Vanguard®

Asset allocation report

September quarter 2021

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Inflation beyond the current spike

Markets weren't too surprised to see a run-up in inflation in much of the world in 2021, aware that prices in a reopening economy would be compared with the low year-earlier prices that prevailed during COVID-19 lockdowns. But readings have been hotter than forecast as supply in a range of goods and even in labor has failed to keep up with resurgent demand.

With accommodative monetary and fiscal policies expected to remain in place for some time, could inflation at rates we've seen in 2021 persist in 2022 and beyond?

It's not our base case. Our proprietary inflation forecast model, described in the recently published Vanguard research paper The Inflation Machine: How It Works and Where It's Going, tells us that the U.S. core Consumer Price Index (CPI) will likely cool from recent readings above 4% toward the U.S. Federal Reserve's 2% average inflation target by mid-2022. Our model then foresees a further uptick toward the end of 2022, assuming fiscal stimulus of about $500 billion is enacted this year.

"Fiscal stimulus, though, is a wild card," said Asawari Sathe, a Vanguard U.S. economist and the paper's lead author. "If we see $1 trillion or more in additional, unfunded fiscal spending enacted this year, core inflation could pick up more sustainably toward the end of 2022 or in 2023. This risk of persistently higher inflation is not fully anticipated by either the financial markets or the Federal Reserve forecasts and could lead the Fed to start raising short-term rates sooner than its present timetable of 2023."

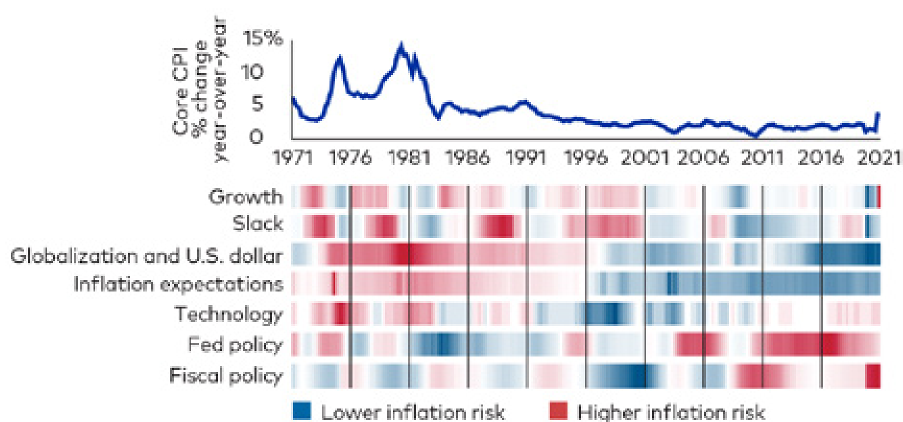
What's been driving U.S. inflation higher

The *Vanguard Economic and Market Outlook for 2021: Approaching the Dawn* envisioned a possible "inflation scare" as spare capacity was used up and recovery from the pandemic continued. Ensuing supply constraints affected a wide range of goods, however, contributing to a greater-than-expected surge in inflation. (The surge in 2021 is reflected in the first panel of **Figure 1** below.)

Nevertheless, most economists (including ours) believe that recent inflation readings that have more than doubled the Fed's 2% target will prove transitory as supply issues are resolved and year-earlier numbers fade out of comparisons.

The second panel of **Figure 1**, which shows key inflation drivers pointing in different directions, supports that view. Although solid economic growth and accommodative Fed and government fiscal policies would argue for inflation staying persistently high, significant labor market slack and stable measures of inflation expectations—what businesses and consumers expect to pay in the future—suggest that price increases may ease.

Figure 1. The key drivers of U.S. inflation are sending mixed signals



Notes: Data cover the 50 years ended June 1, 2021.

Sources: U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, and Federal Reserve, using information from Refinitiv.

The challenges in forecasting inflation
Inflation forecasting is a complex endeavor that must consider broad inputs whose relative importance can vary over time. They include:

- Cyclical factors such as growth and labor market slack.
- Secular forces such as technology and globalisation, which tend to keep costs—and, by extension, prices—from rising.
- Fiscal and monetary policy.

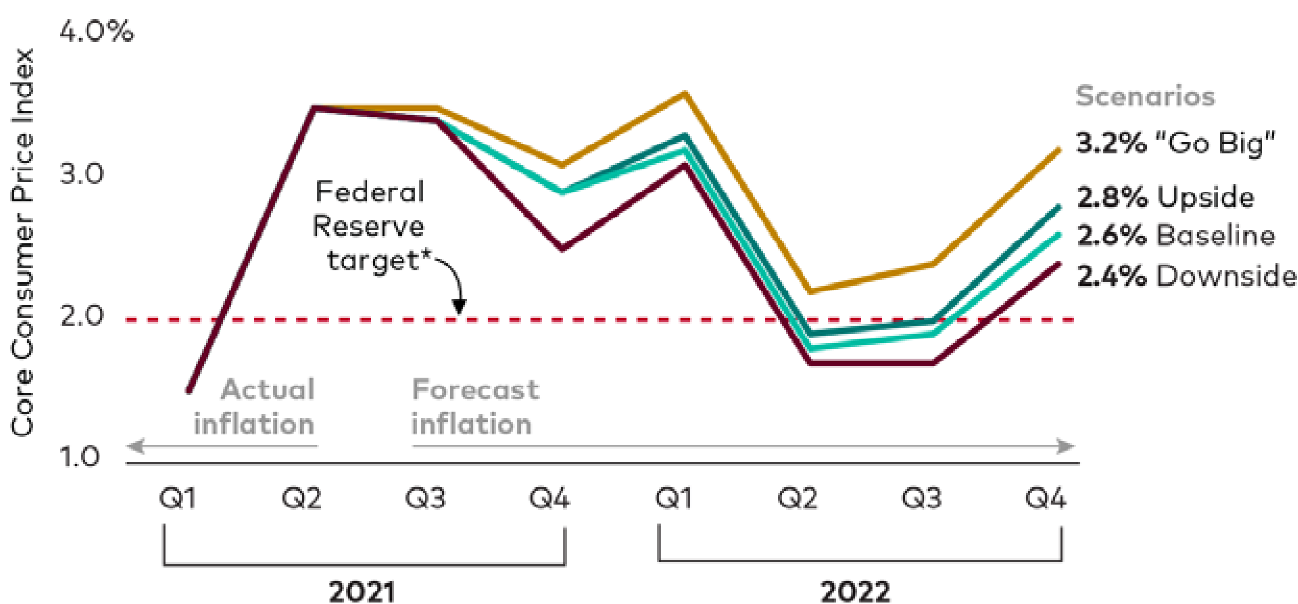
With significant further stimulus being considered in Washington, fiscal policy is a particularly important factor right now in forecasting inflation.

Our model's outlook for inflation: Higher than before the pandemic, but not runaway
We used our model to identify the potential impact of rising fiscal spending on inflation through the end of 2022. For that purpose, we have assumed that both the policy decisions and inflation expectation "shocks" originate in the third quarter of 2021.

"The output of all the scenarios we looked at suggest that risks are toward core inflation running higher than its pre-pandemic level of 2%, but that runaway inflation is not in the cards," said Maximilian Wieland, a Vanguard investment strategist and co-author of the research paper.

In our baseline scenario, shown in **Figure 2**, we assume an additional $500 billion in fiscal stimulus and an increase of 20 basis points (bps) in inflation expectations. (A basis point is one-hundredth of a percentage point.) Our model suggests that would push core CPI to a year-over-year rate of 2.9% by the end of 2021. Continued stimulus and moderately greater inflation expectations would further push inflation—offset by stronger base effects

Figure 2. Scenarios for inflation based on potential fiscal stimulus



Notes: The scenario data for the core CPI are Vanguard's inflation machine model estimates for alternative fiscal stimulus spending. The downside scenario factors in $1.9 trillion in enacted fiscal stimulus and anticipates a 5 bps increase in the break-even inflation rate. The baseline scenario factors in $1.9 trillion in enacted fiscal stimulus and anticipates $500 billion in additional fiscal stimulus and a 20 bps increase in break-even inflation. The upside scenario factors in $1.9 trillion in enacted fiscal stimulus and anticipates $1.5 trillion in additional fiscal stimulus and a 25 bps increase in break-even inflation. The "Go Big" scenario factors in $1.9 trillion in enacted fiscal stimulus and anticipates $3 trillion in additional fiscal stimulus, a 50 bps increase in break-even inflation, and growth upside. All scenarios assume no change in the Fed's monetary policy through 2022. We use the correlation between break-even inflation and long-term inflation expectations to adjust impacts in the model. * The Fed's 2% average inflation target is based on the core U.S. Personal Consumption Expenditures Price Index, which considers a more comprehensive array of goods and services than CPI does and can reweight expenditures as people substitute some goods and services for others.

Sources: Estimates as of September 1, 2021, using data from Thomson Reuters Datastream, U.S. Bureau of Economic Analysis, and Moody's Data Buffet, based on Vanguard's inflation machine model.

(year-over-year comparisons with higher 2021 prices)—to 2.6% by year-end 2022.

In our downside scenario, we envision no additional stimulus and a minimal rise in inflation expectations; in our upside scenario, we bump up our estimate for additional fiscal stimulus to about $1.5 trillion and for inflation expectations by 25 bps; and our "Go Big" scenario factors in substantial net additional fiscal stimulus (about $3 trillion spent over a year) and a marked jump (about 50 bps) in inflation expectations.

In all our scenarios, the second and third quarters of 2022 suggest some weakness from baseline effects. But none of the scenarios results in the kind of runaway, 1970s-style inflation that some fear.

Key takeaways for investors

Although persistently higher inflation is not our base case, our model suggests that the consensus is too sanguine about inflation settling into its pre-pandemic trend of 2% in 2022.

If inflation readings continue to come in higher than expected, it could lead the Fed to move up its schedule for raising short-term interest rates. That might be good news for investors, as today's low rates constrain longer-term portfolio returns.

Increased uncertainty about inflation highlights the importance of building a globally diversified portfolio, which gives investors exposure to regions with differing inflation environments.

Quarter in review

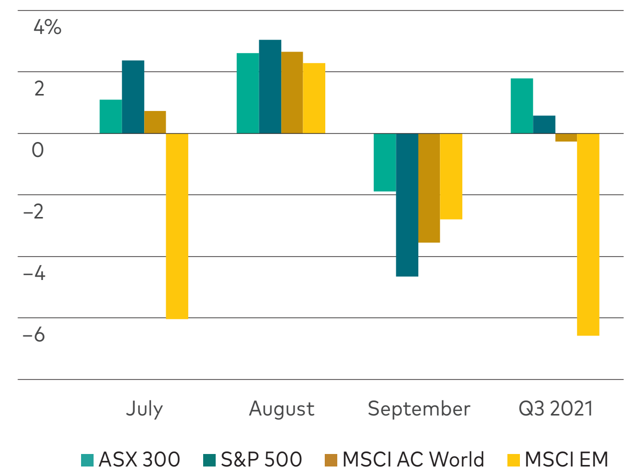
The third quarter saw the broad market finish largely flat as investors weighed rising vaccination rates and signs of economic resilience against sporadic outbreaks and a gradual tapering of policy support.

For developed markets, an early-quarter rally through August was supported by strong earnings and accommodative policy expectations. However, this quickly reversed course in September as stubborn inflation drew a more hawkish tone from the U.S. Federal Reserve, and a bout of policy uncertainty from Washington over a potential U.S. debt default stoked volatility (**Figure 3**). The final weeks of the quarter saw a late rotation away from interest rate sensitive growth stocks and into cyclical sectors such as energy and financials, narrowing the performance gap between value and growth from 4% to 1.5% for the quarter.

Meanwhile, emerging markets were weighed down by the underperformance of Chinese equities. Uncertainty over the Chinese administration's regulatory actions in the services and property sectors continued to dampen investor appetite, causing volatility to briefly spill into broader international indexes. Falling commodity prices and a relatively dovish Reserve Bank of Australia (RBA) saw the Australian dollar provide a buffer to international woes, seeing a fall in global indexes of 0.3% in local currency terms, ultimately improving to a gain of 2.9% for AUD investors (**Figure 4**).

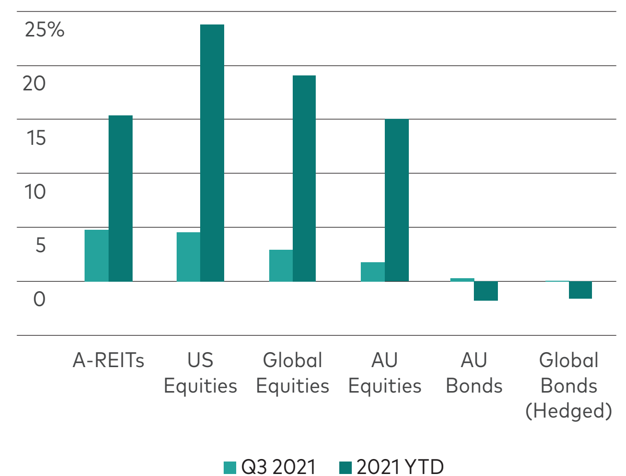
On the fixed income front, returns were positive but nonetheless modest as Treasury yields ended the quarter at similar levels to where they started. Despite relatively well-anchored breakeven inflation, real yields declined early in the quarter as markets bought in to more dovish central bank forward guidance. Yields retraced in the latter half of the quarter as inflation concerns prompted an acceleration of the timeline for tightening in the U.S. and euro area.

Figure 3. Mixed performance for global indices



Notes: Returns are cumulative total returns denominated in local currency.
Source: FactSet, Refinitiv

Figure 4. AUD returns broadly advanced

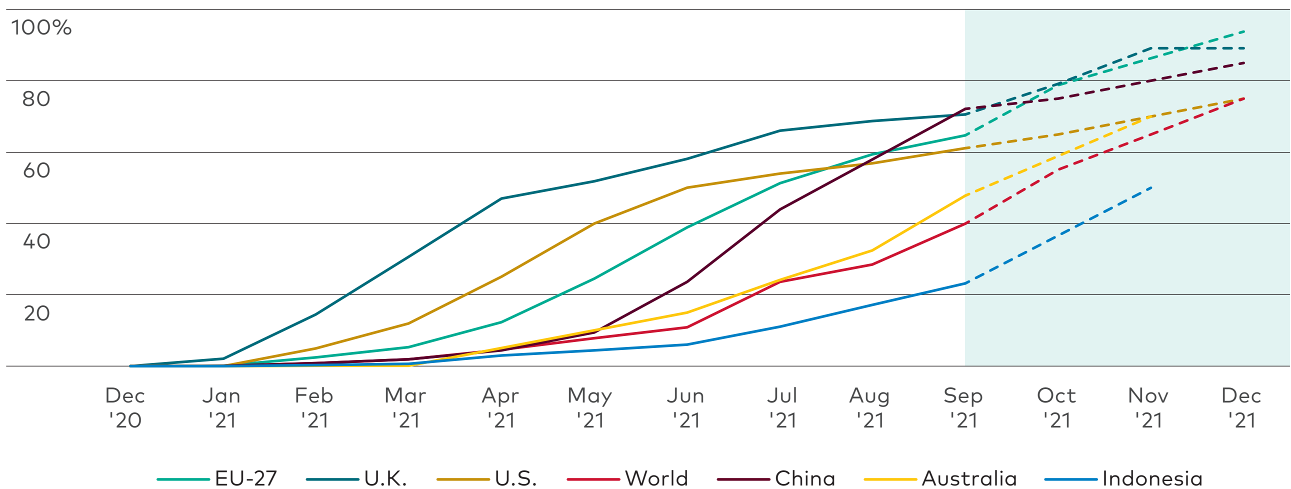


Notes: Returns are cumulative total returns denominated in AUD.
Source: FactSet, Refinitiv

Economic outlook

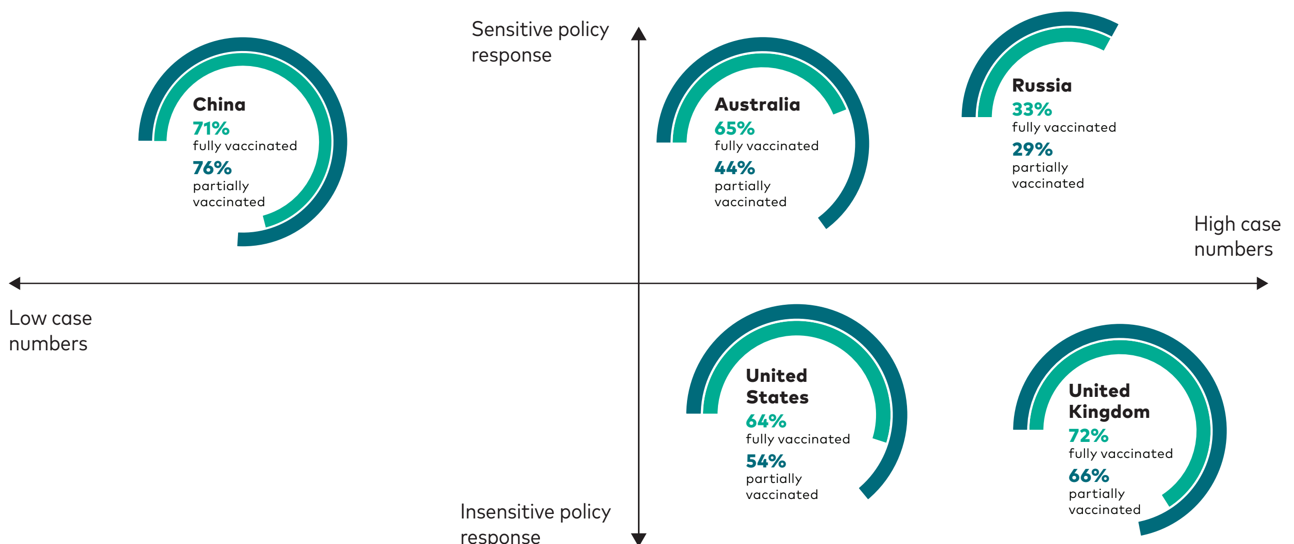
Vaccination progress has ramped up significantly around the world. Around 45% of the world's population has received at least one dose as of Q3, close to double that of the rate seen at the end of June. A closer look at the data, however, suggests that vaccination rates still differ widely across regions, with developed markets far outpacing emerging markets (**Figure 5**). The unevenness in vaccination outcomes has led to different health policy responses around the world. Countries experiencing high vaccination rates, such as the United States and United Kingdom, proving to be less sensitive to rising cases than countries with lower vaccination rates like Australia (**Figure 6**). The exception to this rule is China, which continues to pursue a zero-COVID strategy despite close to 70% of its population having received at least one dose of the vaccine.

Figure 5. Vaccination progress differ across regions



Source: Vanguard, using data from OurWorldinData. Data as of September 2021.

Figure 6. Policy response to Delta variant depends on vaccination progress

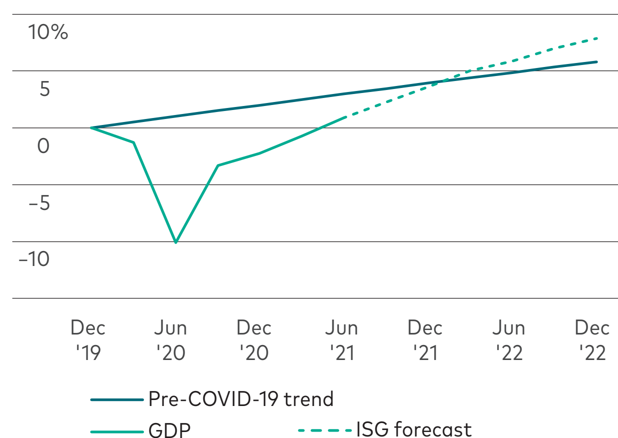


Source: Vanguard, using data from OurWorldinData. Data as at 30 September 2021.

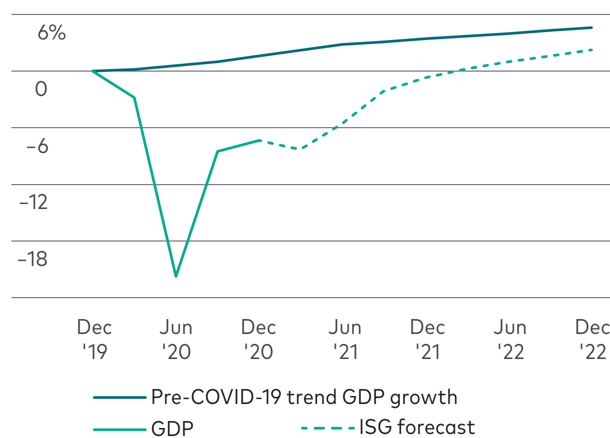
Differences in health policy responses are likely to produce a bifurcation of economic results, with the United States projected to return to its pre-pandemic trend levels by Q1 2022, compared with China and Australia, which will return to trend in the second half of 2022 (**Figure 7**). For Australia, we expect the economy to undergo a contraction in Q3 after declining by 7% in Q2 of 2020 as a result of the extended lockdown restrictions in New South Wales and Victoria. Nonetheless, the gradual move away from a Zero-COVID strategy in exchange for a higher rate of vaccination suggests that conditions are in place for a stronger rebound into 2022, with the national vaccination target of 70% likely to be met by Q4 2021. This could pave the way for improved mobility and add more resilience to the economic reopening going forward. As a result, we have upgraded our 2022 growth forecast from 3.5% to 4% to reflect a more sustainable social easing. Notably, there remains downside risks to our forecasts, especially if the vaccine rollout flattens and vaccine hesitancy rates increase, as is currently observed in Queensland.

Figure 7. An uneven global recovery

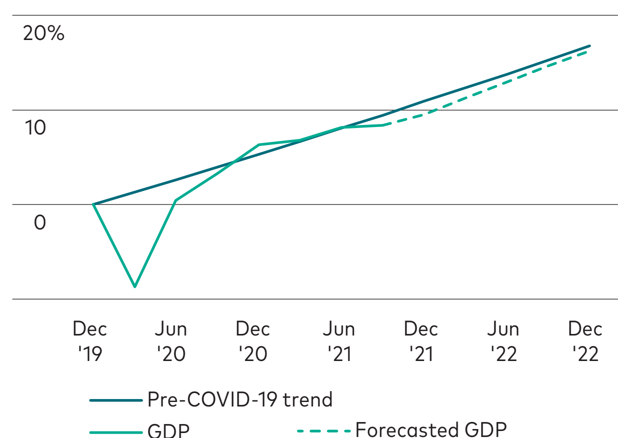
United States GDP



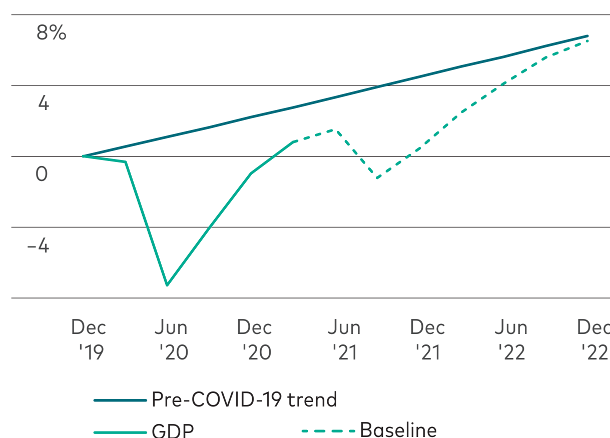
United Kingdom GDP



China GDP



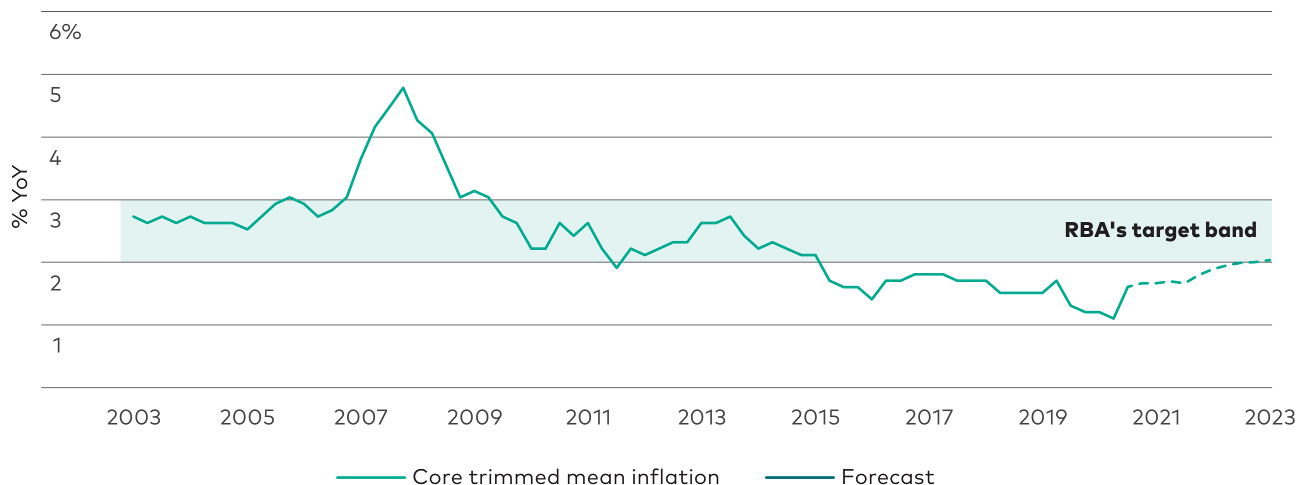
Australia GDP



Notes: For the U.S. chart, the y-axis represents the level impact from the baseline, which is December 2019. **Sources:** For U.S. chart: Vanguard, as of September 30, 2021. For China chart: Vanguard calculations, based on data from Revinitiv as of September 30, 2021. For U.K. chart: Vanguard calculations, based on data from the Office of National Statistics as of September 30, 2021. For Australia chart: Vanguard calculations, based on data from Refinitiv as of September 30, 2021.

From the RBA's perspective, the near-term outlook has clearly deteriorated relative to its August baseline forecasts. The bank's now explicit intention to delay lift-off until realised inflation is established around the middle of the 2–3% target band also suggests that rate hikes are likely off the table in 2022. As **Figure 8** illustrates, we do not expect core inflation in Australia to return to the lower end of the 2–3% band until 2023 given the delayed economic recovery as well as ongoing competitive cost pressures in the labour market, which are depressing wage growth. Against this backdrop, we expect the RBA to keep the cash rate at 0.1% until at least 2023 and maintain a tapered form of quantitative easing until Q3 next year.

Figure 8. Core trimmed mean inflation set to only reach 2% in late 2023



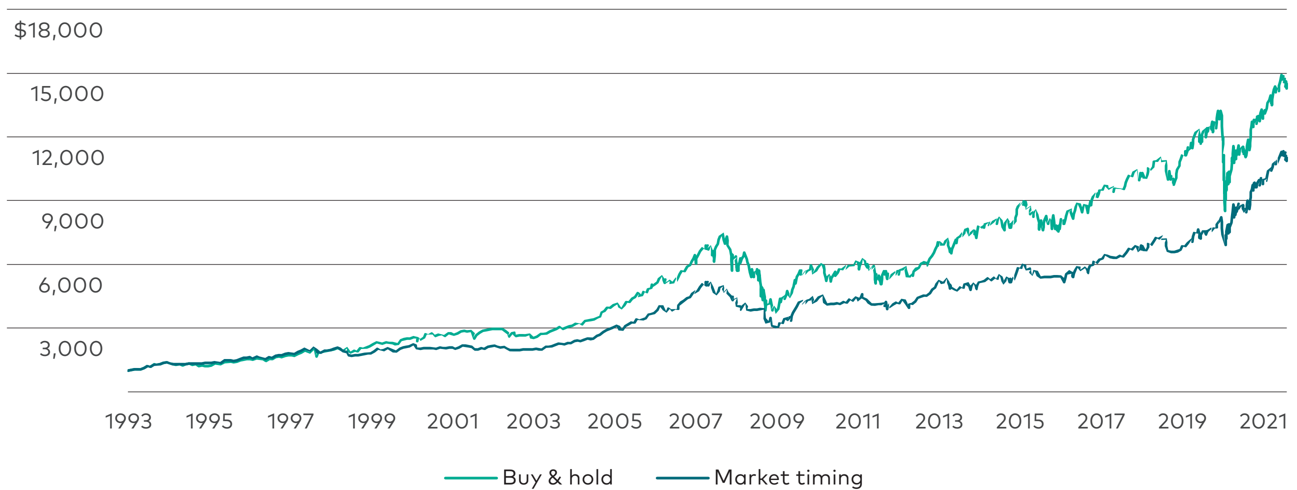
Source: Vanguard, using data from Refinitiv.

Market outlook

The September quarter saw broad market valuations and yields end relatively unchanged, as an intra-quarter equity rally supported by a strong earnings season and easy policy expectations reversed course in the face of concerns over corporate profit sustainability and more persistent inflation prints. Although downside risks remain in the navigation of the pandemic, signs of economic resilience persist and point to a subdued but constructive outlook for risk assets. Expectations for global equities remain positive but modest. Forecast returns for equity are sitting in the range of 3.4% to 5.4% annualised over the next decade, compared with forecast fixed income returns in the range of 1.4% to 2.4% (**Figure 11**).

While markets lost momentum during the quarter, conditions have been favourable throughout 2021. September was the first negative month for Australian shares following 11 consecutive months of gains, including a fresh all-time high in August. As markets regroup, it is timely to remind investors of the need to maintain discipline in sticking to their investment plan. Attempting to time the market or make impulsive decisions can often come at the detriment of long-term objectives, as shown below (**Figure 9**). Investors are well advised to stay calm and focus on the factors within their control: having a well-planned and diversified strategy that is aligned to their specific goals and the discipline and resolve to stay the course, even during the most volatile times.

Figure 9. Market timing doesn't pay: Growth of $1,000 using a 10% sell and 10% buy strategy



Source: Vanguard calculations using data from Factset.

Figure 10. Even for a range of market timing strategies, in the long run buying and holding has delivered superior returns

STRATEGY		ANNUALISED RETURNS		
SELLING AFTER A % FALL FROM THE PEAK	BUYING AFTER A % RISE FROM THE BOTTOM	BUY & HOLD	MARKET TIMING	BUY & HOLD OUTPERFORMS BY
10%	**10%**	9.86%	9.01%	0.85%
5%	**5%**	9.86%	3.43%	6.43%
5%	**10%**	9.86%	5.22%	4.64%
10%	**5%**	9.86%	8.39%	1.47%

Notes: The data shows a comparison of the performance of a buy and hold strategy and market timing strategy. The time period is 1 March 1993 to 30 September 2021. Australian equities are represented by the S&P/ASX 300 Total Return Index and cash by the Bloomberg Ausbond Bank Bill Index. Trading costs are set at 0.5% of transaction amounts.

Source: Vanguard calculations using data from Factset

Long-term market outlook

The chart below shows the Vanguard Capital Markets Model (VCMM) return forecasts over the next 10 years for a range of asset classes and Vanguard's Diversified Funds.

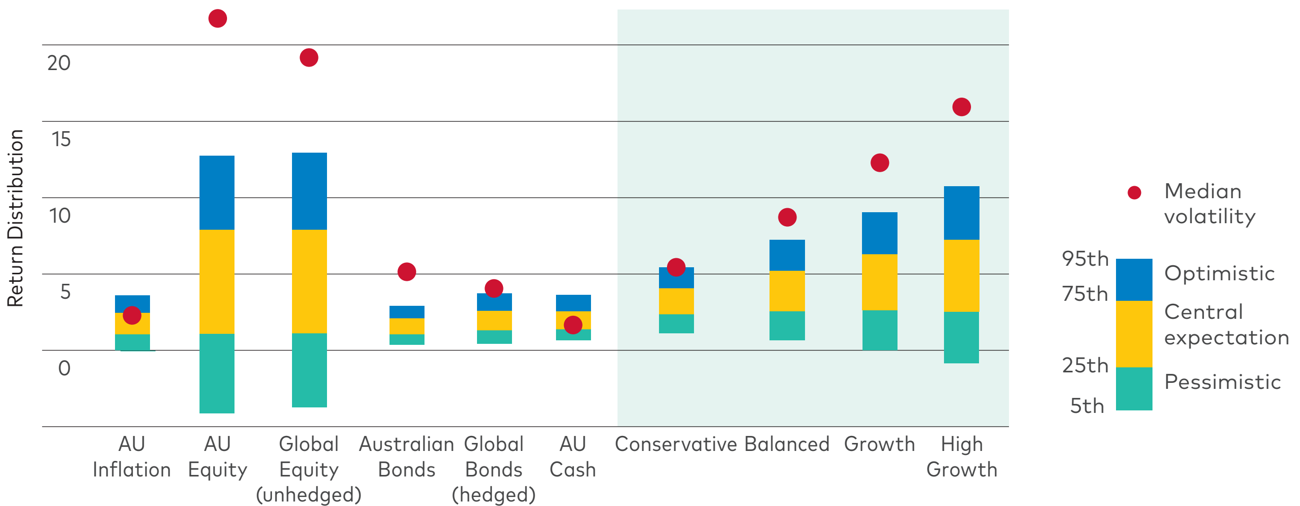
It shows two concepts: the range of annualised 10-year nominal returns and the median volatility experienced.

The bars show the range of return outcomes over a 10-year period. The central return expectations for the asset class or portfolio are shown in the middle of the bars. Observations in the optimistic or pessimistic regions should not come as a surprise though; goals and portfolios should always be positioned with these possibilities in mind.

The red circles show the median volatility forecasts. This represents the volatility of the asset classes that can be expected over the 10-year period. The chart shows that equities are expected to produce a higher return over a 10-year period than bonds, however the trade-off is that an investor can expect a more volatile experience and greater uncertainty over the end point, which could be a much wider range of outcomes.

An important point to remember is that asset returns are not perfectly correlated, which means that if an Australian equity return over 10 years is in the optimistic range, this does not necessarily mean that Australian bond returns will also be in the optimistic range. Combining assets can therefore present strong diversification benefits.

Figure 11a. Projected 10-year nominal return outlook



Source: Vanguard, September 2021 using 30 June 2021 VCMM Simulation.

Figure 11b. Projected 10-year nominal return outlook

	RETURN PERCENTILE					
	5TH	25TH	MEDIAN	75TH	95TH	MEDIAN VOL.
Australian Inflation	–0.1%	1.0%	1.8%	2.5%	3.6%	2.2%
Australian Equity	–4.1%	1.1%	4.6%	7.9%	12.7%	21.7%
Global Equity (unhedged)	–3.7%	1.1%	4.4%	7.9%	12.9%	19.2%
Australian Bonds	0.4%	1.1%	1.6%	2.1%	2.9%	5.1%
Global Agg Bonds (hedged)	0.4%	1.3%	1.9%	2.6%	3.8%	4.0%
Australian Cash	0.7%	1.4%	1.9%	2.6%	3.6%	1.6%
Conservative	1.1%	2.3%	3.2%	4.1%	5.4%	5.4%
Balanced	0.7%	2.5%	3.9%	5.2%	7.2%	8.7%
Growth	0.0%	2.6%	4.4%	6.3%	9.0%	12.3%
High Growth	–0.8%	2.5%	4.9%	7.2%	10.8%	15.9%

Source: Vanguard, September 2021 using 30 June 2021 VCMM Simulation.

The next two charts show the trade-off between targeting a CPI+ return target and the risk of a loss along the way.

Taking more risk means that an investor increases the probability that they will achieve their target over 10 years.

Highlighting the importance of managing expectations, it also means there is the increased probability of experiencing a negative return or a large annual loss in at least one year over the 10 year period.

Figure 12a. Probability of achieving real return

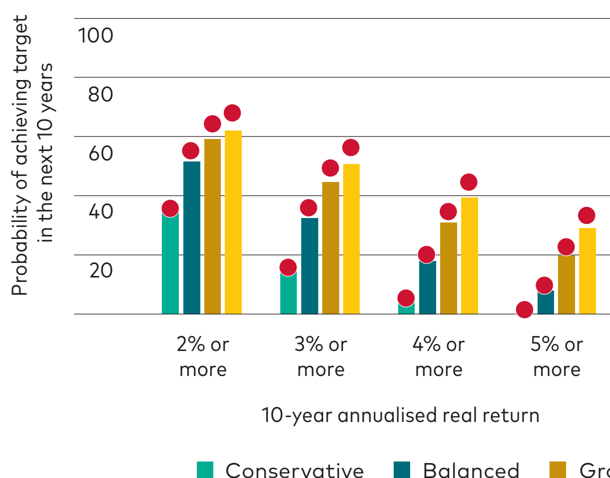
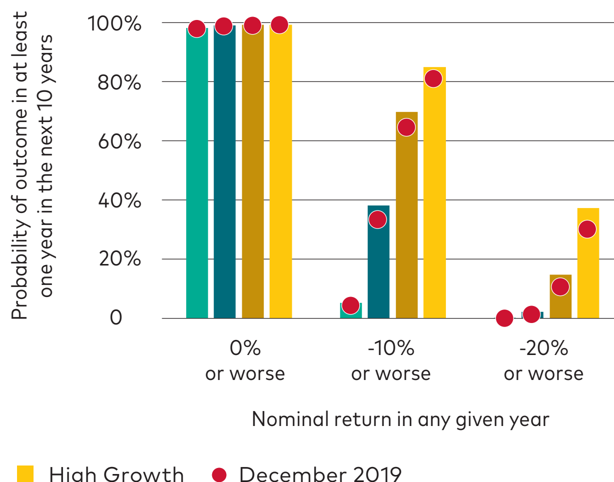


Figure 12b. Downside risks



Conservative Balanced Growth High Growth December 2019

Notes: The projections or other information generated by the 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. Distribution of return outcomes from the VCMM are derived from 10,000 simulations for each modelled asset class in AUD. Results from the model may vary with each use and over time.

Source: Vanguard, September 2021 using 30 June 2021 and 31 December 2019 VCMM Simulations.

About Vanguard's Investment Strategy Group
Vanguard's Investment Strategy Group is a global team of economists and investment and portfolio construction strategists with a wide variety of specialties, ranging from monetary policy to index construction to market trends. Their research serves as the basis for Vanguard's investment principles and methodology, guides Vanguard's global leadership and influences decisions about our investment offerings and portfolio construction.

Research-based investment approach
As part of Vanguard's broader Investment Management Group, ISG plays an essential role in developing Vanguard's investment methodology, which is carried through in the implicit and explicit advice solutions available to our clients. Our global chief economist and head of ISG reports directly to Vanguard's global chief investment officer. We work closely with Vanguard's in-house portfolio managers. Notably, our global chief economist is integrated into Vanguard Fixed Income Group through our portfolio management process. Through that process, ISG advises our fixed income investment managers on the macroeconomic outlook, expected monetary policy and other factors to support day-to-day portfolio management. Vanguard's investors around the world benefit from our collaborative approach to investment management, research and thought leadership.

Vanguard Capital Markets Model
The Vanguard Capital Markets Model® (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 VCMM is a proprietary financial simulator developed and maintained by Vanguard's Investment Strategy Group. It is a long-term tool that takes into account current macroeconomic conditions and equity and bond valuations to forecast distributions of future returns for a wide range of asset classes and portfolios. 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 diversification benefits of various asset classes.

Asset allocation

Vanguard's approach to asset allocation is to provide long-term returns that match investors' desired level of risk. The broad allocations to defensive (fixed income) and growth (equities) are the main factors influencing the risk-return profiles of our asset allocation strategies.

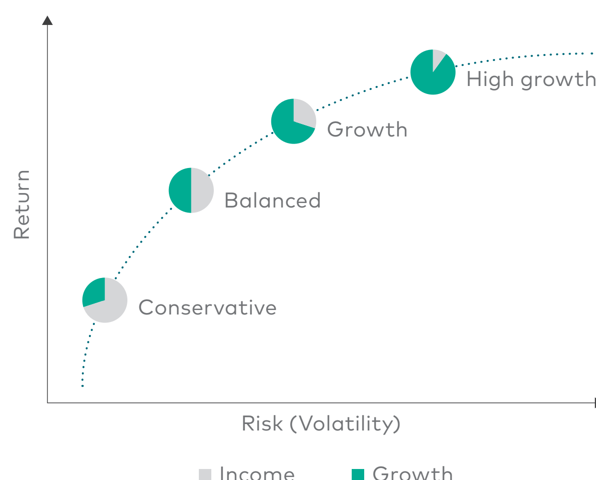
Our asset allocation approach is designed with a medium to long-term investor in mind (a time horizon of at least five years), reflecting the reality that the majority of Australian investors need to accept some market risk in order to reach their investment goals.

Why diversification matters
We believe that a successful investment strategy starts with an asset allocation suitable for its objective. In practice, diversification is a rigorously tested application of common sense: markets will often behave differently from each other—sometimes marginally, sometimes greatly—at any given time.

Owning a portfolio with at least some exposure to many or all key market components ensures the investor of some participation in stronger areas while also mitigating the impact of weaker areas.

Many investors lack the time, interest, or skills, and can become overwhelmed by the choice of investment options, asset classes, and other implementation hurdles such as choosing between index and active management. Investors also face behavioural risks in adhering to their investment plan over time due to the temptation of performance chasing or overreacting to market events.

Vanguard Diversified Funds provide professionally managed portfolio solutions designed to help medium to long-term investors achieve their goals and overcome these challenges.



Understanding Vanguard's SAA process
For multi-asset funds, such as Vanguard Australia's Diversified Funds, Vanguard's Investment Strategy Group (ISG) conducts an annual review of the strategic asset allocation (SAA) of the funds. The team considers new asset classes, currency exposure, home bias, regulatory and tax impact, investment costs, investor behaviours, and implementation factors amongst others. The ISG team presents a recommendation to maintain or change the SAA to Vanguard's global Strategic Asset Allocation Committee (SAAC), which oversees all of Vanguard's multi-asset funds. The SAAC is comprised of senior leaders from the Investment Management Group and Vanguard's advice businesses and is co-chaired by Vanguard's global chief economist. Upon approval of a change to the SAA, Vanguard assesses the feasibility, tax impact, and costs of the recommended changes and presents to the Board of Vanguard Australia for approval prior to implementing the changes.

The shaded boxes display the total return percentile rank of the Vanguard fund within its peer group*, as shown by the colour code, with the number reflecting the Vanguard fund return in excess of the peer group median return (%). The numbers below the shaded boxes indicate the number of funds in the peer groups across each time period.

Figure 13. Vanguard Diversified Funds peer group comparison as at 30 September 2021

VANGUARD FUND ASSET WEIGHTED PEER GROUP MER (% P.A.)	3 MTHS	6 MTHS	1 YR	3 YRS	5 YRS	7 YRS	10 YRS
Conservative	-0.20	-0.05	-0.83	1.38	0.97	1.25	1.09
0.66	49	49	49	44	42	39	38
Balanced	-0.14	0.32	-1.57	1.46	1.03	1.29	1.15
0.80	57	57	55	51	45	40	37
Growth	-0.20	0.23	-0.49	1.54	1.29	1.40	1.30
0.79	75	75	74	68	65	60	56
High Growth	0.02	0.61	0.21	1.76	1.28	1.42	1.15
0.84	54	54	53	50	47	42	41

PEER GROUP PERCENTILE
Top 5%
1st quartile
2nd quartile
3rd quartile
4th quartile

Sources: Vanguard, September 2021. Calculations using data from Morningstar Inc. Past performance is not an indication of future performance. All returns are net of fees and assume reinvestment of income distributions. Returns greater than 12 months are annualised. There has been no adjustment for survivorship bias.

* The peer groups were constructed by first sourcing a universe of funds from Morningstar having the same category as the Vanguard Funds, but excluding Vanguard strategies. An automated filter was then applied to these original peer groups with the aim of removing identified duplicate investment strategies and retain unique strategies.

Figure 14. Vanguard Diversified Funds return contributions for the quarter as at 30 September 2021

FUND	3 MONTH GROSS RETURN (%)	3 MONTH RETURN CONTRIBUTION (%) VCIF	VBIF	VGIF	VHIF
Vanguard Cash Reserve Fund	0.00	0.0	0.0	0.0	0.0
Vanguard Australian Fixed Interest Index Fund	0.32	0.1	0.0	0.0	0.0
Vanguard Australian Shares Index Fund	1.91	0.2	0.4	0.5	0.7
Vanguard International Shares Index Fund	4.03	0.4	0.6	0.8	1.1
Vanguard International Small Companies Index Fund	2.43	0.0	0.1	0.1	0.2
Vanguard Emerging Markets Shares Index Fund	-4.67	-0.1	-0.1	-0.2	-0.2
Vanguard International Shares Index Fund (Hedged) – AU Class	0.62	0.0	0.1	0.1	0.1
Vanguard Global Aggregate Bond Index Fund (Hedged)	-0.05	0.0	0.0	0.0	0.0
Total Return Contribution (%)		**0.6**	**1.0**	**1.4**	**1.8**

* Figures in the return contribution table are calculated as the product of the monthly gross return and the corresponding actual asset allocation.

Testing the pace of China's economic growth

Qian Wang, Ph.D.
Vanguard Asia-Pacific chief economist

China's economy has grown since the 1990s from being a tenth of the size of the U.S. economy to close to two-thirds the size[1]. This raises some natural questions, including, "When might China become the world's largest economy?" and "What are the potential portfolio implications of such a new economic order?"

Vanguard's global economics team set out recently to answer these questions and others in the greater context of the world's productive capacity. We collected the China-specific findings based on our analysis of nearly 150 countries in A Tale of Two Paths: The Future of China. The paper is part of our Megatrends series, which tries to make sense of how long-term shifts in the global economic landscape are likely to affect the financial services industry and broader society.

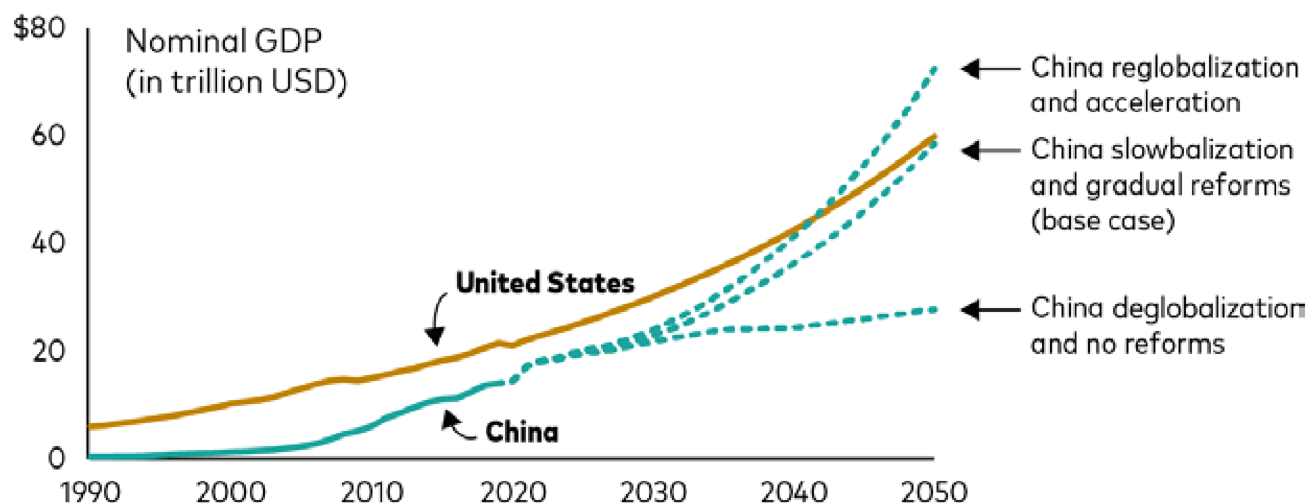
We found that China's future as the world's largest economy is not a foregone conclusion. Whether China manages to tip the balance of economic power or remains stuck in what is known as the middle-income trap will hinge primarily on its ability to navigate rising international and domestic matters. Continued growth for China could mean portfolio diversification benefits for global investors.

How China could become the world's largest economy

Our analysis establishes our base case that China's economy will experience lower but more sustainable growth over the long term as it shifts toward domestic consumption and services, enabling it to outstrip that of the United States sometime beyond 2050.

That scenario factors in headwinds from slowing global trade growth, a trend we looked

Figure 15. How China could become the world's largest economy



Sources: Vanguard, using data from the World Bank, as of July 2021.

1 As measured by gross domestic product in U.S. dollars.

at recently in another paper in our Megatrends series, The Deglobalisation Myth(s). It also anticipates a gradual pace of improvements in education quality, domestic innovation, and privatisation reforms, and capital flowing more symmetrically with other nations as policymakers balance a desire for growth rate with medium-term considerations of growth quality and financial stability. Growth could be even faster should reforms and globalization accelerate, allowing China to become the world's largest economy by 2040.

China's potential economic trajectories are myriad

The pace and extent of progress in these areas, coupled with an evolving external environment, create multiple potential long-term economic trajectories for China. Another potential path is that reforms stall and cross-border trade and investment slow sharply, resulting in China's falling into the middle-income trap—stagnation resulting from a lack of much-needed reform—and failing to ever outstrip the size of the U.S. economy.

China's transition from the world's manufacturer to an innovative, consumer-driven economy would have important, uneven spillover effects on global growth. Neighboring countries such as Japan and South Korea would likely benefit from the rise of a Chinese consumer interested in tourism, luxury goods, and education. On the other hand, raw commodity exporters such as Brazil would be hard-hit by a slowdown in China's old-economy industries such as steel production and manufacturing.

Our outlook for China depends on the path it chooses

Reforms to China's capital markets would likely also have implications for globally diversified investors. China currently has the second-largest equity and bond markets in the world, but a combination of GDP growth, international capital openness, and domestic economic reforms could lead to much greater market capitalisations. For a globally diversified investor, that could translate into an allocation to China roughly doubling from 7% to 14% in an equity portfolio and 7% to 12% in a bond portfolio by 2035. Allocations to China come with a potential diversification benefit given its relatively low correlation with other markets.

Whether China avoids the middle-income trap depends on the degree to which it undertakes domestic reforms in two interrelated areas: alleviating structural risks related to financial and labor markets and encouraging technological innovation. Its chosen path will define one of the key global economic narratives of a generation.

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