

Q4

Economic & Market Review
Fourth Quarter 2020

Economic Review

Fourth Quarter 2020

Rebound in US but Covid Saps Momentum

US GDP rebounded sharply in the third quarter, fueled by over \$3 trillion in government aid. Expectations are for muted growth in the fourth quarter as Covid cases spiked and Congress was slow to pass another round of stimulus.

The economy lost 140,000 jobs in December, the first monthly decline since April. However, job losses were heavily concentrated in the leisure and hospitality sector, and most other sectors showed steady gains. Through the end of 2020, **the economy has recovered over 12 million of the roughly 22 million jobs lost during the pandemic.**

Household spending and retail sales dipped in November amid increased Covid restrictions. **Consumer confidence fell for the second straight month in December** to its lowest point since August. It remains well below pre-pandemic levels.

The Fed – Steady as She Goes

The Federal Reserve reiterated its pledge to support the US economy by maintaining rock bottom interest rates and large ongoing government bond purchases.

Fed Chair Jerome Powell sees some light at the end of the tunnel but says much work still needs to be done, especially on the fiscal side, essentially calling on Congress for more rounds of stimulus.

Updated Fed projections are slightly more favorable, showing a smaller GDP contraction and a lower unemployment rate in 2020. Despite the better projections, **the expectation is for near-zero rates through 2023** or until their target levels for employment and inflation are achieved.

Economic Review

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Foreign Developed Economies Bounce Back but Virus Clouds Further Recovery

The Eurozone economy rebounded sharply in the third quarter, expanding 12.5% as lockdowns were gradually lifted. France, Spain, and Italy led the charge, with each country's economy rebounding more than 15% in the quarter.

However, **a second Covid wave put the brakes on the recovery**, with many countries reintroducing lockdown measures. The European Central Bank (ECB) expects the Euro area economy to shrink again in the fourth quarter, with a total contraction of 7.3% in 2020.

The UK finally left the European Union, but many challenges remain. Trade disruptions will likely be a drag on GDP, with the ongoing pandemic threatening to compound these effects.

China Outpaces Rest of Developing World

China's recovery remains firmly in place and it could be the only major economy to have grown in 2020. Risks remain and the recovery is still heavily dependent on government support, but estimates for 2021 GDP growth exceed 7%.

In contrast to China, **India's economy is expected to have contracted more than 7% in 2020**, which would be its worst year in four decades and will likely spur greater economic support from the government. Recent trends are positive, and analysts project more than 8% growth in 2021.

Brazil's economy rebounded in the third quarter, but momentum is expected to slow as fiscal and monetary stimulus levels wind down. The country struggled in its response to Covid and is now falling behind its neighbors in its vaccination program rollout.

Market Review: Stocks

Fourth Quarter 2020

Despite Pandemic, Stocks Finish 2020 on High Note, Capping Extreme Year for US and International Equities

US stocks rose over the course of a newsworthy fourth quarter in which Joe Biden became President-Elect, Covid vaccines came on line, and another round of government stimulus was approved. The quarter ended with the S&P 500 index—a measure of US large cap stock performance—finishing at an all-time high, with the index rising 12.2% on the quarter and 18.4% for the year, despite a new surge in Covid cases.

The market followed a remarkable path in 2020, with the S&P 500 benchmark tumbling 33.9% at the onset of the pandemic before rocketing 67.9% from its March lows through year-end. It was a reminder of the benefits of “staying the course” and sticking with one’s long-term investment plan, even in the face of a once-in-a-century type disaster.

Mid and small cap US stocks, as measured by the Wilshire 4500 index, **had a scintillating fourth quarter**, gaining 28.3% and returning 32.0% on the year. It was a surprising come-from-behind victory considering large cap stocks (particularly in the tech sector) had dominated headlines throughout most of the year.

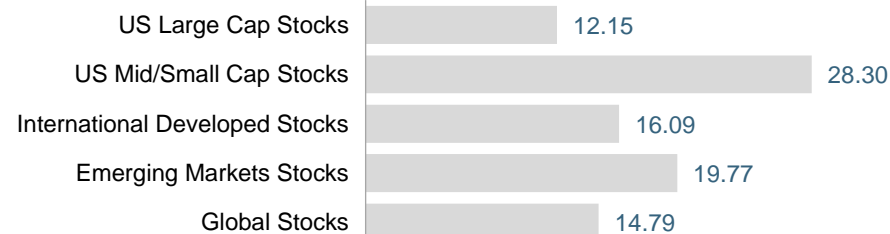
The launch of several vaccines kindled hopes of a relatively quick return to economic normalcy. Economically sensitive sectors logged the biggest gains, while defensive sectors posted more modest progress. Financials rose the most (up 23.2%) followed by Industrials (up 15.7%) and Materials (up 14.5%).

Past performance is not a guarantee of future results. Returns for periods longer than one year are annualized. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Market segment (index representation) as follows: US Large Cap (S&P 500 Index), US Mid/Small Cap (Wilshire 4500 Completion Index), International Developed (MSCI Europe Australasia Far East Index), Emerging Markets (MSCI Emerging Markets Index), and Global Stocks (MSCI All Country World Index). Growth of \$1,000 chart market segmentations as follows: US Stocks (Wilshire 5000 Index) and Foreign Stocks (All Country World Index ex US)

International developed stocks outperformed US stocks on the quarter, with the MSCI EAFE index gaining 16.1%, yet still underperformed on the year—rising 8.3% compared to the 18.4% gain by the S&P 500. Investors were relieved the EU and the UK came to some basic terms on a Brexit trade deal after four years of haggling, averting the economically painful “hard Brexit” scenario.

Emerging markets stocks posted their strongest quarterly return in over a decade, rising 19.8% as measured by the MSCI Emerging Markets index. A weak US dollar amplified gains. For the year, emerging markets rose 18.7%, besting developed market stocks (both domestic and foreign) in 2020.

Returns for the Quarter (%)



Period Returns (%)

Asset Class	1 Year	3 Years*	5 Years*
US Large Cap Stocks	18.40	14.18	15.22
US Mid/Small Cap Stocks	31.99	15.21	16.39
International Developed Stocks	8.28	4.79	7.97
Emerging Markets Stocks	18.69	6.56	13.22
Global Stocks	16.82	10.64	12.86

* Annualized

Market Review: Bonds

Fourth Quarter 2020

Bonds Eke Out Modest Returns in Q4, Capping Strong 2020; Treasury Yields Move Higher

Although the Fed continues to anchor short-term interest rates near historical lows, **Treasury yields in the middle and long-end of the yield curve rose in the fourth quarter.** The 10-year US Treasury yield jumped from 0.69% to 0.93% in Q4, while the 30-year Treasury went from 1.46% to 1.65%. Rates nonetheless ended the year considerably lower than where they started.

Despite the rise in yields, US bonds managed a modest positive return of 0.7% in the fourth quarter, as measured by the Bloomberg Barclays Aggregate Bond index. Corporate bonds performed well, as positive vaccine news fueled hopes for a strong economic recovery in 2021, lessening fears of corporate defaults.

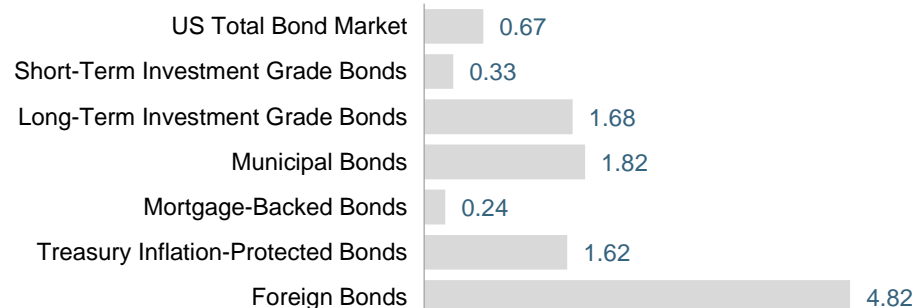
For the full year, US bonds finished the year up 7.5%, another strong showing after last year's 8.7% gain. It's highly unlikely (though not impossible) for bonds to maintain this pace in 2021, so investors would be wise to temper expectations of further gains since yields are already near all-time lows.

High-yield bonds (up 6.5%) were among the best bond performers on the quarter, followed by foreign bonds (up 4.8%), which benefited from a weak US dollar. For the full year, long duration government and Treasury inflation-protected bonds performed best, posting double-digit returns as yields fell in the face of the pandemic.

Municipal bonds continued to offer solid performance in Q4 and throughout 2020, with the Bloomberg Barclays Municipal Bond index rising 1.8% on the quarter and 5.2% on the year.

Considering the federal tax-free nature of municipal bond interest, munis have been an attractive fixed income sector for high bracket investors.

Returns for the Quarter (%)



Period Returns (%)

Asset Class	*Annualized		
	1 Year	3 Years*	5 Years*
US Total Bond Market	7.51	5.34	4.44
Short-Term Investment Grade Bonds	4.71	3.69	2.77
Long-Term Investment Grade Bonds	16.12	9.80	9.35
Municipal Bonds	5.21	4.64	3.91
Mortgage-Backed Bonds	3.87	3.71	3.05
Treasury Inflation-Protected Bonds	10.99	5.92	5.08
Foreign Bonds	10.78	4.63	5.17

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Market Review: Alternatives

Fourth Quarter 2020

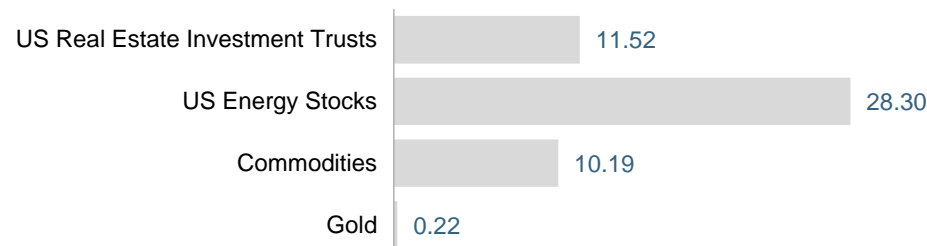
Gold Pauses as it Finishes Stellar 2020; Energy, Commodities, and REITS Rally but Come Up Short on the Year

Despite a quiet fourth quarter, gold (up 0.2% in Q4) finished the year 27.0% higher than where it began. The precious metal was one of the best performing asset classes in 2020, trailing only mid and small cap US stocks. The pandemic has spurred investor interest in gold, as it offers a store of value during turbulent times and a hedge against the possibility of future inflation.

REITs rebounded, rising 11.5%, as investors cheered the prospect of effective vaccines and an improving outlook for the economy. Commercial real estate remains under pressure as tenants face economic challenges and a trend toward teleworking. REITs could remain volatile until the path to economic recovery becomes clearer. Even after recouping some ground in Q4, REITs declined 7.6% over the full year.

US energy stocks (up 28.3%) and commodities (up 10.2%) also rallied in the fourth quarter, with crude oil prices moving higher as a stronger demand outlook offset concerns over increased supply. Among commodities, agriculture was the best performing component, driven by strong performance from soybeans and corn. Despite the strong finish, energy was among the worst performing asset classes on the year, declining 32.8%, while commodities as a whole fell 3.1% in 2020.

Returns for the Quarter (%)









Period Returns (%)

Asset Class	* Annualized		
	1 Year	3 Years*	5 Years*
US Real Estate Investment Trusts	-7.57	3.54	4.84
US Energy Stocks	-32.84	-14.89	-4.75
Commodities	-3.12	-2.53	1.03
Gold	27.00	14.26	13.16

Market Summary

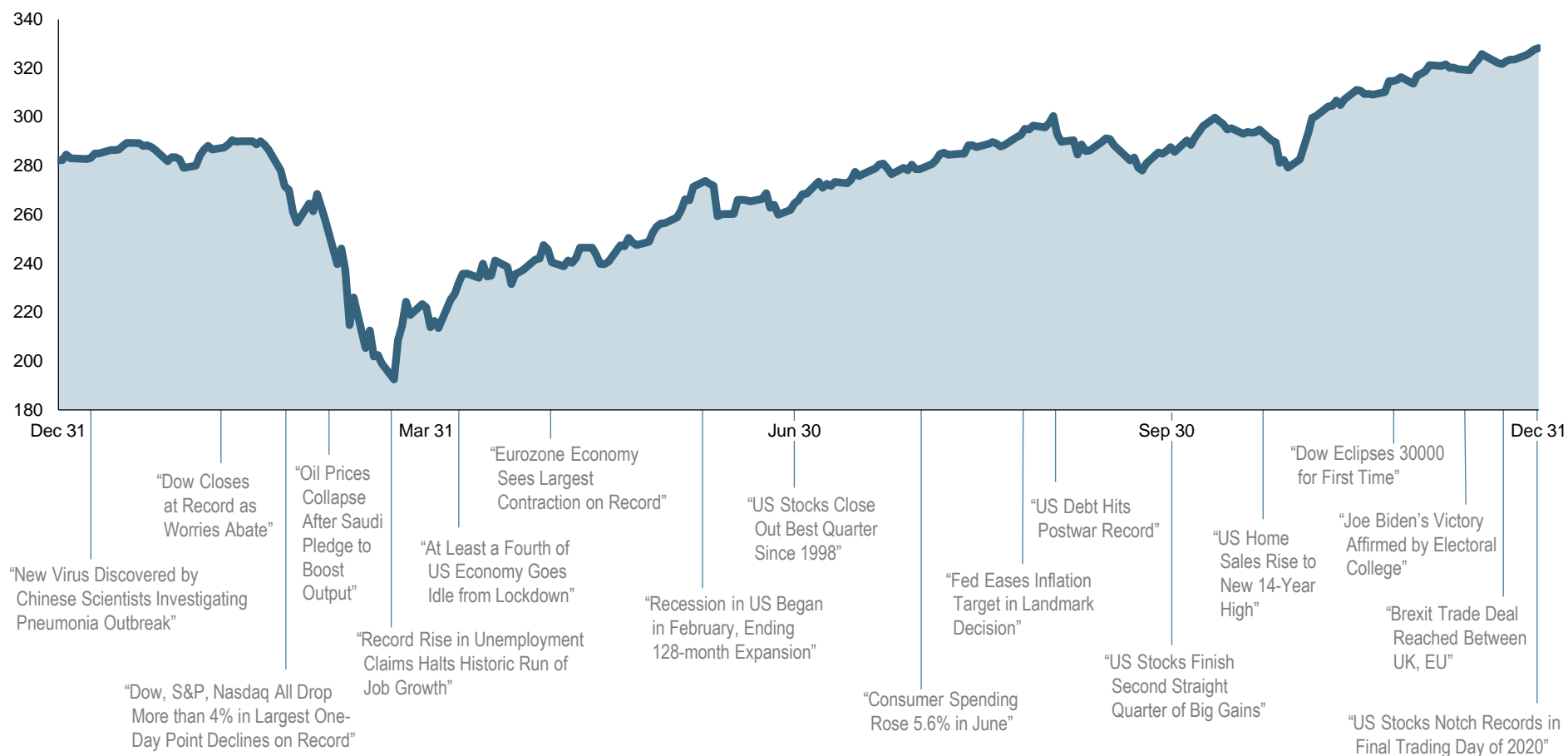
Index Returns

	US Large Cap	US Mid/Small Cap	International Developed	Emerging Markets		US Bond Market	US Dollar
Q4 2020	STOCKS					BONDS/DOLLAR	
	12.15%	28.30%	16.09%	19.77%		0.67%	-4.86%
							
Since Jan. 2001							
Avg. Quarterly Return	2.2%	3.1%	1.6%	2.9%		1.2%	0.3%
Best Quarter	20.5% Q2 2020	30.3% Q2 2020	25.8% Q2 2009	34.8% Q2 2009		4.6% Q3 2001	7.1% Q1 2020
Worst Quarter	-21.9% Q4 2008	-27.9% Q1 2020	-22.7% Q1 2020	-27.6% Q4 2008		-3.0% Q4 2016	-5.8% Q2 2009

Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Market segment (index representation) as follows: US Stock Market (Russell 3000 Index), International Developed Stocks (MSCI World ex USA Index [net div.]), Emerging Markets (MSCI Emerging Markets Index [net div.]), Global Real Estate (S&P Global REIT Index [net div.]), US Bond Market (Bloomberg Barclays US Aggregate Bond Index), and Global Bond Market ex US (Bloomberg Barclays Global Aggregate ex-USD Bond Index [hedged to USD]). S&P data © 2021 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. MSCI data © MSCI 2021, all rights reserved. Bloomberg Barclays data provided by Bloomberg.

World Stock Market Performance

MSCI All Country World Index with selected headlines from past 12 months



These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.

Graph Source: MSCI ACWI Index [net div.]. MSCI data © MSCI 2021, all rights reserved.

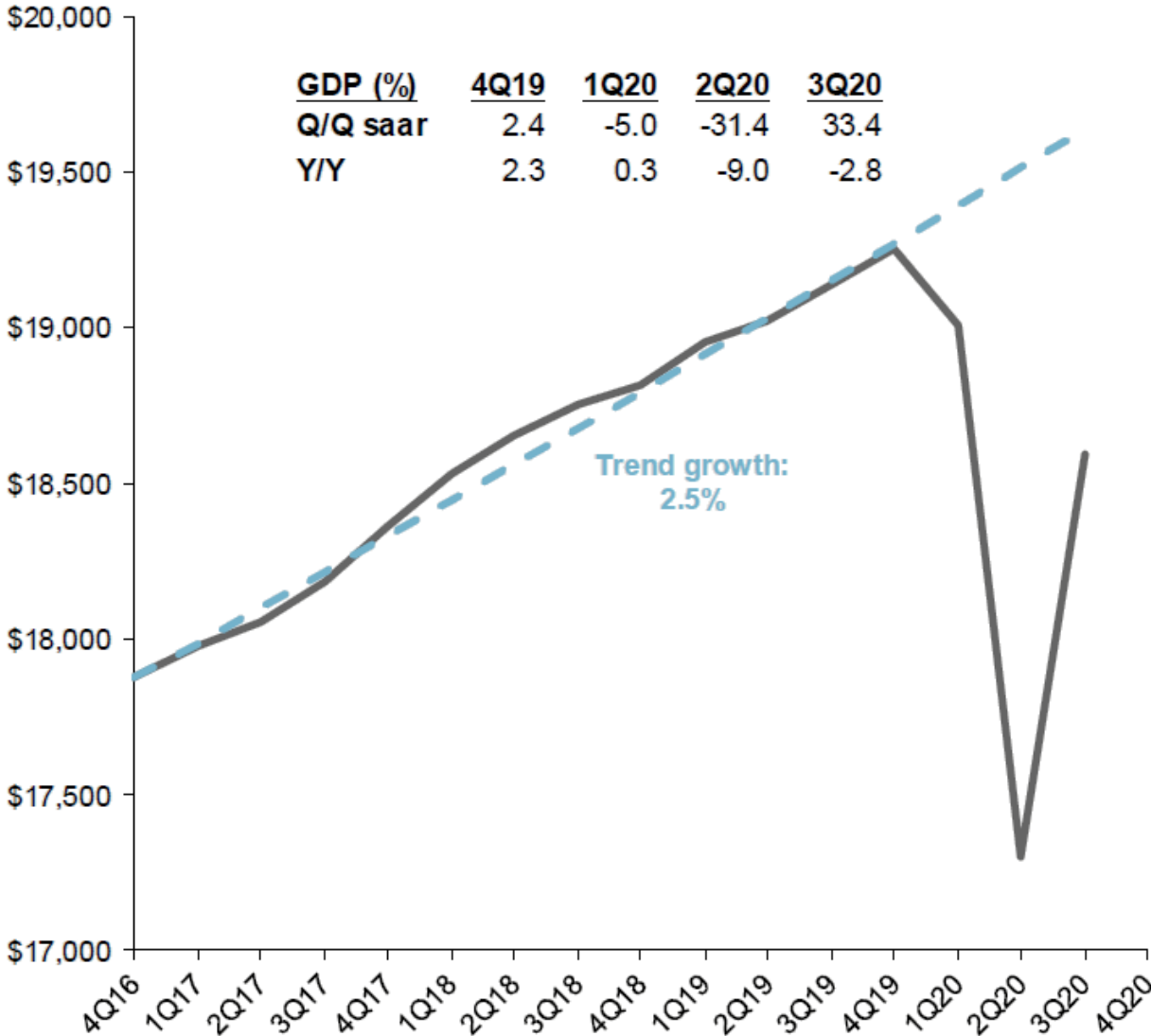
It is not possible to invest directly in an index. Performance does not reflect the expenses associated with management of an actual portfolio. Past performance is not a guarantee of future results.

Economic Growth

Fourth Quarter 2020

Real GDP

Billions of chained (2012) dollars, seasonally adjusted at annual rates



The chart (left) shows the growth of US GDP over the past four years. Note the steep decline in the first half of 2020 when Covid first struck, as well as the subsequent rebound following the injection of over \$3 trillion of government stimulus into the economy. While the recovery has been strong, the chart illustrates how far the US must go to return to the previous trendline.

Source: BEA, FactSet, J.P. Morgan Asset Management. Values may not sum to 100% due to rounding. Guide to the Markets – U.S. Data are as of December 31, 2020.

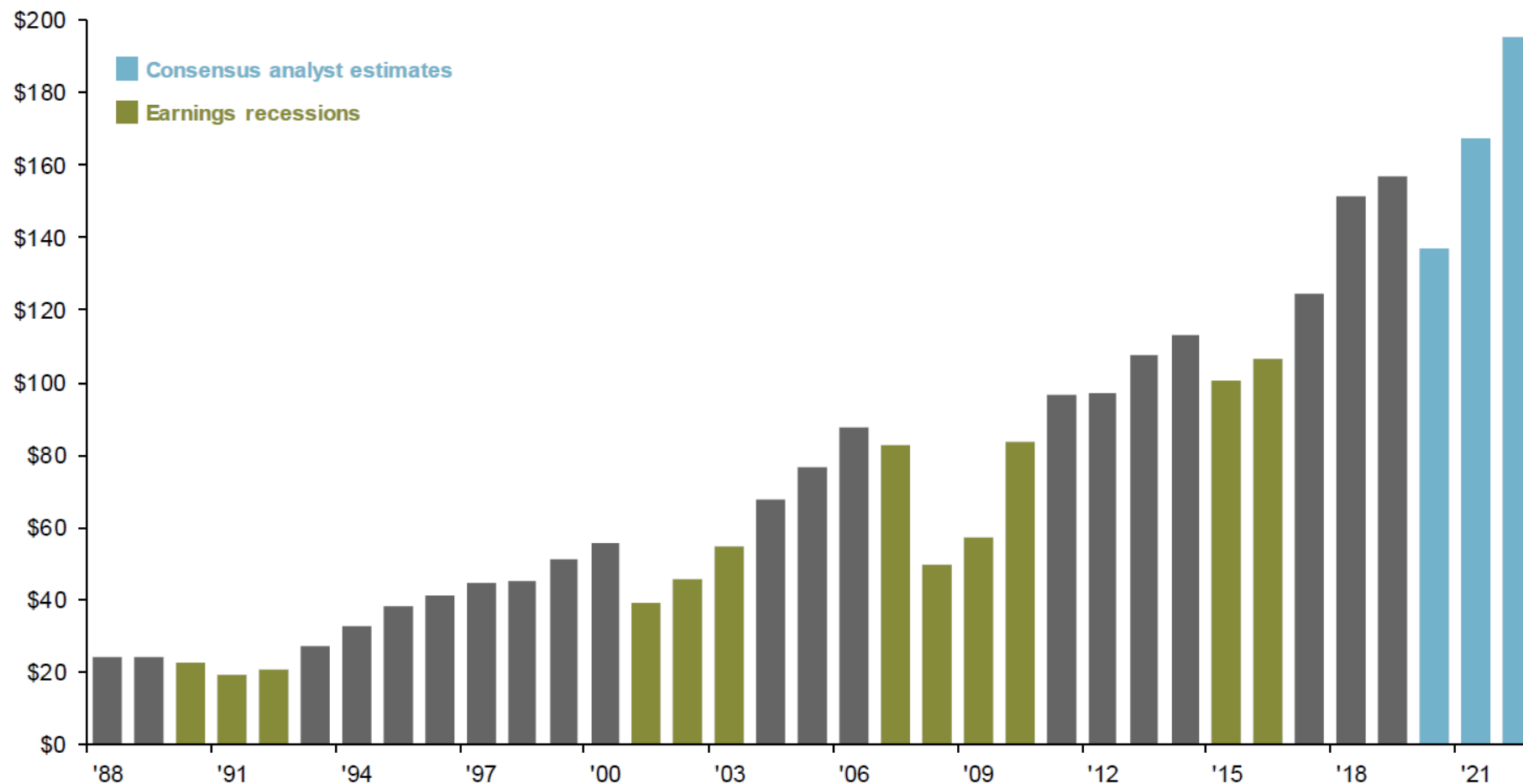
Corporate Profits

Fourth Quarter 2020

The chart shows corporate profit levels over the past 30+ years, measured as total earnings per share of the S&P 500. Profits jumped in 2018, spurred by a cut in the corporate income tax rate, but the pace slowed in 2019. Final earnings numbers are expected to show a sharp drop in 2020 due to the global pandemic. However, a speedy recovery is expected to propel earnings beyond their 2019 highs.

S&P 500 earnings per share

Index annual operating earnings



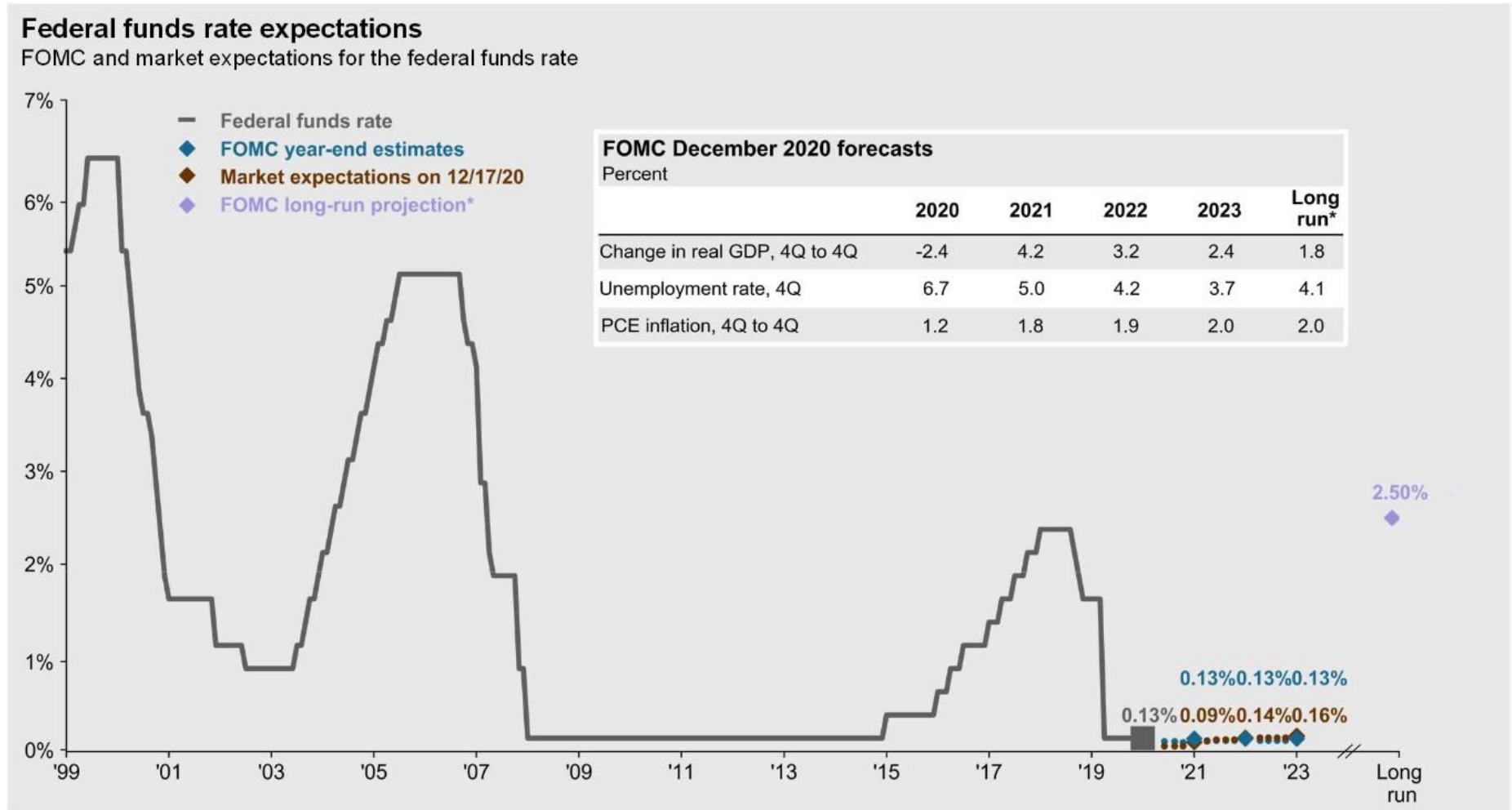
Source: Compustat, FactSet, Standard & Poor's, J.P. Morgan Asset Management.

Historical EPS levels are based on annual operating earnings per share. Earnings estimates are based on estimates from FactSet Market Aggregates. Past performance is not indicative of future returns. Guide to the Markets – U.S. Data are as of December 31, 2020.

The Fed and Interest Rates

Fourth Quarter 2020

The chart shows the Federal Reserve's benchmark short-term federal funds rate over time. As seen on the right edge of the chart, the Fed and the market are in unison in projecting short-term interest rates to remain near zero for the next few years. Fed Chair Jerome Powell has repeatedly committed to keeping rates at rock bottom levels to support the US economy.



Source: Bloomberg, FactSet, Federal Reserve, J.P. Morgan Asset Management.

Market expectations are the federal funds rates priced into the fed futures market as of the following date of the December 2020 FOMC meeting and are through December 2023. *Long-run projections are the rates of growth, unemployment and inflation to which a policymaker expects the economy to converge over the next five to six years in absence of further shocks and under appropriate monetary policy. Guide to the Markets – U.S. Data are as of December 31, 2020.

Periodic Table of Returns

Fourth Quarter 2020

The Periodic Table of Returns below shows annual returns over the last 20 years for various asset classes, ranked best to worst (top to bottom). Note how different asset classes take turns in the spotlight. The balanced portfolio (in white) represents a diversified portfolio, which gives the long-term investor a smoother ride. It is never the best or worst performing asset—instead, it sits reliably in the middle over time.

Annual Total Returns % of Selected Indices (2001-2020) In Order of Performance

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Best	REIT 12.83%	GOLD 25.57%	EMERG MKTS 56.28%	REIT 31.48%	EMERG MKTS 34.54%	REIT 35.92%	EMERG MKTS 39.82%	US BONDS 5.24%	EMERG MKTS 79.02%	REIT 28.48%	GOLD 8.93%	EMERG MKTS 18.63%	US MD/SM CAP 38.39%	US LG CAP 13.69%	REIT 2.52%	US MD/SM CAP 18.54%	EMERG MKTS 37.75%	US BONDS 0.01%	US LG CAP 31.49%	US MD/SM CAP 31.99%
	US BONDS 8.44%	INTL BONDS 22.37%	US MD/SM CAP 43.95%	EMERG MKTS 25.95%	GOLD 17.77%	EMERG MKTS 32.55%	GOLD 31.92%	INTL BONDS 4.40%	US MD/SM CAP 36.99%	US MD/SM CAP 28.43%	REIT 8.69%	US MD/SM CAP 17.99%	US LG CAP 32.39%	REIT 30.38%	US LG CAP 1.38%	US LG CAP 11.96%	INTL STKS 25.62%	GOLD -1.15%	US MD/SM CAP 28.06%	GOLD 24.17%
	GOLD 0.75%	US BONDS 10.25%	INTL STKS 39.16%	INTL STKS 20.70%	INTL STKS 14.02%	INTL STKS 28.86%	INTL STKS 11.63%	GOLD 4.32%	INTL STKS 32.46%	GOLD 29.24%	US BONDS 7.84%	INTL STKS 17.90%	INTL STKS 23.29%	US MD/SM CAP 7.97%	US BONDS 0.55%	EMERG MKTS 11.60%	US LG CAP 21.83%	INTL BONDS -2.15%	REIT 25.84%	EMERG MKTS 18.69%
	EMERG MKTS -2.37%	REIT 3.64%	REIT 36.74%	US MD/SM CAP 18.01%	REIT 12.13%	GOLD 23.20%	INTL BONDS 11.03%	BALANCED -23.07%	REIT 28.61%	EMERG MKTS 19.20%	INTL BONDS 4.36%	REIT 17.77%	BALANCED 15.52%	BALANCED 6.83%	INTL STKS -0.39%	GOLD 9.35%	US MD/SM CAP 17.84%	US LG CAP -4.38%	INTL STKS 22.66%	US LG CAP 18.40%
	INTL BONDS -3.75%	EMERG MKTS -6.00%	US LG CAP 28.68%	INTL BONDS 12.55%	US MD/SM CAP 10.03%	US LG CAP 15.80%	BALANCED 9.86%	US LG CAP -37.00%	US LG CAP 26.46%	US LG CAP 15.06%	US LG CAP 2.11%	US LG CAP 16.00%	REIT 2.47%	US BONDS 5.97%	BALANCED -1.10%	REIT 8.60%	BALANCED 16.30%	REIT -4.57%	BALANCED 20.73%	BALANCED 14.15%
	BALANCED -5.14%	BALANCED -6.06%	BALANCED 25.22%	BALANCED 12.17%	BALANCED 6.95%	US MD/SM CAP 15.28%	US BONDS 6.97%	REIT -37.97%	GOLD 25.04%	BALANCED 13.14%	BALANCED 0.85%	BALANCED 12.26%	US BONDS -2.02%	GOLD 0.12%	US MD/SM CAP -2.65%	BALANCED 7.69%	GOLD 11.85%	BALANCED -5.02%	EMERG MKTS 18.90%	INTL BONDS 10.11%
	US MD/SM CAP -9.37%	INTL STKS -15.66%	GOLD 19.89%	US LG CAP 10.88%	US LG CAP 4.91%	BALANCED 15.00%	US LG CAP 5.49%	US MD/SM CAP -39.03%	BALANCED 23.88%	INTL STKS 8.21%	US MD/SM CAP -4.10%	GOLD 8.26%	EMERG MKTS -2.27%	EMERG MKTS -1.82%	INTL BONDS -6.02%	US BONDS 2.65%	INTL BONDS 10.51%	US MD/SM CAP -9.53%	GOLD 18.83%	INTL STKS 8.28%
	US LG CAP -11.89%	US MD/SM CAP -17.85%	INTL BONDS 19.36%	US BONDS 4.34%	US BONDS 2.43%	INTL BONDS 8.16%	US MD/SM CAP 5.39%	INTL STKS -43.06%	INTL BONDS 7.53%	US BONDS 6.54%	INTL STKS -11.73%	US BONDS 4.21%	INTL BONDS -3.08%	INTL BONDS -3.08%	GOLD -12.11%	INTL STKS 1.51%	REIT 5.07%	INTL STKS -13.36%	US BONDS 8.72%	US BONDS 7.51%
Worst	INTL STKS -21.21%	US LG CAP -22.1%	US BONDS 4.10%	GOLD 4.65%	INTL BONDS -8.65%	US BONDS 4.33%	REIT -16.82%	EMERG MKTS -53.18%	US BONDS 5.93%	INTL BONDS 4.95%	EMERG MKTS -18.17%	INTL BONDS 4.09%	GOLD -27.33%	INTL STKS -4.48%	EMERG MKTS -14.60%	INTL BONDS 1.49%	US BONDS 3.54%	EMERG MKTS -14.25%	INTL BONDS 5.09%	REIT -7.57%

- S&P 500 TR USD Index (US LG CAP)
- MSCI EAFE GR USD Index (INTL STKS)
- Wilshire 4500 Completion TR Index (US MD/SM CAP)
- MSCI Emerging Markets GR USD Index (EMERG MKTS)
- Barclays US Aggregate Bond TR Index (US BONDS)
- LBMA Closing PM Gold Price (GOLD)
- Barclays Global Aggregate Ex USD TR Bond Index (INTL BONDS)
- MSCI REIT GR USD Index (REIT)
- Balanced Portfolio Index (BALANCED)