

**Vanguard economic and market
outlook for 2024**

A return to sound money

Vanguard's forecasts for year-end 2024

	Economic growth	Core inflation	Monetary policy	Unemployment rate
United States	0.5%	2.3%	3.5%–4%	4.8%
Canada	~1%	2%–2.5%	2.5%–3%	6%–6.5%
Mexico	1.5%–2%	3.6%–3.8%	9%–9.5%	3.4%–3.6%
United Kingdom	0.5%–1%	2.8%	4.25%	4.5%–5%
Euro area	0.5%–1%	2.1%	3.25%	7%–7.5%
China	4.5%–5%	1%–1.5%	2.2%	4.8%
Australia	0.75%–1.25%	3%	3.85%	4.6%

Notes: Figures related to economic growth, inflation, monetary policy, and unemployment rate are Vanguard forecasts for the end of 2024. Growth and inflation are comparisons with the end of the preceding year; monetary policy and unemployment rate are absolute levels.

Source: Vanguard, as of December 12, 2023.

Canada

ECONOMIC GROWTH

~1%

We expect the period of weak growth seen in late 2023 to extend into mild recession in early 2024. Though we anticipate a recovery in late 2024 in response to expected Bank of Canada (BOC) rate cuts as inflation moderates, highly leveraged households pose a risk of a greater slowdown.

CORE INFLATION

2%–2.5%

We expect inflation to continue decelerating toward the BOC's target range of 1%–3%. Housing-related inflation, a key driver of overall inflation, should soften as house prices moderate in response to declining affordability. A loosening in the labor market and the resulting easing of wage pressures should slow price increases for services unrelated to shelter.

MONETARY POLICY RATE

2.5%–3%

Rapid interest rate increases in 2022 and 2023 have curbed demand such that the BOC led developed markets central banks in pausing its hiking cycle. The BOC could well lead a rate-cutting cycle, too. We foresee a reduction in the overnight rate by up to half from its current 5% by the end of 2024.

UNEMPLOYMENT RATE

6%–6.5%

We expect inflation to slow further in 2024, but at the cost of a weaker labor market. The unemployment rate has increased by more than half a percentage point from 5% since the start of 2023. We expect further rises as the economy slows in response to rate hikes and as immigration helps ease labor shortages.

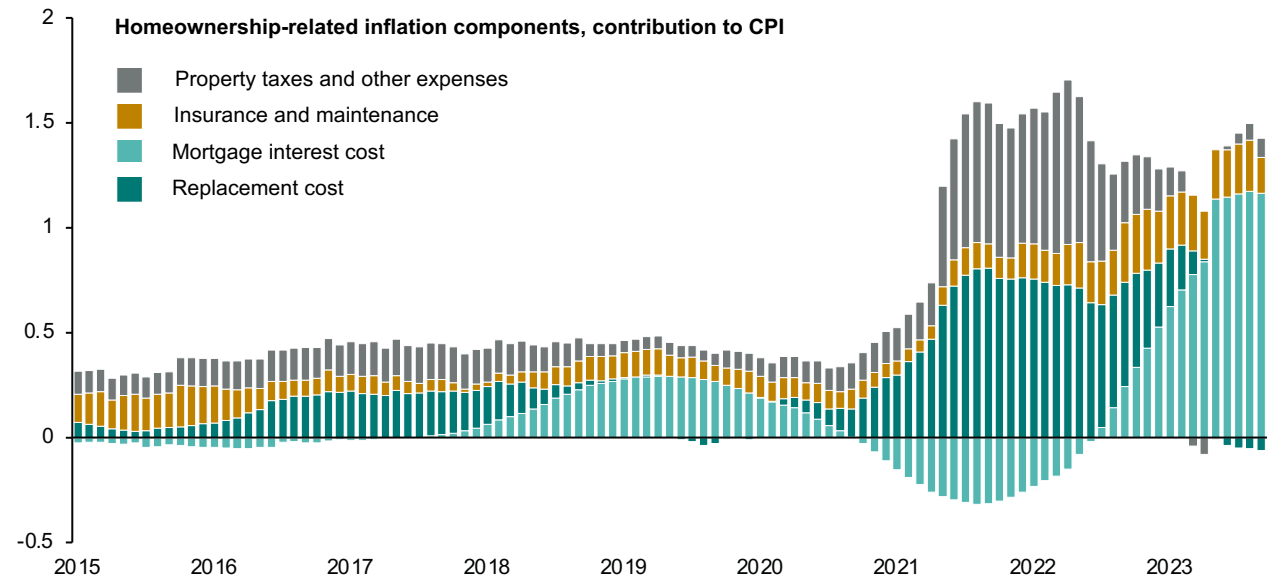


Rhea Thomas
Vanguard Economist

WHAT I'M WATCHING

The prospect of slowing homeownership-related inflation

Prices related to homeownership, also known as owned accommodation, have been a key driver of overall inflation, with a weight of nearly 20% in Canada's Consumer Price Index. Rapid Bank of Canada rate hikes have driven mortgage interest costs to multidecade highs. However, we expect declining affordability to weigh on house prices, helping to offset some of the impact of higher rates on mortgage interest costs. This in turn should help reduce the broader pace of inflation.



Growth, inflation, monetary policy, and unemployment figures above are year-end 2024 Vanguard forecasts. Growth and inflation are comparisons with year-end 2023; monetary policy and unemployment are absolute.

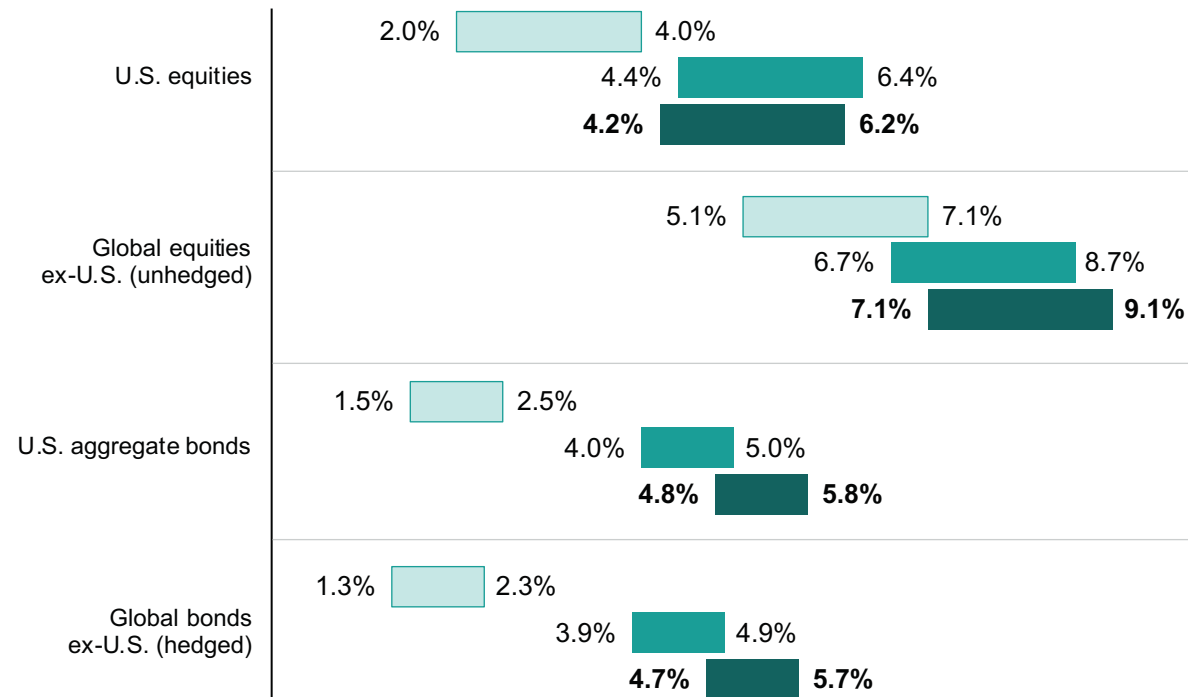
Notes: CPI contributions are on an annual percentage basis. "Other expenses" include land transfer costs and commissions on the sale of real estate. Contributions of homeownership-related inflation are also known as owned accommodation.

Sources: Vanguard calculations, based on data from Refinitiv and Macrobond, as of November 28, 2023.

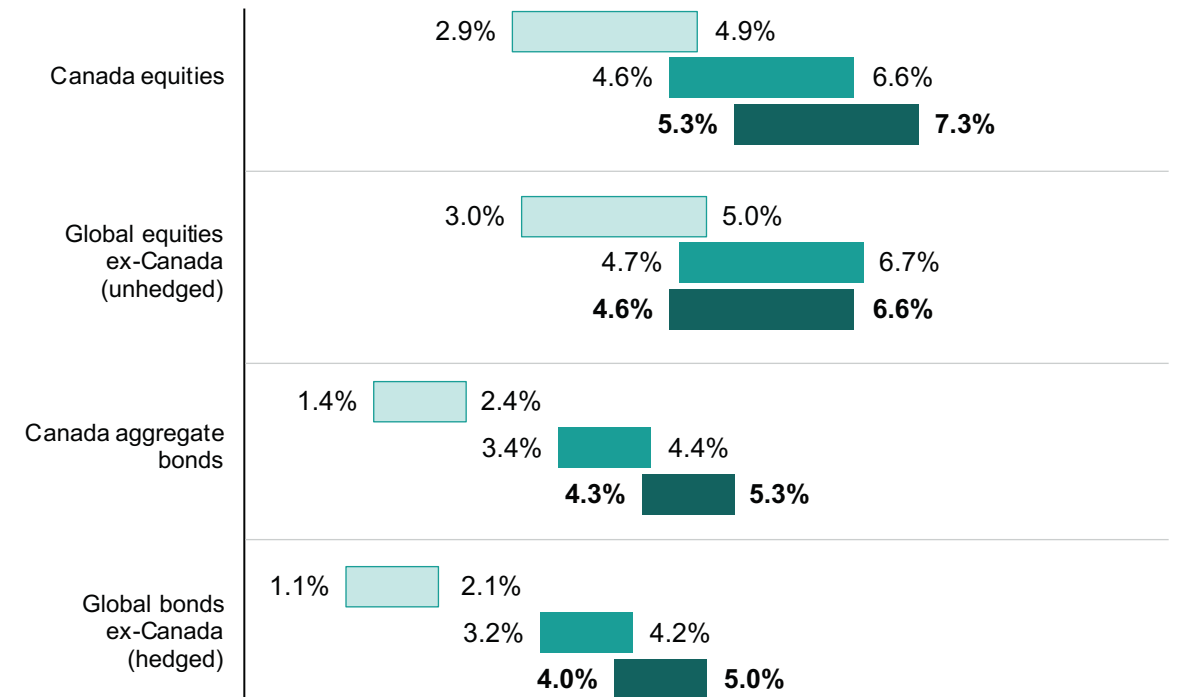
Global equity and fixed income outlook

Our 10-year annualized return forecasts for both equities and fixed income are significantly higher than at year-end 2021, before central banks broadly began raising interest rates to combat inflation. Forecasts are from the perspective of local investors in local currencies.

U.S. dollar



Canadian dollar



Forecast ■ 2021 year-end ■ 2022 year-end ■ 2023

IMPORTANT: The projections and other information generated by the Vanguard Capital Markets Model 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 the VCMM are derived from 10,000 simulations for each modeled asset class. Simulations are as of December 31, 2021; December 31, 2022; and September 30, 2023. Results from the model may vary with each use and over time. For more information, please see the Important information slide.

Note: Figures are based on a 2-point range around the 50th percentile of the distribution of return outcomes for equities and a 1-point range around the 50th percentile for fixed income.

Source: Vanguard.

Important information

Indexes used in Vanguard Capital Markets Model simulations

The long-term returns of our hypothetical portfolios are based on data for the appropriate market indexes as of December 31, 2021, December 31, 2022, and September 30, 2023. We chose these benchmarks to provide the most complete history possible, and we apportioned the global allocations to align with Vanguard's guidance in constructing diversified portfolios. Asset classes and their representative forecast indexes are as follows:

U.S. equities: MSCI US Broad Market Index.

Global ex-U.S. equities: MSCI All Country World ex USA Index.

U.S. aggregate bonds: Bloomberg U.S. Aggregate Bond Index.

Global ex-U.S. bonds: Bloomberg Global Aggregate ex-USD Index.

Canadian equities: MSCI Canada Total Return Index.

Global ex-Canada equities: MSCI All Country World Index ex-Canada in CAD.

Canadian aggregate bonds: Bloomberg Canadian Issues 300MM Index.

Global ex-Canada bonds: Bloomberg Global Aggregate ex-Canada Index (CAD Hedged).

~~**UK equities:** Bloomberg Equity Gilt Study from 1900 through 1964; Thomson Reuters Datastream UK Market Index from 1965 through 1969; MSCI UK thereafter.~~

~~**Global ex-UK equities:** Standard & Poor's 90 Index from January 1926 through March 3, 1957; S&P 500 Index from March 4, 1957, through 1969; MSCI World ex UK Index from 1970 through 1987; MSCI AC World ex UK thereafter.~~

~~**UK aggregate bonds:** Bloomberg Sterling Aggregate Bond Index.~~

~~**Global ex-UK bonds:** Standard & Poor's High Grade Corporate Index from 1926 through 1968; Citigroup High Grade Index from 1969 through 1972; Lehman Brothers US Long Credit AA Index from 1973 through 1975; Bloomberg US Aggregate Bond Index from 1976 through 1990; Bloomberg Global Aggregate Index from 1990 through 2001; Bloomberg Global Aggregate ex GBP Index thereafter.~~

~~**Euro area equities:** MSCI European Economic and Monetary Union (EMU) Index.~~

~~**Global ex-euro area equities:** MSCI AC World ex EMU Index.~~

~~**Euro area aggregate bonds:** Bloomberg Euro Aggregate Bond Index.~~

~~**Global ex-euro area bonds:** Bloomberg Global Aggregate ex Euro Index.~~

~~**Australian equities:** MSCI Australia Index.~~

~~**Global ex-Australia equities:** MSCI All Country World ex Australia Index.~~

~~**Australian bonds:** Bloomberg Australian Aggregate Bond Index.~~

~~**Global ex-Australia bonds:** Bloomberg Global Aggregate ex AUS Bond Index.~~

~~**China equities:** MSCI China A Onshore Index.~~

~~**Global equities ex-China:** MSCI All Country World ex China Index.~~

~~**China aggregate bonds:** ChinaBond Aggregate Index.~~

~~**Mexico equities:** MSCI Mexico Index.~~

~~**Global ex-U.S. developed market equities:** MSCI World ex US Index.~~

~~**Mexico sovereign bonds:** S&P/BMV Sovereign MBONOS Bond Index.~~

~~**Global bonds ex-Mexico:** Bloomberg Global Aggregate Index.~~

Important information (continued)



All investing is subject to risk, including the possible loss of the money you invest. Diversification does not ensure a profit or protect against a loss in a declining market. 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.

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.

Bond funds are subject to the risk that an issuer will fail to make payments on time, and that bond prices will decline because of rising interest rates or negative perceptions of an issuer's ability to make payments.

About the Vanguard Capital Markets Model:

IMPORTANT: The projections and other information generated by the Vanguard Capital Markets Model regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. VCMM results will vary with each use and over time.

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 Investment Strategy Group. 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. 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.

The primary value of the VCMM is in its application to analyzing potential client portfolios. VCMM asset-class forecasts—comprising distributions of expected returns, volatilities, and correlations—are key to the evaluation of potential downside risks, various risk–return trade-offs, and the diversification benefits of various asset classes. Although central tendencies are generated in any return distribution, Vanguard stresses that focusing on the full range of potential outcomes for the assets considered, such as the data presented in this paper, is the most effective way to use VCMM output.

The VCMM seeks to represent the uncertainty in the forecast by generating a wide range of potential outcomes. It is important to recognize that the VCMM does not impose “normality” on the return distributions, but rather is influenced by the so-called fat tails and skewness in the empirical distribution of modeled asset-class returns. Within the range of outcomes, individual experiences can be quite different, underscoring the varied nature of potential future paths. Indeed, this is a key reason why we approach asset-return outlooks in a distributional framework.

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