

Exhibit SC/PCF-14

Vanguard, Vanguard Capital Markets Model® Forecasts (Jul. 23 2025)

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Setting realistic expectations

Vanguard Capital Markets Model® forecasts

July 23, 2025

Our expected returns for most U.S. sub-asset classes have fallen as of June 30, 2025. Corporate fundamentals remained resilient in the face of tariff uncertainty, supporting the recent equity rally. Hopes for a Federal Reserve rate cut raised bond prices. The ongoing strength in equities reinforces Vanguard's case that bonds are attractive relative to U.S. stocks, which we anticipate will offer returns below their long-term historical averages over the next decade.

The gap between our median U.S. equity and U.S. aggregate bond forecasts on a 10-year annualized basis remained narrow, at 0.2 percentage points in favor of bonds.

The chart and table below reflect our outlooks for the annualized 10- and 30-year performance (total returns and volatility levels) of broad asset classes based on a June 30, 2025, running of the Vanguard Capital Markets Model (VCMM). The probabilistic return assumptions depend on market conditions and can change with each running over time.

Following are highlights of the changes in our 10-year annualized return forecasts, relative to our previous set of forecasts. We now expect:

- **U.S. equities to return 3.3% to 5.3%**, down 0.5 percentage points.
- **U.S. growth stocks to return 1.9% to 3.9%**, down 0.6 percentage points.
- **U. S. aggregate bonds to return 4.0% to 5.0%**, down 0.2 percentage points.

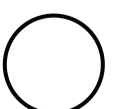
The U.S. equity market continues to trade well above the top end of its fair-value range. Our estimate reflects our proprietary fair-value measure, which considers current prices in relation to average, inflation-adjusted corporate earnings over the past 10 years, as well as prevailing interest rates and inflation levels. You can learn more about [our assessment of valuations within this econ and market hub](#).

It is important to recognize that valuations tend to be poor predictors of performance over the short or even intermediate term and should not serve as a primary reason for changing portfolio allocations.

Note that Vanguard forecast data are not intended to imply portfolio construction advice, which should reflect such factors as an investor's objectives and risk tolerance, as well as asset class correlations and the dispersion of expected returns.

Vanguard's forecasts of asset class performance, as of June 30, 2025: An interactive view

Feedback



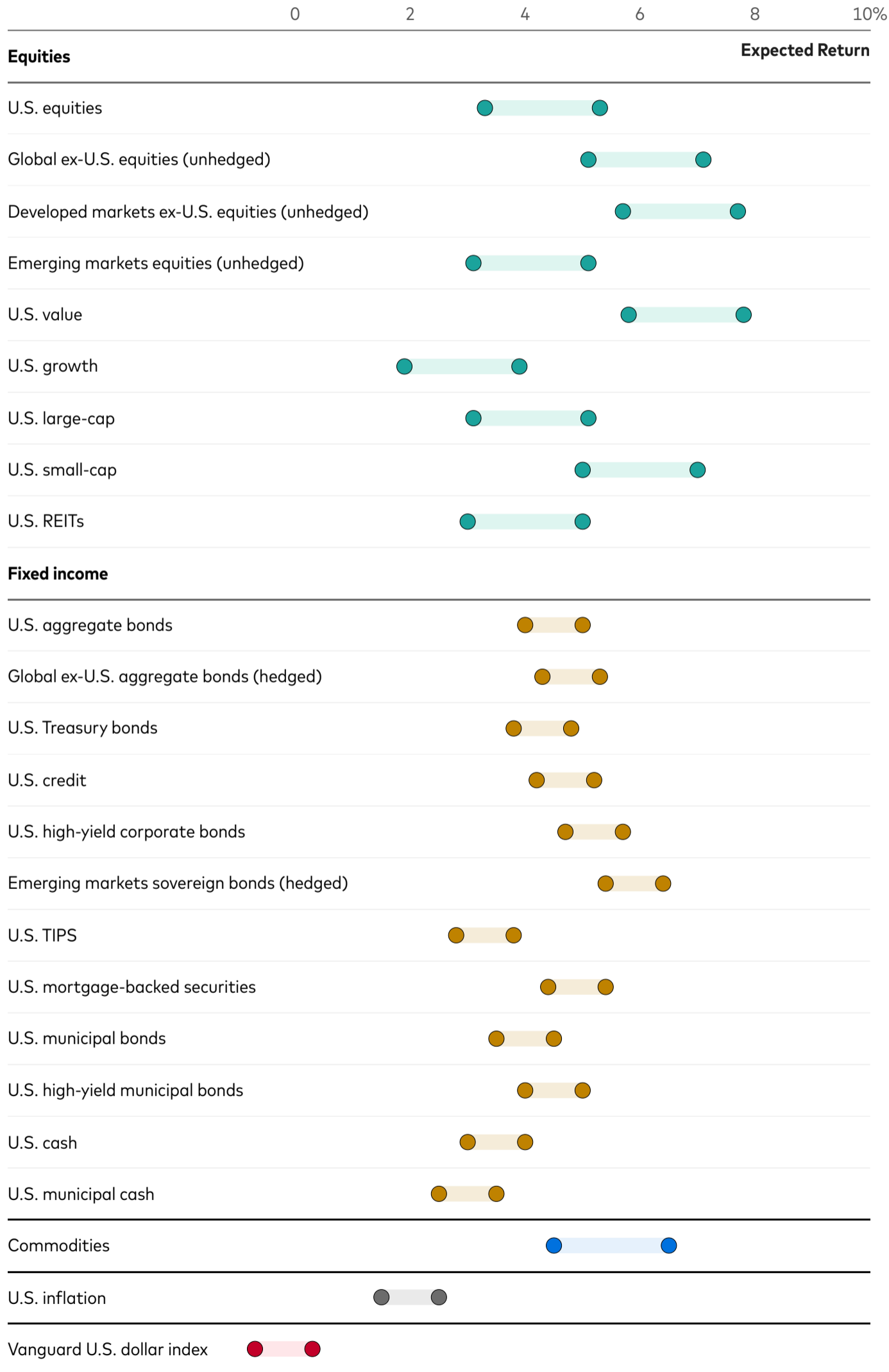
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Horizon: 10 years 30 years

Format: Chart Table

10-year annualized return forecasts

Equity Fixed Income Commodities Inflation Currencies



Notes: These return assumptions depend on current market conditions and, as such, may change over time. We make our updated forecasts available at least quarterly.

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FROM 10,000 SIMULATIONS FOR EACH MODELED ASSET CLASS. SIMULATIONS ARE AS OF JUNE 30, 2025. RESULTS FROM THE MODEL MAY VARY WITH EACH USE AND OVER TIME. FOR MORE INFORMATION, PLEASE SEE THE NOTES SECTION BELOW.

About the Vanguard Capital Markets Model

The asset-return distributions shown here are in nominal terms—meaning they do not account for inflation, taxes, or investment expenses—and represent Vanguard's views of likely total returns, in U.S. dollar terms, over the next 10 or 30 years; such forecasts are not intended to be extrapolated into short-term outlooks. Vanguard's forecasts are generated by the VCMM and reflect the collective perspective of our Investment Strategy Group. Expected returns and median volatility or risk levels—and the uncertainty surrounding them—are among a number of qualitative and quantitative inputs used in Vanguard's investment methodology and portfolio construction process. Volatility is represented by the standard deviation of returns.

IMPORTANT: The projections and other information generated by the Vanguard Capital Markets Model (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. 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 importantly, 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, U.S. municipal bonds, 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 time. Forecasts represent the distribution of geometric returns over different time horizons. Results produced by the tool will vary with each use and over time.

The VCMM's primary value is its utility in analyzing potential investor portfolios. VCMM asset-class forecasts—comprising distributions of expected returns, volatilities, and correlations—are key to the evaluation of potential downside risks, 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 is the most effective way to use VCMM output.

The VCMM seeks to represent the uncertainty inherent in forecasting by generating a wide range of potential outcomes. The VCMM does not impose "normality" on expected return distributions but rather is influenced by the so-called fat tails and skewness of modeled asset-class returns. Within the range of outcomes, individual experiences can be quite different, underscoring the varied nature of potential investment outcomes. Indeed, this is a key reason why we approach asset-return outlooks in a distributional framework.

Indexes for VCMM simulations

The returns of our hypothetical portfolios are based on data for the appropriate market indexes as of June 30, 2025. 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:

Equities

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

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

Global ex-U.S. developed markets equities (unhedged): MSCI World ex-U.S. Equity Index.

Emerging markets equities (unhedged): MSCI Emerging Market Equity Index.

U.S. value: Stocks with a price/book ratio in the lowest one-third of the Russell 1000 Index.¹

U.S. growth: Stocks with a price/book ratio in the highest one-third of the Russell 1000 Index.²

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Fixed income

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

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

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

U.S. credit: Bloomberg U.S. Credit Index.

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

Emerging markets sovereign: Bloomberg Emerging Markets USD Sovereign Bond Index – 10% Country Capped.

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

U.S. mortgage-backed securities: Bloomberg U.S. Mortgage Backed Securities Index.

U.S. municipal bonds: Bloomberg Municipal Bond Index.

U.S. high-yield municipal bonds: Bloomberg Municipal Bond: High Yield Index.

U.S. cash: U.S. 3-Month Treasury—constant maturity.

U.S. municipal cash: Bloomberg Municipal Short-Term Index.

Commodities: Bloomberg Commodity Index

U.S. inflation: Consumer Price Index for all Urban Consumers.

Vanguard U.S. dollar index: Equity market-capitalization-weighted basket of the U.S. dollar against the euro, the Japanese yen, the British pound, the Canadian dollar, and the Australian dollar.

1 To generate our proxy for U.S. value, we sort the stocks in the index according to their price/book ratios and delete the highest two-thirds. We then market cap-weight the remaining portfolio of stocks.

2 To generate our proxy for U.S. growth, we sort the stocks in the index according to their price/book ratios and delete the lowest two-thirds. We then market cap-weight the remaining portfolio of stocks.

3 To generate our proxy for U.S. large-cap, we sort the stocks in the index according to their market capitalizations and delete the lowest two-thirds. We then market cap-weight the remaining portfolio of stocks.

4 To generate our proxy for U.S. small-cap, we sort the stocks in the index according to their market capitalizations and delete the highest one-third. We then market cap-weight the remaining portfolio of stocks.

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 or 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.

High-yield bonds generally have medium- and lower-range credit quality ratings and are therefore subject to a higher level of credit risk than bonds with higher credit quality ratings.

U.S. government backing of Treasury or agency securities applies only to the underlying securities and does not prevent share-price fluctuations. Unlike stocks and bonds, U.S. Treasury bills are guaranteed as to the timely payment of principal and interest.

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