and/or improving the probability that you don't run out of money. Adding a larger percentage of fixed income to your portfolio as your investment time horizon shortens generally makes sense. Diversification also helps.
- Your risk tolerance – Reflect on how you have reacted to previous market declines. Be proactive and anticipate how you would react in the future if your portfolio fell by 10-50%. When would you lose too much sleep at night and begin making bad investment decisions?

After reviewing these factors, please let us know if you would like to revisit your asset allocation alternatives.

As always please reach out to us if you have questions or comments.

Sincerely,

William E. Hawes, CFA, CFP®
President and Chief Investment Officer
Candor Asset Advisors

[43] (Social Security Administration, n.d.)

## References

Congressional Budget Office United States. (2020, September 21). *The 2020 Long-Term Budget Outlook.* Retrieved from Congressional Budget Office: https://www.cbo.gov/publication/56516

European Central Bank. (n.d.). *Press Releases*. Retrieved from European Central Bank: https://www.ecb.europa.eu/stats/policy_and_exchange_rates/key_ecb_interest_rates/html/index.en.html

Federal Reserve Bank of St. Louis. (n.d.). *Economic Research FOMC Summary of Economic Projections for the Fed Funds Rate, Median* . Retrieved from Federal Reserve Bank of St. Louis: https://fred.stlouisfed.org/series/FEDTARMD

FT Visual & Data Journalism Team. (2021, January 8). *Coronavirus tracked: has the epidemic peaked near you?* Retrieved from Financial Times: https://ig.ft.com/coronavirus-chart/

Georgieva, K. (2020, March 4). *Potential Impact of the Coronavirus Epidemic: What We Know and What We Can Do.* Retrieved from https://blogs.imf.org/2020/03/04/potential-impact-of-the-coronavirus-epidemic-what-we-know-and-what-we-can-do/

Investopedia. (n.d.). *Bear Market*. Retrieved from Investopedia: https://www.investopedia.com/terms/b/bearmarket.asp

Khan, F. (2020, June 24). *The Fastest Bear Market & the Fastest Recovery in History.* Retrieved from Medium.Com: https://medium.com/technicity/fastest-bear-market-the-fastest-recovery-in-history

Legg Mason. (n.d.). *It's Time in The Market, Not Market TIming*. Retrieved from Legg Mason Global Asset Management: https://www.leggmason.com/en-us/investor-education/cost-of-timing-the-stock-market.html

Lynch, P. (2000). *One Up on Wall Street Revised.* New York: Simon & Schuster.

Morningstar. (2020, February 28). *Stocks and Bonds.* Retrieved from Analyst Research Center : stocks_and_bonds_20

Morningstar. (n.d.). *Ibbotson Return Studies*. Retrieved from Morningstar Analyst Research Center: https://ar.morningstar.com/

OECD. (2020, December). *OECD Economic Outlook, December 2020*. Retrieved from OECD.org: http://www.oecd.org/economic-outlook/

OECD. (2020, June). *The world economy on a tightrope.* Retrieved from OECD: http://www.oecd.org/economic-outlook/june-2020/

Shiller, R. (2020, July 7). *Understanding the Pandemic Stock Market.* Retrieved from Project Syndicate: https://www.project-syndicate.org/commentary/understanding-us-pandemic-stock-market-by-robert-j-shiller-2020-07

Silverblatt, H. (2021, January 8). Retrieved from S&P Indices.Com: us.spindices.com/.../sp-500-eps-est.xlsx

Social Security Administration. (n.d.). *Actuarial Life Table*. Retrieved from Social Security: https://www.ssa.gov/oact/STATS/table4c6.html

the National Bureau of Economic Research. (2020, June 8). *Determination of the February 2020 Peak in US Economic Activity.* Retrieved from the National Bureau of Economic Research: https://www.nber.org/cycles/june2020.html the National Bureau of Economic Research. (2021, January 8). *US Business Cycle Expansions and Contractions*. Retrieved from the National Bureau of Economic Research: https://www.nber.org/cycles.html

Trading Economics. (2021, January 8). *Indicators*. Retrieved from Trading Economics: https://tradingeconomics.com/indicators

Wikipedia. (2019, January 17). *List of countries by GDP (nominal)*. Retrieved from Wikipedia: https://en.wikipedia.org/wiki/List_of_countries_by_GDP_(nominal)

Worldometer. (2020). *Countries in the world population (2020)*. Retrieved from Worldometer: https://www.worldometers.info/world-population/population-by-country/

Yardeni, E. (2021, January 8). *Global Index Briefing: MSCI Forward P/Es.* Retrieved from yardeni.com: www.yardeni.com

Yardeni, E. (2021, January 8). *Performance Derby: MSCI Regions/Countries Earnings & Revenues Growth 2021E/ 2020E, 2019A.* Retrieved from yardeni.com: https://www.yardeni.com/pub/performancemsciearningsrevenues.pdf

*YCharts*. (2021, January 8). Retrieved from https://ycharts.com

## General Disclosures

- Investment advisory and financial planning services are offered through Candor Asset Advisors, LLC, a registered investment adviser.
- Past performance is not a guarantee of future results.
- Financial plans are hypothetical in nature and intended to help you in making decisions on your financial future based on information that you have provided and reviewed. Assumptions need to be reviewed regularly to ensure results and projections are adjusted accordingly. Small changes in assumptions can have a dramatic impact on the outcome of the financial plan. The projections or other information generated by Candor Asset Advisors regarding the likelihood of various financial outcomes are hypothetical in nature, do not reflect actual results and are not guarantees of future results. Past performance is not a guarantee or predictor of future performance.
- The financial plan does not constitute advice in the areas of legal, accounting and tax. It is your responsibility to consult with appropriate professionals in those areas either independently or in conjunction with the planning process.
- Candor Asset Advisor’s Privacy Policy is available at www.candorassetadvisors.com and covers Candor’s policies and obligations with respect to information you have provided to us and which is stored on our systems or on the systems of third parties with whom we have contracted to do business.