

INVESTING THROUGH Shifting Macro Perspectives

2023 investment outlook and opportunities

Extraordinary events presented significant challenges for investors in 2022. Aggressive central bank tightening and soaring inflation drove pronounced selloffs in both stock and bond markets, leaving investors searching for sources of effective diversification and risk hedging. After a large valuation reset across asset classes, opportunities are beginning to emerge. As early signs of softening inflation come into view, there are renewed glimmers of hope for less aggressive monetary policy actions in 2023.

Against this evolving backdrop, PGIM asset managers share their perspectives on the shifting landscape, provide insights on key trends set to shape 2023 and beyond, and offer ideas for investors seeking to capitalise on the opportunities that lie ahead.

2023 INVESTMENT THEMES

- **1** Greater clarity on Fed policy improves bond market outlook
- 2 Positive catalysts create relative value in fixed income
- **3** Secular growth stands out as earnings climate cools
- 4 Real assets remain key in hedging inflation risks
- **5** REITs revive as valuation gap continues to narrow
- 6 Macro uncertainty calls for agility and diversification

INVESTMENT STRATEGIES FOR SHIFTING CONDITIONS

SEEK OUT CREDIT SELECTIVELY

Global central banks are tightening monetary policies to fight stubbornly high inflation. In the U.S., the Federal Reserve has signaled a potential downshift in the pace of its tightening. If there is a pause or pivot towards lower rates, risk assets may do well. However, a continuation of hawkish policies may invite opposite consequences. Balancing shorter-duration assets for near-term rate increases with high-quality longer-duration assets as recession risks rise may help balance portfolios for what comes next.

INCREASE GROWTH AND QUALITY IN EQUITIES

Profit growth is expected to slow to below-trend levels in 2023. Shifting away from cyclical exposure to more quality and defensive areas could help as the economy slows. Growth stocks with durable earnings less dependent on economic growth could also fare relatively well in this environment.

HEDGE INFLATION RISKS

Inflation remains near four-decade highs with broadbased price pressures. Even if inflation cools from its current level, it will likely remain more elevated than levels seen over the last decade, making it important to include assets that do well in inflationary environments.



Ultra short bonds

Floating rate assets such as securitised products and bank loans have shorter duration and tend to rise alongside higher interest rates.

Short-duration credit

Short-duration credit such as securitised credit can help immunise portfolios against rising interest rates.



Multi-sector strategies

Wide return dispersion across sectors creates pockets of opportunity for flexible multi-sector strategies.



Secular growth stocks

Growth stocks with exposure to secular themes and durable earnings can better weather economic uncertainty.

Real assets

Elevated inflation may offer tactical opportunities in real assets such as natural resources, midstream energy/ master limited partnerships and commodities.

Real estate

Real estate markets have seen a big correction but defensive areas should fare well through continued uncertainty. Additionally, REITs offer hedges against rising interest rates and inflation.

DIVERSIFY WITH ALTERNATIVES

Highly correlated returns between stocks and bonds in this volatile environment makes alternative strategies with lower correlation to traditional asset classes more attractive.



Global macro

Agile strategies with wide opportunity sets can better protect capital, diversify portfolios and generate returns during periods of market volatility.





EDWARD CAMPBELL, CFA

Co-Head of Multi-Asset PGIM Quantitative Solutions

THE MACRO BACKDROP

Economic Outlook | Recession Risks Abound

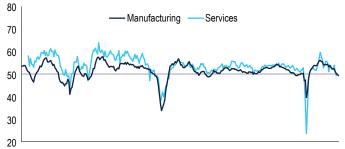
The specter of global recession is upon us as the growth outlook deteriorates amid aggressive monetary policy tightening, high inflation and heightened geopolitical risks. A host of developed economies face significant recession risk while emerging economies face slower growth. The weakened economic environment is most evident in Europe where many economies are likely to enter recessions this winter as the sharp surge in gas prices weighs on households and businesses.

While global oil and commodity prices have corrected in recent months, Eurozone gas and electricity prices have climbed significantly higher due to disruptions from Russia's invasion of Ukraine. The accompanying embargoes and restrictions have further strained supplies, pointing to significant risk of even more dire outcomes should Russia completely and permanently cut off gas flows to the Eurozone.

Following two quarters of negative U.S. GDP growth in the first half of 2022, robust domestic spending and rising exports drove a modest rise in third-quarter growth. Labour market strength and low unemployment should continue to support consumption spending, and as such, we don't think the U.S. economy is at near-term risk of recession. While a recession is most likely in our future, it may come later rather than sooner.

Meanwhile, in China, industrial output, retail sales and fixed asset investment improved marginally in the third quarter following earlier weakness. However, ongoing COVID restrictions continue to dampen consumer spending while the real estate bust and its associated deleveraging weigh on growth. While macro policy support is likely to help Chinese economic growth in 2023, the effectiveness of fiscal stimulus and questions surrounding whether there will be enough shovel-ready projects remain concerns.

Global Economy Teetering on the Edge of Recession

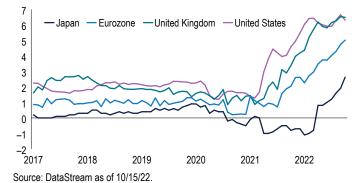


1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022 Source: Haver Analytics as of 10/15/22.

Inflation | Remains Persistent

Among major developed economies the inflation problem is most pronounced in the U.S. and the U.K., where the COVID-related monetary and fiscal stimulus response was the most forceful. Europe's rising inflation has been driven primarily by the energy shock, which is largely a byproduct of Russia's invasion of Ukraine. Disruptions from the war in Ukraine are likely to keep headline inflation elevated into the winter, as rising seasonal demand combines with limited supplies. European natural gas prices were approximately eight times higher than typical for late summer. The threat of being fully cut off from Russian natural gas remains a tail risk and Eurozone energy prices continue to climb higher as declines in global oil and commodity prices are offset by higher gas and electricity prices stemming from the war.

Inflation Remains High



Interest Rates | Central Banks on the Warpath

While the inflation problem might not be easily solved, central banks are laser-beam-focused on trying to stem it by aggressively hiking interest rates, even at the risk of creating substantial economic pain. The Federal Reserve (Fed) has signaled that it intends to do whatever it takes to bring inflation down. The Fed remains steadfast in its hawkish message, while other major central banks, most notably in Europe, hike rates in response to spiking inflation.

Investment Outlook | Caution Is Warranted

Following the bloodletting in the first half of 2022, global equity markets tried to rebound in the second half. Inflation has not declined as expected and central banks have become increasingly hawkish, with tightening financial conditions a prominent feature, not a bug, of their current policy stance.

While equities have already experienced the type of declines one might expect from a mild recession, still-larger declines are a real possibility given the odds of monetary policy over-tightening (and thus more significant economic contraction) in the current inflationary environment. Given this backdrop, we remain cautious. We are overweight cash and commodities, underweight real estate and fixed income, and modestly underweight in global equities.



GREGORY PETERS Co-Chief Investment Officer PGIM Fixed Income

GREATER CLARITY ON FED POLICY IMPROVES BOND MARKET OUTLOOK

Evolving Economic Expectations

Recent deceleration in U.S. inflation levels notably changed expectations for economic outcomes related to monetary policy. While inflation moderation supports markets, we do not believe that the full economic impact of the Fed's tightening efforts is sufficiently priced in. Stagflation expectations are falling, with markets pricing in a shift toward the kind of moderation associated with a soft landing. Our market implied-probabilities framework suggests investors believe that the probability of a soft landing is close to 75%. Still, recession remains our base-case scenario.

It's hard to envision an environment in which inflation falls materially without raising the unemployment rate. The Fed has made it clear that it won't stop tightening until it's confident inflation is under control, which is unlikely to occur until the labour market softens to a degree that reduces consumer spending and wage pressure. As a result, the risk of a recession remains exceedingly high, both in the U.S. and globally. It's likely economies in Europe and the U.K. are already contracting and will probably feel more pain due to their lack of self-sufficiency in food and energy supply chains. Meanwhile, China is unlikely to help offset contraction in other regions as it did in 2010 because its growth prospects are substantially lower than back then due to implications from government policies such as zero-COVID procedures in the country.

Trending Towards Recession

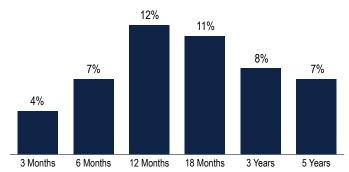
Looking at the data, we appear on our way to a recession, but whether it will be mild or deep depends on the Fed. We are progressing quickly through the business cycle, led by inversion in the yield curve. In the U.S., two-year rates inverted with 10-year rates at the end of March 2022, with three-month rates following suit in October. Higher rates typically tighten credit conditions, which has been evident in feedback from loan officers at big banks through the Fed's SLO Survey.

Weaker corporate fundamentals come next, and downward revisions to corporate earnings continue to take place. These conditions lead to an economic recession. The Fed aims to raise rates enough to cool demand and slow inflation without triggering a deep recession, though only time will tell if the results are consistent with its goals. In the U.S., we're expecting a slightly above-average recession with a peak to trough GDP decline of -4%.

Nearing a Turning Point for the Fed

We expect a peak in the Fed's short-term interest rate hikes in early 2023, possibly even January. After that, we believe the Fed will pause a few months and wait for data to show whether the aggressive tightening has worked. If we get supporting data confirming economic contraction with higher unemployment, lower inflation and core PCE trending closer to 3.5%, we think the Fed will pivot sharply with precautionary rate cuts in the second half of the year to save the economy from falling into a deep recession. This would be a boon for bond markets after a brutal year with negative returns.

Bonds Fare Well After Fed Pauses



Source: Morningstar Direct. Data for Bloomberg U.S. Aggregate Bond Index based on past four periods from 1995 to 2018 when the Fed paused after starting rate hike cycles. Past performance does not guarantee future results.

Rates Revert to Lower Levels Over the Long Haul

While the current environment has been tough, we may be on the cusp of a new long-term bond bull market. The economic backdrop seems destined to return to a configuration more like pre-COVID conditions. Secular factors, such as an aging demographic and high debt burdens, are likely to drive a return to moderate growth and inflation, which should contribute to a lower interest-rate environment—albeit with some variation in the Eurozone market.

We may be seeing a mini-1980s reset in the level of interest rates. But when looking back from a future vantage point years down the road, it will likely be clear that current times included the highest levels of growth, inflation and interest rates for a very long time. So, wherever rates peak—and we think it's highly likely that most of the increase in rates is behind us—it will be at a level of global interest rates that will likely prove to be the high-water mark for years, decades or maybe even generations to come. Given today's higher yields and potential for future capital appreciation as rates decline, now may be an attractive entry point for long-term investors.



MICHAEL J. COLLINS, CFA

Senior Portfolio Manager PGIM Fixed Income

POSITIVE CATALYSTS CREATE RELATIVE VALUE IN FIXED INCOME

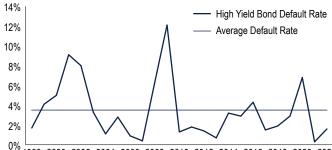
Bond Ballast Comes Back

Bond markets endured one of their worst years in history, resulting in an anomalous period in which bonds were less-effective insulation to investors seeking equity-risk mitigation. With that said, the current configuration-where spreads have widened and yields on government bonds have risen-is hardly the norm. In most cycles, when spreads are wide, there is an economic slowdown and/ or financial crisis, which drives government bond yields lower. Conversely, when the economy performs well and government yields are at their cycle peaks, spreads are often tight. This opens the possibility that once the fear of the central bank rate hikes passes, the bond market will present a rare opportunity of both peaking yields and spreads. While risk assets may experience more volatility in the short term, significant value has been created for the long-term investor. The renaissance of higher yields restores the balance to the asset allocation mix and should be warmly welcomed by investors and savers.

Corporate Fundamentals Remain Strong

Investors worried about investing in bonds now due to fears that default rates will climb as the economy contracts may find solace in knowing that corporate fundamentals remain strong. This is evident in lower leverage ratios, increased interest coverage, resilient profits, and robust share buybacks and dividends. As such, credit quality is high and should enable corporations to better weather an economic downturn without raising default rates.

Low Default Rates



⁰⁷⁶ 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022

Preparing Portfolios for Evolving Conditions

The sell-off in bonds in 2022 combined with higher yields have created tremendous value opportunities in fixed income markets. If our thesis is accurate—peak rates in early 2023, followed by a pause for a few months as data comes in confirming economic slowing and wage pressure cooling, culminating with precautionary cuts in the second half to avoid a deep recession—investors would do well to build up their bond exposure based on the shifting environment. Playing the short end of the curve may be beneficial approaching the peak, while adding credit exposure may help boost total returns if the Fed pauses. Adding to risk assets like high yield and emerging market debt may be beneficial once the Fed begins cutting and the U.S. dollar softens—or in the event that the Fed is successful in engineering a soft landing. The timing of when each of these may be attractive varies, requiring strong analysis and security selection.

Strategies for Varied Economic Outcomes

Scenario	Strategy
Stagflation Fed continues to aggressively hike rates	Lower duration to reduce interest rate risk via: • Ultra-short bonds • Floating rate assets • Short-term municipal bonds
Soft Landing Fed pauses while waiting for confirming evidence that recent hikes worked and economy can grow moderately	Increase credit risk for better return potential via: • Corporate bonds • Flexible multi-sector • Short-duration high yield bonds • High yield bonds • Emerging market bonds
Recession Continued rate hikes tip economy into recession	 Reduce credit risk and focus on high-quality and duration-centric positioning via: Core bonds Core plus/intermediate bonds Intermediate/long-municipal bonds

Source: PGIM Fixed Income as of November 2022.

Source: JP Morgan as of 11/30/2022.



MARK BARIBEAU, CFA Head of Global Equities Jennison Associates

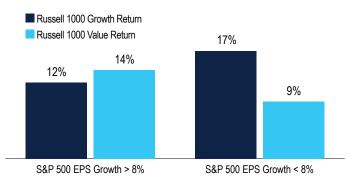
SECULAR GROWTH STANDS OUT AS EARNINGS CLIMATE COOLS

A Changing Growth Landscape

Market uncertainty has resulted in a broad-based sell-off in equities, particularly growth stocks. Today's markets are among the most challenging we have seen in several decades. Contradictory indicators, a lack of visibility, and a confluence of macroeconomic pressures have investors on edge.

In 2021, the economy roared back from the pandemic-inspired downturn, with aggregate S&P 500 earnings rising 48%, or six times their long-term average growth rate. Earnings growth slowed considerably in 2022, and expectations for 2023 forecast growth to recede to below-trend (8%) levels as economic growth slows in response to higher interest rates and elevated inflation. In this environment, growth becomes scarce, boosting potential for durable growth stocks to play a more prominent role in investor portfolios.

Growth Stocks Outperform When Market Earnings Slow



Source: Morningstar, S&P, FactSet, Bloomberg. Data from 1/1/1989 to 12/31/2021. Past performance does not guarantee future results.

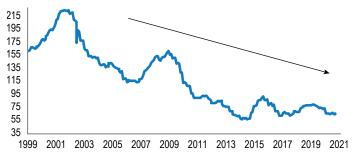
Seek Stability as Earnings Conditions Weaken

Valuations remain significantly compressed in the wake of the 2022 downturn. A closer look reveals that compression among growth stocks is largely attributable to price declines, not earnings deterioration. Higher interest rates raised the discount rates used to determine the current value of future earnings, but the underlying earnings growth remains relatively stable. As aggregate earnings growth is vulnerable to more downward revisions in the months ahead, the few companies that can durably grow revenues and earnings tend to become more attractive to investors. Even if their revenues and earnings take a hit, their growth should remain pronounced versus companies that started with lower expectations that get cut further.

Not All Growth Stocks Are Created Equal

Since 2005, about one in four large- and mid-capitalisation companies posted 7% or greater annualised revenue growth and 10% or higher earnings growth. When the revenue growth threshold is raised to 15% and earnings growth to 20%, the number falls to about one in 10 companies. As the Fed's rate increases slow the economy, investors are likely to favor companies with stable, reliable growth, which can come from a combination of emerging growers and stable growth compounders.

S&P 500 Companies with Greater Than 15% Revenue Growth over 5 Years



Source: Jennison and FactSet. Data as of 12/31/2021. Most recent available.

Secular Trends Reshaping the Future

Looking through the near-term volatility, growth companies that offer differentiated products and services that create real value for society should continue to prosper over the long term. Secular growth themes can provide significant tailwinds to well-managed companies. Three of the biggest secular growth areas heading into 2023 include:

Electric Vehicles: We believe the transportation industry is next in line for widespread disruption, particularly in the automobile space. We're finally hitting big adoption curves in Europe and gaining momentum in the U.S. with supportive fiscal incentives. And the opportunities expand beyond electric vehicles to batteries, the battery supply chain, and their tie-in to alternative energy for producing electricity.

Luxury: Despite economic and market uncertainty, top luxury brands continue to flourish. You can't build a luxury brand overnight. It takes years to develop, and the customer base is largely loyal. While inflation takes its toll on broader spending, high-end spending trends remain healthy.

Fintech: Financial technology platforms represent compelling opportunities in emerging markets as businesses, organisations, and individuals continue to seek more convenient and more affordable access to financial services. Latin America is an especially attractive region because of a lack of service expansion among legacy banks.

Balance for an Either-Or Backdrop

Given the complicated backdrop, we favour a balanced approach between the fast-growing emerging growth category, marked by strong structural secular demand, and stable growth compounders with durable franchises, sustainable earnings, and cash flow growth. We think this will provide investors the best of both worlds if macro conditions improve, while also insulating them from big risks, like the Fed overshooting or more lockdowns in China, should conditions deteriorate.



RORY CUMMINGS, CFA Portfolio Manager PGIM Quantitative Solutions

REAL ASSETS REMAIN KEY IN HEDGING INFLATION RISKS

Inflation May Linger for Longer

Inflation has remained elevated and persistent in 2022 with consumer prices peaking at an annual growth rate of 9.0% in June, well above fourdecade trends. Despite aggressive policy tightening and recent softening, these inflationary pressures may remain elevated over the next several quarters. While our baseline long-term inflation expectations assume a reversion to historical trends, the nearer-term inflation outlook remains highly uncertain.

Short-term: Exogenous factors, such as the war in Ukraine, have driven energy and agricultural prices higher, leading to elevated inflation levels last seen in 1978. These inflationary forces have been further compounded by elevated services prices such as shelter, which tend to be stickier over time. In addition, services prices account for a larger composition of the inflation basket, offsetting the benefits of supply chain normalisation and softening goods prices. In response, global central banks have aggressively tightened monetary policy in hopes of containing inflationary pressures before they become too deeply entrenched. The success of these measures remains to be seen as inflation persists considerably above long-term trends and 2021 levels. With tight labour markets—and absent a significant global recession—it seems that inflation will likely stay elevated for the next several quarters, above the Fed's targeted mid-2% range.

Real Asset Classes That Help Hedge Inflation

Asset Class	Why Now?
U.S. TIPS	TIPS coupon payments adjust to inflation, providing a hedge to inflation risks
Commodities	As demand for goods and services increases, their prices and the prices of commodities needed to produce them also rise
Natural Resources	Natural resources should continue to benefit from high demand and limited commodity supplies as the earth's resource needs intensify as global populations grow and modernise
MLPs	MLPs offer a strong combination of growth and income and tend to have low correlation to commodities
Infrastructure	Infrastructure tends to have inflation-linked revenues, low operating costs, and consequent high margins
Real Estate	Due to their longer-term lease contracts, REITs provide both inflation-protection and growth opportunities in rising inflation and rate environments

Long-term: Current aggregate demand is running well ahead of aggregate supply as evidenced by rates of inflation that developed economies have not seen in decades. However, the jury is still out about how much of the current situation is driven by excess demand or if it is mainly a constrained supply story. Even if excess demand isn't the principal problem now, it's likely to be a problem we face looking forward. The shift from fiscal restraint to profligate spending appears to be a defining feature of the post-COVID world that may be sustained, fueling excess demand well into the future. We expect fiscal deficits to

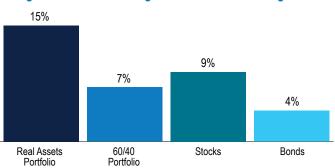
remain high in the coming years as governments are compelled to spend to stem fraying social cohesion, fend off populist political movements, care for aging populations, and facilitate decarbonisation efforts. In addition, support for households from governments, such as the measures generally being considered/implemented across Europe, aim at cushioning households from recent energy price hikes. These measures are likely to have the perverse effect of preventing demand destruction and fueling even further pressure on prices. While policymakers are on the watch for signs of wage-price spirals due to expansive fiscal policies initiated in the aftermath of the pandemic and the Russian invasion of Ukraine, the fiscal stance is likely to remain loose in the coming years.

Real Assets Mitigate Inflation Risks

Protracted periods of elevated inflation represent a material investor concern. The traditional strategic allocation approach employing a 60/40 split between equities and nominal bonds has a long-term track record of negative real returns during inflationary periods. History suggests that investors should consider larger commitments to asset classes that tend to demonstrate a positive relationship with inflation, such as commodities and real estate. Real assets with positive direct exposure to inflation are uniquely attractive amid high inflation due to their potential to help investors position for improved outcomes.

It would be difficult for a traditionally balanced portfolio of stocks and bonds to generate positive real returns if inflation stays stubbornly high. The bright side is that there are public market investment options available to access exposure to real assets that materially outperform equities and nominal bonds in higher-inflation conditions, both on a historical and forward-looking basis. Although an all-in allocation might not be realistic for many asset owners, most investors should recognise the potential benefits in adjusting portfolio guidelines to accommodate greater allocations to real assets in search of improved outcomes in an elevated inflation regime.

Average 1-Year Return During Periods of Above-Average Inflation



Source: Calculated by PGIM Investments using data presented in Morningstar software products. All rights reserved. Used with permission. As of 9/30/2022. Common since inception period is from 5/1/1998 to 9/30/2022. Average 1-year inflation rate during period has been 2.44%. Past performance does not guarantee future results.



RICK J. ROMANO, CFA Head of Global Real Estate Securities PGIM Real Estate

REITS REVIVE AS VALUATION GAP CONTINUES TO NARROW

Macro Cloud Cover

Amid sustained inflation on a global scale, equity investors have spent most of 2022 preoccupied with central bank rate hikes and the potential for policy mistakes to darken an economic outlook already clouded by China's zero-COVID policy and the conflict in Ukraine. While the backdrop warrants continued caution, performance among public real estate securities appears to show that investors may be focusing on macro risks to a degree that underappreciates a particularly compelling situation.

REIT fundamentals remain resilient at a time when REITs should stand out due to their inflation-hedging characteristics and limited supply chain exposure. Not only do REITs offer traits that can serve investors well in current conditions, but they also represent opportunities that should be hard to ignore as visibility improves due to a historically notable disconnect between REIT prices and the private market value of the real estate they hold.

The Right Kind of Shelter

As for current conditions, REITs that benefit from defensive demand characteristics should stand out for their ability to maintain or grow revenue as central bank tightening efforts take their toll on the broader economy. Properties that serve need-based demand, including health care facilities and multifamily apartments, are attractive because the underlying trends are driven by demographics and market dynamics rather than the economic backdrop.

REITs that offer limited exposure to inflation are appealing given persistent price pressures in the economy. Self-storage facilities are in that group because their reduced need for labour limits their exposure to wage inflation. Properties with triple-net leases also offer an inflation hedge because landlords can pass along most higher costs to tenants. Should signs emerge that inflation is easing, properties with significant staffing needs, such as assisted living facilities and hotels, will become increasingly appealing.

Risks Remain

A lot of the risks that gave investors pause through much of 2022 haven't gone away. The broadest concerns, like the economic outcome stemming from central bank tightening efforts or the wide array of threats that might arise from an escalation in the conflict in Ukraine, should continue to impact market sentiment.

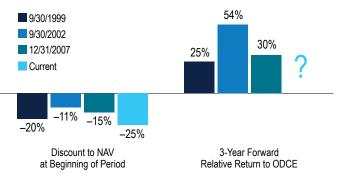
From the REIT-level perspective, substantially higher interest rates pose significant rollover risk. It would be wise to avoid companies that might be forced to refinance substantial amounts of debt at current rate levels due to the earnings hit those companies would likely take in the process.

Undervalued Opportunities

Market volatility leaves REITs looking overshot to the downside relative to the value of real estate assets they hold, creating an attractive arbitrage opportunity. The situation is likely spur M&A activity, with U.S.-based buyers positioned to bargain hunt via crossborder transactions due to the strength of the U.S. dollar.

Valuations beckon. Having been swept up in the volatility of 2022, REITs trade at a discount to their NAVs of close to 25%, representing a significant departure from the historically typical 3.5% premium. When REITs traded at discounts to their NAVs of 10% or more over the past 25 years, they subsequently delivered three-year returns relative to private real estate that ranged from 25% to more than 50%.

Strong REIT Returns Following Discounted NAVs



Source: PGIM Real Estate. As of 11/30/2022. Public REITs represented by FTSE NAREIT All Equity REITs Index and Private Real Estate represented by NCREIF ODCE. Past performance is not a guarantee or a reliable indicator of future results.

M&A motivation. The valuation situation sets the stage for increased M&A activity. As capital markets stabilise, expect to see private capital flow into public markets toward a menu of opportunities available at attractive price levels, including high-quality assets that don't trade often.

More bang for the buck. It's unlikely we'll see cross-border opportunities like this again. The U.S. dollar should play a significant role in the first wave of M&A, considering its pronounced strength versus currencies from Australia, Canada, and other countries. It creates opportunities for well-capitalised, U.S. dollar-denominated real estate investors to cross borders to acquire some very attractive companies or assets.



DR. SUSHIL WADHWANI, CBE

Chief Investment Officer PGIM Wadhwani

MACRO UNCERTAINTY CALLS FOR AGILITY AND DIVERSIFICATION

A Bumpy Road for Traditional Assets

Global markets have taken a beating during most of 2022. Lingering supply chain issues, exacerbated by the war in Ukraine and pandemic-induced shutdowns in China, helped push global inflation significantly higher. As central banks tightened monetary policy in response, fears of recession gripped markets, with stocks, bonds, and real estate assets declining sharply throughout most of the year. Meanwhile, commodities generally rallied, although returns among individual commodities were somewhat divergent.

With central banks around the world enacting restrictive monetary policies to rein in inflation, we highlight four macroeconomic scenarios most likely to occur, depending on future moves of the U.S. Fed:

- **1.A "soft landing"** in which the Fed's forecasts turn out to be broadly correct, with inflation gradually dropping back to target, but without unemployment rising by that much, and with a recession being avoided.
- **2. Persistent inflation and recession** in which inflation turns out to be more stubborn than expected and the Fed is forced to tighten by more than is priced in and/or keep rates high for longer, thereby eventually leading to a recession.
- **3. The Fed tolerates higher inflation** in which the Fed tightens to bring inflation down from current levels but is unwilling to take risks with respect to a recession or financial stability and so pauses before it has done enough to bring inflation down back to target.
- **4. A "hard landing"** in which the tightening in financial conditions that has already come about leads to a recession, and perhaps quite quickly, and thus the Fed may end up tightening less than is currently priced in.

For much of the year, investor expectations generally aligned with a greater likelihood of scenario two transpiring—i.e., persistent inflation followed by recession—in part because the extent of the rise in unemployment projected by the Fed had been associated with past recessions.

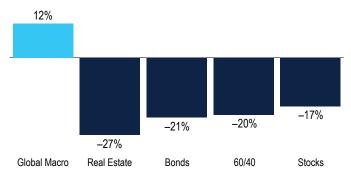
As other central banks signaled or slowed the pace of rate increases in October, investors turned bullish, anticipating that the Fed, too, would move to a less aggressive stance. Amid this backdrop, the probability of either a "soft landing" (scenario one) or the possibility that the Fed might be willing to implicitly accept a higher inflation target (scenario three) increased, and along with it, equity markets partially recovered prior losses.

Agile Diversification Remains a Priority

With headline inflation likely to have peaked (or to peak soon) in many countries, and central banks tightening at a slower pace, investor hopes of a "soft landing" in the U.S. are likely to rise. On the other hand, a slowing global economy is likely to put downward pressure on earnings forecasts. The outlook for equity markets is therefore uncertain. As previously noted, there are concerns that central banks might implicitly tolerate a higher rate of inflation, and this could undermine bonds.

It is therefore possible that the traditional 60/40 portfolio may continue to fare poorly. An agile global macro strategy can isolate diverse and less correlated sources of returns by factoring in regime shifts and profound changes in sentiment or expectations. The ability to go both long and short in various asset classes is an additional advantage, providing flexibility to react nimbly as conditions shift. Global macro has delivered strong absolute returns and relative returns versus stocks, bonds, and real estate this year, making it an attractive portfolio diversifier and alternate return source through rising rates and inflation.

Global Macro Outshines Amid Market Declines



Source: Morningstar Direct, PGIM Wadhwani as of 10/31/2022. Global macro represented by Societe Generale Macro Trading Quant Index, Bonds represented by Bloomberg Global Aggregate Index, 60/40 represented by 60% S&P 500 and 40% Bloomberg U.S. Aggregate Bond Index, real estate represented FTSE EPRA NAREIT Global Index, stocks represented by MSCI All Country World Index. Past performance does not guarantee future results.

DISCLOSURES

Definitions and Indices—Emerging growers are typically young disruptors, in a new or developing industry, and offer significant upside potential. Stable growth compounders demonstrate above-average growth potential, but they have a history of profitability and established drivers of growth. Alerian MLP Index is an unbiased, comprehensive benchmark composite of the 50 most prominent energy master limited partnerships (MLPs). Bloomberg U.S. Aggregate Index represents securities that are SEC-registered, taxable, and dollardenominated. It covers the U.S. investment-grade, fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and assetbacked securities. Bloomberg Global Aggregate Bond Index is an unmanaged index of global investment-grade fixed income markets. Bloomberg Sub Energy Index is a commodity group subindex of the Bloomberg CITR and composed of futures contracts on crude oil, heating oil, unleaded gasoline, and natural gas. Bloomberg Sub Natural Gas Index is a single commodity subindex of the Bloomberg CI composed of futures contracts on Natural Gas. Bloomberg U.S. TIPS Index includes all publicly issued, U.S. Treasury inflation-protected securities that have at least one year remaining to maturity, are rated investment grade, and have \$250 million or more of outstanding face value. FTSE EPRA/NAREIT Global Index is designed to track the performance of listed real estate companies and REITS in both developed and emerging markets. FTSE NAREIT U.S. REIT Index measures the performance of all real estate investment trusts listed on the New York Stock Exchange, NASDAQ National Market, and American Stock Exchange. London Bullion Market Association Gold Price Index measures the price of gold. MSCI All Country World Index (ACWI) is a market capitalisation-weighted index designed to provide a broad measure of equity-market performance throughout the world and is comprised of stocks from both developed and emerging markets. Russell 1000 Growth Index measures the performance of Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values. Russell 1000 Value Index measures the performance of Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values. S&P 500 Index is an unmanaged index of 500 common stocks of large U.S. companies, weighted by market capitalisation. S&P Developed ex-U.S. Property Index measures the investable universe of publicly traded real estate companies domiciled in developed countries outside of the U.S. Societe Generale Systematic Global Macro Index is a trend-following strategy that takes long or short positions in 37 constituent futures across equites, commodities, fixed income, and FX. S&P GSCI Index is a world-production-weighted index composed of 24 commodity futures contracts. S&P Global Infrastructure Index is an unmanaged index that consists of 75 companies from around the world that represent the listed infrastructure universe. S&P Global Natural Resources Index includes funds that invest primarily in the equity securities of domestic and foreign companies engaged in natural resources. S&P 500 Growth Index is a stock index that represents the fastest-growing companies in the S&P 500. S&P 500 Value Index represents the value companies of the S&P 500 Index. West Texas Intermediate (WTI), also known as Texas light sweet, is a grade of crude oil used as a benchmark in oil pricing. 60/40 is a hypothetical portfolio represented by a 60% allocation to the S&P 500 Index and a 40% allocation to the Bloomberg U.S. Aggregate Bond Index, rebalanced annually. Real Assets Portfolio is a hypothetical portfolio represented by an equal allocation (rebalanced annually) to these indexes: Bloomberg Commodity Index (commodities), Natural Resources—from 5/1998 to 10/2002, the S&P North American Natural Resources TR Index from 11/2002 to 3/2019, the S&P Global Natural Resources (Net) Index (natural resources), Global Infrastructure—from 5/1998 to 10/2001, the S&P 500 Utilities Sector Index from 11/2001 to 3/2019, the S&P Global Infrastructure Index (infrastructure), FTSE NAREIT U.S. REIT Index (U.S. real estate), FTSE EPRA/NAREIT Developed Ex US Index (non-U.S. developed real estate), London Bullion Market Association (LBMA) Gold Price Index (gold), Bloomberg U.S. TIPS Index (U.S. TIPS), and Alerian MLP Index (MLPs). Average annual index returns do not include the effects of sales charges or operating expenses. If they had, these returns would have been lower. Indices are unmanaged and are provided for informational purposes only. Investors cannot directly invest in an index.

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