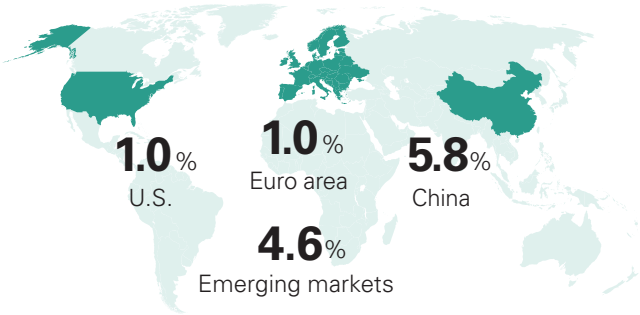
Vanguard

ECONOMIC AND MARKET HIGHLIGHTS

2020 outlook at a glance

The new age of uncertainty

Expected growth



1 or 2 more Fed rate cuts by the end of 2020

↓ **25–50 bps**

U.S. core inflation

<2%

(Below Fed target)

Probability of equity market correction remains elevated

10% downturn	20% downturn
43%	**16%**
31% in a normal environment	11% in a normal environment

Note: Probability corresponds to the percentage of global equity in USD VCMM simulations that declines over the next three years.

Source: Vanguard.

KEY TAKEAWAYS:

- Increasingly unpredictable policy environment is undermining economic activity.
- Global growth to slow further but we're a long way from a serious global contraction.
- The chance of a large drawdown in stocks and other high-beta assets remains elevated.

Investment outlook

The 10-year annualized nominal return projections, based on market conditions as of September 30, 2019, are as follows:

Equities	
U.S. equities	**3.5%–5.5%**
U.S. growth	**2.5%–4.5%**
U.S. value	**6.0%–8.0%**
U.S. large-cap	**3.5%–5.5%**
U.S. small-cap	**4.5%–6.5%**
U.S. real estate investment trusts	**2.5%–4.5%**
Global equities ex-U.S. (unhedged)	**6.5%–8.5%**

Fixed income	
U.S. bonds	**2.0%–3.0%**
U.S. Treasury bonds	**1.5%–2.5%**
U.S. credit bonds	**2.5%–3.5%**
U.S. high-yield corporate bonds	**3.0%–4.0%**
U.S. Treasury inflation-protected securities	**1.0%–2.0%**
U.S. cash	**1.5%–2.5%**
Global bonds ex-U.S. (hedged)	**1.5%–2.5%**

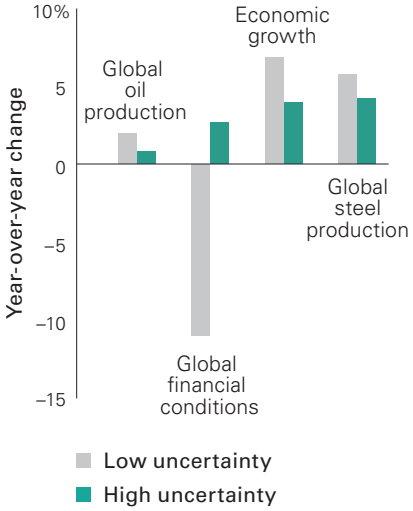
These probabilistic return assumptions depend on current market conditions and, as such, may change over time.

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 September 30, 2019.

Results from the model may vary with each use and over time. For more information, see page 4.

Source: Vanguard Investment Strategy Group.

Spillover effects of uncertainty on fundamentals



Trade tensions and unpredictable policymaking take their toll

An increasingly unpredictable policy environment is undermining economic activity globally through postponed investments and declines in production. But we don't seem on the verge of a serious global contraction.

We do not foresee a significant reversal of trade tensions or expect that policymaking will become more predictable in the year ahead. For example, Vanguard estimates there's only a 10% chance of an upside scenario where China and the U.S. sign a series of trade deals, roll back tariffs, and continue negotiations on structural issues.

Our research also shows that periods of high uncertainty are associated with lower growth, tighter financial conditions, and lower asset returns.

↑4%

We estimate that in periods of **high uncertainty,** year-over-year global growth averages around 4%.

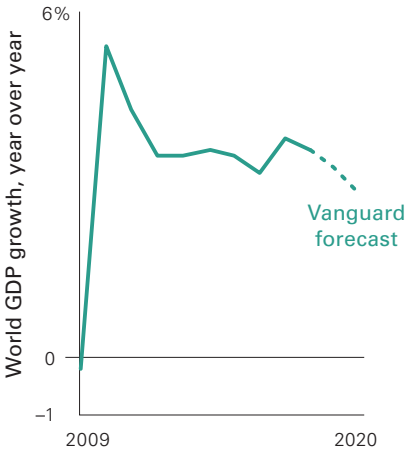
↑7%

We estimate that in periods of **low uncertainty,** year-over-year global growth averages around 7%.

Notes: The bars represent the average year-over-year change in each of the indicators in high- versus low-uncertainty periods. Periods of low versus high uncertainty are obtained through a Markov-switching model for global growth. Global financial conditions are an aggregate measure of risk sentiment and include variables such as equity returns, credit spreads, and lending behavior. Lower values denote easier financial conditions and risk-on attitudes. Z-scores measure how far a value differs from the historical average, accounting for the measure's typical fluctuations.

Sources: Vanguard calculations, based on data from Moody's Analytics Data Buffet and Thomson Reuters Datastream.

Global growth is expected to continue falling



Growth: Prospects around the globe are deteriorating

United States: Downshifting for an uncertain road ahead

Vanguard expects elevated levels of uncertainty to persist through at least 2020 and continue to weigh on business sentiment, along with waning support from the consumer. We see U.S. growth falling below trend to around 1% in 2020, with the risk of recession still elevated.

China: No hard landing, uncertainty impedes stimulus

Slowing global economic growth and expectations for U.S.-China tensions place China's economy in an environment of perpetual high policy uncertainty. These factors constitute a sizable headwind for both immediate and medium-term growth prospects. China will likely slow to a below-trend pace of 5.8% in 2020.

Euro area: No strong rebound in sight given limited fiscal stimulus

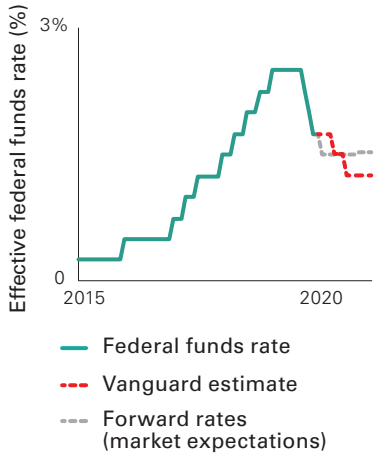
The euro-area economy has continued to slow because of the importance of industrial trade to its economy and some drag from Brexit-related uncertainty. Growth in the euro area is likely to stay weak at around 1%.

Emerging markets: Global trade slowdown

Economic growth for emerging markets in the aggregate is expected to be 4.6% in 2020. However, we expect there to be vast heterogeneity both within and among regions. Some of the recent slowdown across emerging markets reflects the spillover effects of a slowing China, policy tightening by the U.S. Federal Reserve in 2018, and a decline in global trade.

Sources: International Monetary Fund and Vanguard forecasts.

Fed models imply more cuts



Monetary policy: The pivot to looser policy continues

Despite increased doubts about the effectiveness of monetary policy, we expect central banks to continue to adopt unconventional measures, while significant fiscal stimulus remains unlikely unless there is a more severe downturn. Our outlook is for subdued inflation trends across major economies, consistent with the inflation expectations held by consumers and financial markets.

United States. Vanguard expects that the U.S. economy, and in turn the U.S. Federal Reserve, will shift into a lower gear in 2020 as policy-makers, businesses, and consumers navigate a more uncertain road ahead. That translates into the Fed reducing the federal funds rate by 25 to 50 basis points before the end of 2020. We expect inflation to barely reach 2% in the U.S., with the Federal Reserve's core inflation gauge staying below its 2% policy target.

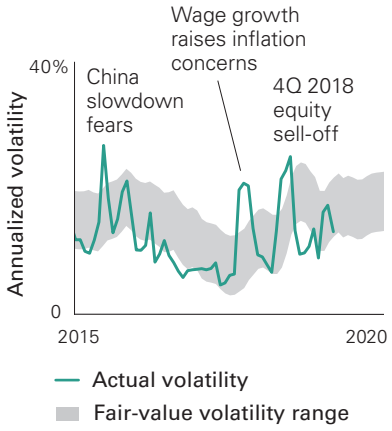
Euro area. In 2020 we expect the European Central Bank to leave policy broadly unchanged, with risks skewed toward further easing.

China. Policy efforts to stabilize growth will continue, but concerns about medium-term financial stability risks will keep these measures in moderation relative to prior easing cycles, reducing the tailwinds for global growth prospects.

Notes: Vanguard's base case expectations for 2020 (0.5%–1.5% GDP growth, 1.8% core PCE, and 100,000 new non-farm payroll jobs per month for the duration of 2020). Vanguard estimate includes model-based expectations and those of Vanguard's Investment Strategy Group.

Sources: Vanguard calculations, based on data from the U.S. Bureau of Economic Analysis, the Federal Open Market Committee, Bloomberg, and Moody's Analytics Data Buffet.

High uncertainty often coincides with higher volatility



Investment outlook: Subdued returns ahead

In the face of elevated uncertainty and a synchronized global slowdown, equity markets have remained surprisingly robust. However, investors should caution themselves against extrapolating present gains into the future.

As global growth slows further in 2020 and policy uncertainties continue, investors should expect periodic bouts of volatility and a fragile backdrop for markets in 2020 and beyond.

Near-term. Our near-term outlook for global equity markets remains guarded, and the chance of a large drawdown for equities and other high-beta assets remains elevated and significantly higher than it would be in a normal market environment. High-quality fixed income assets, whose expected returns are positive only in nominal terms, remain a key diversifier in a portfolio.

Long-term. Returns over the next decade are anticipated to be modest at best. Our expectation for fixed income returns has fallen because of declining policy rates, lower yields across maturities, and compressed corporate spreads.

10-year annualized nominal return projections

2.0%–3.0%	1.5%–2.5%	3.5%–5.5%	6.5%–8.5%
U.S. bonds	Global bonds ex-U.S. (hedged)	U.S. equities	Global equities ex-U.S. (unhedged)

Based on simulated ranges of portfolio returns and volatility, the diversification benefits of global fixed income and global equity remain compelling.

Notes: Fair-value volatility range is calculated with an OLS regression using Vanguard's leading economic indicator index (VLEI), financial conditions index (VFCI), and policy uncertainty index as independent variables. Volatility is measured as the standard deviation of daily returns of the S&P 500 index on a 30-day rolling time period, annualized. The forecasted range of volatility for 2020 is based on Vanguard's economic projections.

Sources: Vanguard calculations, based on data from Thomson Reuters Datastream and policyuncertainty.com.

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All investing is subject to risk, including possible loss of principal.

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.

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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 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.

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