Q4

PGIM QUANTITATIVE SOLUTIONS

September 30, 2021

Q4 2021 OUTLOOK

PGIM Quantitative Solutions Global Multi-Asset Solutions Team

EXECUTIVE SUMMARY

Economic Outlook:

- A robust global recovery from the pandemic-induced downturn continues despite signs that economic activity hit a speed bump in Q3, from the COVID-19 Delta variant spreading around the world. Renewed lockdowns in certain countries and more cautious behavior among consumers are pushing down Q3 growth expectations from earlier estimates and from Q2's torrid pace.
- As the Delta variant recedes, we expect a growth reacceleration into year end. The Delta variant is likely to represent a temporary hit to growth that won't prevent a solid global economic expansion from continuing in 2022.
- Given Delta variant headwinds, US GDP growth should see a slowdown in Q3 from the 6.6% annualized pace in Q2. In contrast, Eurozone GDP growth is expected to strengthen to a double-digit pace in Q3 due to significant vaccination rates.
- In China, economic growth is expected to slow in the second half of 2021 from the strong pace in the first half of the year, in an environment of government regulatory crackdowns on certain sectors. But the fiscal and monetary policy stance is likely to become more supportive to protect growth.
- Price increases have remained stubbornly elevated and the debate over inflation continues. The jury is still out on whether the rise will be "transitory" or not.
- In the near-term, inflation is likely to remain under upward pressure by factors related to the pandemic shock and any unwind is likely to be gradual in an environment of strong demand growth, lean inventory positions and a normalization of service sector prices.
- On the whole, advanced economy central banks maintain their accommodative policies, however, there has been a modest tilt toward more hawkishness: The US Federal Reserve is on track to begin tapering asset purchases in November, the Norges bank became the first developed economy central bank to hike rates, and the Bank of England is telegraphing that a rate hike could come sooner than expected.
- In Emerging Markets, central banks remain divided between those hiking rates due to rising inflation (Russia, Brazil, Mexico, Peru, Pakistan. and Chile) and others supporting their economies from virus-related downside risks (India, China, and ASEAN countries).

Investment Outlook:

- We are sticking with a moderate pro-risk investment strategy with economic growth likely to reaccelerate into year-end—as the economic impact of the Delta variant recedes—and global monetary policy conditions stay accommodative.
- On asset allocation, we remain overweight stocks, real estate and commodities relative to cash and fixed income. Equities and commodities should continue to perform strongly, and interest rates should rise as Delta risks recede and investors focus on the post-Delta recovery.
- Value, cyclical, and small cap stocks have faced a setback in recent months but remain attractively valued. These segments could see renewed outperformance as economic growth stays strong and risks from the Delta variant fade.
- Until the most recent turbulence sparked by China risks, US and global stocks had been experiencing a relentless rise on low volatility and very limited drawdowns this year.
- A credit event in China like an Evergrande default could spark an overdue correction in global stock markets, however, we think this would be a dip to buy given the underlying strength in the global economy and earnings and the low odds of an economic recession.
- Bond yields should rise back toward the levels seen earlier in the year as Delta variant risks peak and decline. However, rates should stay historically low, at least for now, anchored by structural trends and central bank policy.
- Within fixed income we are selective, emphasizing spread sectors such as high yield bonds over core bonds (Bloomberg Barclay's Aggregate index) given the strength of the global recovery.
- The biggest risk to investors looking forward is that policymakers (both fiscal and monetary) stay too profligate and allow inflation to rise above what investors consider to be benign levels for too long. However, we think it is still too early to get more defensive.
- We remain bullish on the outlook for real assets, such as natural resources stocks, midstream energy/MLPs, and commodities given the strong economic growth prospects, supply side constraints and rising inflation risks.

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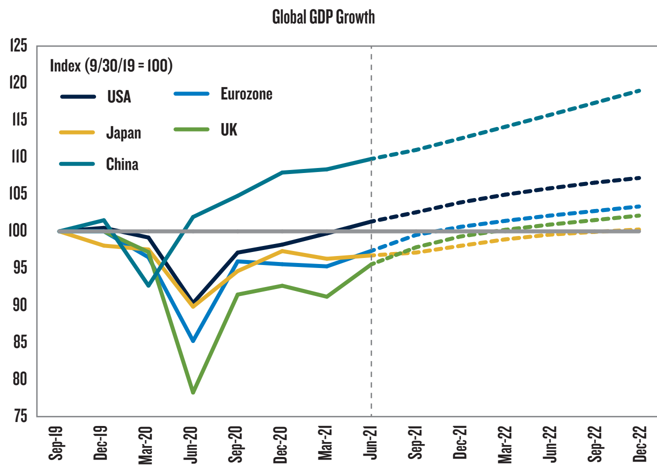
All investments involve risk, including the possible loss of capital.

Economic Outlook:

The Delta Variant: A Speed Bump for an Otherwise Robust Global Recovery

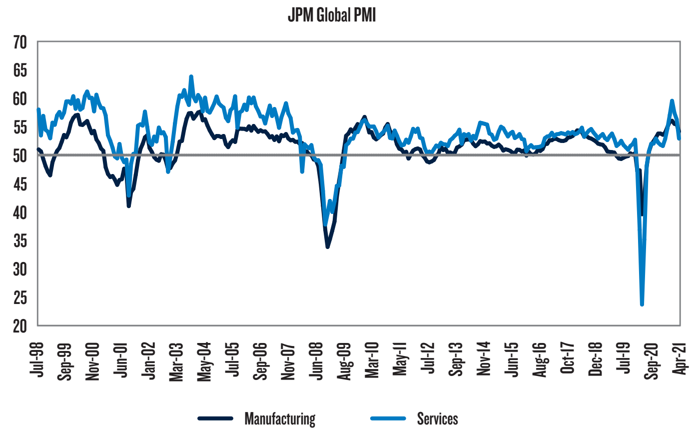
A robust global recovery from the pandemic-induced downturn continues despite signs that economic activity is hitting a speed bump in the third quarter, from the COVID 19 Delta variant spreading around the world. The US economy reached a key milestone at mid-year, as it more than recouped its lost output from the COVID recession (Figure 1). China's economy had reached that point a year earlier, as the first economy to be impacted by the virus, and as a stand-out in bringing the virus under control. At mid-year 2021, China's economic output is nearly 10% greater than its pre-COVID level. Meanwhile, outside the United States, other major developed economies are lagging. Europe is expected recoup lost output by the end of this year, while Japan and the United Kingdom reach that point sometime next year.

Figure 1: Robust Yet Uneven Global Recovery Continues



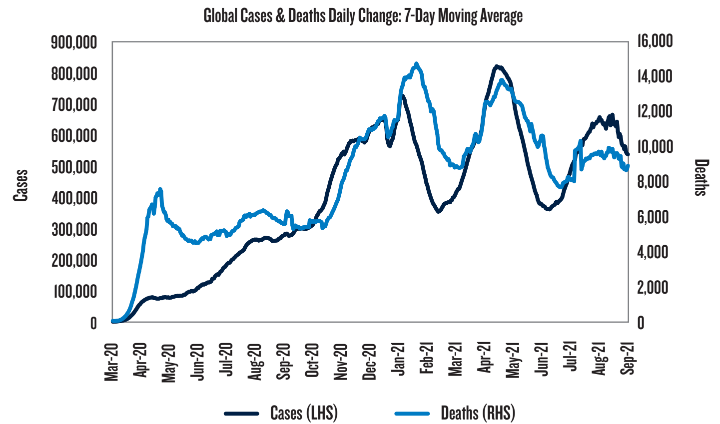
Source: Bloomberg as of 9/17/21.

Figure 2: Delta Variant Weighing on Near Term Growth

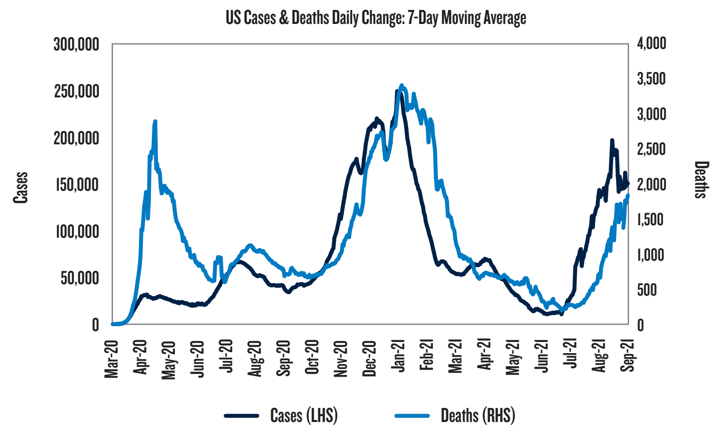


Source: Haver Analytics as of 8/31/21.

Figure 3 & 4: Delta Spike Appears to Be Receding



Source: WHO, PGIM Quantitative Solutions as of 9/17/21.



Source: WHO, PGIM Quantitative Solutions as of 9/17/21.

The global economic recovery shifted into higher gear in Q2 2021 with strong growth in the US, Europe, China, Taiwan, Brazil, India, and several other emerging markets. However, the second quarter of 2021 looks to have been "peak growth" in the post-COVID recovery as the Delta variant of the COVID-19 virus weighs on growth, and the strong tailwinds of global policy support begin to wane.

Renewed lockdowns in certain countries (including China and Japan) and more cautious behavior among consumers are pushing down Q3 growth expectations from earlier estimates and from Q2's torrid pace, but the net impact of Delta on growth is still not fully clear. Business confidence has declined from very elevated levels of Q2 but still remains solid in Q3 as shown in Figure 2. With widespread vaccinations weakening the link between infections and death and natural immunity rising there have been fewer restrictions and lockdowns associated with the latest surge in cases, which also looks to be peaking (see figures 3 & 4). Still, businesses have pushed back return-to-office plans, and airlines have been reporting increased cancellations. As the Delta variant recedes, we expect government restrictions to ease and the recovery in service sector spending to continue. That should coincide with a growth reacceleration heading into year end. All in, we expect the Delta variant will represent a temporary hit to growth that won't prevent a solid global economic expansion from continuing in 2022.

All data from PGIM Quantitative Solutions unless otherwise noted.

Given Delta variant headwinds, US GDP growth should see a slowdown in Q3 from the 6.6% annualized pace in Q2. The Bloomberg consensus forecast for Q3 is 5.0%, however, the Atlanta Fed's GDPNow tracker is currently estimating 3.6%, highlighting downside risks to that forecast. Retail sales declined in July, signaling that after flying high for months, consumer spending is falling back to earth. While retail sales subsequently rebounded in August, the figures are still consistent with a sharp slowdown in consumer spending in the third quarter. However, Ellen Gaske, a senior economist at PGIM Fixed Income, has argued that inventory rebuilding from current low levels and increased capital spending—as firm's beef up their digital capabilities—could offset any slowdown in consumer spending. She expects the net result to be solid overall GDP growth well into next year.

In contrast to the US, Eurozone GDP growth is expected to strengthen to a double-digit pace in Q3, after rising nearly 9% in Q2. European COVID-19 vaccination rates have increased significantly, which has helped prevent the Delta variant from spreading as widely as in the US. The latest hard economic data from the end of Q2 was positive, particularly for Eurozone consumers. However, confidence indicators have pulled back modestly recently. Japanese GDP rose more than expected in Q2, up 1.3% annualized after declining -3.9% in Q1, with a recovery in consumer spending, and a pickup in both capital spending and government expenditures. The recovery in Japan continues, but Q3 growth is likely to be sluggish with ongoing lockdowns in several areas.

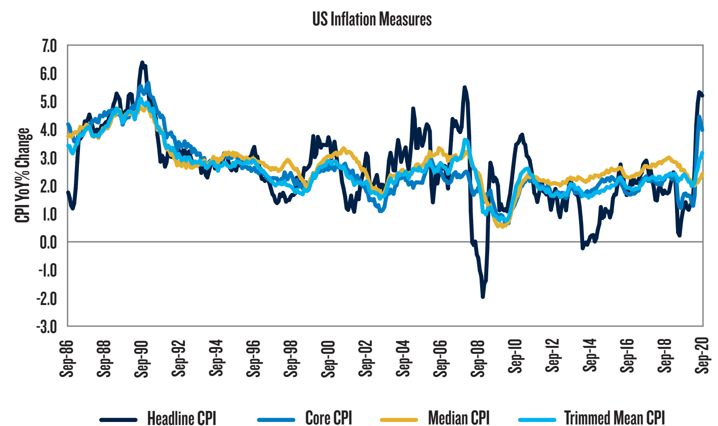
In China, economic growth is expected to slow in the second half of 2021 from the strong pace in the first half of the year. GDP growth increased 8% in Q2 after a blistering 18.3% in Q1. China's domestic activity indicators weakened and missed expectations in August reflecting a combination of factors, including the widest Covid-19 outbreak since early 2020 (and related strict control measures), a relatively tight macro policy stance, and potential impact from recent regulatory tightening measures. The policy stance is likely to become more supportive in the rest of the year, including at least one more bank reserve requirement ratio cut, as well as increases in fiscal expenditure and local government bond issuance.

Price increases have remained stubbornly elevated and the debate over inflation continues. Will elevated pricing pressures prove to be transitory or sustained? In June, we published a paper arguing that "the four-decade trend in falling inflation had ended and inflation will likely rise at a higher rate over the next decade" due to lessening or reversing secular disinflation trends.[1] We also took a less sanguine view on shorter-term inflation risks noting that "a sustained period of 3%-to-4% average inflation," while not our base case, was a "non-trivial risk for investors."

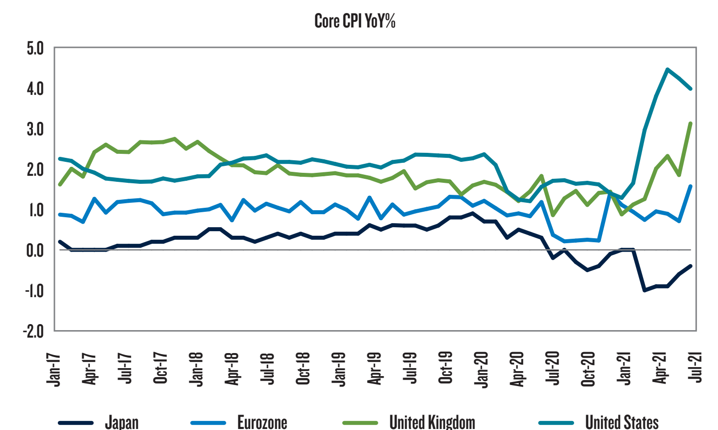
The jury is still out on which view will prevail. In the near-term, inflation is likely to remain under upward pressure by factors related to the pandemic shock. Goods price pressures, linked to supply chain bottlenecks and rising transportation and material costs, are behind this acceleration, but these effects are expected to ease in the coming months. However, the unwind is likely to be gradual in an environment of strong demand growth, lean inventory positions and a normalization of service prices that were depressed by mobility restrictions. Further, owners' equivalent rent, which has a significant weight in the various inflation baskets, is expected to rise given the surge in house prices. Market rents should also rise back toward their historical pace after slowing during the pandemic.

Figure 5 shows that US headline inflation has been running at more than 5% year-on-year for more than three months now. Meanwhile, core inflation (excluding food and energy) edged down to 4% in August. But the median and trimmed mean CPI published by the Cleveland Fed—which filter out outlier price changes to get a better sense of the underlying inflation trend—are both above the Fed's 2% target and in a rising trend. Meanwhile, the NY Fed's Survey of Consumer Expectations shows that short- and medium-term inflation expectations rose to a new series high of 5.2% and 4.0% in August. While inflation risks appear greatest in the United States, other developed-world economies are also seeing a rising trend in core inflation (Figure 6) but Japan still remains in deflation.

Figure 5&6: The Inflation Debate Continues



Source: Datastream as of 8/31/21.



Source: Datastream as of 8/31/21.

[1] Brundage, Campbell, Cummings & Tokat-Acikel, 2021, "Is Inflation About to Revive?", https://www.pgimquantitativesolutions.com/research/inflation-about-to-revive

In Emerging Markets, soaring food and energy prices have pushed inflation to high levels. In Brazil, consumer prices are up 9% year over year in July, more than twice the central bank's target rate. In Russia, inflation is 6.5%, well above the central bank's target of 4%. Consumer inflation may tick higher in the near term after President Putin announced one-off social payments to pensioners and soldiers ahead of the September Parliamentary elections. Inflation in India, which had been high in 2020, rose above 6% in May-June, before easing modestly in July to 5.6%. China is the only EM where inflation remains low, coming in at 1% in July.

Advanced economy central banks maintain their accommodative policies even as the US Federal Reserve debates the timing of asset-purchase tapering against a backdrop of potential growth risk from the Delta variant and elevated inflation. Chairman Powell's speech at the Jackson Hole monetary policy conference in late August emphasized the risk of pulling back on monetary policy too early if inflationary factors prove transitory. He also noted that there is still room to go for the Fed to meet its maximum employment goal. However, consistent with the Fed's July minutes, Chair Powell believes the inflation goal has been met and that the Fed may need to slow asset purchases later in the year, likely in November.

On the fiscal policy side, the US Congress is still working toward passing infrastructure and reconciliation bills with a vote expected on the infrastructure bill likely in late September.[2] The former focuses primarily on infrastructure, climate and jobs proposals, and the latter on social welfare proposals like healthcare, child care and education. Markets are expecting the infrastructure bill to pass, but the size of the reconciliation bill remains a wildcard with moderate Democratic Senator Manchin favoring a significantly smaller bill than the $3.5 trillion supported by the President and Congressional leadership. Given the narrow majority Democrats hold in the Senate, Manchin has an out-sized influence. States and local governments are developing plans to spend their relief aid in the coming quarters. Fresh public spending should also help support growth.

The European Central Bank announced in September that it will continue its asset purchases "at a moderately lower pace" in Q4 than in the last two quarters. This decision reflects the ECB's acknowledgement of the improved growth and inflation outlook in the Eurozone. ECB President Lagarde noted this should not be considered a prelude to "tapering" but instead an adjustment. In Japan, the Bank of Japan noted the impact of Delta and supply constraints on the economy, trimming its' fiscal year 2021 GDP forecast. However, it continues to forecast a recovery led by services and expects stronger growth in 2022. The bank has also raised its' inflation forecast for both 2020 and 2021. The BoJ is likely to keep policy unchanged.

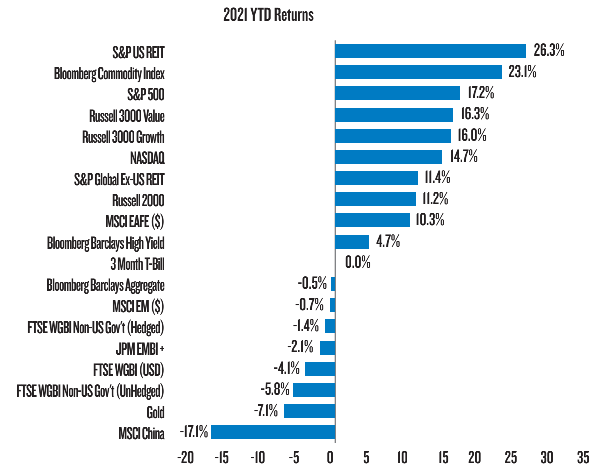
In the Emerging Markets, central banks remain divided between those hiking rates due to rising inflation (Russia, Brazil, Mexico, Peru, Pakistan. and Chile) and others supporting their economies from virus-related downside risks (India, China, and ASEAN countries). China left its benchmark interest rate unchanged in August for the 16th consecutive month, but that did little to dampen expectations authorities will boost stimulus to counter a slowdown in the economy. While expectations are that the Chinese government would boost fiscal spending and the People's Bank of China will keep liquidity in the financial system ample, they are likely to stay clear of any aggressive monetary easing that could run the risk of creating asset bubbles.

Investment Outlook:

Stay the Course for Now

2021 has generally been a "risk on" year with developed market equities delivering strong performance that has beaten the returns on global bonds by a large margin. With a strong US recovery—in both the economy and corporate earnings—low policy rates and ongoing asset purchases by the Federal Reserve, US equities have been particularly strong performers with both US REITs and broader US equities leading among the major market indices displayed in Figure 7.

Figure 7: 2021 Performance—U.S. REITs and Commodities Lead, China Stocks Lag



Source: FactSet as of 9/20/21.

Commodities have also exhibited strong performance due to the strength of the global economic rebound from COVID-19, continued supply chain bottlenecks, and tight capacity stemming from a decade of minimal investment given last decade's commodity price bust, environmental regulations, and the influence of ESG investing. Commodity performance has also been bolstered by the rising trend in global inflation, given the assets' historical record as an effective hedge against unexpected inflation. We think the strength in commodities prices should persist looking forward, and we remain overweight the segment in our multi-asset portfolios.

In contrast, Chinese equities have been significant underperformers, with much of the damage happening in the latest quarter, due to the Chinese government's unprecedented regulatory crackdown on a range of sectors, including Big Tech, Data Security, and the after-school education sector.[3] In addition, there have been several policy interventions addressing social matters, including climate change, property prices and health care. The speed and breadth of these changes have created uncertainty among investors, leading some to question whether Chinese stocks are still investable. Given that Chinese stocks have the largest weight—about 40%—in the MSCI emerging markets index, they have been the most significant contributor to this year's underperformance of emerging market stocks relative to developed market equities.

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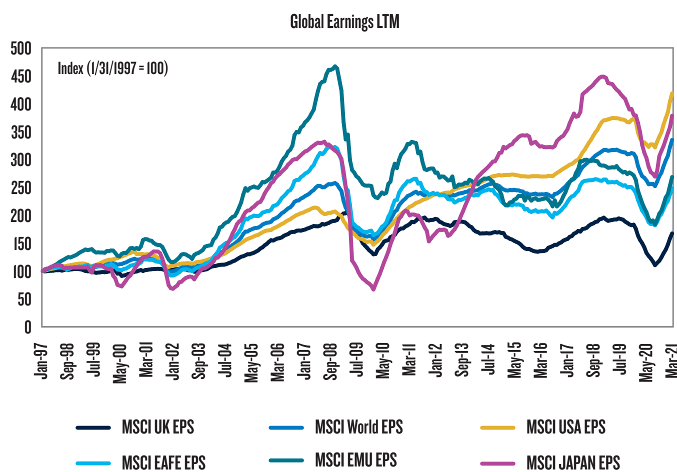
[2] The vote on the infrastructure bill was delayed as we were publishing due to lack of agreement among progressive and moderate Democrats on the state of the reconciliation bill.
[3] Ahmed, Rengarajan, 2021 *"China Regulatory Crackdown Takes A Toll On Tech And Education Sectors"*
https://www.pgimquantitativesolutions.com/article/china-regulatory-crackdown-takes-toll-tech-and-education-sectors

The latest China-related risk to unsettle markets is a looming default by the massive and overly leveraged real estate developer, Evergrande Group. This situation was exacerbated by the Chinese government's tightening of restrictions on leverage in the property sector. While some have warned that this could represent a "Lehman moment" for China, most observers have dismissed the analogy, noting Evergrande's less central position in the global financial system compared to Lehman, and the expectation that the Chinese government will take proper steps to prevent the property giant's crisis from destabilizing the wider financial system and economy. Whether or not this situation escalates into a bigger problem for financial markets is still unknown. At a minimum, however, any default could be a deflationary shock resulting in a hit to economic growth, motivating a pivot toward policy easing in China, which is already underway, even if wider financial market contagion is avoided.

Until the most recent turbulence sparked by China risks, US and global stocks had been experiencing a relentless rise on low average volatility and only very limited drawdowns so far this year. Could a credit event like an Evergrande default spark an overdue correction in global stock markets? With a near doubling in US and global stocks since the 2020 COVID-19 low and the elevated level of stock market valuations, this remains a distinct possibility. However, should stocks experience a notable drawdown linked to this event, we think this would be a dip to buy given the underlying strength in the economic and earnings recovery and the low odds of an economic recession.

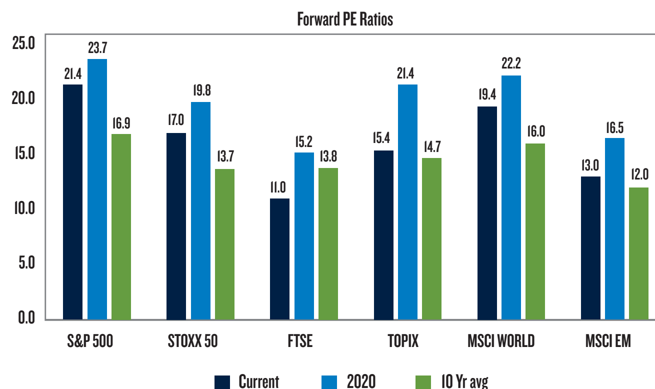
As shown in Figure 8, the strong economic rebound from the COVID-19 recession has sparked an impressive rebound in corporate profits. U.S companies are expected to grow earnings by 46% this year while Eurozone, U.K., Japanese, and emerging market firms are expected to deliver calendar year 2021 earnings growth of 60%, 77%, 29% and 64%, respectively, according to MSCI. Rapid earnings growth has led to a moderation in elevated valuation ratios despite continued gains in global stocks. All major regions shown in figure 9, for example, have seen PE ratios fall from 2020's end. US and European stocks still trade at a notable premium to their 10-year average forward multiple, while emerging market and Japanese stocks sport valuation multiples more in line with their historic averages. UK stocks, in contrast, trade at a discount to their historic average due in part to the uncertainty related to Brexit.

Figure 8: Surge in Corporate Earnings



Source: FactSet as of 8/31/21.

Figure 9: Stocks Sport Expensive Though Declining Valuation Multiples



Source: Bloomberg as of 9/17/21.

With economic growth likely to reaccelerate into year-end as the economic impact of the Delta variant recedes and global monetary policy conditions stay accommodative, we are sticking with a moderate pro-risk investment strategy: Overweight stocks, commodities, and real estate relative to fixed income and cash (Figure 10). The recent rise in inflation is unlikely to provoke a significant policy shift at this stage. While the Fed is on track to taper its asset purchases later this year, the policy rate should stay near zero well into 2022. Monetary policy will likely stay accommodative as the Fed is willing to tolerate inflation overshoot in pursuit of its maximum employment goal.

Bond yields should rise back toward the levels seen earlier in the year as Delta variant risks peak and decline. However, rates should stay historically low, at least for now, anchored by structural trends and central bank policy. Stock markets exhibit high, though improving, valuation ratios but macro conditions, corporate performance, and low interest rates continue to support solid performance. Value, cyclical, and small cap-stocks have faced a setback in recent months but remain attractively valued. These segments could see renewed outperformance as economic growth stays strong and risks from the Delta variant fade.

Figure 10: Sticking with Moderate Pro-Risk Positioning

Asset Class	-		Neutral		+
Stocks				■	
Fixed Income	■				
Real Estate				■	
Commodities					■
Cash	■				
Stocks					
US				■	
EAFE				■	
EM				■	
Fixed Income					
US Core	■				
TIPS		■			
High Yield				■	
Non-US Dev Sov	■				
EMD			■		

Source: PGIM Quantitative Solutions as of 9/30/21. For illustrative purposes only.

PGIM QUANTITATIVE SOLUTIONS

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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, Haver Analytics, 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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