



Global Markets Quarterly Update

Fourth Quarter 2022

KEY INSIGHTS

- The U.S. lagged gains in most other developed markets as inflation appeared to peak in many countries and easing COVID restrictions in China boded well for global growth.
- European stocks performed particularly well as inflation in the eurozone decelerated for the first time in 17 months.
- The Bank of Japan took a surprise step away from its zero interest rate policy, becoming the last major central bank to begin monetary tightening.

HIGHLIGHTED REGIONS

- U.S.
- Europe
- Japan
- China
- Other Key Markets

What We're Watching Next
With Sébastien Page

U.S.

Despite surrendering much of their gains in late December, stocks recorded gains for the quarter thanks to a strong rally over the previous two months. Performance varied widely among benchmarks, asset styles, and sectors, however. Sharp declines in some heavily weighted information technology and internet-related shares left the Nasdaq Composite index with a small loss, and growth shares generally trailed value stocks by a large margin. Within the S&P 500 Index, consumer discretionary stocks fell over 10% on a total return (including dividends) basis, weighed down by a 54% decline in Tesla and a 26% decline in Amazon.com. Conversely, energy shares gained nearly 23%, and fellow value-oriented industrials (up 19%), materials (up 15%), and financials (up 14%) sectors were also very strong.

Bonds also gained for the quarter, helped by a sharp, mid-quarter decrease in longer-term bond yields. (Bond prices and yields move in opposite directions.) Short-term yields rose sharply as the Federal Reserve increased the federal funds target rate twice during the quarter, although policymakers slowed the pace of rate increases from three-quarters of a percentage point (0.75%) to one-half of a percentage point (0.50%) at their December meeting.

Throughout the quarter, investors seemed focused on statements from Fed officials and rumored changes in Fed policy. Early in the quarter, policymakers repeated their pledge to hike rates as much as needed to cool inflation, but stocks bounced after *The Wall Street Journal* reported that some were prepared “to stop raising rates early next year to see how their moves this year are slowing the economy.”

Stocks Follow the Rise and Fall of Hopes for a “Soft Landing”

Hopes that the Fed might achieve a “soft landing”—hiking rates just enough to slow inflation without causing a recession—seemed to fuel a rally through much of the quarter. The S&P 500 gained nearly 17.5% between its intraday low on October 13 and its intraday high on December 13.

Several signs suggested price pressures had peaked earlier in the year. The headline consumer price index (CPI) rose 0.4% in October, which was below expectations, and only 0.1% in November, bringing the year-over-year gain to 7.1%. A modest rally also followed news that the increase in the Fed’s preferred inflation gauge, the core personal consumption expenditures price index, came down to 5.5% for the 12 months ended in November, its lowest level in over a year.

Past performance is not a reliable indicator of future performance.

While goods prices appeared to be on a solid downward trend, services inflation appeared “stickier” due largely to the delayed impact of changes in housing and rental costs. Although sharp downturns in house prices, sales, and construction activity already reflected the negative impact from rising mortgage rates, housing and rent inflation remained elevated in the official data because of the complicated methodology used to calculate shelter costs. A working group assembled by T. Rowe Price recently estimated that shelter inflation costs could increase 5.3% over the 12 month period through November 2023.¹

Fed Officials Warn More Rate Hikes Are Ahead

Sentiment turned decisively lower on December 14 following the release of the Fed’s post-meeting statement, which showed that policymakers expected the federal funds rate to reach a median of 5.10%—well above the 2022 year-end fed funds target rate range of 4.25% to 4.50%. While acknowledging that some inflation signals were moderating, Fed Chair Jerome Powell cautioned that the tight labor market required continued vigilance. Monthly increases in reported average hourly earnings continued to accelerate throughout the quarter, reaching 0.6% in November, the fastest pace in 10 months.

As 2022 came to an end, a consensus seemed to grow among investors that a recession was at least likely in the coming months, although the economic signals were not definitive. While manufacturing activity seemed to be well into a slump and the housing market was pulling back sharply, services sector activity picked up surprisingly in November, and payroll gains proved resilient. Moreover, the question of whether any coming recession was already reflected in earnings

expectations and stock valuations was also up for debate. Which side they came down on may have been the main factor separating the bulls from the bears as they looked ahead to 2023.

Europe

Shares in Europe rebounded sharply in the fourth quarter amid hopes that central banks would scale back interest rate increases as inflation slowed and economies weakened. In local currency terms, the pan-European STOXX Europe 600 Index ended 9.55% higher. Major indexes in Germany, France, Italy, and the UK also posted strong gains.

ECB Reduces Size of Rate Hikes but Suggests Higher Peak; Inflation Slows

The European Central Bank (ECB) raised its key deposit rate by one-half of a percentage point (0.50%) to 2.00%. Although the increase was less than the two previous hikes, ECB President Christine Lagarde said rates “will still have to rise significantly at a steady pace to reach levels that are sufficiently restrictive” to bring inflation back down to the 2% target. The ECB also said it plans to shrink the portfolio accumulated as part of its Asset Purchase Programme. This process will start in March and run until at least the end of the second quarter, when the central bank will review the situation.

Inflation in the eurozone decelerated in November for the first time in 17 months, to 10% from a record high of 10.6% in October. Eurozone business activity shrank for a sixth consecutive month in December, although at a slower pace as preliminary results from a survey of purchasing managers showed. S&P Global’s flash composite Purchasing Managers’ Index ticked up to 48.8—a reading that was still in contractionary territory (below 50).

BoE Raises Key Rate for Ninth Time; Inflation Slows but Growth Outlook Worsens

The Bank of England (BoE) hiked its key interest rate by one-half of a percentage point—the ninth consecutive increase—to a 14-year high of 3.5%. The Monetary Policy Committee said “further increases” may be required to quell inflation. Governor Andrew Bailey noted in a letter to Finance Minister Jeremy Hunt that UK inflation may have peaked. The BoE also forecast that the economy would shrink 0.1% in the final quarter of the year, less than its November estimate, which had called for a 0.3% contraction.

UK inflation slowed from a 41-year high to 10.7% in November as motor fuel prices fell. However, other data showed that the economy deteriorated further. Gross domestic product (GDP) shrank 0.3% sequentially in the third quarter—more than initially estimated—accompanied by a sharp contraction in business investment and a pronounced slowdown in the housing market. The jobless rate crept up to 3.7% in October from 3.6% in September.

Swiss, Norwegian, and Swedish Central Banks Raise Rates

Central banks in Norway, Sweden, and Switzerland indicated that more rate hikes were likely. The Swiss National Bank raised its benchmark rate to 1.0%. “It cannot be ruled out that further increases will be necessary,” Chairman Thomas Jordan said. Norges Bank hiked to 2.75% and signaled that it would “most likely” raise borrowing costs again in the first quarter of 2023. In Sweden, the Riksbank raised its key rate by three-quarters of a percentage point to 2.5%—the highest level since 2008. Outgoing Governor Stefan Ingves said, “It’s our judgment now that there are one or more rate hikes still in the pipeline.”

¹ Actual future outcomes may differ materially from estimates.

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Japan

Japanese equities made modest gains in the fourth quarter of 2022, with the MSCI Japan Index rising 3.2% in local currency terms. Japan reopened its borders in October, boosting the country's economic growth prospects, while risk appetite was initially buoyed by expectations that the U.S. Fed would slow the pace of interest rate increases. However, sentiment suffered in December after the Fed presented a more hawkish-than-anticipated monetary policy outlook, stoking concerns that continued tightening by the major central banks could push the global economy into recession.

The Bank of Japan (BoJ) surprised markets in the penultimate week of the year by announcing that it would modify its policy of yield curve control (YCC), allowing 10-year Japanese government bond (JGB) yields to rise as high as 0.50%, doubling its prior implicit cap of 0.25%. Most market participants had not expected a shift in the BoJ's YCC until 2023. As a result, the JGB yield finished December at around the 0.42% level, up sharply from 0.24% at the end of the prior quarter. BoJ policy developments also lent support to the yen, which strengthened to about JPY 131.13 against the U.S. dollar, from approximately 144.74 at the end of September.

BoJ Surprises Markets With Earlier-Than-Anticipated Monetary Policy Tweak

Market participants had widely expected the BoJ to maintain its monetary policy settings at its December meeting. Indeed, the central bank kept its ultralow benchmark interest rates unchanged. However, the decision to modify its YCC policy and double the range within which JGB yields can fluctuate—to one-half of a percentage point on either side of zero percent—came as a surprise. Building

inflationary pressures—nationwide core consumer price inflation rose 3.7% year on year in November, driven by higher prices of processed foods—are a factor that could drive the BoJ toward more fully fledged monetary policy tightening, akin to that currently pursued by the other major central banks. BoJ Governor Haruhiko Kuroda reiterated late in the quarter that the central bank does not intend to alter its long-standing stance of easy monetary policy.

Japan Reopens Its Borders

Japan reopened its borders in October, allowing tourists to enter freely for the first time since the start of the coronavirus pandemic. The country removed the requirement to book packaged tours and resumed visa-free travel. A weak yen increases the purchasing power of foreigners in Japan, providing a tailwind.

Economy Contracted Less Than Initially Expected in the Third Quarter of 2022

Data from the Cabinet Office confirmed that GDP shrank an annualized 0.8% in the third quarter of the year, less than the 1.2% contraction indicated by initial estimates. While historic yen weakness has adversely affected trade, stronger-than-anticipated exports mitigated the impact. Firms' capital expenditures remained solid, but consumption was weaker than initially thought due to the resurgence of the coronavirus and accelerating inflation.

Government to Raise Defense Budget to 2% of GDP by Fiscal 2027

Prime Minister Fumio Kishida signaled that Japan's defense budget would be increased to 2% of GDP by fiscal 2027, representing a doubling in spending that will be funded through tax increases. Kishida stressed the urgency to increase the budget within five years, with reinforcing deterrence being the government's top priority.

China

Chinese stocks rose as Beijing eased coronavirus pandemic restrictions and stepped up measures to support economic growth. The MSCI China Index climbed 13.5% and the China A Onshore Index rose about 3.8% in U.S. dollar terms.

Chinese officials abandoned the country's zero-COVID approach after the government announced a 10-point guideline to new coronavirus prevention and control measures. The National Health Commission (NHC) downgraded the management of the virus from the highest to second-highest level starting January 8, 2023. The change will remove almost all standard restrictions and require inbound travelers to provide a negative coronavirus test result 48 hours before departure and allow the resumption of outbound travel in "an orderly manner," according to the NHC. The commission also said it would stop publishing daily coronavirus case numbers following widespread doubts about the accuracy of its data.

New Monetary Stimulus and Plans to Support Property Sector

In November, the People's Bank of China (PBOC) announced a 25-basis-point cut to the reserve requirement ratio for banks, its second such cut this year. The following month, the central bank pledged to support a recovery in consumption and guide financial institutions to back property sector mergers and acquisitions. In mid-December, the PBOC injected a higher-than-expected CNY 650 billion into the banking system through its one-year medium-term lending facility to ease stress on credit markets.

Calls to bolster domestic demand in 2023 picked up following the Central Economic Work Conference, an annual meeting held in December in which officials discuss policy goals

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for the coming year. Meanwhile, China's securities market regulator outlined policies intended to help the beleaguered property sector, including allowing qualified developers to secure backdoor listings via other listed companies. Property was also the focus of a 16-point plan issued in November by China's central bank and insurance regulators intended to salvage the country's ailing real estate market, including extending loans to developers and homebuyers.

Economic Data Weaken

China's trade data weakened over the quarter, adding another headwind to the economy already reeling from pandemic disruptions and the property market downturn. Exports fell by 8.7% in November from a year earlier, marking the steepest monthly exports drop since February 2020 as global demand softened. In October, exports and imports both unexpectedly fell for the first time in two years. In December, the World Bank forecast that China's economy would expand 2.7% this year and 4.3% in 2023, the latest of several downgrades by the lender this year to reflect growing risks to the country's growth outlook.

Other Key Markets

Brazilian Stocks Lag Broad Emerging Markets Gains

Stocks in Brazil, as measured by MSCI, returned 2.51% in the fourth quarter versus 9.79% for the MSCI Emerging Markets Index. Brazilian assets were volatile due to political and economic uncertainty stemming from the October presidential election in which former president Luiz Inácio Lula da Silva (Lula) narrowly defeated incumbent President Jair Bolsonaro. In the immediate aftermath of the election, Bolsonaro did not formally concede, though he eventually gave a half-hearted speech in which he promised to follow the country's constitution.

Although Lula's vice president-elect Geraldo Alckmin began working with

Bolsonaro's officials to facilitate a smooth power transfer, Lula delayed the announcement of his cabinet member choices until after returning from a climate change conference and recovering from throat surgery. In mid-December, Lula finally confirmed that he would select Fernando Haddad—a former mayor of Sao Paulo, minister of education, and presidential candidate—to be his administration's finance minister. Toward the end of the month, Lula announced the remainder of his cabinet members, including former Environment Minister Marina Silva, who would return to the same post she held for most of President elect Lula's previous presidency. Market-friendly Senator Simone Tebet will head the Planning Ministry, which will play a role in budget formation and execution.

Throughout the quarter, Lula's rhetoric raised worries about an erosion of fiscal discipline and structurally higher inflation during his administration, which began on January 1. In fact, Lula's advisors and members of his transition team began working with lawmakers to create legislation that would increase the government's social spending and exclude it from a mandatory spending cap.

In December, the legislature passed a constitutional amendment that temporarily waives the spending cap—which forces fiscal discipline by restricting growth in the federal budget to the rate of inflation—so that the government can fund such spending. The final legislation will allow for up to BRL 168 billion in spending above the cap for one year, with a portion of this spending tied to tax receipts. While the new spending is larger than it would have been had the spending cap remained in effect, T. Rowe Price sovereign analyst Richard Hall notes that the increase in spending levels is not as large compared with final 2022 spending, as Congress had authorized spending above the cap this year as well. New Finance Minister Haddad has promised to send a proposal to Congress

in the first half of the year for a new fiscal rule to replace the spending cap.

Stocks Surge in Hungary Despite Skyrocketing Inflation

Stocks in Hungary, as measured by MSCI, returned 36.33%. Hungarian assets were volatile during the quarter amid elevated inflation exceeding 20% and government tensions with the European Union (EU) that jeopardized funds that Hungary expected to receive from the EU.

On October 14, Hungary's central bank unexpectedly authorized an enormous increase in the overnight collateralized lending rate, from 15.50% to 25.00%. This interest rate is considered the upper limit of an interest rate "corridor" for the central bank base rate, which was raised to 13.00% in late September and remained there during the quarter. The lower limit of the corridor is the overnight deposit rate, which remained at 12.50%. According to a statement published that day, the central bank also decided to use some "targeted and temporary instruments" in an attempt to restore and maintain market stability. Specifically, the central bank's Monetary Council decided to create a one-day foreign exchange swap instrument and begin daily overnight deposit quick tenders "at higher interest rate levels than before." Policymakers asserted that these actions are "designed to ensure the rapid and flexible implementation of tighter monetary conditions."

In late November, the European Commission (EC)—which creates proposals for European legislation and implements decisions made by the European Parliament and the Council of the EU—concluded that Hungary had yet to fully implement the reforms needed to resolve the "rule of law" dispute it has had with the EU. As a result, the EC adhered to its proposal from September that the EU should "suspend" EUR 7.5 billion of the EUR 35 billion that Hungary anticipated receiving for the 2020–2027 time frame.

In mid-December, however, the EU and Hungary reached an agreement. Hungary agreed not to block financial aid for Ukraine or the imposition of a global corporate minimum tax rate. In exchange,

the EU approved Hungary's Recovery and Resilience Plan, which had already been accepted by the EC with some strict conditions. This means that Hungary—if it implements certain reforms—could still

receive up to EUR 5.8 billion in funds from the EU's Recovery and Resilience Facility. The EU also decided that only EUR 6.3 billion, rather than EUR 7.5 billion, would continue to be suspended.

Major Index Returns

Total returns unless noted

As of 12/31/2022		4Q22	2022
Figures shown in U.S. dollars			
U.S. Equity Indexes			
S&P 500		7.56%	-18.11%
Dow Jones Industrial Average		16.01	-6.86
Nasdaq Composite (Principal Return)		-1.03	-33.10
Russell Midcap		9.18	-17.32
Russell 2000		6.23	-20.44
Global/International Equity Indexes			
MSCI Europe		19.42	-14.53
MSCI Japan		13.26	-16.31
MSCI China		13.53	-21.80
MSCI Emerging Markets		9.79	-19.74
MSCI All Country World		9.88	-17.96
Bond Indexes			
Bloomberg U.S. Aggregate Bond		1.87	-13.01
Bloomberg Global Aggregate Ex-USD		6.81	-18.70
Credit Suisse High Yield		3.77	-10.55
J.P. Morgan Emerging Markets Bond Global		7.44	-16.45

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Note: Returns are for the periods ended December 31, 2022. The returns include dividends and interest income based on data supplied by third-party provider RIMES and compiled by T. Rowe Price, except for the Nasdaq Composite, whose return is principal only.

Sources: Standard & Poor's, LSE Group, Bloomberg Index Services Limited, MSCI, Credit Suisse, Dow Jones, and J.P. Morgan (see Additional Disclosures).

What We're Watching Next



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Entering 2023, investors stand at a major turning point in capital market history. The global economy has passed from decades of declining interest rates into a new regime marked by persistent inflationary pressures and higher rates.

Regime change clearly presents risks. But markets may have overreacted to some of those risks in 2022, creating attractive potential opportunities for investors willing to be selectively contrarian:

- Valuations in most global equity markets have improved markedly, although U.S. equities still appear expensive relative to their own history. Excess liquidity and demand from passive investors could be propping up stock multiples, leaving them

vulnerable to further compression if earnings disappoint.

- Fixed income yields have reached attractive levels, given what appears to be a manageable outlook for credit downgrades and defaults. Corporate balance sheets generally are in strong shape, and energy issuers account for a smaller share of U.S. high yield debt than in the past, helping reduce default sensitivity.
- Structural challenges could boost capital spending on supply chains and renewable energy development, allowing investors to seek the new winners.

In this environment, we believe investors will need to be able to blend top-down macroeconomic insights with detailed bottom-up fundamental research. Some investors may also need to adjust their tolerance for risk, as many of the factors driving markets are difficult to forecast. The potential for market volatility will only increase as the Fed and other central

banks raise rates and press ahead with quantitative tightening.

In 2022, bear markets unfolded in two stages. The first was a rate shock as the Fed raised rates from zero to 4% over a nine-month period. This was followed by a growth shock as investors discounted the risk of an earnings downturn. In 2023, investors could face a third bear market stage: a liquidity shock, in which markets decline across the board as leveraged positions are likely unwound.

While painful, such shocks also can create major buying opportunities, as a liquidity event could mark the kind of capitulation that typically has marked the bottom of a bear market. Although timing a market bottom is notoriously difficult, history suggests investors don't need to be precise to potentially benefit from temporarily depressed equity valuations. One caveat: Historically, the chances of successfully investing around a market bottom were significantly lower when inflation was high and interest rates were rising, as is the case currently.

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