

A midyear update to the

***Vanguard Economic  
and Market Outlook  
for 2024***

For professional investors only (as defined under the MiFID II Directive) investing for their own account (including management companies (fund of funds) and professional clients investing on behalf of their discretionary clients). In Switzerland for professional investors only. Not to be distributed to the public.

# Vanguard's forecasts for year-end 2024

	GDP growth	Inflation*	Monetary policy**	Unemployment rate
United States	2.0%	2.9%	5.25%–5.50%	4.0%
United Kingdom	0.7%	2.8%	4.75%	4.0%–4.5%
Euro area	0.8%	2.2%	3.25%	6.5%
China	5.1%	1.0%	2.25%	5.1%

**Any projections should be regarded as hypothetical in nature and do not reflect or guarantee future results.**

\*Inflation forecasts are for core inflation, which excludes volatile energy and food prices.

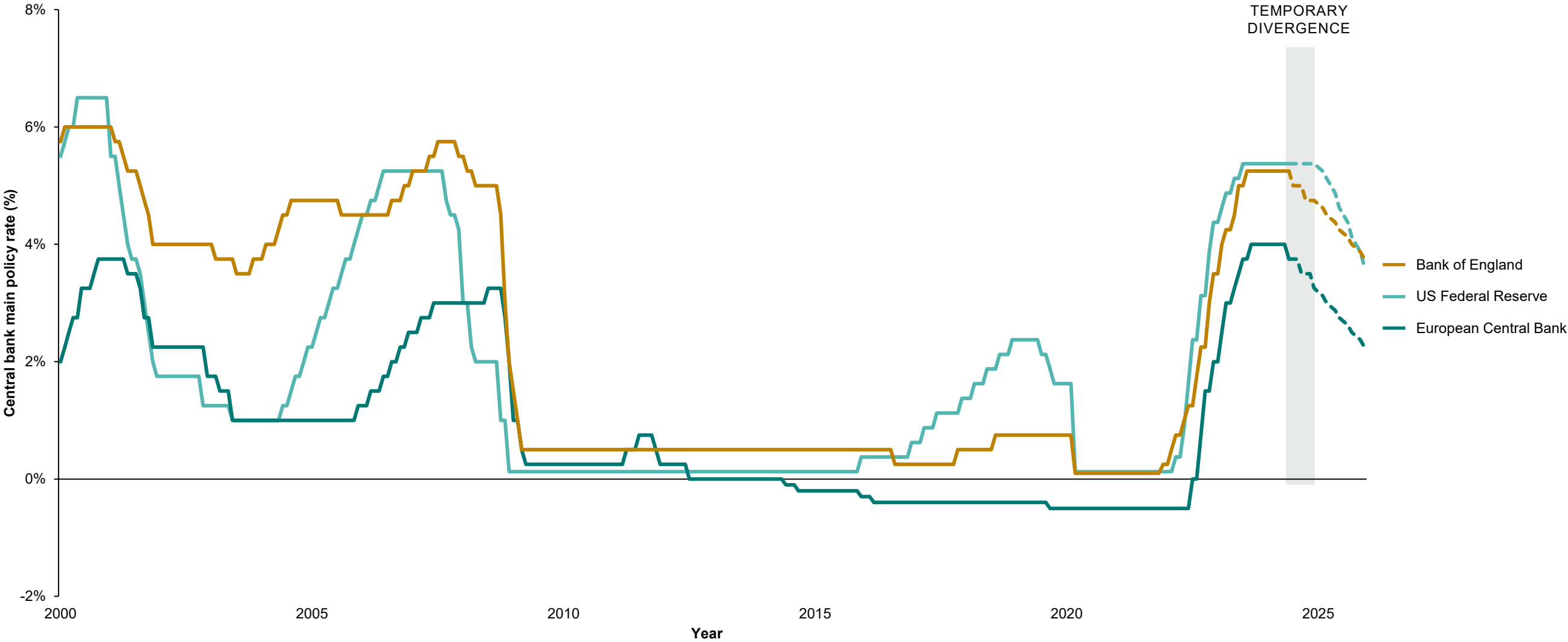
\*\*Our forecast for the United States year-end monetary policy rate reflects our expected US Federal Reserve federal funds target range.

**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 at 25 June 2024.

# Monetary policy likely to diverge only temporarily



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Notes: Monthly data from January 2000 to 20 June 2024, forecasts thereafter.

Sources: Vanguard calculations using data as at 20 June 2024, from Bloomberg and Macrobond.

# United States

## ECONOMIC GROWTH

**2.0%**

Stronger-than-expected labour supply and productivity gains should continue to support growth before gradually subsiding. After a strong second-quarter start, growth appears to be moderating. Consumer spending held up in the first quarter, particularly on services. We're monitoring softer gains in real disposable incomes.

## CORE INFLATION

**2.9%**

We foresee core inflation gradually falling to an annualised 2.9% at year-end. We expect shelter and other services prices to remain sticky. We don't foresee core inflation falling to 2% until the end of 2025. Elevated wage growth since the start of 2024 appears persistent and likely to keep services inflation heightened.

## MONETARY POLICY

**5.25–5.50%**

Continued economic growth, labour momentum, and stubborn inflation are likely to leave the US Federal Reserve without the confidence it needs to cut interest rates this year. We anticipate that the Fed will need to see inflation readings near 2.5% year over year to begin easing policy.

## UNEMPLOYMENT RATE

**4.0%**

Job growth has broadened across private industries, a bullish sign for the labour market. Strong productivity growth and low-income labour supply through immigration have reduced immediate reflationary risks from wage dynamics. However, if wages don't moderate in the second half, those risks will grow.

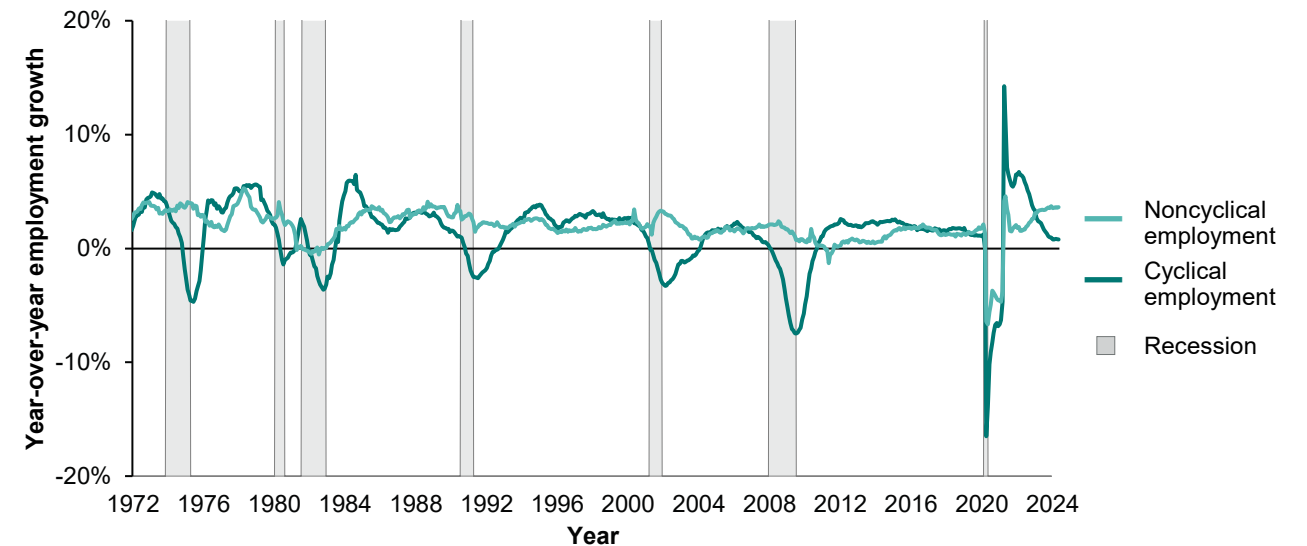


**Adam Schickling**  
Vanguard Senior  
Economist

## WHAT I'M WATCHING

### Cyclical employment and an economy with room to run

In the last two years, the three sectors that represent noncyclical employment—government, health care and education—have created about half of the new jobs in the United States, despite representing just 30% of the labour market. Health care and education spending is nondiscretionary, so employment in these sectors is typically agnostic to the economic environment. Government employment is less sensitive than other industries to an economic downturn as the sector is an attractive destination for workers in such periods. Meanwhile, cyclical employment—the rest of the labour market—typically rises and falls with economic conditions. Though cyclical employment has moderated since 2022, it continues to grow, an encouraging sign that the economic expansion will likely continue and the labour market will remain strong throughout 2024.



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

**Notes:** Employment growth is the year-over-year change in the three-month moving average. Noncyclical employment represents education, government and health services, industries that historically have had little correlation with the broader economy. Cyclical employment represents all other industries, such as but not limited to finance, professional and business services, construction, manufacturing and wholesale and retail trade.

**Sources:** Vanguard calculations using data from the St Louis Federal Reserve FRED database as at 13 June 2024.

# United States (continued)

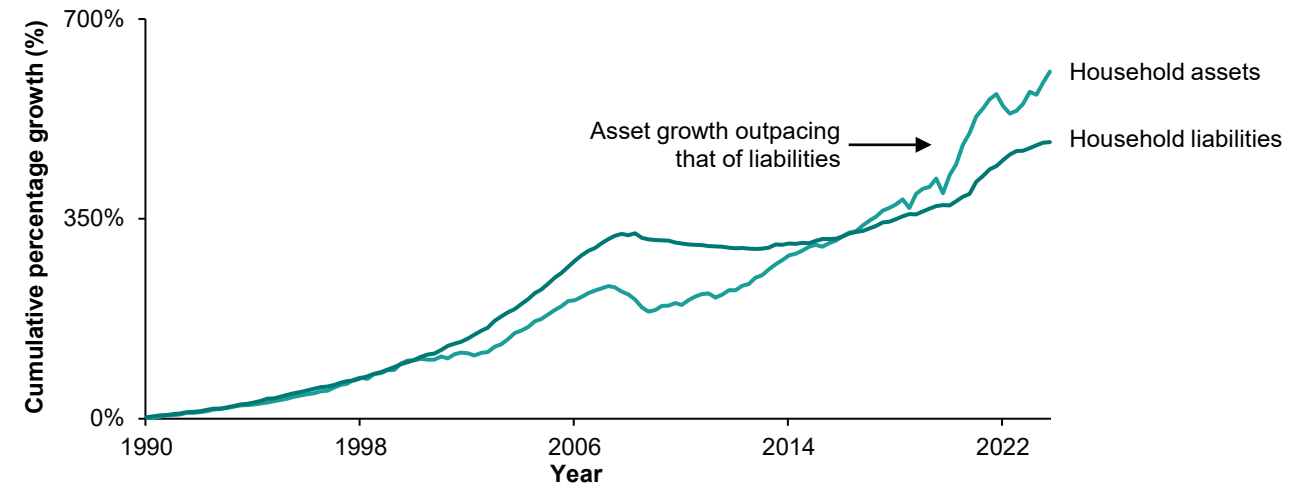


**Rhea Thomas**  
Vanguard Economist

## WHAT I'M WATCHING

### Healthy balance sheets remain a support for consumers

After a buildup in liabilities ahead of the 2008 global financial crisis, households have deleveraged and growth in assets has outpaced growth in liabilities over the last decade. Although this positive gap has moderated from its pandemic-era surge, it remains elevated. We expect healthy balance sheets and a steady labour market to continue to support consumer spending in the coming quarters, though at a more modest pace than in recent quarters.



**Note:** The chart depicts the cumulative percentage growth in household assets and liabilities since 1990.

**Sources:** Vanguard calculations using data from the US Federal Reserve as at 11 June 2024.

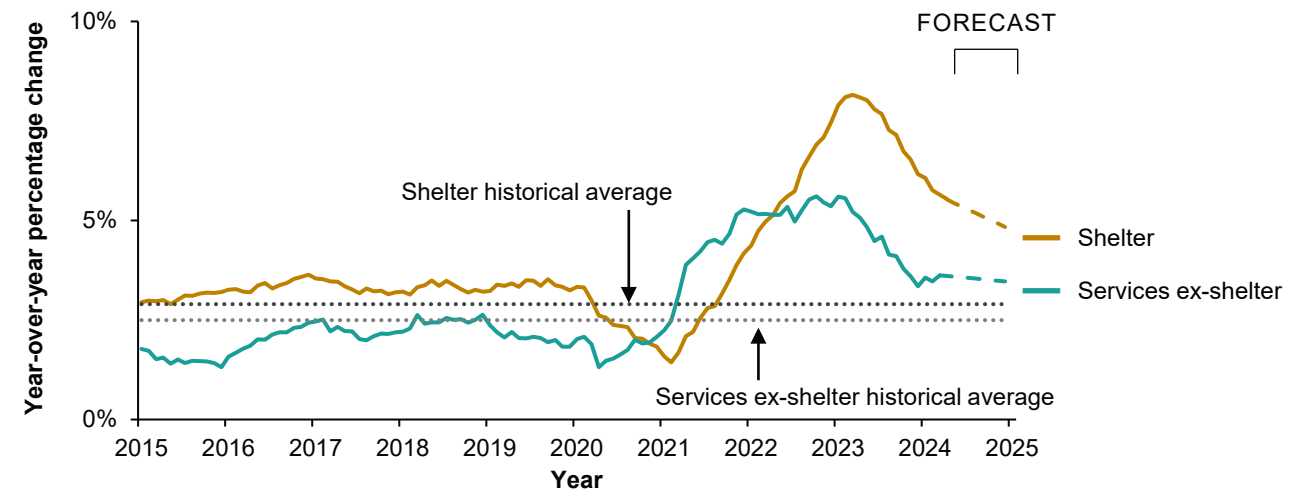


**Ryan Zalla**  
Vanguard Economist

## WHAT I'M WATCHING

### The role of shelter in keeping inflation sticky

Shelter, a component of services inflation that comprises 45% of the core Consumer Price Index and 17% of the core Personal Consumption Expenditures index, is the primary cause of sticky inflation and a factor in our view that the US Federal Reserve (Fed) will find it difficult to cut interest rates this year. We expect a shortfall of 1 million single-family homes at year-end 2024, owing partly to a “mortgage lock-in” effect whereby homeowners are reluctant to sell when that means giving up low fixed-rate mortgages. We foresee shelter inflation falling to 4.8% year over year by the end of 2024, keeping inflation solidly above the Fed’s comfort zone.



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**Sources:** US Bureau of Labor Statistics Consumer Price Index data accessed via Refinitiv on 6 June 2024, and Vanguard forecasts.

# Euro area

## ECONOMIC GROWTH

**0.8%**

The economy grew by 0.3% in the first quarter, leaving five quarters of stagnation behind. We foresee continued growth driven by robust rises in real household incomes and a fading credit drag. Still, restrictive monetary and fiscal policy and the lingering effects of the energy crisis will limit activity.

## CORE INFLATION

**2.2%**

Energy, food and core goods inflation are tracking at levels consistent with the 2% inflation target set by the European Central Bank (ECB). Services inflation has remained sticky. Though we remain confident that services price increases will slow to target-consistent levels by year-end, risks skew to the upside.

## MONETARY POLICY

**3.25%**

The ECB lowered its deposit facility rate to 3.75% at its 6 June meeting having held it at a cycle high of 4% for nine months. We expect a quarterly cadence for future quarter-point cuts, leaving the policy rate at 2.25% at the end of 2025. However, risks skew towards less easing given recent inflation and growth data.

## UNEMPLOYMENT RATE

**6.5%**

We believe that the labour market is softer than suggested by an unemployment rate that hovers near record lows. Job vacancy rates have receded, labour hoarding remains elevated, and the number of hours worked has stagnated. We expect the unemployment rate to stay close to 6.5% for the rest of the year and next.

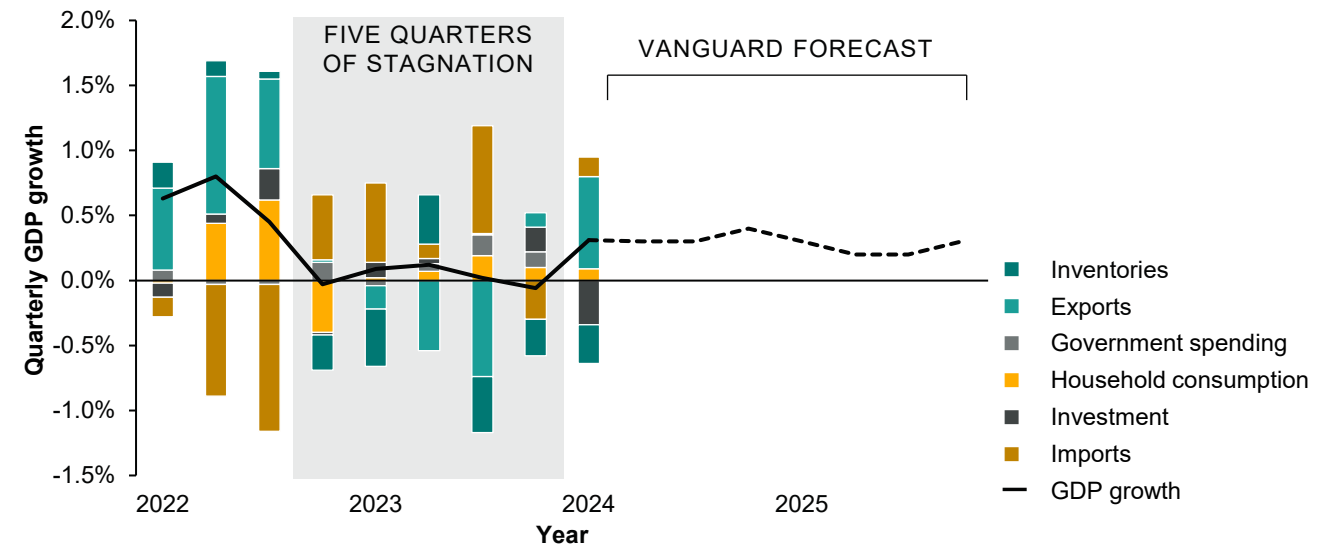


**Shaan Raithatha**  
Vanguard Senior  
Economist

### WHAT I'M WATCHING

#### After five quarters of stagnation, a modest return to growth

After five quarters of stagnation, the euro area returned to growth in the first quarter of 2024, thanks mainly to higher exports. The growth outlook is an important factor driving underlying inflation trends and will be a key input into monetary policymaking. We expect quarterly growth rates of 0.3% or 0.4% (non-annualised) for the rest of the year, which would leave euro area growth at 0.8% for 2024 as a whole.



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

Sources: Vanguard calculations using data as at 7 June 2024, from Eurostat.

# United Kingdom

### ECONOMIC GROWTH

**0.7%**

The UK economy emerged from a brief recession in the first quarter amid gradually rising real incomes, loosening financial conditions and increased activity in the euro area. However, headwinds from still-restrictive monetary and fiscal policy are likely to keep growth significantly below trend.

### CORE INFLATION

**2.8%**

Sticky services inflation skews risks to the upside. Year-over-year headline inflation slowed to the 2% target set by the Bank of England (BOE) in May. But its pace is likely to tick higher as certain price declines last year fall out of annual comparisons. Wage growth is slowing more moderately than we had anticipated.

### MONETARY POLICY

**4.75%**

We anticipate quarterly BOE cuts beginning in August to leave the bank rate at 4.75% to end 2024 and 3.75% to end 2025. The BOE may be constrained by the Federal Reserve likely keeping rate cuts on hold in 2024 and the European Central Bank potentially unable to cut rates as much as domestic conditions might warrant.

### UNEMPLOYMENT RATE

**4.0%–4.5%**

Soft factors such as reduced vacancies and fewer hours worked, rather than an increase in unemployment, are driving the labour market's gradual loosening.

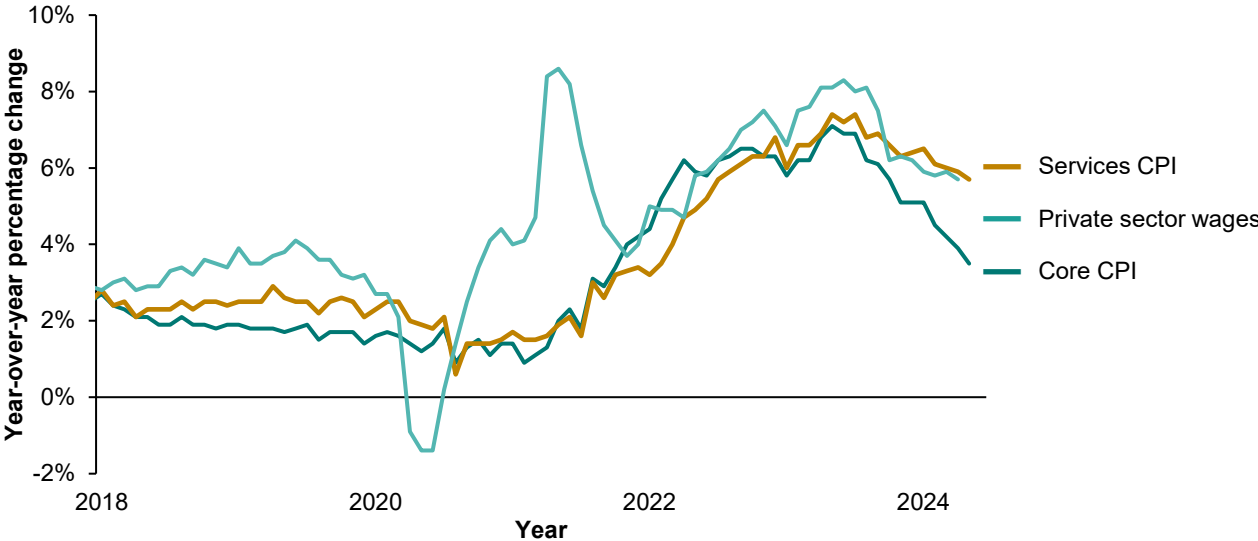


**Shaan Raithatha**  
Vanguard Senior  
Economist

### WHAT I'M WATCHING

#### Sticky measures of underlying inflation

Three measures of underlying inflation have slowed in 2024 but remain elevated and inconsistent with the BOE's 2% inflation target. A continued deceleration in all three will be necessary for the BOE to feel comfortable about cutting interest rates this year.



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# China

## ECONOMIC GROWTH

**5.1%**

We expect growth to hit a soft patch in the second quarter before stabilising around trend in the second half of the year. However, fundamentals remain fragile, with supply and demand out of balance, which could challenge that growth's sustainability.

## CORE INFLATION

**1.0%**

Pro-growth policy could spur a rise in consumer prices, for which capacity is ample after a brief deflationary period. We expect mild reflation that will depend on revived consumer confidence. We foresee inflation well below the 3% central bank target given supply-demand imbalances and growth below potential.

## MONETARY POLICY

**2.25%**

We expect only modest easing from the current 2.5% policy rate given concerns about banks' net interest margins and a "higher for longer" US Federal Reserve. We expect the policy rate to stay lower for longer given the need to sustain a growth recovery and ensure smooth deleveraging from China's property overhang.

## UNEMPLOYMENT RATE

**5.1%**

We foresee the unemployment rate remaining around current levels, below the government's 5.5% target. Although the headline unemployment rate should remain stable, growth in jobs and wages is tilting toward the lower-income end of the labour market, which could lead to a lackluster recovery in household consumption.

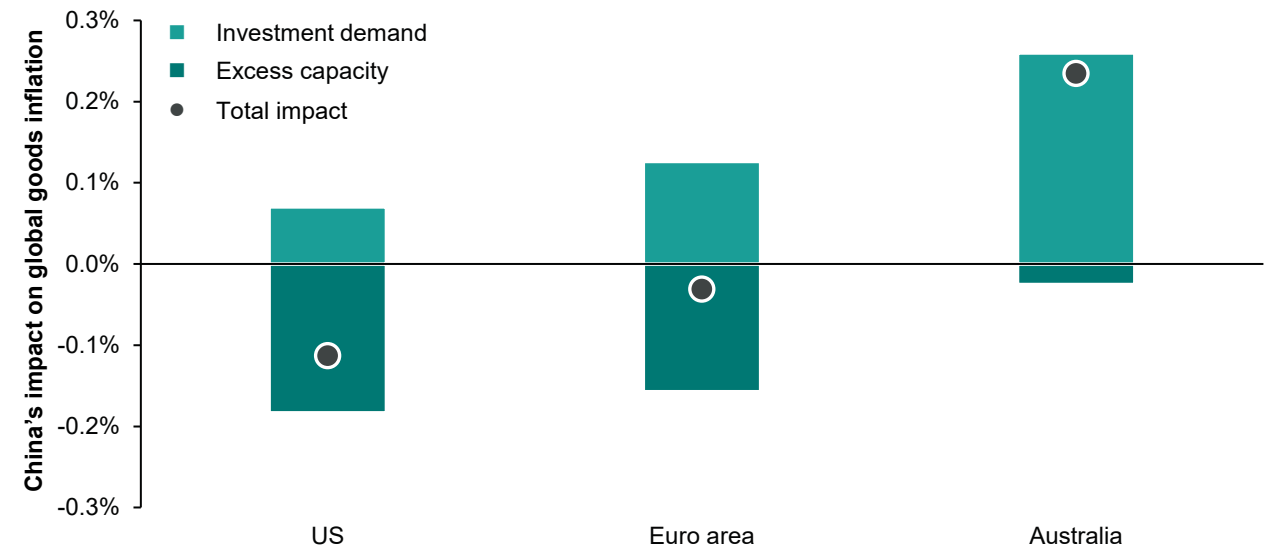


**Grant Feng**  
Vanguard Senior  
Economist

### WHAT I'M WATCHING

#### The mixed impact on global goods prices from China's uneven recovery

The idea that China is "exporting deflation" doesn't hold globally. Although its excess manufacturing capacity amid tepid domestic demand helps lower goods prices in the US and the euro area, China's booming manufacturing and infrastructure investments drive up energy and industrial metals prices, which especially affects commodities producers such as Australia.



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

**Notes:** We use China's export prices as a proxy for the impact of excess capacity and China's fixed asset investment as a proxy for the impact of investment demand. We expect a 6% drop in export prices this year and a 5.5% increase in fixed asset prices. We use a vector autoregressive model incorporating each economy's output gap, policy rate and goods price inflation, and China's export prices and fixed asset investment to estimate China's spillover to goods inflation.

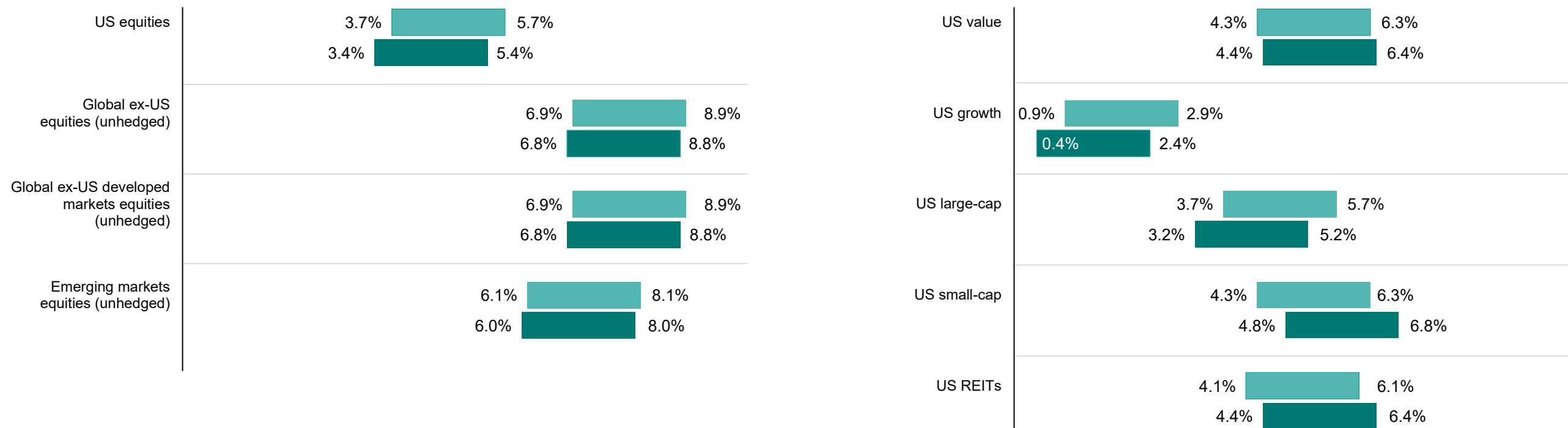
**Sources:** Vanguard calculations using data from CEIC as at 8 June 2024.



# Global equity and fixed income outlook

Developed markets sovereign bond yields have mostly risen since the start of the year, pushing our 10-year annualised return forecasts higher as well. Our ex-US developed markets domestic equities forecasts are flat to marginally higher, though higher US equities valuations have largely dragged down global equities forecasts. Forecasts are from the perspective of local investors in local currencies and reflect the reinvestment of income and capital gains.

## US dollar



Forecast ■ 2023 year-end ■ 2024 midyear

**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 at 31 December 2023 and 31 May 2024. Results from the model may vary with each use and over time. For more information, please see the important information slide.

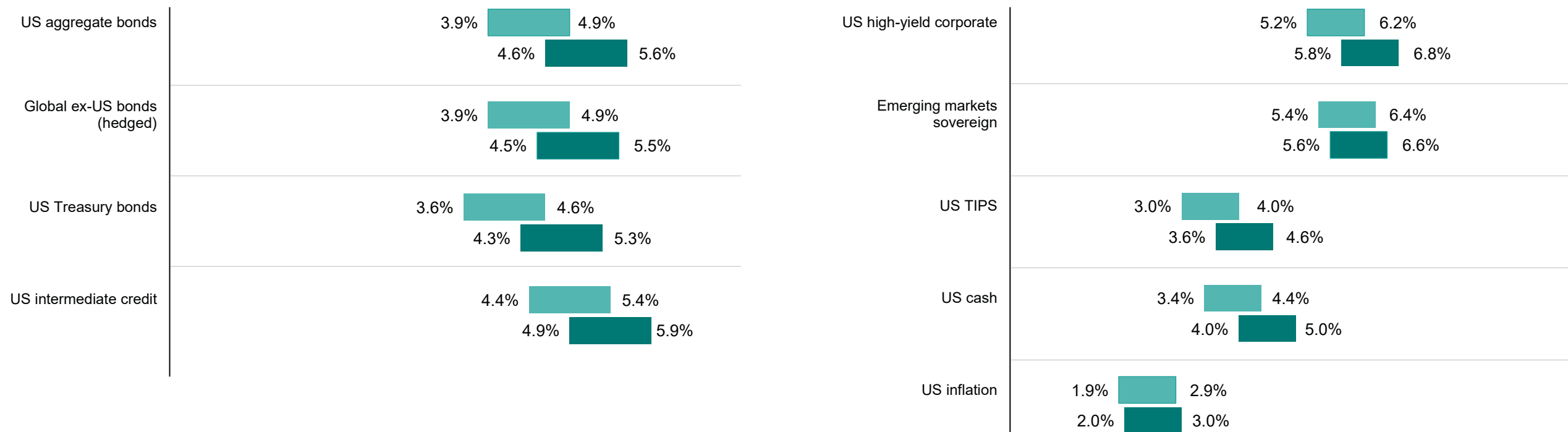
**Note:** Figures are based on a 2-point range around the 50th percentile of the distribution of return outcomes for equities and a 1-point range around the 50th percentile for fixed income.

**Source:** Vanguard. See page 15 for the indices used as reference for the asset classes shown.

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## US dollar (continued)



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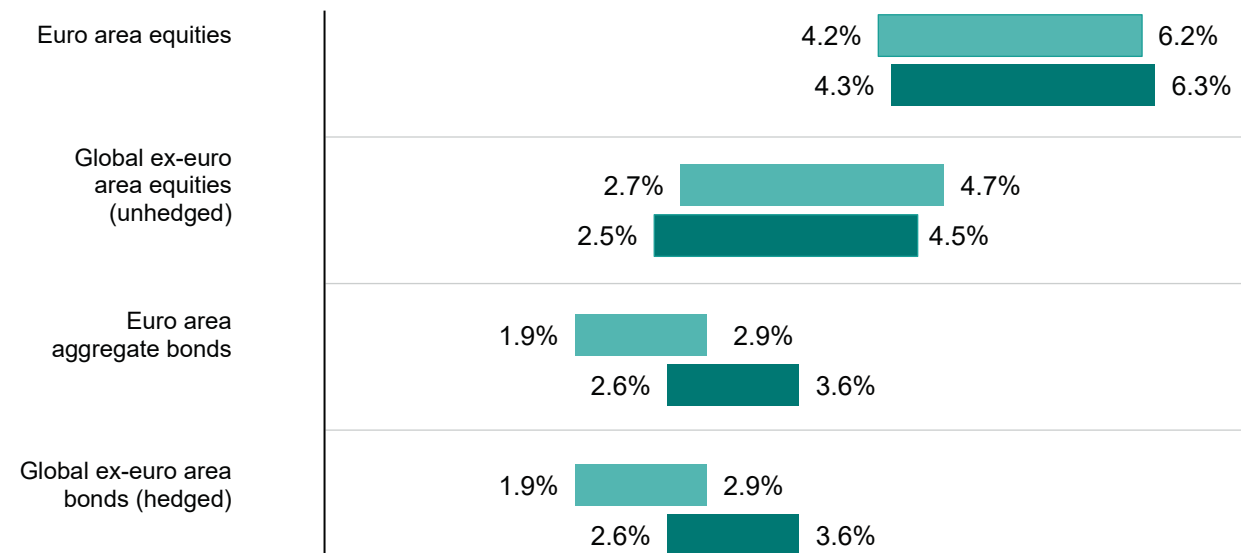
**Note:** Figures are based on a 2-point range around the 50th percentile of the distribution of return outcomes for equities and a 1-point range around the 50th percentile for fixed income.

**Source:** Vanguard. See page 15 for the indices used as reference for the asset classes shown.

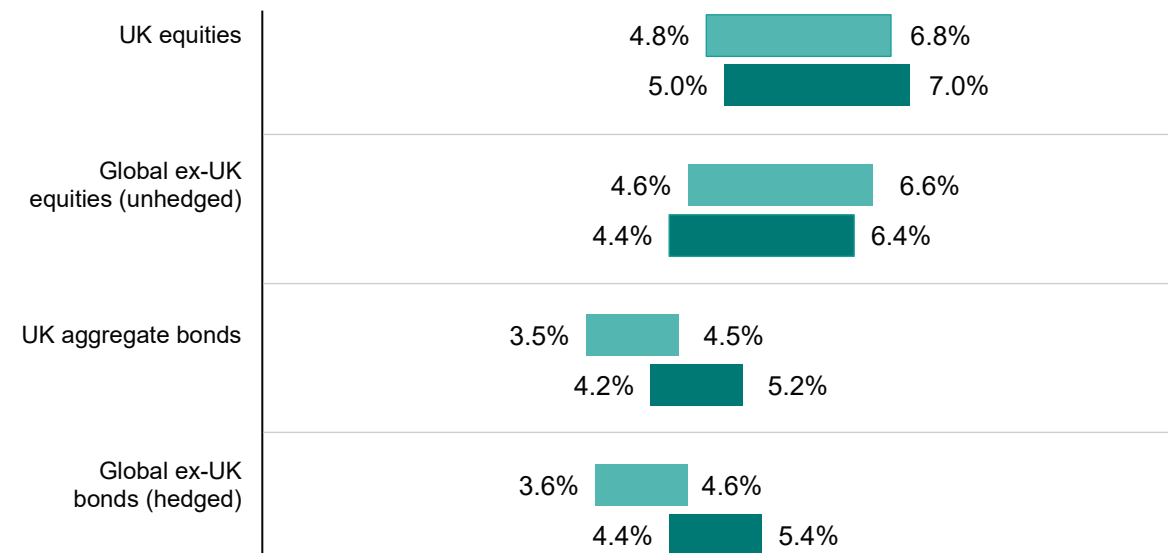
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## Euro



## British pound



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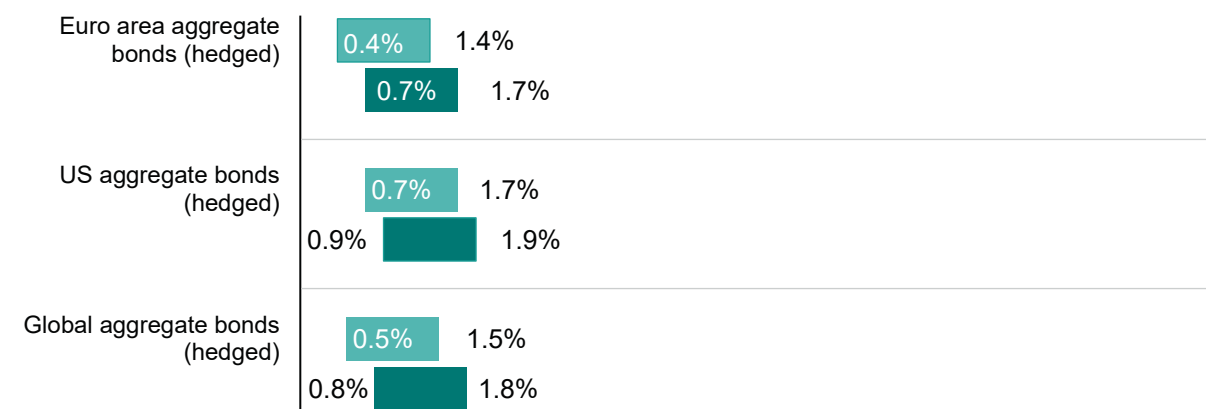
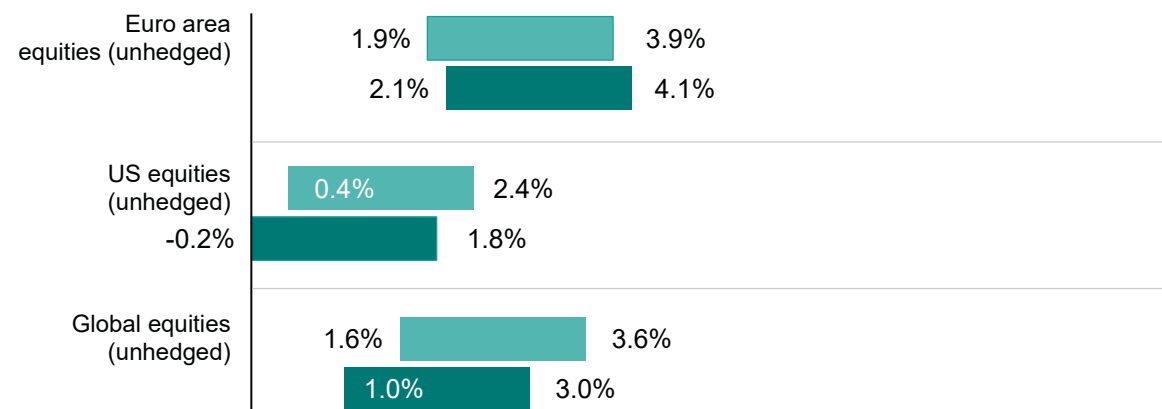
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## Swiss franc



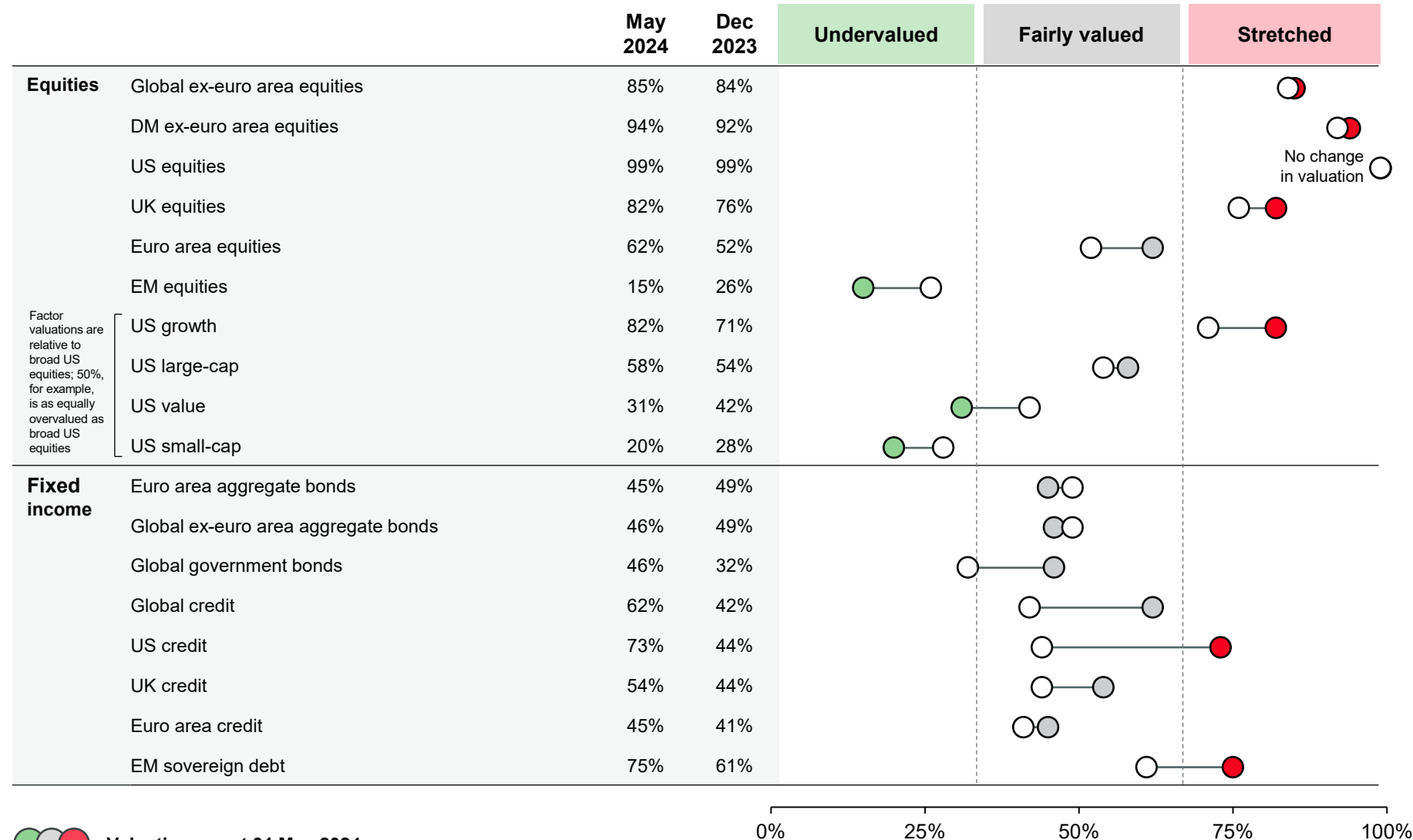
Forecast ■ 2023 year-end ■ 2024 midyear

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**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. See page 15 for the indices used as reference for the asset classes shown.

# Valuations have moved in both directions



Factor valuations are relative to broad US equities; 50%, for example, is as equally overvalued as broad US equities

●●● Valuations as at 31 May 2024  
○ Valuations as at 31 December 2023

**Notes:** The US, UK and euro area equity valuation measures are the current cyclically adjusted price/earnings ratio (CAPE) percentile relative to our fair-value CAPE estimate for the MSCI US Broad Market Index, the MSCI UK Index and the MSCI EMU Index. The global ex-euro area and developed market ex-euro area valuation measures are the market-capitalisation-weighted CAPE percentiles relative to our fair-value CAPE estimate for the MSCI US Broad Market Index, MSCI UK Index, MSCI Japan Index, MSCI Canada Index, MSCI Australia Index and MSCI EM Index. The valuation measure for the MSCI EM Index is only used for the global ex-euro area equity valuation measure. The emerging market valuation measure is based on the percentile rank based on our fair-value model relative to the market. Factor valuations are relative to US equities as the base at the 50th percentile. Growth, value and small-cap valuation measures are all based on the percentile rank based on our fair-value model relative to the market. The large-cap valuation measure is a composite valuation measure of the style factor to US relative valuations and the current US CAPE percentile relative to its fair-value CAPE.

Aggregate bond valuation measures are market-capitalisation-weighted averages of credit and government bond valuation percentiles for the euro area and global ex-euro area (which in turn is a market-capitalisation weighted average of the US, the UK, Japan, Canada and Australia aggregate bond valuation measures that are calculated the same way). The global government bond valuation measure is based on a market-capitalisation-weighted average of the valuation measures for the euro area, the US, the UK, Japan, Canada and Australia, comparing current yields relative to the VCMM simulation of equilibrium yields in year 30 of our forecast. Credit and emerging markets sovereign debt valuation measures are based on current spreads relative to the VCMM simulation of equilibrium spreads in year 30 of our forecast, with global credit based on a market-capitalisation-weighted average of the valuation measures for the euro area, US, UK, Japan, Canada and Australia.

**Sources:** Vanguard calculations, based on data from Robert Shiller's website at [aida.wss.yale.edu/~shiller/data.htm](http://aida.wss.yale.edu/~shiller/data.htm), the U.S. Bureau of Labor Statistics, the Federal Reserve Board and Refinitiv, as at 13 June 2023.

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# Vanguard's global economics and markets teams

## Global



**Joseph Davis, Ph.D.**  
Chief Economist

## Americas



**Roger A. Aliaga-Díaz, Ph.D.**  
Chief Economist



**Kevin DiCiurcio, CFA**  
VCMC Team Leader



**Kevin Khang, Ph.D.**  
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**Joshua M. Hirt, CFA**



**Ian Kresnak, CFA**



**Olga Lepigina, MBA**



**Vytautas Maciulis, CFA**



**Adam J. Schickling, CFA**



**Ziqi Tan, CFA**



**Rhea Thomas**



**Ben Vavreck, CFA**



**Daniel Wu, Ph.D.**



**Ryan Zalla, Ph.D.**



**Eric Evonsion**



**Will Jung**

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**Jumana Saleheen, Ph.D.**  
Chief Economist



**Lukas Brandl-Cheng, M.Sc.**



**Shaan Raithatha, CFA**



**Josefina Rodriguez**



**Ranieri Arcella, M.Phil.**

## Asia-Pacific



**Qian Wang, Ph.D.**  
Chief Economist and Global Head of VCMC



**Grant Feng, Ph.D.**



**Alex Qu**

# Important information

## Indices used in Vanguard Capital Markets Model simulations

The long-term returns of our hypothetical portfolios are based on data for the appropriate market indices as at 31 December 2023 and 31 May 2024. 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:

**US equities:** MSCI US Broad Market Index.

**Global ex-US equities:** MSCI All Country World ex USA Index.

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

**Global ex-US 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 3 March 1957; S&P 500 Index from 4 March 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.

**Emerging market equities:** MSCI Emerging Markets Index.

**Emerging market sovereign debt:** Bloomberg Emerging Markets USD Sovereign Bond Index – 10% Country Capped.

**US Treasury bonds:** Bloomberg U.S. Treasury Index.

**US intermediate credit:** Bloomberg U.S. 5-10 Year Credit Bond Index.

**US high-yield corporate bonds:** Bloomberg U.S. High Yield Corporate Bond Index.

**US TIPS:** Bloomberg U.S. Treasury Inflation Protected Securities Index.

**US Cash:** U.S. 3-Month Treasury constant maturity.

**US Inflation:** U.S. Consumer Price Index for all urban consumers.

**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.

**Global equities:** MSCI All Country World Index.

**Global aggregate bonds:** Bloomberg Global Aggregate Bond 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-US 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.

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

# Important information



**IMPORTANT: The projections or 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 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 US and international equity markets, several maturities of the U.S. Treasury and corporate fixed income markets, international fixed income markets, US 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 1960. 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 analysing 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 recognise 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.



# Investment risk



The value of investments, and the income from them, may fall or rise and investors may get back less than they invested.

Past performance is not a reliable indicator of future results.

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