



December 22, 2021

2022 OUTLOOK

PGIM Quantitative Solutions Global Multi-Asset Solutions Team

EXECUTIVE SUMMARY

Economic Outlook:

- The global economic recovery from the 2020 pandemic-induced recession continued in 2021, buoyed by massive policy support and progress on COVID-19 vaccines and treatments. This furthered a return toward economic normalcy, which unleashed significant pent-up demand.
- While the recovery has been a strong one—global growth likely expanded by 5.8% in 2021—it has also been uneven. Growth was especially robust in the first half of 2021, but the recovery hit a speed bump in Q3, as the Delta variant spread across Europe, the US, and many parts of Asia.
- The global expansion is poised to continue in 2022, underpinned by solid consumer income and excess savings, inventory rebuilding, and increased business investment. Growth should slow from 2021's breakneck pace but remain solidly above trend in the major economies.
- While the emergence of the Omicron variant clouds the outlook somewhat, at this moment we believe it will not derail a continued strong expansion.
- Consumer Price Index inflation in the US registered the largest year-over-year percentage increase in 40 years in November. While the rise in inflation has been a global phenomenon, with some exceptions, it is most pronounced in the US (among major economies) as that is where policy stimulus has been the most robust.
- In the emerging markets, inflationary pressure has been most prevalent in EMEA (Europe, Middle East, and Africa) and Latin America but much less of an issue in Asia.
- In response to the elevated inflation trends, global central banks have shifted toward phasing out emergency measures. While the Federal Reserve (Fed) continues to provide substantial support to the economy, it has shifted in a more hawkish direction recently with respect to reducing the pace of asset purchases and moving forward plans for rate liftoff.
- The outlook for fiscal policy is also more complex after a strongly expansive stance in 2020-21. Policymakers face more difficult trade-offs as the growth tailwind from past fiscal stimulus fades in an environment of elevated inflation.

Market Outlook:

- The growth environment we foresee for 2022 looks likely to be supportive of risk assets. We expect growth to slow from 2021's strong pace but remain solidly above trend.
- However, we believe 2022 will be a more turbulent and less rewarding year, for US stocks in particular, as the Fed unwinds extraordinary monetary accommodation in response to above-trend growth, the rapidly falling unemployment rate, and elevated inflation.
- While solid economic growth is typically good for stock market performance, high valuations, elevated rates of inflation, and rising real interest rates seem likely to coincide with lower returns, higher volatility, and larger drawdowns than we saw in 2021.
- Nonetheless, we believe stocks will outperform bonds again next year as yields on the long end are likely to rise in response to the shifting monetary policy environment. In addition, we believe stocks will be supported by a continued rise in corporate profits.
- Equity valuations have improved this year with profit growth far outpacing stock market gains, but multiples are still elevated in certain markets—especially in the US.
- Outside the US, market valuation remains much more favorable. This could fuel outperformance of non-US stocks next year. However, this has been the case for several years, and price momentum still favors the premium-priced and higher-quality US market.
- Similarly, valuation, higher rates, and elevated inflation should favor value and small-cap stocks over large-cap and growth within US equities. However, these conditions were also in place in 2020 and bets favoring value and small-cap proved difficult to time and delivered mixed results.
- We are currently neutral on style and market-cap positioning in the US, but we could shift in the direction of small-cap and value stocks next year if we see more definitive signs that market sentiment is moving in their favor.
- We continue to look at commodity futures. They are an inflation hedge and one of the few asset classes that is currently cheap historically. Further, we think the pandemic ended a brutal secular bear market in commodities, and supply/demand conditions suggest the bull market should continue in 2022.

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Economic Outlook:

Slower Growth in 2022 but Still Above Trend

The global economic recovery from the 2020 pandemic-induced recession continued in 2021. Buoyed by massive and timely policy support on the fiscal and monetary side, the recovery was also fueled by the rapid development and distribution of effective vaccines, which allowed a rollback of virus-related restrictions that unleashed significant pent-up demand. Yet, while the rebound has been a strong one, it also has been uneven.

The economic recovery was especially robust in the first half of the year, with strong Q2 2021 GDP growth in the US, Europe, China, Taiwan, Brazil, India, and several other emerging markets (EM). However, the recovery hit a speed bump in the second half with the emergence of the more contagious COVID Delta variant and its spread across Europe, the US, and many parts of Asia. High vaccination rates in developed economies have weakened the link between infection and deaths, reducing the need for more intrusive restrictions and lockdowns. However, in Japan and emerging markets, where vaccination rates were lower, the imposition of new restrictions took a toll on growth.

Consequently, global growth slowed in Q3 2021 as lockdowns to contain the Delta variant severely disrupted supply chains. The resulting dislocations hit US Q3 growth and drove a downshift in China's growth due to supply-chain pressures along with the troubles in the real estate sector. Growth appears to be reaccelerating at the end of 2021 as the Delta variant begins to subside, global lockdowns ease, and supply-chain disruptions show signs of abating.

Figure 1: Slower Global Growth in 2022 But Still Above Trend

GDP Growth (Consensus Forecasts)			
	2020 A	2021 E	2022 F
World	-3.1	5.8	4.4
USA	-3.4	5.6	3.9
Eurozone	-6.4	5.1	4.2
Germany	-4.6	2.8	4.2
Italy	-8.9	6.3	4.5
UK	-9.7	6.9	4.9
Japan	-4.7	1.8	2.9
China	2.3	8.0	5.2

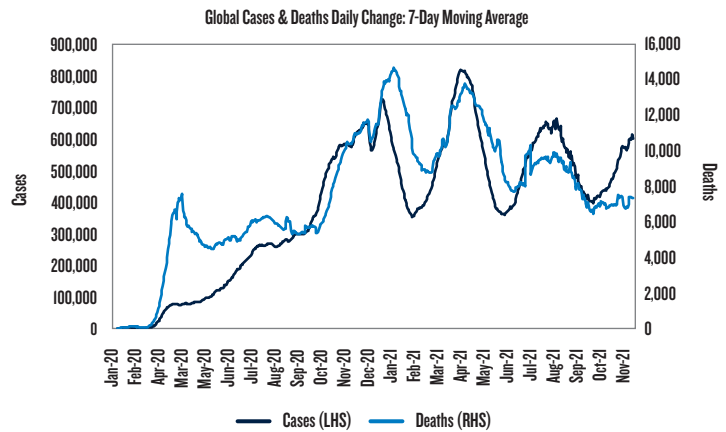
Source: Bloomberg as of 12/17/21.

The global expansion is on track to continue into 2022, as the underlying fundamentals remain healthy with solid consumer income and savings, the need for inventory rebuilding, and increased business investment spending. While growth is expected to slow from 2021's breakneck pace, it should remain solidly above trend in the major economies (Figure 1).

On the virus front, the steady increase in the pace of vaccination will likely slow growth in new cases globally, beyond a potential increase during the winter in the Northern Hemisphere. However, the emergence of the Omicron variant has clouded the outlook for economic activity in 2022. Cold winter weather in the Northern

Hemisphere is already resulting in a rise in cases (Figure 2), and initial reports indicate the new Omicron variant is spreading faster than the Delta variant. However, there is lack of clarity on the virulence of the new variant (early data suggests it is less severe) and the effectiveness of current vaccines in countering it.

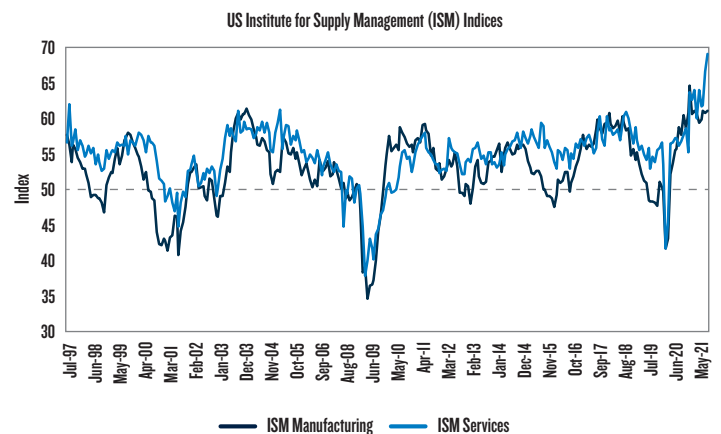
Figure 2: As Delta Declines Omicron Rises



Source: World Health Organization as of 12/10/21.

After the Q3 slowdown, we see US GDP growth strengthening through the end of 2021 and early 2022. Improvements in the public health situation achieved without lockdowns and restrictions should support increased services consumption and labor market participation. Supply disruptions may take some time to fully ease, but as they do, solid goods consumption by households and businesses should increase. As the labor market tightens further, broad-based wage gains, combined with increased labor participation, should underpin consumer spending. While the pandemic-related fiscal measures from 2020 and early 2021 have largely expired, consumers still have significant accumulated excess savings. The latest infrastructure spending legislation, still-low policy rates, the continued normalization of sectors hit hard by the pandemic, and strong global demand are expected to keep US GDP growth at an above-trend pace in 2022. Key measures of business sentiment in the US (from The Institute for Supply Management) are currently registering at extraordinarily strong levels (Figure 3).

Figure 3 : Exceptionally Strong Business Sentiment Readings in the US



Source: Datastream as of 11/30/21.

Eurozone growth is expected to remain solid in 2022. The vaccination rollout gathered pace in mid-2021 with about 75% of the European Union population having received at least one dose of the vaccine by mid-November. Private consumption and investment should continue to benefit from the lifting of containment measures and buoyant household spending, catalyzed by falling unemployment. Economic activity will likely be further supported by strong export growth fueled by the recovery in the rest of the world.

Consumption remains the main driver of growth in the UK, with unemployment expected to continue to decline. Business investment spending is also likely to improve but continues to be held back by uncertainty. The UK economy will likely continue to recover into 2022 with GDP growth expected to come in at about 5% following 7% growth in 2021.

China's growth is likely to gradually moderate to a pre-pandemic pace, with infrastructure investment poised to pick up as the issuance of special bonds accelerates and as projects are frontloaded, the latter offsetting the drag from the troubled real estate sector. The relaxation of environmental regulations to address electricity shortages is also expected to boost production. Further, the recent strong growth in online sales indicates that consumption is gradually rebounding. China is likely to maintain its zero-COVID policy for longer as the new Omicron variant spreads globally.

Global headline inflation remains elevated in late 2021 and is expected to rise by around 4.7% in the last quarter of this year (source: JPMorgan). Strong gains in energy and commodity prices, supply shortages, and higher transportation costs have been the key drivers of elevated inflation. Headline inflation is expected to stay at elevated levels globally and in the US and UK (Figure 4).

Figure 4 : Inflation to Stay Elevated in 2022

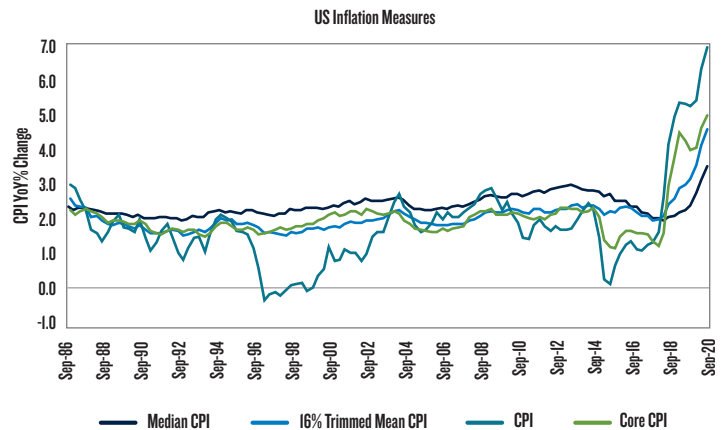
Headline Inflation (Consensus Forecasts)			
	2020 A	2021 E	2022 F
World	3.2	3.9	3.9
USA	1.2	4.7	4.2
Eurozone	0.3	2.5	2.4
Germany	0.4	3.1	2.6
Italy	-0.2	1.9	2.3
UK	0.9	2.5	3.9
Japan	0.0	-0.2	0.7
China	2.5	1.0	2.2

Source: Bloomberg as of 12/17/21.

Among developed economies, the inflation problem appears most pronounced in the US, where fiscal and monetary policy stimulus has been the most robust. Inflation data through the end of November showed a continued increase, with headline inflation rising 6.8% and core inflation up 4.9% (Figure 5). Alternative inflation measures such as the CPI median and trimmed mean,

which filter out outlier price changes, confirm that the rise in inflation is broad based (Figure 5). We believe US inflation will turn lower in 2022 but stay above the Fed's comfort zone. While some transitory supply-chain-driven pressures on inflation will fade, demand-side pressures may intensify. So far, the increase in wage inflation, for example, has lagged the general increase in prices, leading to lower real wages for workers. In an environment characterized by widespread labor shortages, we think workers will have the bargaining power to recoup the loss in spending power going forward.

Figure 5: Broad Based Increase in US Inflation



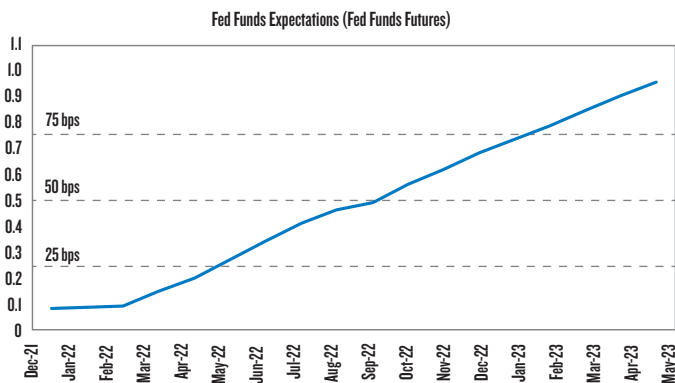
Source: Datastream, Federal Reserve Bank of Cleveland as of 11/30/21.

The divergence in inflationary outcomes across EM has been reflected in EM central banks' policy moves. Most Latin America and EMEA central banks have shifted to a tightening stance, while EM Asia has mostly held monetary policy steady in 2021. Inflation has surprised to the upside in Latin America and EMEA with rapid pickup in activity as mobility restrictions were eased, oil and commodity prices rose, and rates fell to record lows in most EMs. In Q4 2021 there have been sharp rate hikes in several countries, including Brazil (150 basis points or bps), Czech Republic (125 bps), Poland (75 bps) and smaller rate hikes in Mexico (25 bps), Peru (50 bps), and Colombia (50 bps). Central banks in a host of smaller EMs and frontier markets have also hiked rates. Turkey has been the one central bank that has moved in the opposite direction, cutting rates by 400 bps to 15% on political pressure even as inflation has risen above 20%. This has prompted a sell-off in the Lira, which is down more than 40% against the US dollar in 2021.

Developed-world central banks have shifted further toward removing monetary accommodation to address rising inflation by reducing asset purchases and by hiking rates sooner. Further, the Omicron variant is likely to complicate central banks' task as they try to rein-in inflation. When the COVID-19 pandemic first hit the global economy in March 2020, inflation was low and policy makers could bring out the heavy artillery to fight the recession. Policymakers face a more difficult trade-off now.

In the US, monetary policy continues to provide substantial support to the economic recovery, through the near-zero federal funds rate and the Fed's asset-purchase program. However, in an acknowledgment of stubbornly elevated inflation, the Fed announced it would double the pace of its asset purchase taper and signaled it would move forward raising rates to the first half of 2022. In August, the Fed was expected to hold rates steady for all of 2022, and not hike rates until 2023. Now markets are expecting three rate hikes in 2022 and a fourth in early 2023.

Figure 6 Shift in Fed Policy: Markets Now Expect Mid-Year Liftoff



Source: FactSet as of 12/16/21.

The outlook for fiscal policy has become more complicated after a strongly expansionary fiscal stance in 2020-21. Policymakers now face more complex challenges as the tailwind from fiscal stimulus fades. Fiscal policy remains supportive in the near term, largely due to the continued implementation of measures announced in 2020 and early 2021. In the US, most crisis-related fiscal support has already been withdrawn. However, the earlier relief payments have resulted in significant accumulated savings that should continue to support the economic recovery. Longer-term public spending plans related to physical infrastructure are likely to start being implemented next year, with new funding for transport networks, broadband upgrades and improvements to power and water systems. Looking ahead, the recent \$1-trillion infrastructure law, and the \$1.75-trillion budget reconciliation bill currently being negotiated are expected to add around 0.3% of GDP growth in both 2022 and 2023.

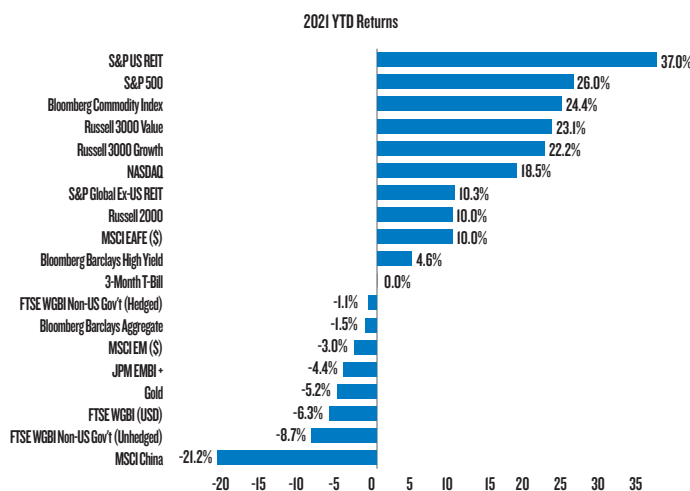
In the Eurozone, national fiscal policies provided substantial support to the economy in 2020 and 2021. Governments provided discretionary stimulus in excess of 2% of euro-area GDP in 2021, but a gradual consolidation is expected in 2022 and 2023 as exceptional support measures are phased out. In Japan, the new government has announced a fiscal-policy package, which includes measures such as increasing the health care system's in-patient capacity, continued support for affected households, and promotion of sectors that can help strengthen supply-chain resilience.

Market Outlook:

Expect a More Turbulent and Less Rewarding Year

US stocks delivered stellar returns in 2021, but globally returns were more mixed. We saw double-digit increases in Europe and the UK and many emerging markets bourses. However, poor performance in China, driven by government regulatory crackdowns and property sector woes, dragged down the emerging-market index to negative returns. Japanese stocks were about flat for the year. US REITs and commodities were particularly strong performers this year (Figure 7), benefiting from their status as real assets during a period when inflation surged to levels not seen in decades. Bonds mostly posted negative returns, as yields bounced around but generally ended the year at higher levels. In the US, for example, the 10-year Treasury yield began the year at 0.9% and is currently trading at a yield of 1.467% as of 12/21/21. The entire increase, however, came in the first quarter when the yield hit 1.74% on 3/31/2021 and has since traded back down.

Figure 7: US Stocks, REITs, and Commodities Top 2021 Performance Derby



Source: FactSet as of 12/16/21.

The growth environment for 2022 looks to be supportive of risk assets. We believe above-trend global growth is still likely, although growth should slow from 2021's torrid pace. The outlook for economic activity is somewhat clouded by the emergence of the Omicron variant. Experts are still studying the variant, and more data will be available in the coming weeks. However, at this moment, we believe Omicron is unlikely to derail growth next year. Rather, it is more likely to represent another economic speed bump in an ongoing expansion.

That said, we believe 2022 will be a more turbulent and less rewarding year for US stocks in particular, as the Fed unwinds extraordinary monetary accommodation in response to above-trend growth, the rapidly falling unemployment rate, and elevated inflation. While solid economic growth is typically good for stock market performance, high valuations, elevated rates of inflation, and rising real rates seem likely to coincide with lower returns, higher volatility, and larger drawdowns than we saw in 2021.

Nonetheless, we maintain the view that stocks will outperform bonds next year as yields on the long end are likely to rise in response to the shifting monetary policy environment. This should translate into another year of negative returns for the Bloomberg Barclays US Aggregate Bond Index. Meanwhile, equities should be supported by a continued rise in corporate earnings. Moreover, stocks typically perform well in the early stages of Fed rate hikes, which seem likely to begin next year. The real damage from higher rates tends to occur later in the tightening cycle when tighter policy flattens/inverts the yield curve; we are still not at that point.¹ Things could be different this time, though, as the Fed is hiking rates after inflation is already running at levels substantially above its target.

We expect profit growth to continue but to slow from this year's blistering pace. 2021 was a banner year for corporate earnings as profits rose globally by more than 50% due to several factors, including base effects, increased revenue from pent-up demand, operating margin expansion, and declining interest costs. Triple-digit earnings growth rebounds in emerging markets Latin America and EMEA were driven by sharply higher oil and commodity prices.

Given the tough comparison and expected slower economic growth, profit growth should come back to earth in 2022. US and global earnings are expected to grow at a high-single-digit pace next year (Figure 8).

Figure 8: Earnings Growth to Slow Next Year, But Remain Positive

Consensus Earnings Outlook			
	2020	2021	2022
MSCI World	-13.8%	51.1%	7.3%
US	-10.3%	49.5%	8.1%
Eurozone	-21.7%	69.6%	8.0%
U.K.	-36.8%	82.4%	2.4%
Japan	20.0%	35.2%	7.8%
Emerging Markets	-2.5%	60.8%	5.8%
Emerging Asia	6.5%	42.3%	7.6%
Emerging CEEMEA	-20.4%	104.2%	7.3%
Latin America	-37.4%	217.7%	-7.5%

Source: IBES, MSCI, Datastream as of 12/9/21.

Notes: Japan 2020, 2021, 2022 refer respectively to fiscal year ending March 2020, 2021, 2022.

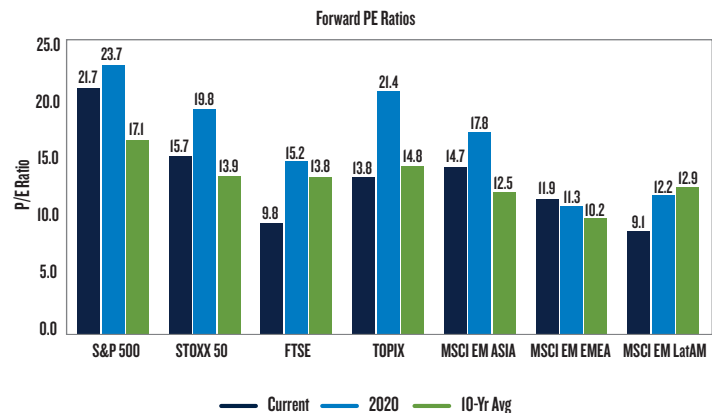
Equity valuation multiples had risen sharply over 2020 as earnings collapsed due to the COVID recession, while stocks prices rose sharply in response to unprecedented monetary and fiscal policy stimulus, and in anticipation of a rebound in profits in 2021. During 2021, valuations improved with price/earnings (PE) multiples contracting as earnings growth in the 50%-70% range outpaced stock gains in the 10%-20% range. The forward PE ratio on the S&P 500 Index, for example, has fallen to 21 from 24 at the end of 2020 (Figure 9). While this is still elevated relative to its 10-year average, we do not view it as excessive given the current level of interest rates and with profitability for S&P 500 firms at a record level.

Outside of the US, market valuations are much more favorable. As shown in Figure 9, multiples in non-US markets have generally fallen more decisively than those in US from 2020 levels. Eurozone equities exhibit forward multiples not too far above the 10-year average, while UK (FTSE) and Latin American stocks are trading at significant discounts to the same measure. As a result of the much better valuation starting point, non-US markets could see significant outperformance over US stocks next year. However, this has been the

case for several years, and the momentum still favors the premium-priced and higher-quality US market. We are currently neutral on US, EAFE, and emerging-market stocks.

Similarly, valuation, higher rates, and elevated inflation should favor value and small-cap stocks over large-cap and growth. However, these conditions were in place this past year as well, and bets favoring value and small-cap proved difficult to time and delivered mixed results. In the US large-cap space, value stocks charged out of the gate this year, besting their growth counterparts 18.4% to 1.6% through May.² However, since then it's been almost the mirror image with growth beating value 16.0% to 2.5%. Similarly, the small-cap Russell 2000 Index was also beating the large-cap S&P 500 Index at mid-year but is now trailing by a large margin (see Figure 7). We are currently neutral on style and market-cap positioning in the US but could shift back in the direction of small-cap and value stocks next year if we see more definitive signs that market sentiment is shifting in their favor.

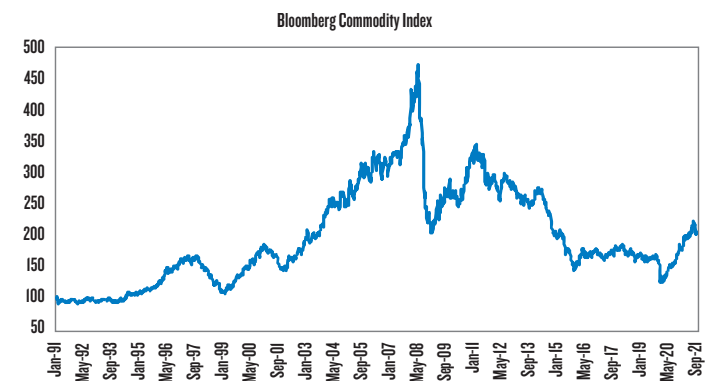
Figure 9: Equity Valuation: Elevated in Some Markets But Off 2020 Highs



Source: Bloomberg as of 12/9/21.

Commodity futures stand out as one of the few major asset classes that remains historically cheap (it's worth noting the Bloomberg Commodity Index fell nearly 75% from mid-2008 to April 2020), so even with this year's strong performance, the commodity index is still nearly 60% below its prior peak. We think the pandemic marked the bottom in the secular bear market for commodities, and a new bull market should continue into 2022. Further, price gains should be driven by elevated inflation trends, constrained supply, (driven by a decade of underinvestment due to falling prices, environmental policies and ESG investing), and buoyant demand (due to economic normalization from the fading impact of the pandemic and past government fiscal and monetary stimulus).

Figure 10: 2021 Rally Still Leaves Commodities Way Below Prior Peak



Source: Datastream as of 12/15/21.

¹ Taking the Tantrum out of the Taper, Credit Suisse Securities, Jonathan Golub, 12/13/2021.

² Russell 1000 Growth and Value indexes.

All data from PGIM Quantitative Solutions unless otherwise noted.

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*Assets under management (AUM) are based on company estimates and are subject to change.

Notes to Disclosure

Sources: Bloomberg, Datastream, FactSet, Federal Reserve Bank of Cleveland, IBES, MSCI, PGIM Quantitative Solutions and World Health Organization (WHO). **This is intended for Professional Investors only. All investments involve risk, including the possible loss of capital. Past performance is not a guarantee or a reliable indicator of future results.**

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