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Secular outlook for global growth: The next 20 years

Slower economic growth is expected to result in less of
a tailwind for equities

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KEY TAKEAWAYS

- The Fidelity Asset Allocation Research team's secular gross domestic product (GDP) growth framework is a proprietary, dynamic approach, serving as a foundation for developing long-term capital market assumptions for asset class returns.
- Global growth is expected to be 2.1% over the next 20 years, down from 2.7% for the previous 20 years, with the United States averaging 1.8% annually and developing economies likely to register the highest GDP growth rates.
- Even though demographic constraints are set to dampen global growth prospects, other secular trends, including artificial intelligence technologies, may boost productivity in some countries.

GDP forecasts: A foundation for long-term capital market assumptions

Economic growth provides the backdrop for asset markets, influencing corporate earnings and interest rates, among other factors. We believe, therefore, that long-term GDP growth forecasts form the foundation for long-term capital market assumptions (CMAs) for equity, fixed income, and alternative asset classes. We publish our [secular CMAs](#) annually.* Our CMAs help inform strategic asset allocation and portfolio planning considerations. Overall, in our view, slow growth and high equity valuations will generate a headwind for asset returns over the next 20 years, compared with the previous two decades of unusually favorable performance for equities versus fixed income.

Modern financial markets have a relatively short history, particularly outside the United States and a handful of other developed countries, limiting the availability of data for growth and asset assumptions. Most approaches use a framework centered on the U.S. and other advanced economies; further, many are backward-looking and rely on mean reversion to historical averages.

* ["Capital market assumptions: A comprehensive global approach for the next 20 years."](#)

We believe it is important for CMA frameworks to be forward-looking. In our view, the global economic landscape will look quite different over the next 20 years, relative to the past century. Our CMAs seek to consider this outlook in a dynamic environment of rising geopolitical risks and deglobalization trends.

Generating a long-term global GDP forecast is the first step in the CMA process. At a high level, economic growth can be separated into two components: population growth, or the increase in the number of workers, and productivity growth, or the increase in output per worker (Exhibit 1).

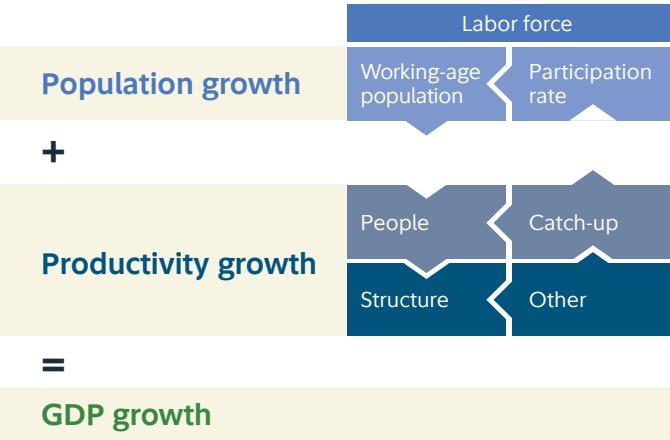
Post-Industrial Revolution growth:
Blip or new baseline?

During much of the world’s history, productivity grew very slowly. Economies generally expanded in line with their population growth. As of 1820, the largest economies coincided with the largest populations by country, with China and India topping the list.¹

Since the onset of the Industrial Revolution in Great Britain more than 200 years ago, bursts of technological transformation have powered rapid productivity gains. Throughout the world, innovation brought fundamental change—from steamships, railroads, indoor plumbing, electrification, and telephones in the 19th century to automobiles, airlines, antibiotics, radio, television, and the internet in the 20th century. Starting in the late 1800s—and for the first time in history—income per capita rose exponentially, especially in the United States and the more advanced European economies (Exhibit 2). By 1900, the United States had become the world’s largest economy, despite having a population only one-fifth the size of China’s.

EXHIBIT 1: Labor force growth and productivity growth are key determinants of economic growth.

Key drivers of GDP growth

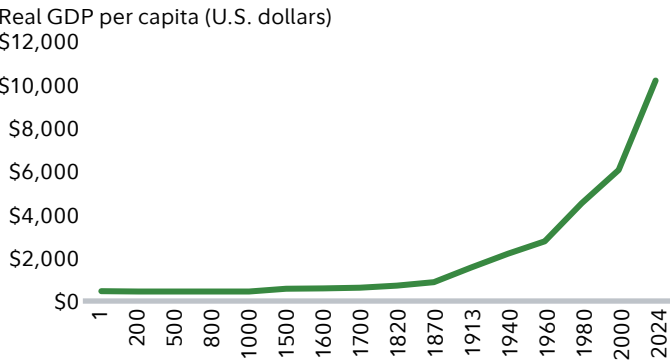


Source: Fidelity Investments (AART), as of 7/31/25.

EXHIBIT 2: The technological transformations of the 19th and 20th centuries led to major expansion in per-capita income.

Average world GDP per capita

Annualized change in world GDP per capita			
1–1000	1000–1870	1870–1960	1960–2024
0.0%	0.1%	1.3%	2.1%



The date scale on the X-axis (bottom of the chart) is truncated for illustrative purposes. Source: Angus Maddison, Groningen Growth and Development Centre, World Bank, Haver Analytics, Fidelity Investments (AART), as of 7/31/25.

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We think the global economic landscape is likely to look quite different over the next 20 years compared with the past 20 years. A forward-looking approach to developing capital market assumptions can reflect the unique attributes of the current environment and provide better information about potential asset performance.

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Extrapolating history

Two schools of thought prevail among forecasters attempting to project global growth rates further into the 21st century. One assumes that the productivity of the past 100 years will continue apace for years to come, perhaps boosted by artificial intelligence and other cutting-edge technologies. Another perspective is that technological breakthroughs are less transformative than before, with many recent advances resulting disproportionately in consumer luxuries such as new smartphone apps, rather than revolutionary innovations.

Our view is that both analytical frameworks fall short. Extrapolating productivity trends based on a brief period of world history may optimistically assume that such rapid expansion can continue, even though the global economy is now growing from a much larger base. Conversely, extrapolating slowing productivity growth by comparing inventions from different eras may pessimistically assume a trend from a small sample of technological advances, which are by nature largely unpredictable. In our view, both perspectives suffer from a narrow focus on the United States, whose current outlook may not fully reflect a global economy in which emerging countries account for a substantial share of output.

Our forward-looking, global approach to growth forecasts

The objective of our forecasting framework is to address these shortcomings by emphasizing a forward-looking approach that does not depend on historical averages. Our methodology also has a global focus that we think is more reflective of the worldwide opportunity set for growth, enabling us to model long-run growth potential based on fundamental drivers.

We use historical data to (1) understand the underlying determinants of economic growth over time and (2) find measurable factors that have been predictive of economic growth in the past. We employ a multidimensional panel data model³ that combines trends over time across economies within a common framework.⁴ This approach helps us make direct comparisons while also capturing the different characteristics that make an economy unique.

Together, these traits root our analysis in historical realities and measurable drivers of economic growth. At the same time, our methodology provides a dynamic framework determined by model-driven predictions rather than historical averages or overly qualitative hypotheses about the nature of technological progress.

Population growth: Less positive than in the past

Of the two primary determinants of GDP growth, we find population increases easier to forecast, as demographic trends tend to vary less over time than trends in other economic data sets. Growth in a country's labor force directly affects GDP growth.

A country's labor force is determined by a combination of the overall size of its working-age population and the percentage of people within that cohort who are either working or seeking employment (i.e., its labor force participation rate).

In advanced economies, aging populations tend to result in lower labor force participation over time, adding to the concurrent demographic challenge of weaker growth in working-age populations.

Although labor-force growth has risen rapidly for several decades, we estimate that all major countries will receive less of a direct demographic benefit over the next 20 years (Exhibit 3). It’s important to note that any changes to immigration policies could have a notable impact on these forecasts. While an influx of a relatively younger population could help mollify demographic challenges, the opposite effect could occur if more restrictive policies were enacted to combat migration.

In general, labor-force growth should be faster in the developing world—Latin America, the Middle East, Africa, and parts of Emerging Asia. Conversely, labor-force growth is set to decline among several large, developed economies, including Japan and parts of western Europe, as well as some emerging markets, including South Korea and China.

Productivity growth: Still positive

Compared with population growth, productivity growth is often more difficult to predict, given the multiple forces whose relative importance varies according to the characteristics of different

Although labor-force growth has risen rapidly for several decades, we estimate that all major countries will receive less of a direct demographic benefit over the next 20 years.

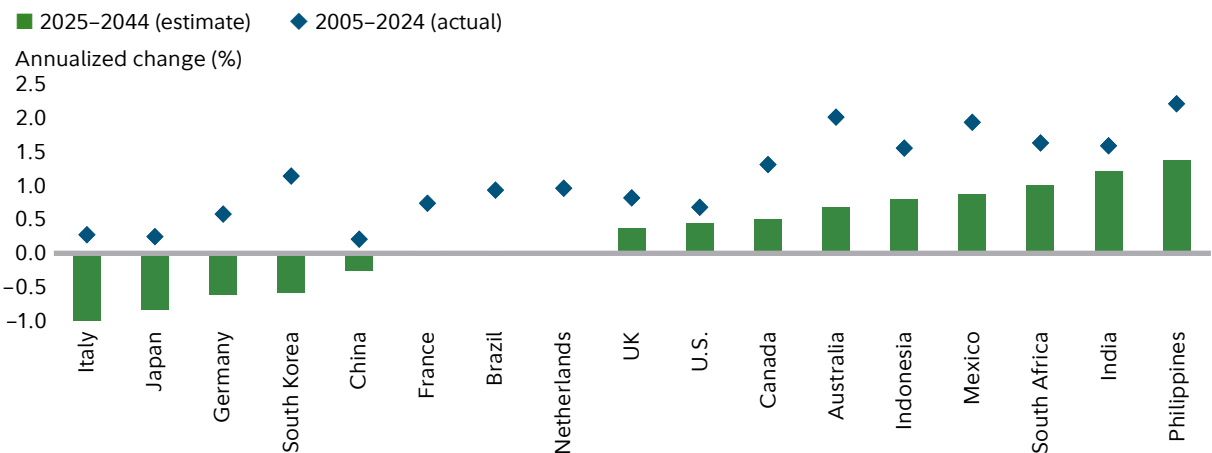
economies. While many factors influence rates of productivity growth, we focus our analysis on three main categories of economic conditions that we have identified empirically as key drivers of productivity:

1. People. The characteristics of a country’s population can affect productivity in several ways, perhaps most notably: the greater the human capital, the more productive the economy.⁵ According to our proprietary Human Capital Index, which incorporates measures of educational and scientific achievement as key drivers of future innovation and the adoption of new technologies, the accumulation of human capital over the past two decades should boost global growth in the next two decades.

2. Structure. Complex economies tend to be more competitive, use technology more effectively, and foster a better business climate and more nurturing institutions.⁶ As a result, greater complexity typically means greater productivity. Greater variety and more sophisticated products in a country’s output signal a more complex economic structure.

EXHIBIT 3: The contribution of labor-force growth to economic growth should decrease over the next 20 years.

Labor-force growth



Sources: World Bank, OECD, Country Statistical Organizations, Haver Analytics, Fidelity Investments (AART), as of 7/31/25.

3. Catch-up potential. In theory, less advanced economies should grow faster than their more mature counterparts, thanks partly to their starting from a smaller base, their ability to adopt existing technologies, and their potential to catch up to the higher incomes of developed countries. In practice, however, this convergence does not occur automatically; it depends on other factors, such as the people and structure of an economy.

Once we account for these other growth determinants, catch-up potential has been—and will remain—a contributor to global GDP growth on an absolute basis.

Shifting sources of productivity growth

The fast pace of change in some developing economies the past 20 years has changed the mix of sources for future productivity growth. On the negative side, the rapid industrialization and growth in per-capita incomes in recent times has left less catch-up

potential for the years ahead, a maturation process that tends to reduce the rate of productivity growth. The silver lining, though, is that dramatic improvement in structural complexity and human capital realized over the past 20 years provides some counterbalance by boosting potential productivity.

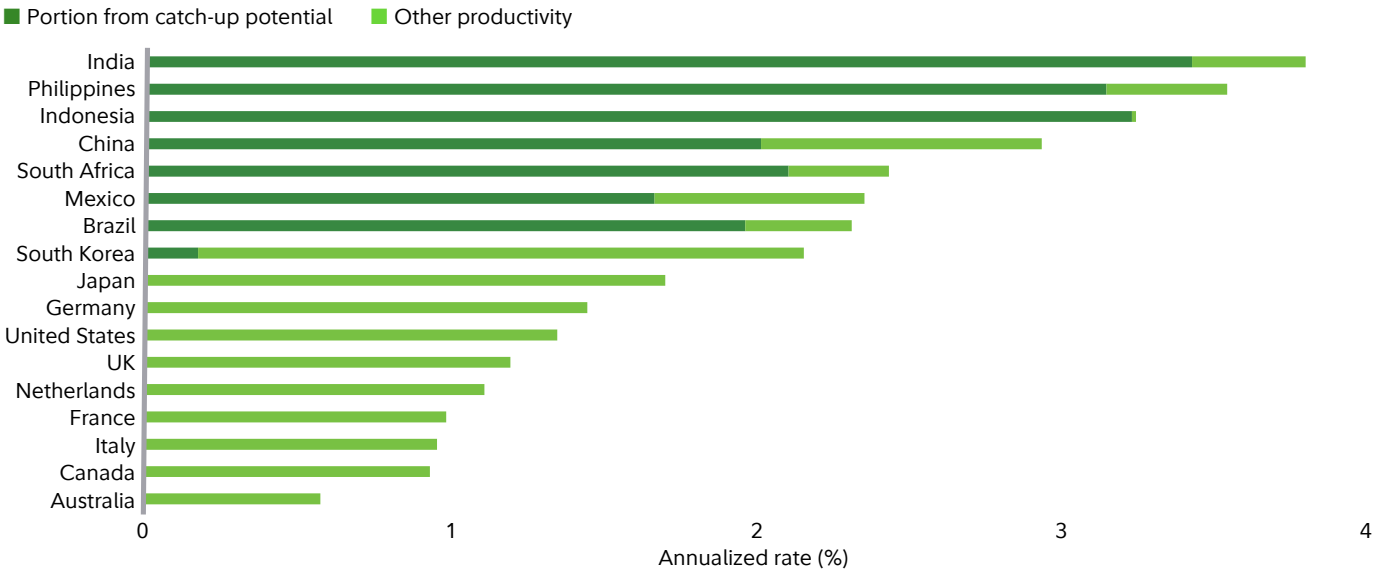
Significant regional differences remain, with Emerging Asia providing a vivid illustration. South Korea, for example, has advanced to a developed-economy standard of living, implying its future productivity could be derived almost exclusively from its human capital and high complexity (Exhibit 4).

Poorer countries—such as India—have made relatively less progress and thus retain considerable catch-up potential.

In between, China will confront the challenges of middle-income countries but will do so with more sophisticated human capital and greater structural complexity than many others.

EXHIBIT 4: Emerging markets have a more favorable productivity backdrop due to catch-up potential.

Productivity growth forecasts, 2025–2044



Source: Fidelity Investments (AART), as of 7/31/25.

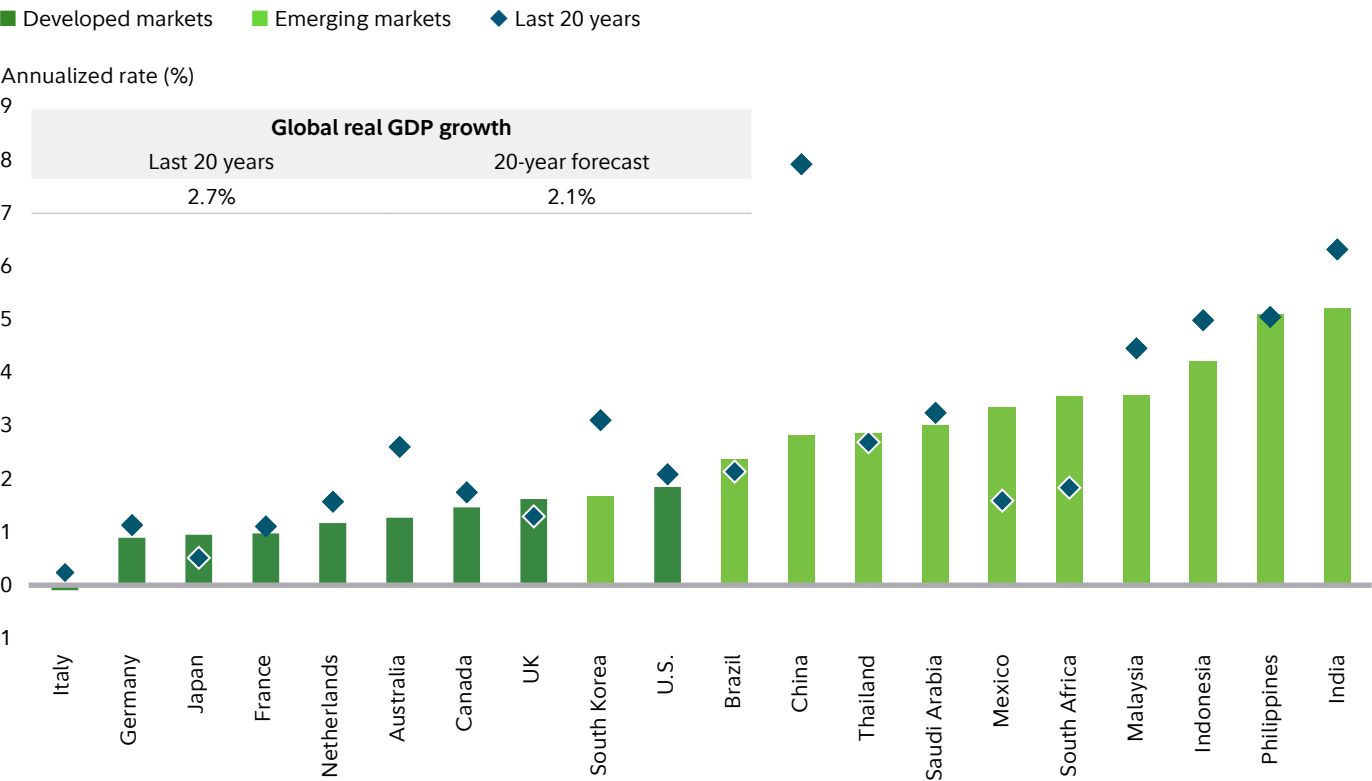
Model results. The methodology detailed above has been successful at explaining about two-thirds of GDP growth in our sample of about 80 countries over the past 40 years. As with any projections, our forecasts include some degree of uncertainty. We continue to search for additional factors to further refine our forecasts and improve our results.

GDP forecasts

Using projections for all the countries within the MSCI All Country World Index, we expect global GDP growth of 2.1% annually over the next 20 years, compared with 2.7% growth, on average, the past two decades. We estimate most of these countries will experience slower growth, especially developed economies (Exhibit 5).

EXHIBIT 5: The world economy will grow more slowly in coming years, with the highest GDP growth rates likely to be found among developing economies.

Real GDP 20-year growth: Forecasts versus history, 2025–2044



Bars indicate predicted 20-year annualized GDP growth rates. Source: Fidelity Investments (AART), as of 7/31/25.

In general, we expect worsening demographics around the world to take the greatest toll on the global forecast relative to historical experience, as almost all economies confront a demographic outlook inferior to that of two decades ago. In addition, the rapid gains made by many developing economies may leave less room for industrialization and catch-up potential going forward.

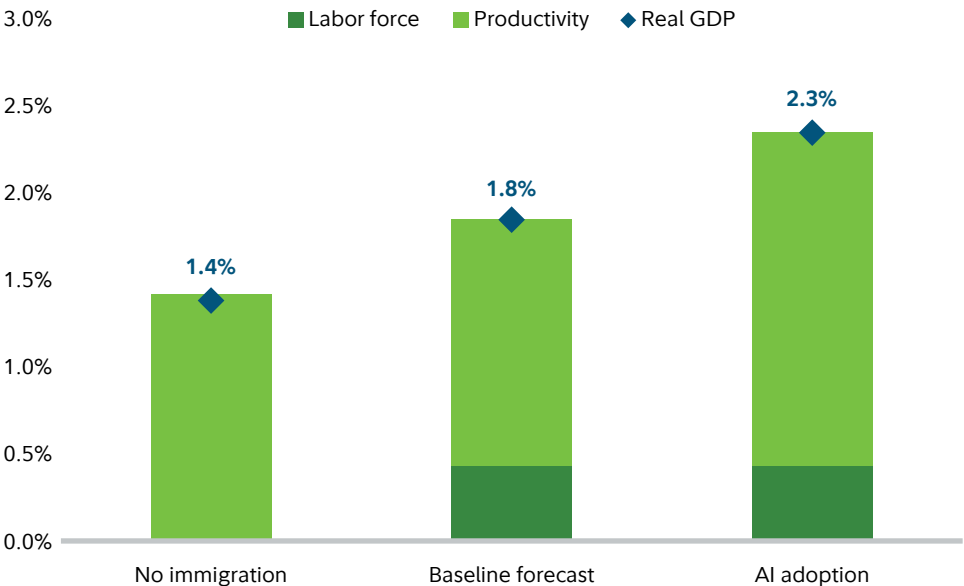
Nevertheless, our forecasts indicate that global growth will remain positive. The United States should average roughly 1.8% annualized growth, which might come in lower if immigration is restricted or higher if broader AI adoption and higher capital spending on onshoring production and addressing climate change improve productivity (Exhibit 6).

We estimate that closing borders to immigration would subtract about 0.5% from our baseline labor force growth forecast, taking it to approximately zero. At the same time, broader AI adoption could add about 0.5%, on average, to our baseline productivity growth forecast of 1.4%, depending on how fast this technology comes into widespread use (see “Artificial intelligence: An X-factor in a new investment regime”).

Improved human capital and increased economic complexity could benefit productivity growth in many developing countries. Those with faster growth rates likely will account for a greater share of global growth moving forward.

EXHIBIT 6: The risks to U.S. growth from immigration restrictions and from wider adoption of AI are broadly balanced.

United States baseline forecast and alternative scenarios

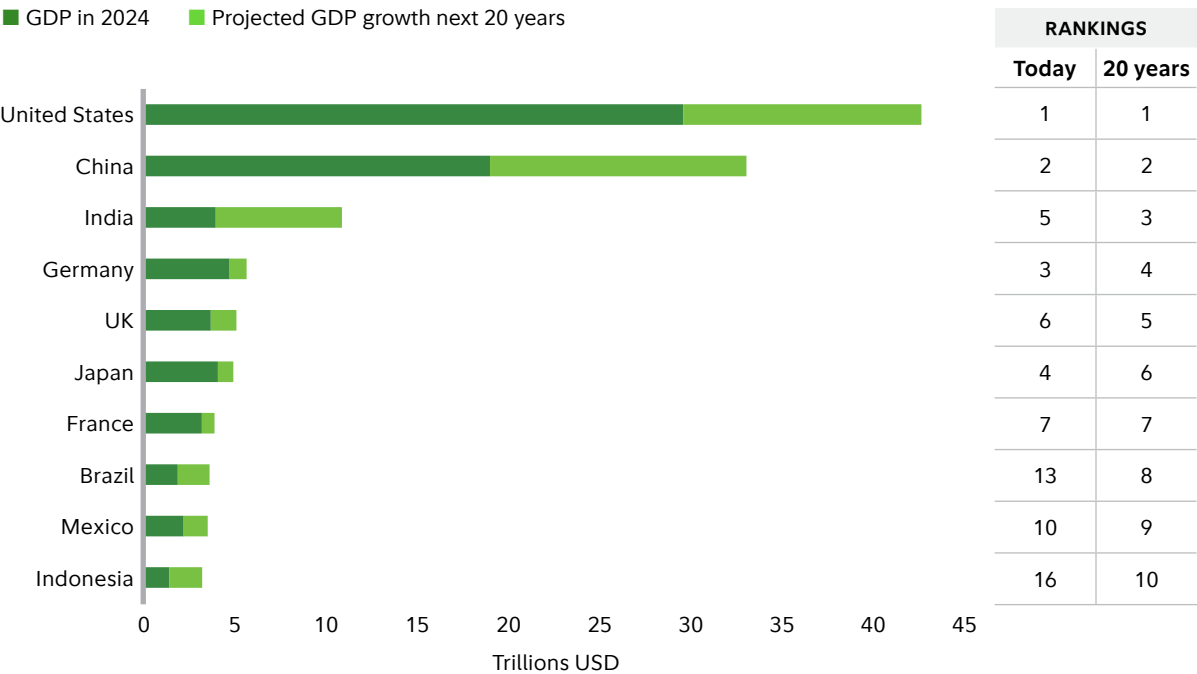


Source: Fidelity Investments (AART), as of 7/31/25.

We estimate that in 20 years, the U.S. and China will remain the largest economies in the world (Exhibit 7). Our forecasts indicate that India will grow from the fifth-largest economy today to the third-largest by 2044, with Mexico and Indonesia moving into the top 10.

EXHIBIT 7: We forecast several emerging markets ranking among the largest global economies by 2044.

World’s largest economies by 2044



GDP is in constant dollars. Sources: Haver Analytics, Fidelity Investments (AART), as of 7/31/25.

Conclusion

- Slower global growth should generate less of a tailwind for equity returns over the next 20 years relative to the post-World War II era.
- Geographic opportunities will likely favor emerging economies, although with a significant dispersion of expected growth around the world.
- Growth prospects together with equity valuations, bond yields, and other capital market factors, drive long-term asset return expectations across geographies. They underpin our secular capital market assumptions that can help inform strategic asset allocation decisions across a broad, global opportunity set (see our [secular CMAs](#)).

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ResearchThe Asset Allocation Research Team (AART) conducts economic, fundamental, and quantitative research to develop asset allocation recommendations for Fidelity's portfolio managers and investment teams. AART is responsible for analyzing and synthesizing investment perspectives across Fidelity's Asset Management unit to generate insights on macroeconomic and financial market trends and their implications for asset allocation.



References

Barro, R., and J.W. Lee. *Education Matters: Global Schooling Gains from the 19th to the 21st Century*. Oxford University Press (2015).

Barro, R., and X. Sala-i-Martin. "Convergence." *Journal of Political Economy*, Vol. 100, No. 2 (April 1992): 223–251.

Cowen, T. *The Great Stagnation: How America Ate All the Low-Hanging Fruit of Modern History, Got Sick, and Will (Eventually) Feel Better*. Dutton (2010).

Gordon, R. "Is U.S. Economic Growth Over? Faltering Innovation Confronts the Six Headwinds" Centre for Economic Policy Research, Policy Insight No. 63 (September 2012).

Hausmann, R., C. Hidalgo, et al. *The Atlas of Economic Complexity: Mapping Paths to Prosperity*. Harvard Center for International Development, Harvard Kennedy School, MIT Media Lab (2011).

Kremer, M., J. Willis, and Y. You. Working Paper. "Converging to Convergence." Accepted NBER Macro Annual 2021.

Endnotes

1. Angus Maddison (Groningen Growth and Development Centre).
2. See especially Gordon and Cowen.
3. Multidimensional panel data includes numerous observations of three or more macroeconomic variables, e.g., across multiple individuals, companies, or countries (one dimension); in multiple series (a second dimension); across multiple time periods (a third dimension); and for multiple time horizons (a fourth dimension).
4. See Barro and Sala-i-Martin; also, more recently, Kremer, Willis, and You.
5. See Barro and Lee.
6. See Hausmann, Hidalgo, et al.

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All indices are unmanaged. You cannot invest directly in an index.

Index definitions

The **MSCI ACWI (All Country World Index)** is a market capitalization-weighted index that is designed to measure the investable equity market performance for global investors of developed and emerging markets.

The **Human Capital Index** is a proprietary indicator incorporating measures of educational and scientific achievement as key drivers of future innovation and adoption of new technologies.

The **Demographic Index** is a proprietary indicator incorporating detailed demographic measures that capture the mixed indirect effects of aging on productivity rates.

The **international dollar**, also known as the Geary-Khamis dollar, is a hypothetical unit of currency with the same purchasing power that the U.S. dollar had in the United States at a stipulated time, commonly the year 1990 or 2000. The international dollar facilitates standard-of-living and GDP comparisons across countries and through time.

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