PGIM INVESTMENTS

THE GREAT BALANCING ACT

Preparing portfolios for what comes next

Investors rode a roller coaster during the first half of 2022, with extraordinary events presenting significant challenges. Surging inflation from the ongoing war in Ukraine and renewed COVID-19 lockdowns in China continue to cloud the outlook for global economies, financial markets, and central bank monetary policies.

Against this confusing backdrop, our PGIM asset managers assess the current landscape, share perspectives on key trends set to shape the second half of 2022 and beyond, and offer ideas for investors seeking to capitalize on the opportunities ahead.

2H 2022 INVESTMENT THEMES

1. A bumpy road to a familiar low-growth destination
2. Credit markets favor alpha over beta
3. Outlook improves for growth stocks
4. Real assets outshine if inflation persists
5. Real estate poised to perform going forward
6. Inflation and demand tailwinds buoy midstream energy
7. Agile alternatives diversify amid macro uncertainty
8. Volatility boosts tax loss harvesting potential

INVESTMENT STRATEGIES FOR CHALLENGING MARKETS

SEEK OUT CREDIT SELECTIVELY

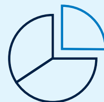
Global central banks are tightening monetary policies to fight stubbornly high inflation. In the U.S., the Federal Reserve appears to be behind the curve, making more aggressive rate hikes likely. As recession risk rise, balancing shorter duration assets for near-term rate increases with high-quality longer-duration assets may help balance portfolios for what comes next.

Short duration credit

Short-duration credit, such as securitized credit, can help immunize portfolios against rising interest rates.

Floating rate assets

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



Multi-sector strategies

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

BROADEN EQUITY EXPOSURE

Profit growth is expected to slow in the second half but should remain strong enough to support equity markets, even if interest rates rise. Earnings for growth stocks should outpace value stocks as the economy slows. But higher inflation will impact asset classes differently, making diversification across sectors and styles critically important.

Secular growth stocks

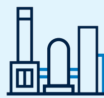
Quality secular growth stocks with fortified balance sheets and durable earnings can better weather economic uncertainty and are currently trading at discounts.

Value stocks

As the economy continues to expand, albeit at a slower rate, stocks with lower valuations and more cyclical exposure, such as energy, should benefit.

HEDGE INFLATION RISKS

Inflation remains near a four-decade high with broad-based price pressures. Even if inflation cools from its current level, it'll likely remain more elevated than seen over the last decade.

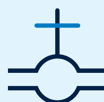


Real assets

Continued supply-side constraints and elevated inflation may offer tactical opportunities in real assets, such as natural resources, midstream energy/master limited partnerships (MLPs), and commodities.

Real estate

As economies fully reopen around the world, real estate markets should see a strong recovery. Additionally, REITs offer hedges against rising interest rates and inflation.

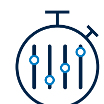


MLPs

MLPs can mitigate interest rate and inflation risks due to their long-term fixed rate debt and contracts with inflation adjustors.

DIVERSIFY WITH ALTERNATIVES

The high correlation of stocks and bonds in this highly volatile environment makes alternative strategies with lower correlations 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.

FIND TAX ALPHA

During periods of elevated market volatility, investors are often less concerned with finding returns and more concerned with keeping more of what they earn after taking taxes into consideration.

Direct indexing

Tax loss harvesting through direct indexing strategies can help investors turn volatility into opportunities to increase after-tax return potential.

EDWARD CAMPBELL, CFA
Co-Head of Multi Asset
PGIM Quantitative Solutions

THE MACRO BACKDROP

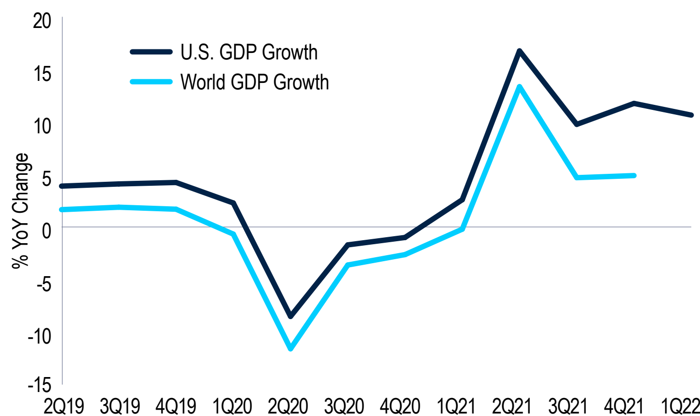
Economic Outlook | Stagflation

Economic activity has slowed amid rising costs and supply disruptions following Russia's invasion of Ukraine. Economists have generally lowered global growth expectations since the beginning of the year, especially for Europe, where the war's impact is high. Despite strong consumption and business spending, imports and inventory have dragged down growth. Nevertheless, global economic growth continues although recent data have been mixed. In the U.S., the Fed has sharply pivoted in a hawkish direction to combat surging inflation. While the odds of a U.S. recession are still subdued for the near term, recession risks rise substantially as we look out to 2023.

Fallout from the war in Ukraine could push the eurozone economy into recession, given rising energy costs and disrupted supply chains. With the European Central Bank (ECB) concluding asset purchases and set to start hiking rates in July, tighter monetary policy is contributing to recession risk.

Japanese gross domestic product (GDP) is expected to decline modestly with rising energy costs and COVID-19 restrictions. However, growth is likely to improve as restrictions are eased. Emerging markets (EM) growth expectations have been revised lower given the war's impact and a slowdown in China. A stronger U.S. dollar from rising U.S. interest rates is also pressuring emerging markets.

Economic growth is slowing

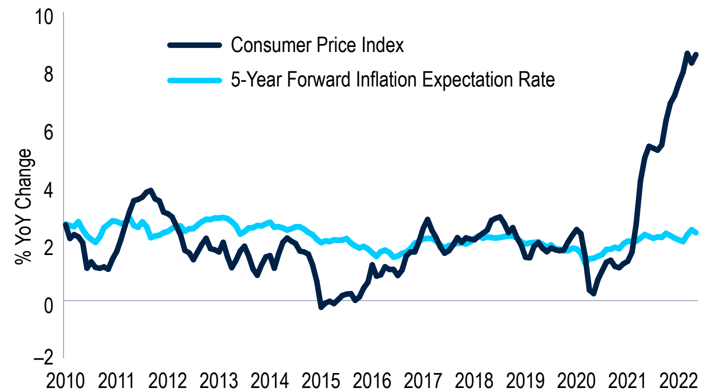


Source: FRED, OECD as of 5/31/2022.

Inflation | Not Transient

Global inflation remains elevated despite the consensus view that the worst may be behind us. While goods prices show signs of moderating, service sector inflation continues a steady rise. Developed market inflation also remains high due to the spike in oil and food costs. High and persistent inflation, the longer it remains, risk becoming embedded in inflation expectations, fueling demand for wage increases, and becoming a self-fulfilling prophecy.

Inflation remains elevated



Source: FRED as of 5/31/2022.

Interest Rates | Hawkish Central Banks

The Fed and other major central banks are focused on tightening monetary policy to tame inflation, which surged beyond their earlier expectations. The ECB confirmed that it would conclude net asset purchases by July 1, and start its rate hike cycle at its July meeting. The Bank of Japan remains an exception, making no changes to its current policy stance and framework yet. Central banks in EM continue to raise rates, as most are facing inflation above their target range.

Investment Outlook | Weathering the Storm

Stock and bond markets both sold off sharply in the first half of 2022 while commodities soared due to fundamental supply imbalances and supply-chain disruptions. The war in Ukraine reinforced these imbalances in commodity markets. While a multitude of risks remain, equity markets are already pricing in a high risk of recession with many markets experiencing drawdowns of more than 20%. While stocks could fall further on concerns over the Russia-Ukraine war, persistent inflation, and COVID lockdowns in China, the Chicago Board Options Exchange Volatility Index is already at historically elevated levels. Given improved stock market valuations and low odds of an imminent U.S. recession, stocks could experience a powerful relief rally from here.

While we are resisting becoming increasingly bearish on stocks in the context of market declines, we are still pursuing a fairly cautious investment strategy. We are neutral on stocks in our multi-asset portfolios, while overweighting commodities and cash and underweighting fixed income. The outlook for fixed income returns looking forward has improved significantly on notably higher yields on 10-year U.S. Treasury notes and wider spreads on fixed income risk assets. We are considering increased exposure here.

GREGORY PETERS
Co-Chief Investment Officer
PGIM Fixed Income

A BUMPY ROAD TO A FAMILIAR LOW-GROWTH DESTINATION

Inflation is still in the driver's seat

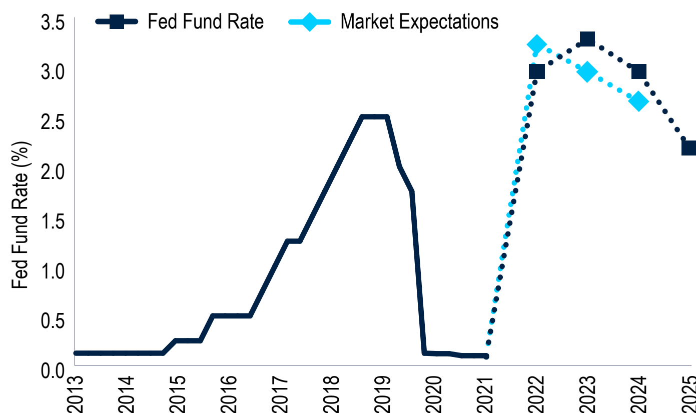
We are moving through the business cycle at an aggressively compressed rate, with markets feeling more pronounced shocks along the way. The good news is that this could mean that we'll come out on the other side faster. Of course, the unpredictable course of the Ukraine conflict, the global response, and the associated impacts on the world's geopolitical order and financial system will continue to drive market dynamics in the near term.

As inflation has become more broad-based and remains stubbornly high, central banks have ramped up their hawkishness, with many investors anticipating a stagflation or recession scenario. In the U.S., the Fed appears to be behind the curve raising downside risks for the economy. Given that supply-chain disruptions are easing and markets expect long-term inflation expectations to come down, there is still opportunity for the Fed to engineer a soft landing by becoming more aggressive quickly. If inflation does not show signs of moderating as expected in the coming months, we think any "Volcker" moment of more aggressive Fed action would likely come late this year or early next year.

Speeding to neutral

With the Fed confirming its goal to frontload rate hikes to get inflation under control, higher (50 basis points or more) rate hikes are likely in the second half of the year. The Fed is shrinking its balance sheet, letting U.S. Treasury and mortgage-backed securities roll off at a faster pace than during its previous quantitative tightening cycle in 2017-2019.

The increases in Fed rate hike expectations



Source: Bloomberg as of 6/15/22.

Secular forces will overtake cyclical trends

Cyclical trends overwhelmed secular factors in the first half of 2022. In the coming months, we expect to see the prevailing effects of already-building headwinds, including tighter financial conditions, a fiscal rollback, high energy and food prices, lagging wages, and a slowing global economy. Interest-rate-sensitive sectors of the economy will likely respond in coming quarters to tighter financial conditions and companies' dissipating pricing power as workers' wages continue to lag. Real earnings, which spiked early in the pandemic, are now back down to their pre-COVID levels. We expect to see other economic gauges follow suit. Longer term, we expect secular forces to overpower cyclical trends.

Key features of a post-pandemic economy

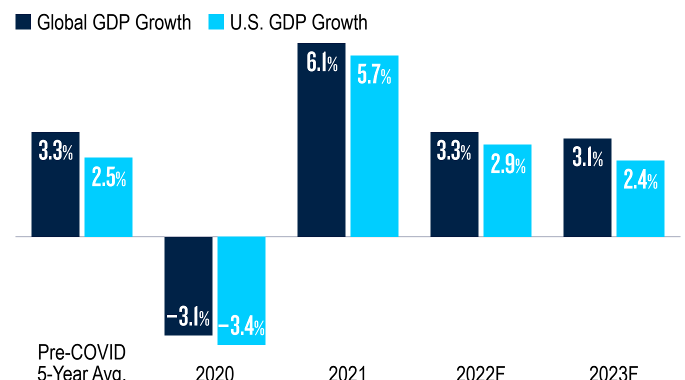
1. Excessive global debt
2. Aging demographics
3. Globalization
4. Capital concentration
5. Moderate growth
6. China deceleration
7. Technology
8. Tax structure
9. Easy monetary policy
10. Low inflation

Inflation: As the impact of policy runs through the system, we expect inflation to recede from its four-decade high before falling toward more benign trend-like levels by the end of next year. Longer-term technology and labor-saving innovation/automation will act as deflationary forces.

Economic Growth: Aging demographics, high debt, and deficits will curb economic growth, forcing GDP growth back towards trend levels.

Interest Rates: While rates on the short-end of the yield curve may remain volatile given the near-term uncertainty, it's possible the long-end of the curve may be nearing a peak as expected growth slows as well.

Reverting to lower economic growth



Source: PGIM Fixed Income as of June 2022.

MICHAEL J. COLLINS, CFA
Senior Portfolio Manager
PGIM Fixed Income

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CREDIT MARKETS FAVOR ALPHA OVER BETA

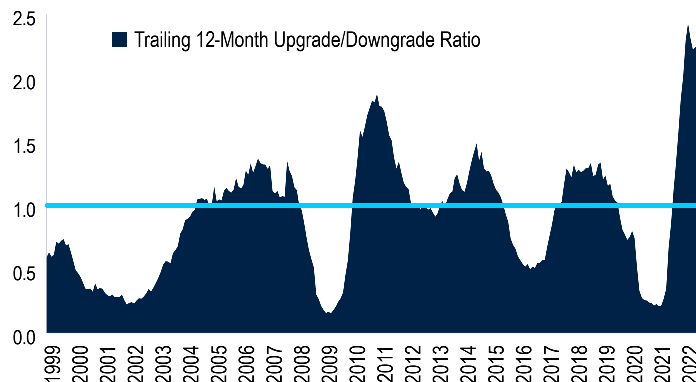
Near-term caution to long-term optimism

Bond markets have endured one of their worst starts to a year in history. But after this sizeable decline, markets may be bottoming out and could be set up for a major rally in the coming year—particularly if rates crest and the Fed appears likely to rein in inflation. While it's far too early to embrace this notion, we do expect volatility to drop over the short-to-intermediate term, providing a respite for bond yields and spreads over the next quarter or two. But the surprises we've seen over the last few months raise the risk of relying on market beta for returns. We'll need to continually reassess the balance of geopolitics, growth, inflation, and policy risks. After the first-half volatility, valuations have improved with credit spreads back near pre-pandemic levels. Caution is still warranted over the near term with respect to interest-rate and credit risk, especially as recession risks rise.

Credit fundamentals return to pre-pandemic levels

Corporations have regained strength. Leverage ratios have declined, interest coverage has increased, profit margins remain strong, and share buybacks and dividends are rising. As such, credit quality has improved rapidly but appears to be approaching a peak, and strong improvement in credit fundamentals will likely moderate going forward. Upgrades have sharply outnumbered downgrades, bolstering many rising stars (bonds moving to an investment-grade rating from below-investment-grade). This financial strength should enable corporations to better weather what comes next for the economy.

Credit upgrades outpacing downgrades

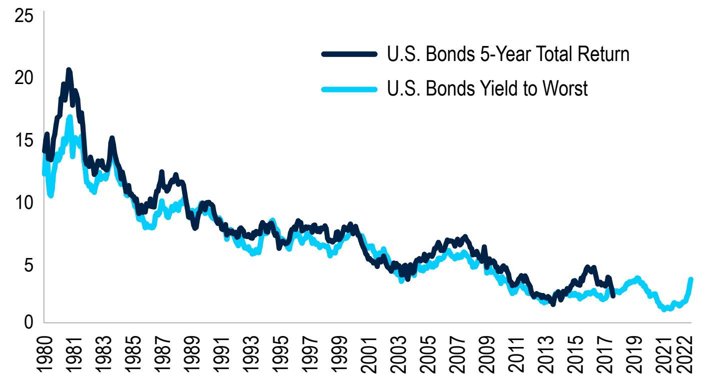


Sources: JPMorgan and BofA Merrill Lynch Global Research as of 4/30/2022.

Better returns to follow higher income

Higher interest rates have increased the income return to bond investors. Yield-to-worst (YTW) on the Bloomberg U.S. Aggregate Bond Index has increased ~2.4% since its pandemic low. As YTW has historically been a good proxy for future return potential, we expect better fixed income returns going forward.

Strong relationship between YTW and future bond returns



Source: Bloomberg, Morningstar as of 5/31/2022. Past performance does not guarantee future results.

Investing for different economic scenarios

The current backdrop may render beta an ineffective generator of returns, reinforcing the need for an expanded focus on bottom-up research and relative-value positioning as a reliable way to generate alpha. Investors may benefit positioning portfolios based on their expected outcome from Fed policy. Our base case for now remains a soft landing with notable fat tail risks for stagflation and recession as downside risks remain elevated.

Scenario	Strategy
Stagflation Fed raises faster to "catch up" but economy absorbs higher rates	Lower duration to reduce interest rate risk via: • Ultra-short bonds • Floating rate assets • Short-term municipal bonds
Soft Landing Fed engineers soft landing with positive growth and lower inflation	Increase credit risk for better return potential via: • Corporate bonds • Flexible multi-sector • Short-duration high yield bonds
Recession Fed gets overly aggressive and tips 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

MARK BARIBEAU, CFA
Head of Global Equities
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3

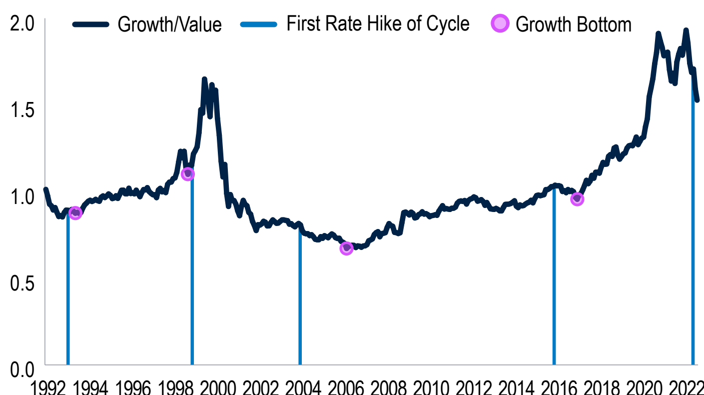
OUTLOOK IMPROVES FOR GROWTH STOCKS

Growth stocks to rebound as economy slows

When investors prepare for tightening cycles, they tend to focus on how much will interest rates rise and when, putting pressure on the highest-growth and highest-multiple stocks that are not currently profitable but are expected to be in the future. But as investors shift their focus on what higher rates ultimately mean for the economy, growth stocks typically regain investor favor. Growth stocks plunged into bear market territory in the first half of 2022. While it appears most of the significant damage is done, continued volatility is expected until there is clarity around when and where rates may peak.

We are likely past peak growth for this cycle as investors grapple with the economy's ultimate direction—a soft landing, stagflation, or a recession. In any of these scenarios, GDP growth would decline. Subsequently, stocks that can offer durable growth become more attractive and in higher demand. While the timing of when this will happen is still uncertain given some lingering wild cards, conditions should materially improve for growth stocks.

Growth stocks typically bottom early in rate cycles

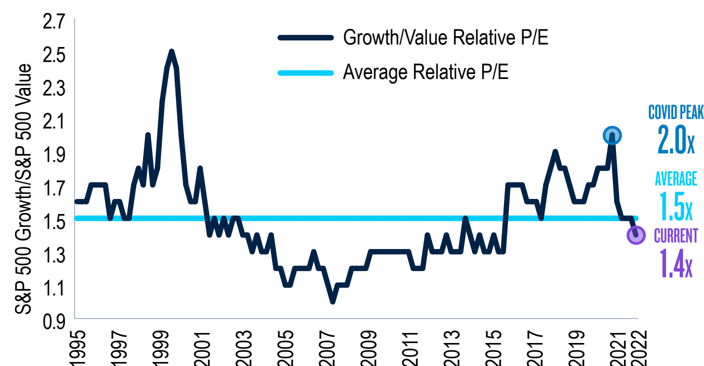


Source: Morningstar as of 5/31/2022. Growth represented by Russell 1000 Growth Index and Value represented by Russell 1000 Value Index. Past performance does not guarantee future results.

Reset valuations create an attractive entry point

After the sharp sell-off, price-to-earnings (P/E) multiples for growth stocks have sharply contracted to below long-term averages, both in absolute terms (compared to their own historical performance) and in relative terms (compared to their performance versus value stocks). As valuations have reset, strong secular growth stocks with high consumer demand, pricing power, and robust revenues present an attractive entry point for long-term investors. While these stocks may continue to reprice in the near term based on future rate hike expectations, their ability to consistently deliver durable, profitable growth will make them more valuable to investors as economic growth prospects decline.

Growth stock valuations have declined



Source: Factset as of 6/15/2022.

Quality of growth matters

Longer term, we see a wide frontier for new market leaders to emerge, in sharp contrast to the broader market and its historically low share of companies posting strong revenue growth. A little more than a decade ago, one out of two companies in the MSCI ACWI Index was growing sales at 15% or more annually. Today, it's one in five. Given this dynamic, investors will be willing to pay more for companies with consistently stronger earnings growth because these stocks outperform over time.

Growth with grit: Where to find opportunities

In a world of scarcer growth and rising competition, the future belongs to companies that understand the transformative power of technology and successfully integrate it into their core business models. The tech-driven growth cycle is far from over, though it is evolving. Areas such as direct-to-consumer, cloud computing, digital payments, and health care innovation will be big beneficiaries of the digital revolution over the long term.

Given the rapidly shifting macro backdrop, we also think it's important to find secular growth with grit to better navigate the near-term uncertainty. Some prudent and attractive options to boost durable growth exposure and help withstand the turning tides include:

- Upgrade portfolios with high-quality names with strong durable earnings.
- Reduce interest-rate sensitivity by paring back on high-multiple stocks.
- Play into the business cycle with exposure to medical technology companies that can benefit from procedures that were delayed during the pandemic.

RORY CUMMINGS, CFA
Portfolio Manager
PGIM Quantitative Solutions

4

REAL ASSETS OUTSHINE IF INFLATION PERSISTS

Inflation may last longer this time

The four-decade trend in falling U.S. inflation has halted after rising over 7.0% in 2021. Given current inflation measures, these recent price pressures may remain elevated over the next several quarters. While our baseline long-term inflation expectations assume a reversion to longer-term trends, the nearer-term outlook for inflation is highly uncertain.

Short-term: As prices continue to rise, inflation is at its highest level since 1981 and will likely remain elevated for the next several quarters. Although some transitory components, such as durable goods prices, should subside and help steer inflation lower, the real test for whether inflation will exceed the Fed's targeted mid-2% range, on a sustained basis, will depend on how policymakers respond as the economy nears full employment. With the recent round of rate hikes, policymakers are responding, though it will take time to see policy measures impact the real economy and prices.

Long-term: Long-term inflation is expected to be somewhat higher than in the period between the Global Financial Crisis of 2008 and COVID-induced recession of 2020. During the past four periods since 1950 when inflation exceeded 5%, it took anywhere from 17 to 122 months for it to climb from and then recede back to its long-term average of 3.5%. While an extreme scenario of 1970s-style, double-digit inflation appears unlikely, the potential for a sustained period of average inflation well above central bank targets is a non-trivial risk for investors.

Real asset classes that help hedge inflation

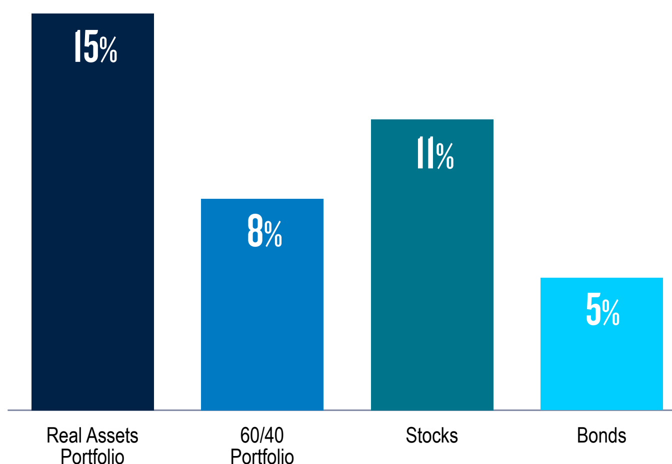
Asset Class	Why Now?
U.S. TIPS	TIPS coupon payments adjust to inflation, providing a hedge to inflation risks
Commodities	As demand for goods and services increases, their prices and the prices of commodities needed to produce them also rise
Natural Resources	Natural resources benefit from high demand and limited commodity supplies as the earth's resource needs intensify as global populations grow and modernize
MLPs	MLPs offer a strong combination of growth and income and at times 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

Real assets mitigate inflation risks

A prolonged period of higher inflation has important implications for investor outcomes. Strategic allocations like a 60/40 split between equities and nominal bonds have historically delivered lower real returns in periods of elevated inflation. Investors should consider larger allocations to asset classes with a positive exposure to inflation, such as commodities and real estate, given their historical strength in high-inflation environments. Real assets with a positive exposure to inflation could potentially help investors better position their portfolios for meaningfully improved outcomes.

If inflation remains elevated it may be challenging for a traditional balanced portfolio concentrated in stocks and bonds to deliver positive real returns. The good news is that there are public market investment options to real assets that may perform materially better than stocks and nominal bonds in higher-inflation regimes, both on a historical and forward-looking basis. While a 100% allocation to real assets may not be palatable or possible for many asset owners, adjusting portfolio allocations to allow greater exposure to real assets can potentially and meaningfully improve expected portfolio 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 3/31/2022. Common since inception period is from 5/1/1998 to 3/31/2022. Past performance does not guarantee future results.

RICK J. ROMANO, CFA
Senior Portfolio Manager
PGIM Real Estate

5

REAL ESTATE POISED TO PERFORM GOING FORWARD

Long recovery road with some speed bumps

As the world recovers and reopens at varying speeds, the real estate industry is transforming and offering new opportunities. While the uncertainty caused by the war in Ukraine and increased rate-hike expectations remain wild cards, the worst of the COVID-19 pandemic has passed.

Higher interest rates are undoubtedly a concern, but there are good reasons that the tightening cycle now under way in the U.S. or that are expected to commence soon in most major global economies will not last long. Inflation should recede from its four-decade high, although stay elevated for some time given the lingering impact of supply-chain disruptions. Real estate is well positioned to perform well against this challenging macro backdrop.

Well-prepared for what comes next

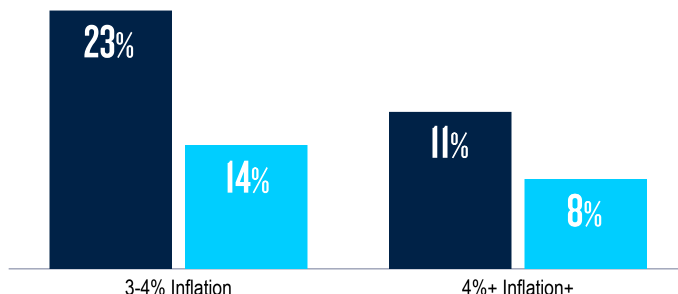
Real estate's recent performance in a turbulent economy suggests the industry is well positioned to weather whatever comes next—recession or no recession. Data from the first half of 2022 are holding up well—even in Europe, which is absorbing a direct impact from the war. However, real estate data typically lag other economic data as a result of such factors as fixed-term lease contracts, index-linking, and infrequent valuation cycles.

Rising Rates: After the global financial crisis, real estate investment trusts (REITs) restructured their debt to strengthen their balance sheets and operating efficiencies. Today, REITs tend to have long-term fixed-rate debt, which have largely been locked in at low levels. Additionally, net operating income margins have risen sharply and are now back near pre-pandemic levels. This has reduced their leverage ratios, meaning REITs should be minimally impacted by rising interest rates.

Reflation: Historically, real estate has demonstrated strong correlation with inflation, particularly in assets with short-lease duration and strong operating leverage. Shorter-lease duration assets tend to appreciate the most when reflation takes hold, particularly those seeing strong demand, which allows lease holders to pass expenses along to their tenants. Residential properties, which offer inflation protection, are poised to benefit from reflation as improving cost controls and supply/demand imbalances should lead to above-Consumer Price Index operating income growth. Other sectors, such as self storage and data centers, have little exposure to wage inflation.

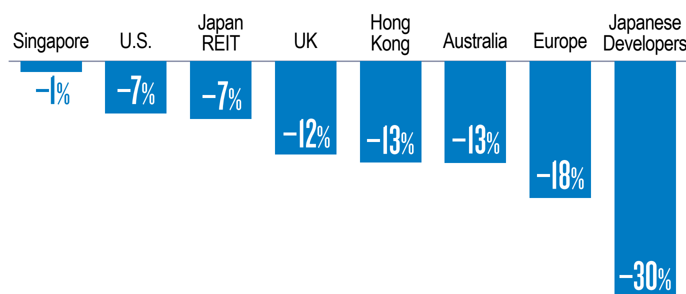
Reopening: As the U.S. has largely reopened from the pandemic, U.S. real estate markets have seen a robust recovery from pandemic lows. Using the U.S. as a proxy for international real estate markets, hard-hit sectors should recover as business operations return to normal as economies around the world fully reopen. While many regions are currently trading at significant discounts, we expect share prices to bounce back strongly in consumer industries and travel, particularly in lodging and urban real estate. Because COVID-19 vaccinations are progressing at varying speeds across the world, this trend will likely continue for months, if not years.

REITs outpace stocks in elevated inflation regimes



Source: PGIM Quantitative Solutions, FTSE NAREIT, Standard & Poor's. Analysis based on returns from 1973-2021. Inflation ranges are created using YoY inflation of Consumer Price Index, measured at quarterly frequency. Consumer Price Index before seasonal adjustment from the Bureau of Labor Statistics as of March 2022.

REITs trading at discounts to 10-year average



Source: PGIM Real Estate, Evercore, ISI as 5/31/2022 unless otherwise noted. Hong Kong data through 3/31/22.

Recalibration: Technology has enabled some REITs to take advantage of their scale and operating history to incorporate vast volumes of data into various aspects of their business. What will follow is a period of consolidation as some REITs acquire small to midsized trusts to realize value through efficiency gains.

STEPHEN J. MARESCA, CFA
MLP Portfolio Manager
Jennison Associates

INFLATION AND DEMAND TAILWINDS BUOY MIDSTREAM ENERGY

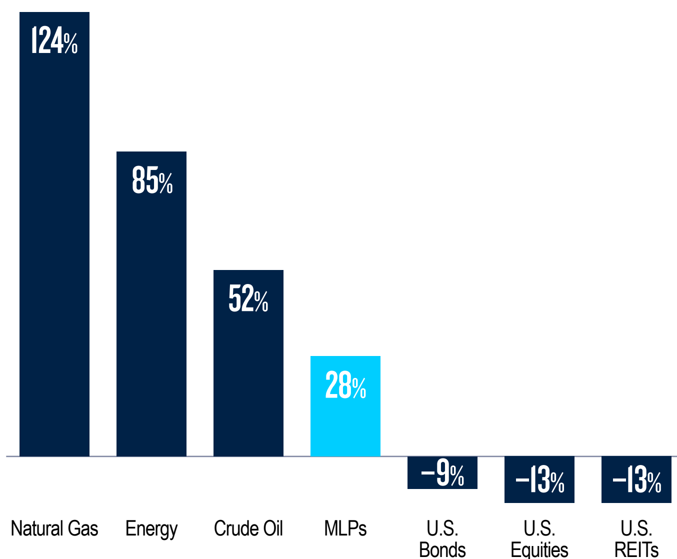
Elevated energy prices attract investors

A powerful combination of surging inflation and soaring energy prices, fueled by the war in Europe, is driving strong investor interest in the energy sector.

Short-term: The global supply crisis will take time to resolve due to severe underinvestment in the sector in recent years, making it impractical to quickly ramp up production. This should keep energy prices elevated near term.

Long-term: While prices should fall over time, they will likely remain more elevated than in recent years, especially in the midstream energy/master limited partnership space, which provides the "plumbing" for energy sources. Strong secular tailwinds from diversification of energy sources, particularly in European countries that are turning away from Russian oil, and a larger global transition to cleaner energy sources provide strong, long-term tailwinds for midstream energy.

Energy markets surge in 2022



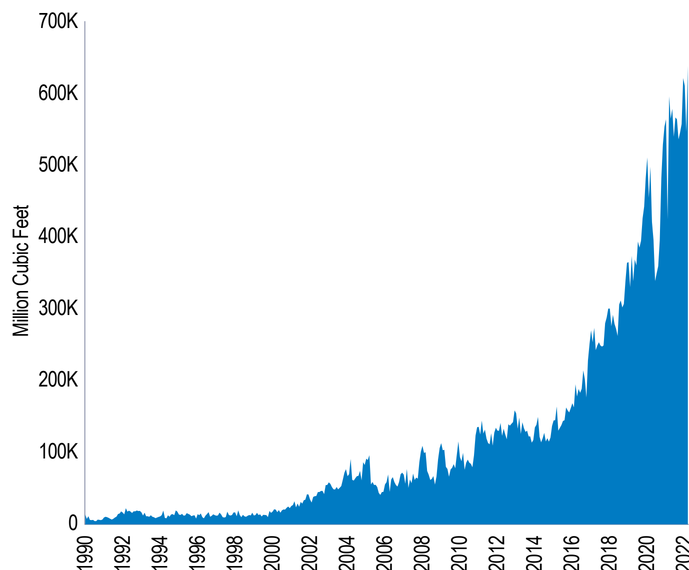
Source: Morningstar as of 5/31/2022. Past performance does not guarantee future results.

A midstream energy capex boom is on the horizon

In an effort to reduce carbon emissions, the world is in the early stages of a multi-decade energy transition. Demand for natural gas is especially strong and is expected to continue growing for several decades as it is a cleaner-burning energy source, making it a sought-after commodity for renewable energy as well.

The U.S. is a low-cost natural gas producer and has one of the most stable political climates, making it a potentially high-demand source for countries seeking to diversify their energy sources. U.S. liquified natural gas exports have been rising and are near record levels, putting the U.S. on track to soon become the leading global exporter of natural gas. But U.S. exports are at maximum capacity with the existing infrastructure, and significant capital investment will be necessary to build more export terminals to meet the growing demand. Given the multi-year process required to build new re-gasification terminals, this could create a long-term growth tailwind for U.S. midstream energy companies. This may also help alleviate some of the regulatory hurdles to building pipelines that midstream energy companies have been subject to recently.

Expansion of U.S. natural gas exports



Source: Energy Information Administration as of 3/31/2022. Most recent data available.

MLPs insulate against inflation and rising rates

Minimally impacted by interest rates: Immediate cash flow impacts on MLPs from potentially higher interest rates are minimal as most MLPs typically use fixed-rate debt to finance long-term energy infrastructure projects. While rising rates could potentially negatively impact MLPs over the short term as other yield-oriented investments become relatively more competitive, historically MLPs have been a strong performer in rising rate environments.

Hedge against inflation risks: Additionally, most MLP contracts have built-in inflation adjustors, allowing corporations to pass through higher costs to users.

DR. SUSHIL WADHWANI, CBE
Chief Investment Officer
PGIM Wadhwani

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AGILE ALTERNATIVES DIVERSIFY AMID MACRO UNCERTAINTY

A roller-coaster ride for traditional assets

Global markets started 2022 in a risk-off mood as high inflation persisted and various central banks turned increasingly hawkish. The fog of war in Ukraine continues to grip markets, adding a stagflationary shock to the mix. Globally, stocks, bonds, and real estate markets have all declined year to date, while commodity markets surged amid soaring crude oil and natural gas prices.

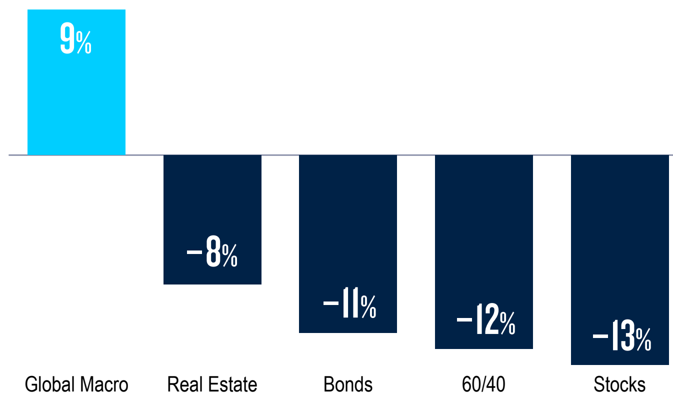
What happens next is very unsettling because it's been a long time since central banks have been this far behind the curve. It's very difficult to achieve an economic soft landing at this stage, meaning the risk of recession is high. Today's macroeconomic scenario mirrors that of the late 1970s and early 1980s. Inflation has remained higher and more persistent than central banks expected, compounded by geopolitical events. It's clear that inflation expectations have become de-anchored and that central banks are behind the curve. In this situation, they may need to tighten aggressively and are signaling they will.

Central banks have few policy options as they can't allow inflation expectations to be permanently de-anchored. This is starkly different from the economic landscape of the last 20 years when inflation was persistently low. Virtually every time financial conditions tightened and equity markets fell during that period, central bankers rode to the rescue. Today we're faced with a situation where bond yields are rising because inflation is high and central banks are tightening, while equity markets are threatened by both higher interest rates and the prospect of a recession. This is a challenging environment for portfolios consisting of 60% stocks and 40% bonds, just as it was in the 1970s.

An attractive landscape for alternatives

It's rare for stocks and bonds to decline together, so the correlated fall of major asset classes this year poses a conundrum for the traditional 60/40 portfolio model. In this uncertain environment, the need for diversification is palpable. Portable alpha approaches are very well suited to today's challenging investment landscape because of their low correlation to equities and bonds and their ability to generate returns in the neighborhood of cash plus 4%. So, the diversifying role these approaches can play in portfolios is to mitigate equity risk.

YTD returns across asset classes



Source: Morningstar Direct, PGIM Wadhwani as of 4/30/2022. 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.

Diversify with a global macro approach

Given the wide variety of potential economic outcomes, it is especially important to remain agile and responsive to the evolving economic data. It is also necessary to remain diversified across asset classes, investment styles, and time frames, and to choose solutions with a low beta to traditional markets over a full market cycle. Agile strategies should deliver low average holding periods across positions and emphasize capital preservation. It's also essential to consider taking both long and short positions in volatile, quickly changing market environments.

Investors need to be more dynamic with their investment allocations and prepare their portfolios for the inflation scenario most likely to prevail. Including a global macro approach can be an attractive way for investors to gain both a wide investment universe and agility. 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.

ROBERT HOLDERITH
Head of PGIM Custom Harvest

VOLATILITY BOOSTS TAX LOSS HARVESTING POTENTIAL

Capitalize on appreciated assets and high volatility

Over the past decade, investors have enjoyed low interest rates, low inflation, and rising bond and equity markets, leading to an accumulation of assets that have appreciated significantly. For instance, housing prices have more than doubled in the last decade while the S&P 500 Index is up over 500% and Bitcoin is up over 1,500%. Typically, investors seeking to outright sell largely appreciated assets like these would incur large tax bills. Enter tax-loss harvesting—an approach that allows investors to take losses on depreciating assets to offset capital gains elsewhere, while reducing the value of their total taxable assets and overall tax burden. As the Fed began to normalize monetary policy by raising interest rates and reducing its balance sheet to curtail inflation, a broad range of assets declined and market volatility spiked, providing a compelling opportunity for investors to harvest tax losses on their depreciated assets to offset gains from selling highly appreciated assets.

Higher volatility is here to stay

The first half of 2022 marked one of the few instances where stock and bond markets both fell. Equity investors have faced significant volatility in 2022, contrasting the low volatility seen in 2021. But the roller-coaster ride is far from over. The Fed is likely to continue tightening monetary policy until there are clear signs that inflation will decline, which in turn will keep market volatility elevated. We think we're entering a structurally higher volatility regime as investors readjust to normal market conditions with reduced liquidity and less-accommodative policy, and that this trend will continue. Investors can turn the market volatility into an opportunity to capture tax-loss benefits to offset other capital gains. Tax loss harvesters need volatility and dispersion of returns to capture tax-benefit opportunities, and 2022 has provided both in spades.

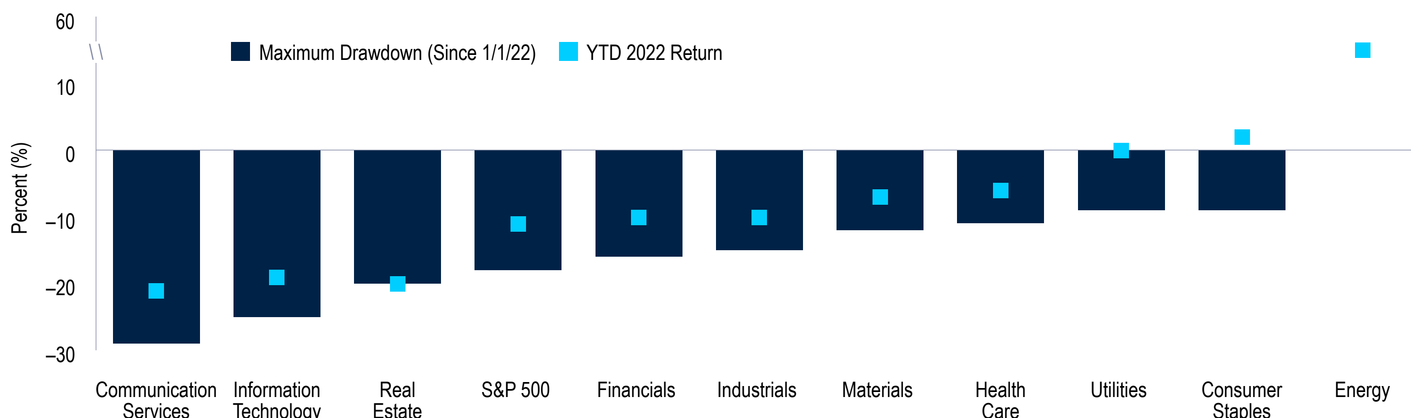
2022: A great year for tax loss harvesting

Source: Bloomberg as of 5/31/2022. Past performance does not guarantee future results.

Market dispersion raises tax loss harvesting potential

It's hard to have a drawdown in the S&P 500 without a drawdown in the big sectors that comprise the index. The biggest components are largely growth sectors that were hurt by the rotation to value stocks given rising interest-rate expectations. Unsurprisingly, we've seen the largest tax-loss harvesting opportunities in the information technology, consumer discretionary, and communication services sectors, which collectively account for ~50% of the S&P 500. These sectors were each down 20% or more year-to-date through the end of May, providing ample opportunities to harvest tax losses. However, opportunities were not limited to these sectors, as all Global Industry Classification Standard sectors, with the exception of energy and utilities, are trading at lower levels than where they began on January 1.

Tax loss harvesters benefit from large drawdowns



Source: Morningstar as of 5/31/2022. Past performance does not guarantee future results.

DISCLOSURES

Definitions and Indices—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 dollar-denominated. It covers the U.S. investment-grade, fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed 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 capitalization-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 capitalization. **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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