

*A midyear update to the Vanguard  
Economic and Market Outlook for 2021*

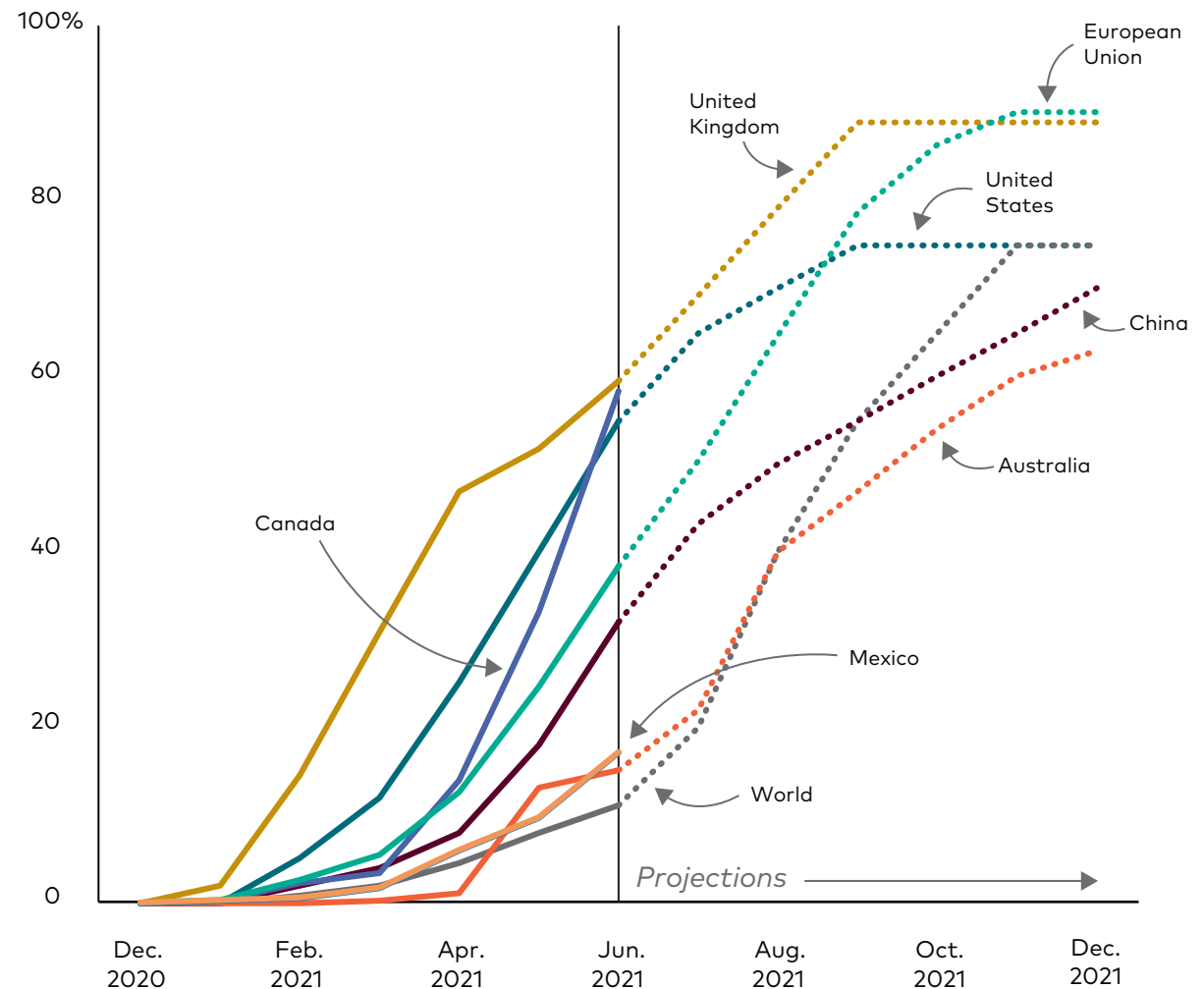
# **A strong but uneven global recovery**

# Health outcomes remain critical

## The march toward herd immunity

- The degree to which economic activity can resume depends on the staying power of COVID-19 and its variants.
- Vaccination progress suggests an uneven global economic recovery. Consumers are more likely to engage in face-to-face economic activity where vaccination rates are greatest.
- Emerging markets remain at greater risk from COVID-19 and its variants than developed markets given the pace of vaccinations.

Percentage of population with at least one vaccine dose



**Notes:** Levels that constitute herd immunity will vary by region, depending on vaccine efficacy. Higher vaccination rates generally permit greater economic activity.  
**Sources:** Vanguard projections, based on data from Our World in Data, the University of Oxford, and the Australian federal government, as of June 1, 2021. No projections are available for Canada and Mexico.

# Global economies in transition

Growth | Inflation | Monetary policy



Differences in vaccination rates and varied levels of fiscal support are likely to produce uneven economic growth.

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**We expect the United States (with its strong fiscal support), the United Kingdom (a leader in vaccination efforts), and China (the first to emerge from pandemic restrictions) to lead the way.**



As vaccinations progress, emergent demand amid supply shortages in some sectors has heightened inflation risks, especially in the United States, where we anticipate above-target core inflation into 2022.

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**We expect core inflation to rise toward central bank targets outside the United States.**



Improving economies are spurring talk about eventual tapering of central bank asset purchases, a first step in the gradual removal of policy accommodation.

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**We expect continued accommodative policy nonetheless, with liftoff in policy rates not broadly occurring until 2023.**

# Global economies in transition

**Growth** | Inflation | Monetary policy

## United States

**+ 7%**

Positive health care developments and strong fiscal support are likely to drive **full-year growth of at least 7%**, stronger than we anticipated at the start of 2021. Activity will likely peak late in the second quarter and early in the third.

## Euro area

**~ 5%**

After a halting start, vaccination rollout has accelerated, supporting **full-year growth of around 5%**, and possibly higher. Supportive policy underpins our view, which is largely in line with our expectations at the beginning of 2021.

## United Kingdom

**~ 7%**

Our forecast for **full-year growth of around 7%** is lower than it was when 2021 began, as surprising fourth-quarter 2020 growth started the new year at a higher base. Strong vaccination rollout has supported an easing of COVID-19 restrictions that has largely been faster than expected.

## China

**~ 8.5%**

Our expectation for **full-year growth of around 8.5%** is down somewhat from the start of 2021. We expect support from the export sector to wane and consumption growth to normalise slowly, given sporadic virus outbreaks and an initially slow vaccination rollout.

## Australia

**~ 5.5%**

Strong pent-up demand informs our view of **full-year growth of around 5.5%**, higher than we expected at the start of the year. Virus management has been effective despite a slow vaccination rollout that could delay a return to normal of face-to-face activity.

## Emerging markets

**+ 6%**

Virus resurgence, particularly in emerging Asia, has slowed first-half 2021 growth. Whether our view of **full-year growth of above 6%** (up slightly from our view at the start of 2021) can be achieved will depend on accelerated vaccination efforts.

# Global economies in transition

Growth | **Inflation** | Monetary policy

## United States

### Keeping a watchful eye

Prospects for stimulative fiscal policy and only a gradual readjustment of a supply-and-demand imbalance **increase the likelihood of moderately higher inflation** more persistently. We don't, however, foresee a return to 1970s-style runaway inflation.

## China

### Modest consumer demand

We continue to foresee **core inflation of around 1.5% for the year**, well below the People's Bank of China's 3% target. Though producer prices have climbed, we expect pass-through effects to remain limited, especially amid modest consumer demand.

## Euro area

### A moderate increase

Energy prices are likely to push headline inflation above 2% in the second half of 2021, but underlying price pressures remain subdued. We foresee **core inflation rising to 1% to 1.5% by year-end**, slightly higher than our view at the start of 2021.

## Australia

### Still below target

We foresee **core inflation ending the year just above 1.5%**, higher than our view at the start of 2021. But spare capacity in the economy is likely to keep inflation below the Reserve Bank of Australia's 2% target in the medium term.

## United Kingdom

### Moving toward target

In line with our view at the start of 2021, we expect **core inflation to rise toward the Bank of England's 2% target** this year. Headline inflation should exceed that level in the second half as the economy strengthens and energy prices rise.

## Emerging markets

### Greater than expected

A disinflationary trend in parts of Asia has disappeared, and inflation in other regions has **largely risen above its pre-pandemic pace**, as higher borrowing costs in developed markets spill over. The trend threatens central banks' flexibility.

# Global economies in transition

Growth | Inflation | **Monetary policy**

## United States

### Policy remains accommodative

We foresee **accommodative policy remaining in place** the rest of the year, though talk of reducing the pace of asset purchases will ramp up in the second half. We don't foresee conditions meeting the Federal Reserve's rate-hike criteria until the second half of 2023.

## China

### Gradual policy normalisation

Our largely unchanged view continues to see the People's Bank of China **normalising its monetary policy, albeit gradually**, as economic growth remains uneven. Bond yields could rise in the near term as deleveraging efforts continue.

## Euro area

### Accommodative policy continues

We expect European Central Bank policy interest rates to remain on hold at least through 2022, even as the economy improves, though **the bank is likely to slow its pace of asset purchases** slightly in the near term.

## Australia

### Dovish stance continues

The pace of asset purchases may slow this year, but we **continue to foresee dovish central bank policy**. We expect the Reserve Bank of Australia won't raise its cash rate before 2024, as increases in inflation and wage growth are likely to be modest.

## United Kingdom

### Slowing asset purchases

The Bank of England has slowed the pace of its asset purchases, and we expect a halt to purchases by the end of 2021. We **continue to foresee accommodative policy interest rates**, however, with the central bank not tightening until 2023.

## Emerging markets

### Policy challenges abound

Inflation dynamics and rising U.S. interest rates **have constrained central banks' accommodative bias** even as economic growth remains below potential. Recent rate hikes in Brazil, Russia, and Turkey amid rising inflation demonstrate the challenge.

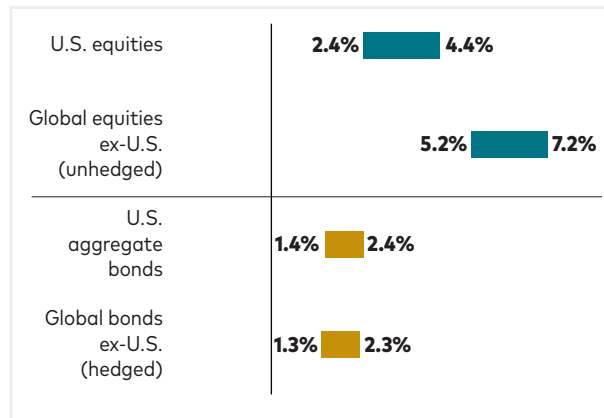
# Global equity and fixed income outlook

Our forecasts are derived from a May 31, 2021, running of the Vanguard Capital Markets Model<sup>®</sup>. All forecasts are in local currencies.

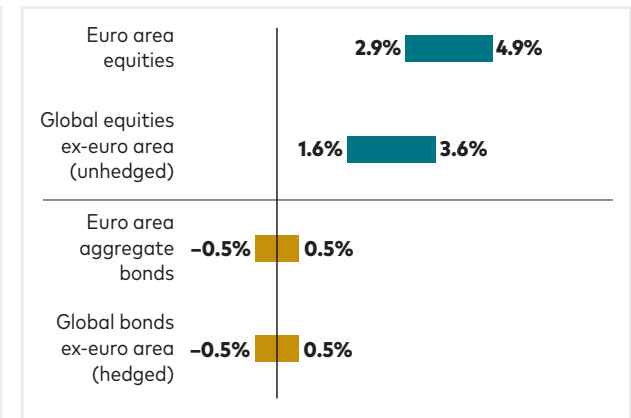
Vanguard's 10-year annualised outlooks for equity and fixed income returns have changed markedly since the *Vanguard Economic and Market Outlook for 2021* was released in December 2020.

Our equity return outlooks are significantly lower—in some developed markets by nearly 2 percentage points—as equity valuations have continued to rise. Our fixed income outlooks, on the other hand, have risen, largely in a range of a half to a full percentage point, attributable primarily to higher interest rates.

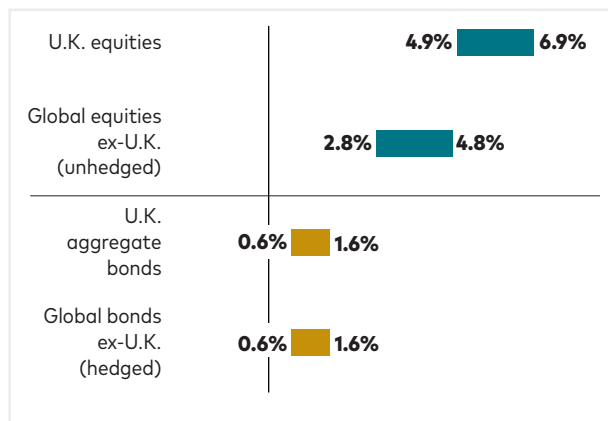
## U.S. dollar



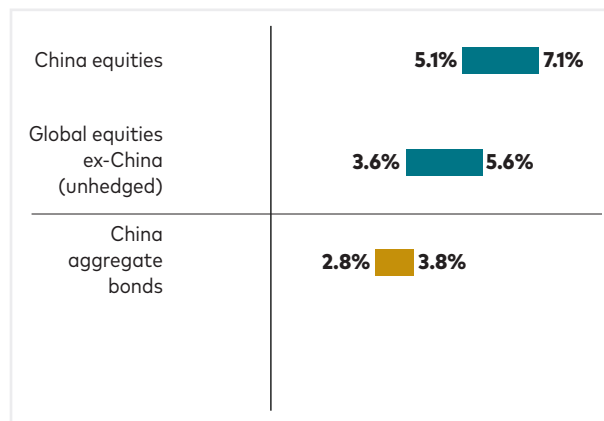
## Euro



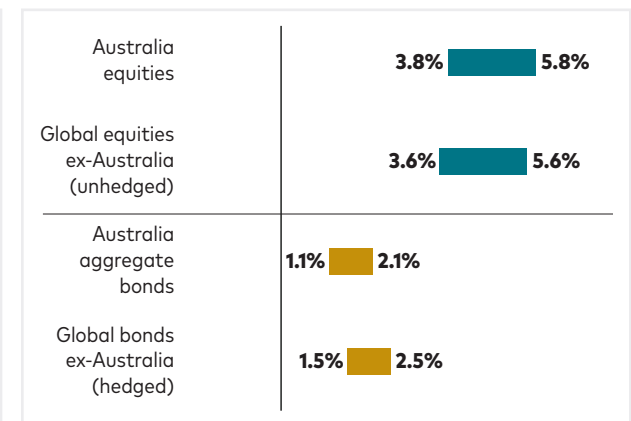
## British pound



## Chinese yuan



## Australian dollar



**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. Distribution of return outcomes from the VCMM are derived from 10,000 simulations for each modeled asset class. Simulations are as of May 31, 2021. 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 1-point range around the 50th percentile of the distribution of return outcomes for equities and a 0.5-point range around the 50th percentile for fixed income.

**Source:** Vanguard.

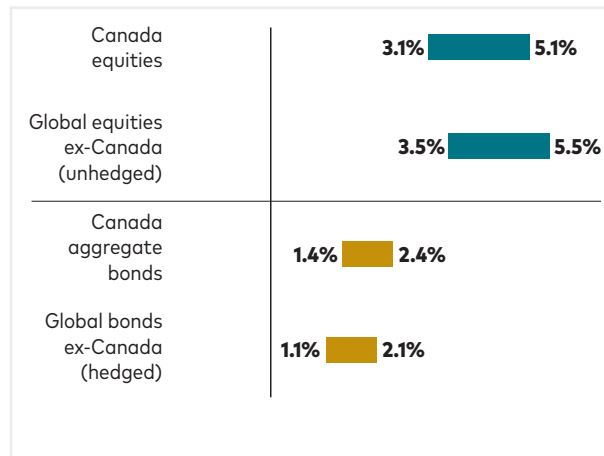
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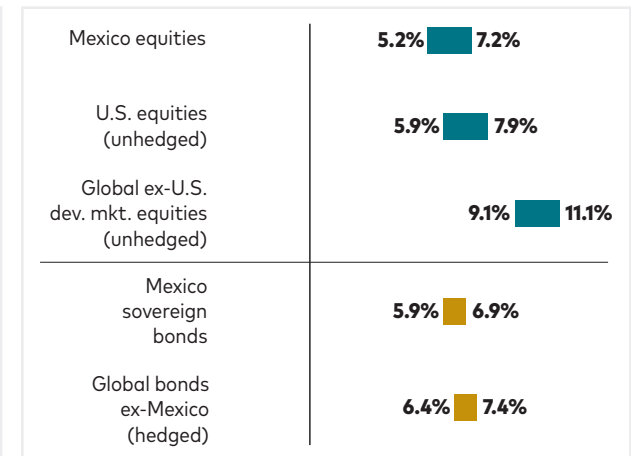
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## Canadian dollar



## Mexican peso



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**Source:** Vanguard.



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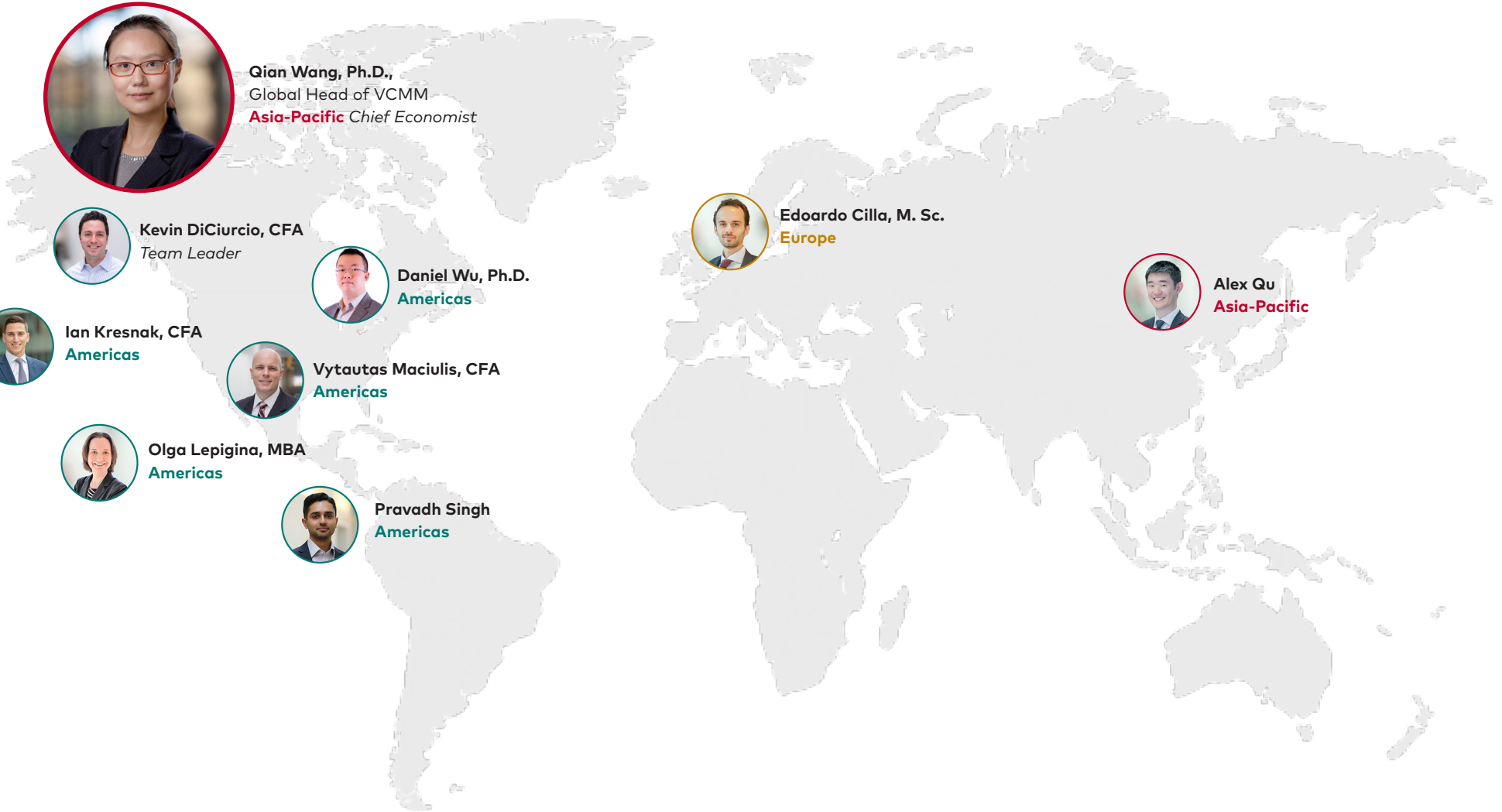
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## Indexes used in Vanguard Capital Markets Model simulations

The long-term returns of our hypothetical portfolios are based on data for the appropriate market indexes through May 31, 2021. 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 Barclays U.S. Aggregate Bond Index.

**Global ex-U.S. bonds:** Bloomberg Barclays 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 Barclays Canadian Issues 300MM Index.

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

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

**Global ex-UK equities:** S&P 90 Index from January 1926 to 3 March 1957; S&P 500 Index from 4 March 1957 to 1969; MSCI World ex UK from 1970 to 1987; MSCI AC World ex UK from 1988 onwards.

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

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

**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 Barclays Euro-Aggregate Bond Index.

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

**Australian equities:** MSCI Australia Index.

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

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

**Global ex-Australia bonds:** Bloomberg Barclays 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 Barclays Global Aggregate Index

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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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