

# 2022 economy and markets: 4 things to know

The Vanguard Economic and Market Outlook for 2022: Striking a Better Balance, is scheduled to be released in the United States on Monday, December 13.

We offer perspective here on four of its key topics: the overvaluation of U.S. stocks, the market's likely underestimation of how high the U.S. Federal Reserve may raise its key interest rate target, why we don't foresee global financial-market contagion from debt woes in China's property sector, and how the new COVID-19 Omicron variant may affect economies.

## U.S. equities more overvalued than any time since the dot-com bubble

One of the key takeaways from our economic and market outlook shouldn't be a surprise. We've said for a few years that U.S. equity valuations were approaching "stretched" territory. A strong 2021 run-up in prices driven more by valuation expansion than by increased profits makes U.S. equities more overvalued than at any other time since the dot-com bubble.

Our assessment is based on the latest quarterly running of the Vanguard Capital Markets Model® (VCMM), as of September 30, 2021. Our model considers equity valuations relative to their fair value, conditional on interest rates and inflation. Rising interest rates erode the present value of future cash flows, so interest rates and inflation tend to influence equity market valuations—and, by extension, prices.

## U.S. equity valuations are well above their fair-value range



**Notes:** The U.S. fair-value CAPE (cyclically adjusted price/earnings ratio) is based on a statistical model that corrects CAPE measures for the level of inflation expectations and interest rates. The statistical model specification is a three-variable vector error correction, including equity-earnings yields, 10-year trailing inflation, and 10-year U.S. Treasury yields estimated over the period January 1940 to September 2021. The solid blue line extending above the gray band suggests overvaluation of U.S. equities.

**Sources:** Vanguard calculations, as of September 30, 2021, 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, Refinitiv, and Global Financial Data.

**IMPORTANT:** The projections or 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. Distribution of return outcomes from the VCMM are derived from 10,000 simulations for each modeled asset class. Simulations are as of September 30, 2021. Results from the model may vary with each use and over time. For more information, please see important information below.

The illustration makes the extent of the overvaluation clear. The solid blue line representing U.S. equities' cyclically adjusted price/earnings ratio leaps from its fair-value range, represented by the gray band, just as it did for an extended period before the dot-com bubble burst.<sup>1</sup>

Although our model provides a 10-year outlook for equity returns, it doesn't provide insight as to when and how a return to fair value may occur. "There is nothing in valuation levels' relationships with interest rates and inflation that keeps an overvalued market from continuing on to greater highs," said Kevin DiCiurcio, who leads the VCMM research team. "You look at the growing deviation in the late 1990s; that lasted five years before it returned to fair value."

Mr. DiCiurcio and his team are studying the relationship between deviations from fair value and the probability of a correction. They have observed that past reversions from overvaluation to a fair-value range have more so been a function of prices falling than of earnings rising, and that market corrections of 10% or more have occurred with greater frequency when equities were overvalued as opposed to when they were valued fairly.

Investors may find this to be a good time to assess whether recent equity price run-ups have left their asset mix out of proportion to their risk comfort level.

## **Markets may underestimate how high the Fed may raise rates**

Financial markets have focused recently on when developed-market central banks will likely raise interest rates. Just as important is the terminal rate, or how high central banks will ultimately raise rates.

Vanguard believes that markets are underestimating the U.S. Federal Reserve's terminal rate. To understand why, it's useful to understand the terminal rate's relationship with the neutral rate, a long-term equilibrium that roughly depicts monetary policy that is neither accommodative nor restrictive.

"Short-term changes in the economy—headwinds or tailwinds—will push interest rates above or below neutral," said Alexis Gray, a Vanguard senior economist in Australia who studies the neutral rate. "If the economy experiences tailwinds, interest rates might rise above neutral."

Our 2022 economic and market outlook discusses the challenges that policymakers face in removing accommodative measures that were essential to economies' surviving the COVID-19 pandemic but that, left unchecked, could produce too-strong tailwinds.

Market expectations for a terminal rate around 1.5% are more than a percentage point higher than the Fed's current federal funds rate target of 0% to 0.25%. But they're below the Fed's 2.5% neutral-rate estimate and Vanguard's 2% to 3% neutral-rate estimate.

We emphasize that the neutral rate has fallen for several decades, in part a function of global savings and investment relationships. We don't anticipate a return to interest rates higher than those that prevailed before the 2008 global financial crisis, and the journey to the terminal rate could take several years.

"But the risk exists that run-ups in inflation and tight labor markets could cause the Fed to raise rates not only sooner than anticipated, but somewhat more sharply, which could spook the markets," said Andrew Patterson, Vanguard's U.S.-based senior international economist. "This highlights the importance for investors to remain disciplined and focused on their long-term goals."

## China housing defaults unlikely to cause global financial contagion

Defaults among private housing developers in China have risen in 2021, but Vanguard doesn't foresee global financial market contagion from the sector for several reasons.

The default rate for private enterprises in China rose to 7% through the first 10 months of 2021. That's largely attributable to property developers and compares with a 5% default rate at the start of the year. But it's not unfamiliar territory; the default rate for private enterprises reached 8% at the peak of a deleveraging cycle in 2018.<sup>2</sup>

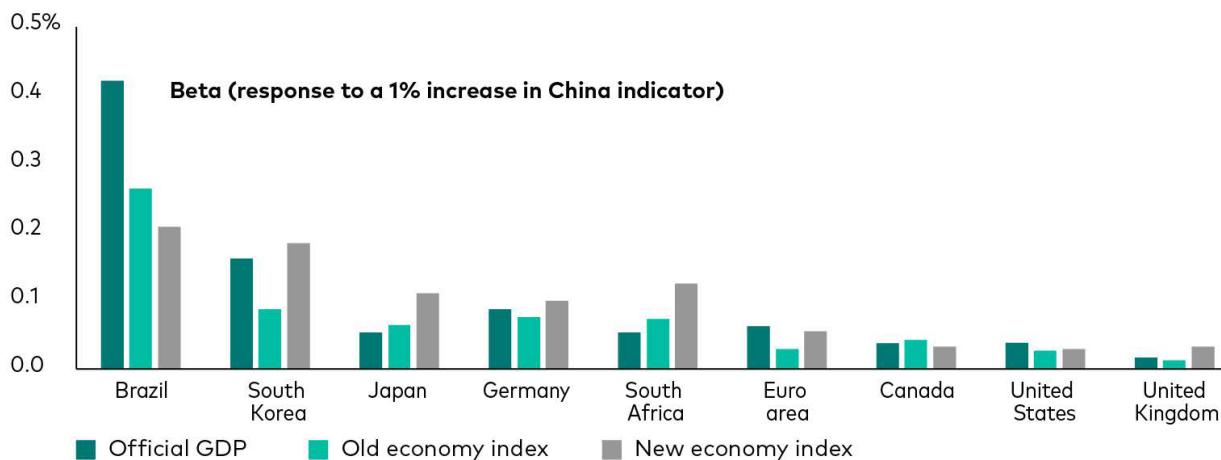
The risk of defaults may grow in 2022 as principal repayments become due for some of the largest private developers. "We think defaults are inevitable, especially as policymakers structurally shift toward a new policy regime that is dependent on more sustainable growth drivers," said Beatrice Yeo, a Melbourne-based Vanguard economist who studies China. "However, we think policymakers will do enough to prevent excessive contagion in the financial system."

The composition of property-related loans may also mitigate contagion concerns. Though such loans accounted for more than a quarter of outstanding bank loan balances through the first half of 2021, the vast majority was in mortgage loans, where credit risk is lower given hefty down-payment requirements, Ms. Yeo said. Nonpublic housing developer loans, which arguably bear greater credit risk than public housing developer loans, accounted for just 4% of total bank loans.

Vanguard believes that any fallout from the property sector is more likely to be realized through slower economic growth, with a reduction in Chinese property investment likely to lessen demand for commodity imports from countries including Australia, Brazil, and Canada.

The takeaway for investors is to remain disciplined and not to read too much into headlines about defaults that may be inevitable.

## Uneven regional impacts from a rebalancing Chinese economy



**Notes:** Vanguard used a vector autoregression model to measure the effects of China's old and new economy growth momentum on respective countries' or regions' growth. The sample period covers from 2006 to 2018. Brazil would be hardest hit because a slowdown in China's old-economy industries disproportionately affects Brazilian exports. Regional trading partners such as South Korea would benefit from increased Chinese consumption. Textiles and mining are examples of China's old-economy sectors; health care, high-tech manufacturing, and innovative green technology are examples of China's new-economy sectors.

**Sources:** Vanguard calculations, based on data from Thomson Reuters Datastream, CEIC, and Bloomberg.

## A variant keeps COVID-19 well in the economic discussion

The recent emergence of the COVID-19 Omicron variant underscores the extent to which healthy economies still depend on keeping populations healthy.

Before the potential seriousness of Omicron became known, Vanguard believed that Northern Hemisphere developed markets were in for a disease-filled winter, owing to a combination of waning vaccination immunity and slow uptake of booster shots. Yet we believed these economies would be less likely to resort to shutdowns than during earlier waves, emboldened by reasonably high levels of infection-acquired immunity and the knowledge that infection fatality rates have fallen with each successive wave.

It's too early to tell whether Omicron might change our views on the global economy as we'll set them forth in our 2022 outlook. "It's unclear whether Omicron will outcompete the Delta variant," said Maximilian Wieland, a U.S.-based Vanguard economist who studies COVID-19. "If it doesn't, then the Delta variant remains the predominant strain and our economic forecasts remain intact. But there's a lot we don't know yet about the Omicron variant, such as whether it's more transmissible than Delta and the extent of its immune evasiveness. The answers may cause us to adjust our economic forecasts."

An Omicron strain that outcompeted Delta would be felt around the world, Mr. Wieland said, with the effect especially pronounced in Asia. Both developed and emerging Asia benefit from the recency of their vaccination efforts, Mr. Wieland said—benefit that would succumb to a COVID-19 strain resistant to current vaccines. Asia's low levels of infection-acquired immunity would add to the risk.

The world is eager to move on from COVID-19. When it can do so—and the extent to which economic shutdowns occur in the interim—relies on the course of COVID-19 variants.

<sup>1</sup>The Nasdaq Composite Index fell 78% from its March 10, 2000, high until its October 9, 2002, post-bubble low. The Standard & Poor's 500 Index fell 49% from its March 24, 2000, high until its October 9, 2002, post-bubble low.

<sup>2</sup>Source: Wind Economic Database.

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