

Q3

Economic & Market Review

Third Quarter 2021

Economic Review

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US Expansion Robust, Delta Variant Likely Hurt Q3 Growth

The US economy expanded at a 6.7% annualized rate in the second quarter and is now above its previous peak reached in the fourth quarter of 2019. GDP growth is expected to have slowed in the third quarter due to the Delta variant, supply chain interruptions, and raw materials shortages.

Job growth slowed in September against a backdrop of a persistent labor shortage and Delta variant concerns. The headline unemployment rate fell to 4.8%, but was largely attributable to workers leaving the labor force rather than new jobs filled. Wages increased 0.6% as employers raised wages to stay competitive in the tight labor pool.

Pending home sales rose 8.1% to a seven-month high in August, good news for homeowners but also making it more difficult for first-time buyers to enter the market. New home sales increased 1.5% in August. About 78% of those sales were of homes either under construction or yet to be built as **homebuilders grapple with shortages of both labor and materials**.

US manufacturing activity increased in September, but producers reported higher input costs and delays in getting raw materials delivered to factories. Supply chain disruptions are expected to last well into 2022 and perhaps beyond.

The Fed Signals Bond-Purchase Tapering Coming Soon

The Fed concluded its most recent meeting by making no changes to its monetary policy, keeping short-term interest rates near zero. Jerome Powell did set the stage, however, for reversing some of its monetary stimulus programs as inflation heats up and the labor market improves.

While the Fed still believes that rising inflation is transitory, **it is evident from their new projections that they are more concerned with the risks of persistent higher inflation**. Half of Fed officials penciled in a rate hike by the end of next year and Jerome Powell signaled a tapering of its bond purchases could begin as early as November.

Mr. Powell also indicated that the taper process would likely be quicker than the last one, which took about ten months, as the economy is much further along in recovery than last time. If the Fed were to taper roughly \$15 billion of bond purchases per month, its bond purchase would cease after eight months.

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Europe and Japan Bounce Back—For Now

The euro area economy recovered nicely from its two prior quarters of economic contraction, posting a growth rate of 2.2% in the second quarter. The rebound was attributed to stronger consumer spending as economies reopened and vaccination rates improved.

European Central Bank (ECB) President **Christine Lagarde** indicated that the ECB may diverge from the US Fed a bit with regards to tapering its bond-buying program. She **signaled a slight reduction in purchases but did not signal a complete winding down.**

The ECB emphasized that while Europe's recovery has hit a sweet spot, they expect the bloc's economy will lose momentum in the fourth quarter. **Massive supply chain disruptions, inflation, and another resurgence of Covid cases are reasons to be cautious in the fourth quarter.**

Japan's economy expanded 0.5% in the second quarter, but its recovery has been modest compared to other developed countries. Lagging vaccination rates is considered the main culprit for the country's slow recovery. Japan's prime minister aims to have all willing adults vaccinated by the end of November.

Signs of Slowdown in China; India and Brazil Economies at Different Stages Following Latest Covid Wave

Manufacturing activity in China slipped into contraction territory for the first time since the beginning of the pandemic, largely due to increased input costs and curbs on electricity usage. **The country's real estate market is also under scrutiny,** with a number of property developers, including one of the largest (Evergrande), missing recent interest payments. Beijing has signaled it is willing to step in to contain potential fallout in the overheated real estate sector.

India's economy grew at a record 20.1% year-over-year in the second quarter, largely driven by a low base effect after the deep slump in the same quarter last year. Manufacturing and consumer spending picked up following a devastating second wave of Covid cases.

Brazil's economy contracted slightly in the second quarter. A severe second wave of Covid cases prompted restrictions in major cities in April and May, putting a damper on manufacturing and consumer spending.

Market Review: Stocks

Third Quarter 2021

US Equities Eke Out Small Gain, International Stocks Retreat as Economic Concerns Grow

Stocks pushed higher in July and August, only to have those gains mostly erased in September. Concerns about rising inflation, energy costs, and the pace of economic growth fueled the late quarter change in investor sentiment.

US stocks managed a modest gain, rising 0.6% on the quarter, as measured by the S&P 500 index. **Corporate earnings remained strong** in Q3, **however, supply chain disruptions and inflation worries created headwinds for returns.** Even with the pause, year-to-date returns remain stellar, with the S&P 500 up 15.9% on the year.

Financial stocks continued to surge in 2021, benefiting from expectations for higher interest rates. They were the best performing sector in the third quarter (up 2.7%) and lead all industrial sectors year-to-date (up 29.1%). Utilities (up 1.8%) and Health Care (up 1.4%) were the next best performing sectors.

International developed stocks posted positive returns as measured in local currencies, but a strong US dollar (up 1.9% in Q3) **negated most gains**, with the MSCI EAFE index declining 0.4% on the quarter in US dollar terms. Year-to-date, international developed markets have lagged US stocks, rising 8.8% in 2021 so far.

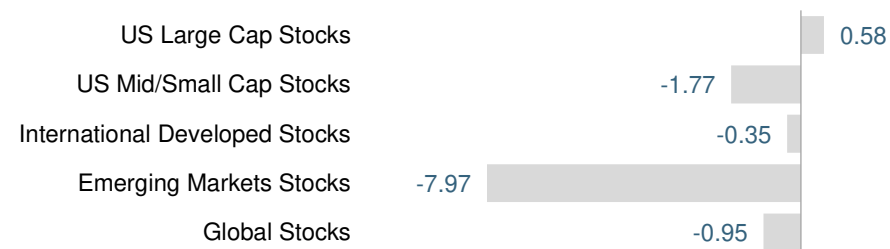
Emerging markets fared worse, driven by a difficult year

for China, in which energy supply issues and debt concerns (e.g., Evergrande) have tested investor patience.

Outside China, many emerging markets are still struggling to deploy Covid vaccines and get a handle on the pandemic. This can be seen in the lackluster performance of the MSCI Emerging Markets index, which fell 8.0% in Q3 and is down 1.0% on the year.

Market volatility was mostly subdued in July and August before rising markedly in September, in concert with the stock market's drop; the VIX volatility index rose from 15.8 at the start of the quarter to 23.1 at the end.

Returns for the Quarter (%)



Period Returns (%)

Asset Class	* Annualized			
	YTD	1 Year	3 Years*	5 Years*
US Large Cap Stocks	15.92	30.00	15.99	16.90
US Mid/Small Cap Stocks	14.05	46.33	16.51	16.95
International Developed Stocks	8.79	26.29	8.13	9.33
Emerging Markets Stocks	-0.99	18.58	8.96	9.62
Global Stocks	11.49	27.98	13.14	13.77

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)

Market Review: Bonds

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Bonds Flat as Fed Signals Intent to Start Tightening Monetary Policy in Q4

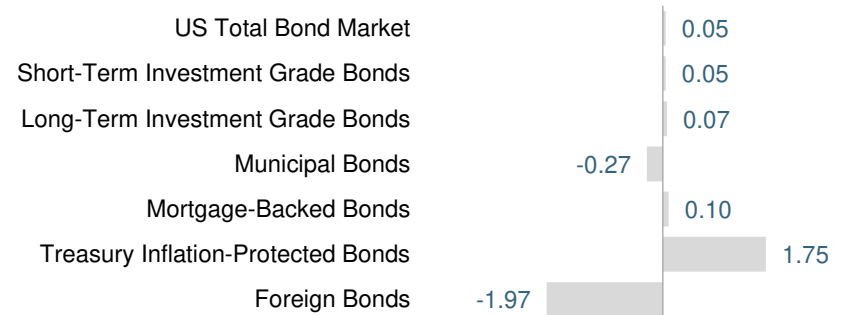
US bonds finished flat in Q3 (up 0.1%, as measured by the Bloomberg US Aggregate Bond index), although that belies a tumultuous quarter for the conservative asset class. **Bonds rallied in July as yields fell, but that proved short-lived as investors grew increasingly concerned about inflation and the prospect of earlier-than-expected monetary tightening.** This caused yields to rise modestly in August and more so in September, erasing earlier Q3 gains. Year-to-date, US bonds have returned negative 1.6%.

The yield on 10-year US Treasuries rose 0.07% on the period, from 1.45% on June 30 to 1.52% by quarter-end, but dipped as low as 1.18% at the beginning of August. Bond yields have remained low despite higher inflation in the past year, suggesting investors generally believe the inflation will be short-lived.

Almost all bonds were flat on the quarter, save for Treasury-Inflation Protected Securities (TIPS), which rose 1.8%, **and high yield bonds**, which gained 0.9%. These are also the two best performing bond sectors on the year, with TIPS gaining 3.5% year-to-date and high yield up 4.5%. TIPS returns are linked to inflation, providing a hedge if recent higher inflation rates prove to be longer lasting.

Municipal bonds declined modestly, falling 0.3% in Q3, but remain ahead of most taxable bonds on the year, returning 0.8% year-to-date through September 30th. Munis' outperformance may have been driven by the prospect of higher income tax rates on taxable bond interest, should Congress ultimately pass the spending bill currently under negotiation.

Returns for the Quarter (%)



Period Returns (%)

Asset Class	*Annualized			
	YTD	1 Year	3 Years*	5 Years*
US Total Bond Market	-1.55	-0.90	5.36	2.94
Short-Term Investment Grade Bonds	-0.25	0.08	3.62	2.19
Long-Term Investment Grade Bonds	-4.57	-2.97	10.12	5.21
Municipal Bonds	0.79	2.63	5.06	3.26
Mortgage-Backed Bonds	-0.67	-0.43	3.85	2.17
Treasury Inflation-Protected Bonds	3.51	5.19	7.45	4.34
Foreign Bonds	-7.86	-3.41	2.89	0.76

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Market Review: Alternatives

Third Quarter 2021

Performance of Alternatives Mixed in Q3 as Inflation and Energy Concerns Make for Volatile Environment

Alternative investments posted mixed results, as energy, inflation, and supply chain concerns contributed to a volatile quarter for alt investors.

Commodities (up 6.6% in Q3) **were the best performers**, benefitting from high energy prices and the rising cost of many raw materials. Year to date, commodities are up 29.1% and are among the year's best performing asset classes, trailing only energy stocks, which have surged 42.2% in 2021 after many years of weak performance.

Real estate investment trusts (REITs) **rose modestly in Q3** (up 1.0%), but have posted strong returns year-to-date, gaining 23.0% through September 30th. REITs continue to benefit from the post-Covid economic recovery, however, they can be sensitive to the level of interest rates, so it will be a sector to watch should yields start to rise.

Gold's disappointing year continued unabated in the third quarter. The price of the precious metal declined 1.1% in Q3 and has fallen 7.8% since the start of the year. **Historically, gold has been considered a hedge against inflation, but that hasn't been the case in 2021**, with the consumer price index (CPI) up 5.7%.

A strong US dollar and the prospect of higher interest rates seem to be creating headwinds for gold, as does the popularity of various cryptocurrencies that claim to offer similar hedging benefits to gold.

Returns for the Quarter (%)



Period Returns (%)







* Annualized

Asset Class	YTD	1 Year	3 Years*	5 Years*
US Real Estate Investment Trusts	23.00	37.16	10.10	6.84
US Energy Stocks	42.23	82.48	-6.51	-1.39
Commodities	29.13	42.29	6.86	4.54
Gold	-7.84	-7.64	14.51	6.51

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Market Summary

Index Returns

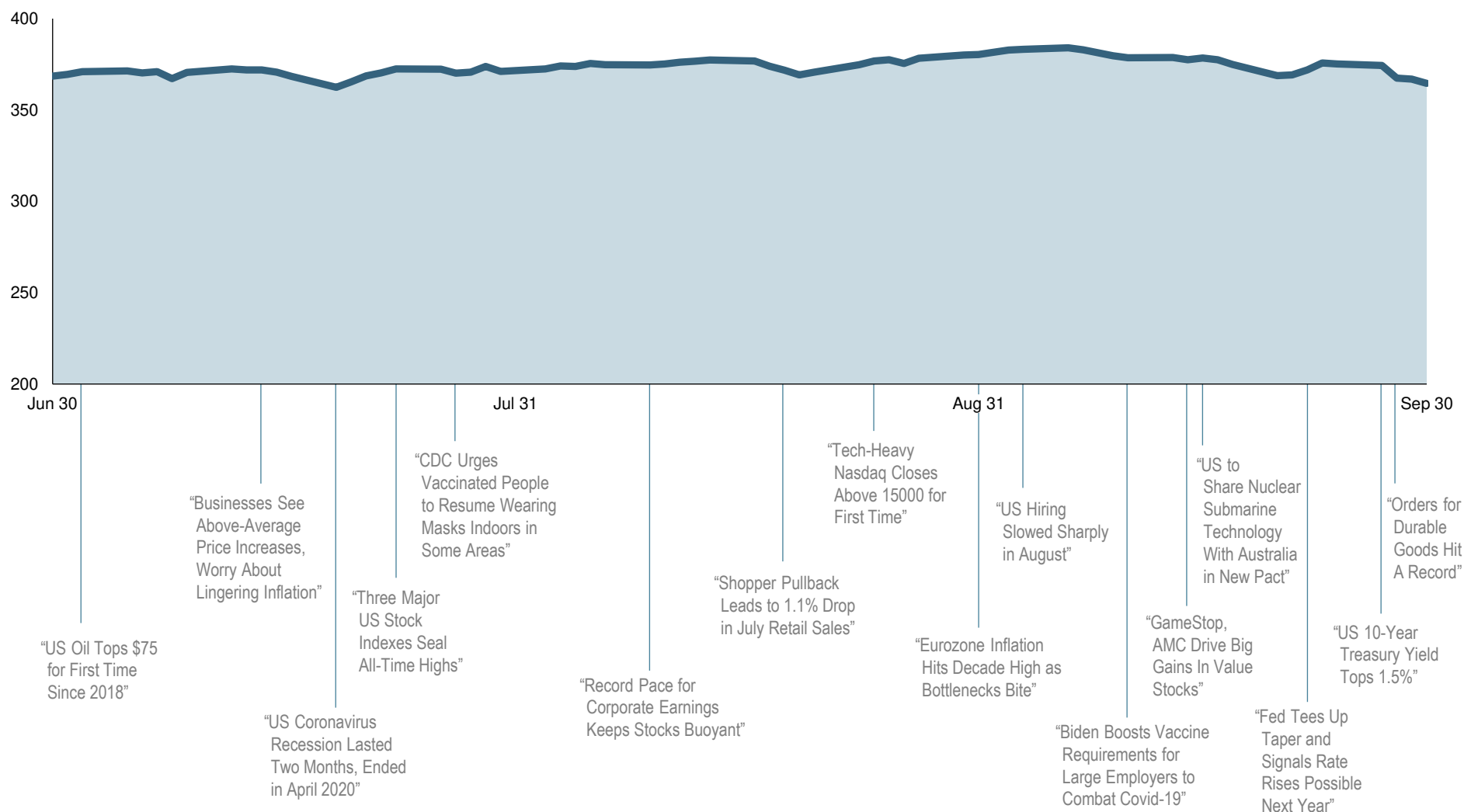
	US Large Cap	US Mid/Small Cap	International Developed	Emerging Markets		US Bond Market	US Dollar
Q3 2021	STOCKS					BONDS/DOLLAR	
	0.58%	-1.77%	-0.35%	-7.97%		0.05%	1.90%
							

Since Jan. 2001							
Avg. Quarterly Return	2.3%	3.1%	1.7%	2.8%		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		-3.4% Q1 2021	-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 Q3 2021



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.

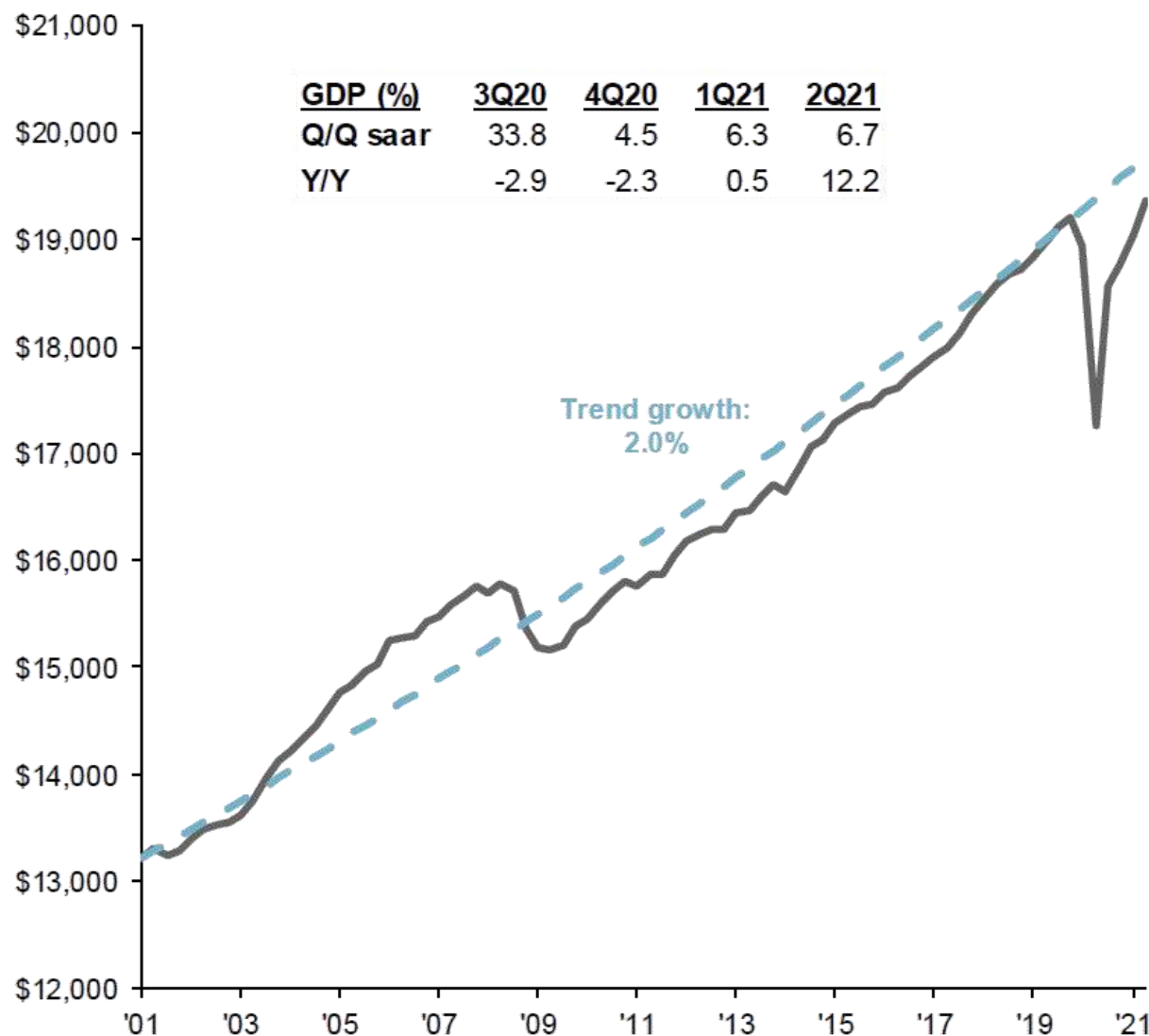
It is not possible to invest directly in an index. Performance does not reflect the expenses associated with management of an actual portfolio. **Past performance is not a guarantee of future results.**

Economic Growth

Third Quarter 2021

Real GDP

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



This chart shows the growth of US GDP over the past twenty years. The recent steep decline at the pandemic's outset is followed by a sharp rebound. Massive government stimulus and economic reopening, helped by the introduction of effective vaccines, spurred the upswing.

GDP now already tops its pre-pandemic highs. Still, more progress is needed for it to return to its historical trend line.

Source: BEA, FactSet, J.P. Morgan Asset Management. Values may not sum to 100% due to rounding. Trend growth is measured as the average annual growth rate from business cycle peak 1Q01 to business cycle peak 4Q19. *Guide to the Markets – U.S.* Data are as of September 30, 2021.

Price of Oil

Third Quarter 2021

Price of oil

WTI crude, nominal prices, USD/barrel



This chart shows the price of crude oil over the past twenty years. Rising demand amid a recovering economy, coupled with OPEC supply constraints, have recently pushed oil prices to 3-year highs.

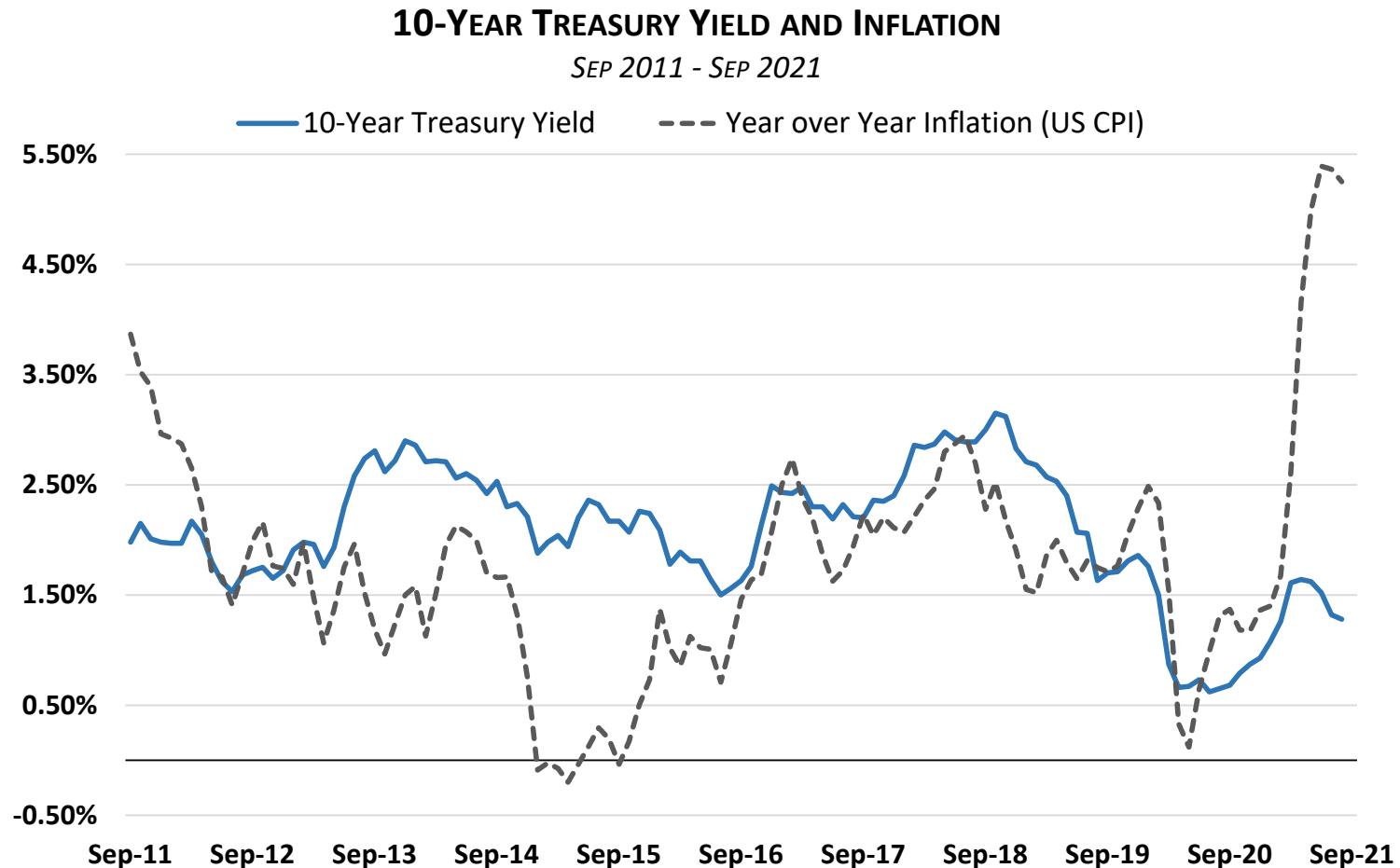
Prices could remain elevated even if demand cools because energy producers' investments in new supply is tumbling. In the face of global warming, investors and other constituencies are pushing hard for transition to renewable energy sources.

Source: J.P. Morgan Asset Management, FactSet. WTI crude prices are continuous contract NYM prices in USD.
Guide to the Markets – U.S. Data are as of September 30, 2021.

10-Year Treasury Yield and Inflation

Third Quarter 2021

The accompanying chart shows that despite a bounce from last year's pandemic lows, bond yields have not nearly kept up with inflation. Instead, long-term Treasury yields remain near historic lows. One possible explanation is that the market accepts the Fed's assertion that the inflation jump is transitory, and inflation will return to pre-pandemic levels relatively soon. The other is that the market expects inflation to really be higher than recent norms, but expansive monetary policy is artificially depressing bond yields worldwide. Whether this jump in inflation is long-lasting or just a blip may depend in part on psychology. If people believe inflation is back to stay, contracts will start to build in that assumption, creating a feedback loop that makes higher inflation a self-fulfilling prophecy.



Source: Consumer Price Index (CPI) from Bureau of Labor Statistics, 10-Year Treasury yield from Federal Reserve Economic Data (FRED).