

Vanguard economic and market outlook for 2023: Global summary

The global outlook summary highlights the top-level findings of Vanguard's full economic and market outlook, to be distributed in mid-December.

The global economy in 2023: Beating back inflation

In our 2022 economic and market outlook, we outlined how we believed the removal of policy accommodation would shape the economic and financial market landscape. Policy has in fact driven conditions globally in 2022, one of the most rapidly evolving economic and financial market environments in history. But one fact has been made abundantly clear: So long as financial markets function as intended, policymakers are willing to accept asset price volatility and a deterioration in macroeconomic fundamentals as a consequence of fighting inflation. The stabilization of global consumer behavior, cyclical acceleration in demographic and geopolitical trends, and rapid monetary tightening suggest a more challenging macroeconomic environment in 2023 that, in our view, will help bring down the rate of inflation.

Global inflation: Persistently surprising

Inflation has continued to trend higher across most economies, in many cases setting multidecade highs. The action taken, and likely to be taken in the months ahead, by central banks reflects a promising effort to combat elevated inflation that has proven more persistent and broad-based. Supply-demand imbalances linger in many sectors as global supply chains have yet to fully recover from the COVID-19 pandemic and as demand is supported by strong household and business balance sheets buoyed by pandemic-

era stimulus. The war in Ukraine continues, threatening another surge in energy and food commodities prices. Effective monetary policy requires good decision-making, good communication, and good luck. The current backdrop is missing the good-luck component, posing a challenge for policymakers whose fiscal and monetary tools are less effective combating supply shocks.

A recession by any other name

Global conditions today and those anticipated in the coming months are similar to those that have signaled global recessions in the past. Energy supply-and-demand concerns, diminishing capital flows, declining trade volumes, and falling output per person mean that, in all likelihood, the global economy will enter a recession in the coming year. Although central banks generally seek to avoid recessions, inflation dynamics mean that supply-side pressures must continue to ease and that policymakers must tighten financial conditions to lessen the inflationary push from elevated demand. That said, households, businesses, and financial institutions are in a much better position to handle an eventual downturn, to the extent that drawing recent historical parallels seems misplaced. Although all recessions are painful, this one is unlikely to be historic.

Our base case is a global recession in 2023 brought about by the efforts to reduce inflation. Whether history views it as mild or significant matters little for those affected by the downturn. But failing to act aggressively

to combat inflation risks harming households and businesses through entrenched inflationary pressures that last longer than the pain associated with any one recession.

As the table below highlights, growth is likely to end 2023 flat or slightly negative in most major economies outside of China. Unemployment is likely to rise over the year but nowhere near as high as during the 2008 and 2020 downturns. Through job losses and slowing consumer

demand, a downtrend in inflation is likely to persist through 2023. We don't believe that central banks will achieve their targets of 2% inflation in 2023, but they will maintain those targets and look to achieve them through 2024 and into 2025—or reassess them when the time is right. That time isn't now; reassessing inflation targets in a high-inflation environment could have deleterious effects on central bank credibility and inflation expectations.

Vanguard's economic forecasts

Country/ region	GDP growth*			Unemployment rate			Headline inflation*		Monetary policy		
	2023			2023			2023		Year-end 2022	Year-end 2023	Neutral rate
	Vanguard	Consensus	Trend	Vanguard	Consensus	NAIRU	Vanguard	Consensus			
U.S.	0.25%–0.5%	0.9%	1.8%	4.4%	4.4%	3.5%–4%	3%	2.4%	4.25%	4.5%	2.5%
Euro area	0%	0.2%	1.2%	7.4%	7.1%	6.5%–7%	5.3%	5.2%	1.75%–2%	2.5%	1.5%
U.K.	–1% to –1.5%	–0.5%	1.7%	4.7%	4.4%	3.5%–4%	6.3%	6.5%	3.5%	4.5%	2.5%
China*	4.5%	5%	4.3%	4.7%	N/A	5%	2.2%	2.3%	2.65%	2.6%	4.5%–5%

* For the U.S., GDP growth is defined as the year-over-year change in fourth-quarter Gross Domestic Product. For all other countries/regions, it is defined as the annual change in total GDP in the forecast year compared with the previous year.

* For the U.S., headline inflation is defined as year-over-year changes in this year's fourth-quarter Personal Consumption Expenditures (PCE) Price Index compared with last year. For all other countries/regions, it is defined as the average annual change in headline Consumer Price Index (CPI) inflation in the forecast year compared with the previous year. Consensus for the U.S. is based on Bloomberg ECFC consensus estimates.

* China's policy rate is the one-year medium-term lending facility (MLF) rate.

Notes: Forecasts are as of October 31, 2022. NAIRU stands for non-accelerating inflation rate of unemployment.

Source: Vanguard.

Global fixed income: Brighter days ahead

The market, which was initially slow to price higher interest rates to fight elevated and persistent inflation, now believes that most central banks will have to go well past their neutral policy rates—the rate at which policy would be considered neither accommodative nor restrictive—to quell inflation. The eventual peak and persistence of policy rates, which will depend heavily on the path of inflation, will determine how high bond yields rise. Although rising interest rates have created near-term pain for investors, higher starting interest rates have raised our return expectations more than twofold for U.S. and international bonds. We now expect U.S. bonds to return 4.1%–5.1% per year over the next

decade, compared with the 1.4%–2.4% annual returns we forecast a year ago. For international bonds, we expect returns of 4%–5% per year over the next decade, compared with our year-ago forecast of 1.3%–2.3% per year. This means that for investors with an adequately long time horizon, we expect their wealth to be higher by the end of the decade than our year-ago forecast would have suggested. In credit, valuations are attractive, but the growing likelihood of recession and declining profit margins skew the near-term risks toward higher spreads. Although credit exposure can add volatility, its higher expected return than government bonds and low correlation with equities validate its inclusion in portfolios.

Global equities: Resetting expectations

Rising interest rates, inflation, and geopolitical risks have forced investors to reassess their rosy expectations for the future. The silver lining is that this year's bear market has improved our outlook for global equities, though our Vanguard Capital Markets Model® (VCMM) projections suggest there are greater opportunities outside the United States.

Stretched valuations in the U.S. equity market in 2021 were unsustainable, and our fair-value framework suggests they still don't reflect current economic realities. We also see a high bar for continued above-average earnings growth, especially in the U.S. Although U.S. equities have continued to outperform their international peers, the primary driver of that outperformance has shifted from earnings to currency over the last year. The 30% decline in emerging markets over the past 12 months has made valuations in those regions more attractive. We now expect similar returns to those of non-U.S. developed markets and view emerging markets as an important diversifier in equity portfolios.

From a U.S. dollar investor's perspective, the VCMM projects higher 10-year annualized returns for non-U.S. developed markets (7.2%–9.2%) and emerging markets (7%–9%) than for U.S. markets (4.7%–6.7%). Globally, our equity return expectations are 2.25 percentage points higher than they were at this time last year. Within the U.S. market, value stocks are fairly valued relative to growth, and small-capitalization stocks are attractive despite our expectations for weaker near-term growth. Our outlook for the global equity risk premium is still positive at 1 to 3 percentage points, but lower than last year due to a faster increase in expected bond returns.

EQUITIES (MXN investor)	RETURN PROJECTION
Mexican equities	7.4%–9.4%
U.S. equities (unhedged)	8.5%–10.5%
Global ex-U.S. developed market equities (unhedged)	9.4%–11.4%
FIXED INCOME (MXN investor)	
Mexican sovereign bonds	11.0%–12.0%
Global bonds ex-Mexico (hedged)	10.0%–11.0%

IMPORTANT: The projections and other information generated by the VCMM regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Distribution of return outcomes from VCMM are derived from 10,000 simulations for each modeled asset class. Simulations as of September 30, 2022. Results from the model may vary with each use and over time. For more information, please see the Notes section.

Notes:

All investing is subject to risk, including the possible loss of the money you invest. Be aware that fluctuations in the financial markets and other factors may cause declines in the value of your account. There is no guarantee that any particular asset allocation or mix of funds will meet your investment objectives or provide you with a given level of income. Diversification does not ensure a profit or protect against a loss.

Investments in bonds are subject to interest rate, credit, and inflation risk.

Investments in stocks and bonds issued by non-U.S. companies are subject to risks including country/regional risk and currency risk. These risks are especially high in emerging markets.

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The VCMM projections are based on a statistical analysis of historical data. Future returns may behave differently from the historical patterns captured in the VCMM. More important, the VCMM may be underestimating extreme negative scenarios unobserved in the historical period on which the model estimation is based.

The Vanguard Capital Markets Model® is a proprietary financial simulation tool developed and maintained by Vanguard's primary investment research and advice teams. The model forecasts distributions of future returns for a wide array of broad asset classes. Those asset classes include U.S. and international equity markets, several maturities of the U.S. Treasury and corporate fixed income markets,

international fixed income markets, U.S. money markets, commodities, and certain alternative investment strategies. The theoretical and empirical foundation for the Vanguard Capital Markets Model is that the returns of various asset classes reflect the compensation investors require for bearing different types of systematic risk (beta). At the core of the model are estimates of the dynamic statistical relationship between risk factors and asset returns, obtained from statistical analysis based on available monthly financial and economic data from as early as

19620. Using a system of estimated equations, the model then applies a Monte Carlo simulation method to project the estimated interrelationships among risk factors and asset classes as well as uncertainty and randomness over time. The model generates a large set of simulated outcomes for each asset class over several time horizons. Forecasts are obtained by computing measures of central tendency in these simulations. Results produced by the tool will vary with each use and over time.

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ISGVEMOG 122022

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