Commentary

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 2.9% for the previous 20 years, with the United States averaging 1.7% annually and developing economies likely to register the highest GDP growth rates.
- The rate of productivity growth is a major factor that could lead some regions and countries to exceed our secular economic growth estimates.
- Asset allocation strategies that can be selective across a broad, global opportunity set may have the greatest potential to take advantage of future growth prospects.

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 favorable performance for equities versus fixed income.

Fidelity INVESTMENTS

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.

The global economic landscape likely will look quite different over the next 20 years versus the past century, we believe a forward-looking, global approach to developing CMAs should not be centered on the past 75 years of U.S. dynamism. Our CMAs seek to provide a less biased 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).

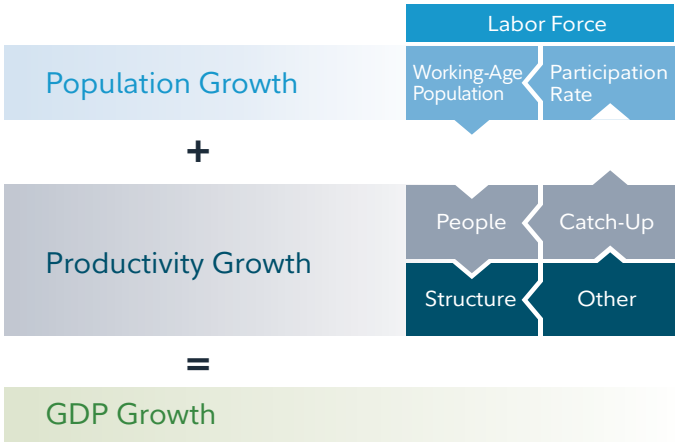
Post-Industrial Revolution growth: Blip or new baseline?

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, and 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

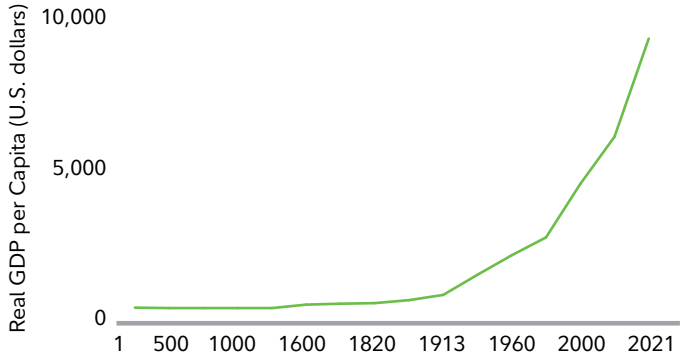


Source: Fidelity Investments (AART), as of 4/30/23.

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	1960-2021
0.0%	0.1%	1.3%	2.0%



Sources: Angus Maddison, Groningen Growth and Development Centre, Fidelity Investments (AART), as of 12/31/22.

We think the global economic landscape is likely to look quite different over the next 20 years compared with the past 20 years and that a forward-looking approach to developing capital market assumptions may provide a better chance for success in this dynamic environment.

Extrapolating history

Two schools of thought prevail among forecasters attempting to project global growth rates further into the 21st century. One assumes the United States possesses an inherent dynamism that will perpetuate the high U.S. average productivity experienced over the past 100 years, perhaps boosted by artificial intelligence, robotics, and other cutting-edge technologies. Data limitations prevent large, developing economies from being incorporated into the historical average productivity rate, but the general presumption is that their rapid expansion may keep global growth solid for years to come.

Another perspective is that the two-century burst of productivity growth may be ending.[2] Per capita income in the United States and many other developed economies has stagnated, and technological breakthroughs seem less transformative than before. Many recent advances—mobile connectivity, for example—have resulted disproportionately in consumer luxuries such as new smartphone apps, rather than revolutionary innovations. Implicit in this view are slower growth rates for the United States and other Western economies relative to less-developed countries in South America and Southeast Asia.

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 more than one-third 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 not as static assumptions but 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 model[3] that compares common data sets 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.

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.

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 the most.

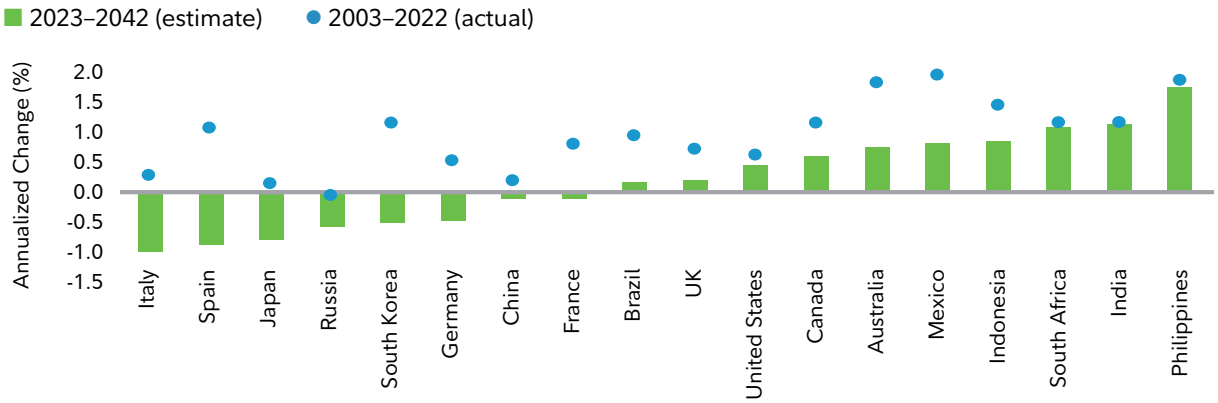
A country's labor force is determined by a combination of the overall size of its working-age population and the percentage of people within that cohort who are either working or seeking employment (i.e., its labor force participation rate). In advanced economies, aging populations tend to result in 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, particularly for Europe, where an influx of a relatively younger population could help mollify the region's demographic challenges. Of course, 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 developing economies, including South Korea and China.

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 4/30/23.

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 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.

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 and Indonesia—have made relatively less progress and thus retain considerable catch-up potential.

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

Other factors

Globalization. Decades of rapid integration, spurred by technological advances and more countries joining the rules-based multilateral system, helped foster a global boom through the mid-2000s. Globalization engendered greater mobility of goods, services, capital, and workers through increased trade and immigration.

- **Trade**. Low barriers to global commerce facilitate international diffusion of knowledge and technology transfer, raising productivity potential everywhere. Trade also allows local firms to access global markets and benefit from economies of scale, at the same time exposing them to greater competition and forcing greater specialization. Most countries, including most major economies, experienced an increase in trade openness over the past few decades.

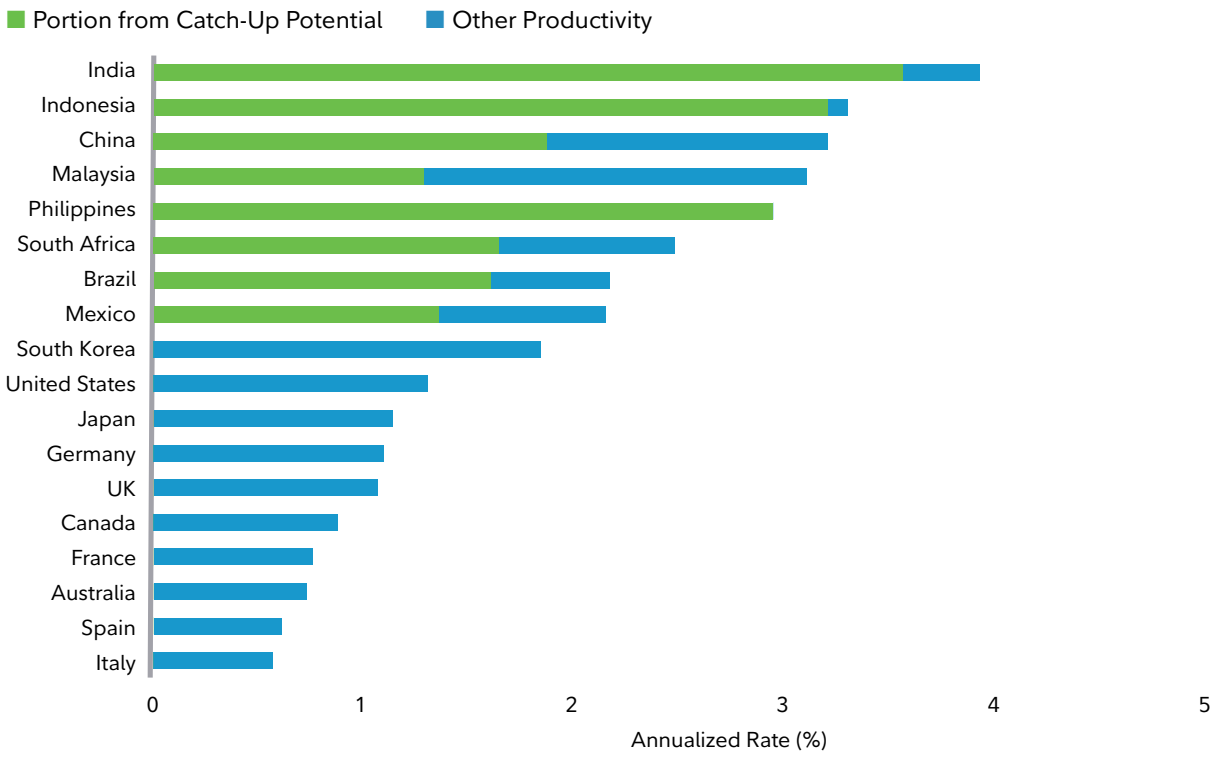
- **Immigration**. When foreign-born workers enter a labor force, they directly contribute to the expansion of that country's GDP. High-skilled immigrants in mathematical, scientific, and computer-related fields that move to a more technologically advanced country can employ their skills more effectively and thereby raise productivity directly. Lower-skilled immigrants in, for example, cleaning, construction, maintenance, and transportation occupations could help indirectly by allowing other workers to move into more productive jobs.

We believe the world has experienced a secular peak in globalization. This will affect countries with a large concentration in manufacturing exports, such as Germany and South Korea, as well as countries where manufacturing exports have grown rapidly, including China and Mexico. If the flow of migrants were to ebb worldwide, we would expect long-term GDP growth to decline across developed economies, with countries that are the most dependent on immigration—including the United States and Western Europe—facing the largest declines. Generally, greater dependence on global trade and immigration can put a country at a relative disadvantage in an environment of de-globalization.

Commodity booms. Commodity booms can greatly influence the long-term growth trajectory of resource-dependent economies. In general, we do not foresee a lasting commodity-price boom in the current environment. We include long-term estimates of commodity exports in those economies, although the results do not have a material effect on most countries.

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

Productivity Growth Forecasts, 2023–2042



Source: Fidelity Investments (AART), as of 4/30/23.

Model results. The methodology detailed above has been successful at explaining about 70% of GDP growth in our sample of about 80 countries over the past 40 years. As with any attempt at making projections, our forecasts include some degree of uncertainty. We continue to search for additional factors to further refine our forecasts and improve our results.

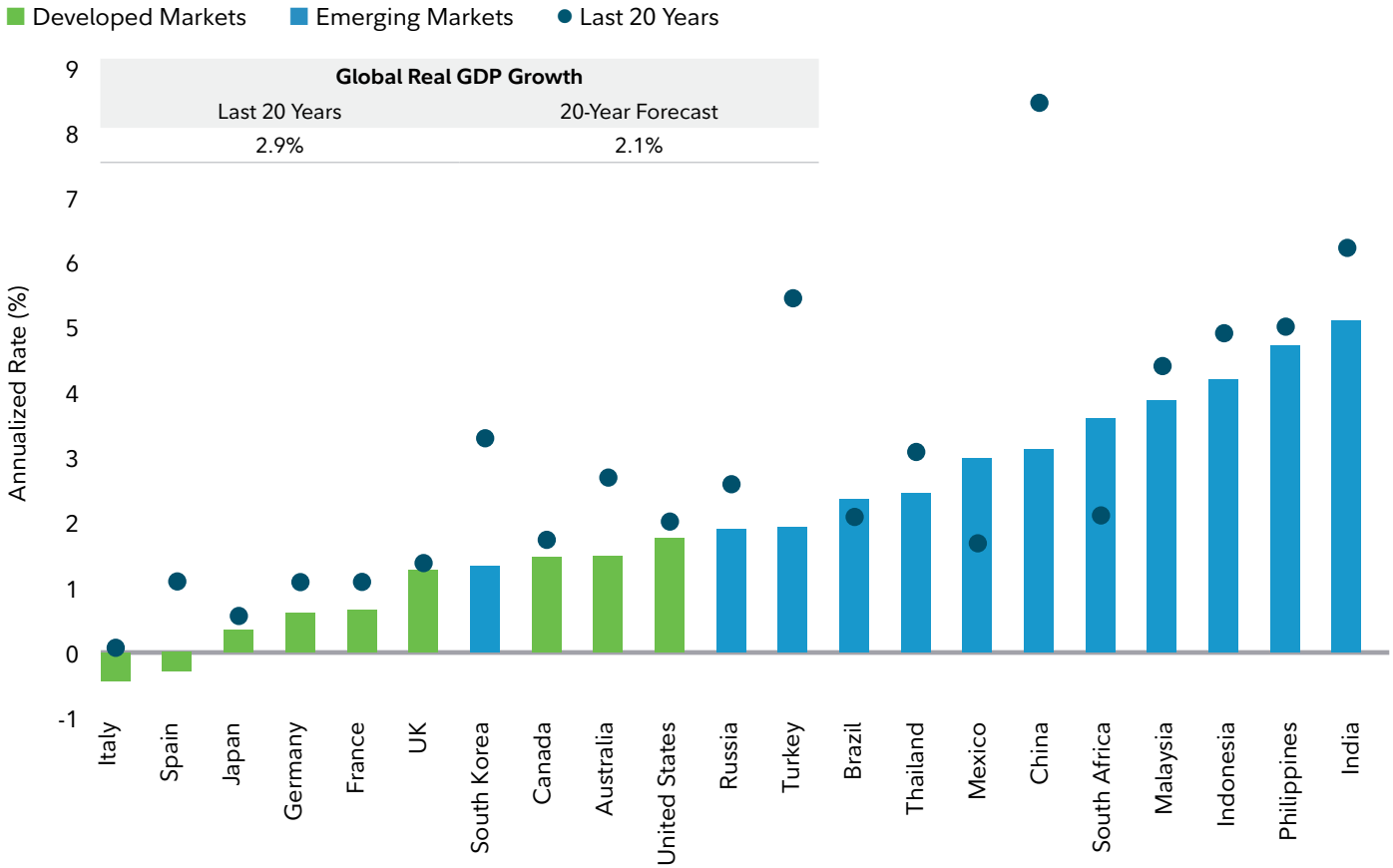
GDP forecasts

Using projections for 41 countries within the MSCI All Country World Index, we expect global GDP growth of 2.1% annually over the next 20 years, compared with 2.9% growth, on average, the past two decades. We estimate 90% of these countries will experience slower growth, including all the developed economies (Exhibit 5).

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.

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, 2023–2042



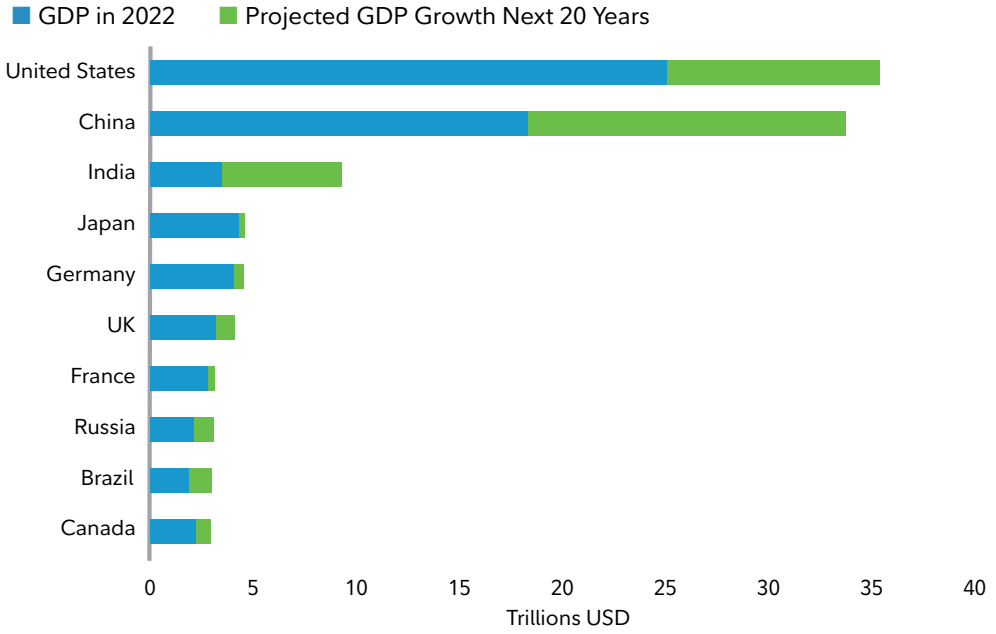
Bars indicate predicted 20-year annualized GDP growth rates. Sources: The United Nations and UN International Labour Organization, World Bank, OECD, Fidelity Investments (AART), as of 4/30/23.

Nevertheless, our forecasts indicate that global growth will remain positive. The United States should average roughly 1.7% annualized growth, which might come in higher depending on the rate of productivity growth (see Exhibit 8). 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. Some countries and regions could see better-than-expected growth due to productivity gains (see "What could lead to GDP upside" section on page 9). This should help offset the weaker outlooks for Japan and many European countries.

We estimate that in 20 years, the U.S. and China will remain the largest economies in the world, with relatively favorable demographics helping the U.S. maintain its top position (Exhibit 6). Our forecasts indicate that India will grow from the fifth-largest economy today to the third-largest by 2042, with Brazil moving into the top 10.

EXHIBIT 6: We forecast several emerging markets ranking among the largest global economies by 2042.

World's Largest Economies by 2042



RANKINGS	
Today	**20 Years**
1	1
2	2
5	3
3	4
4	5
6	6
7	7
9	8
11	9
8	10

GDP is in constant dollars. Sources: Haver Analytics, Fidelity Investments (AART), as of 12/31/22.

What could lead to GDP upside

The rate of productivity growth is a major factor that could lead some regions and countries to exceed our secular economic growth estimates over the next two decades.

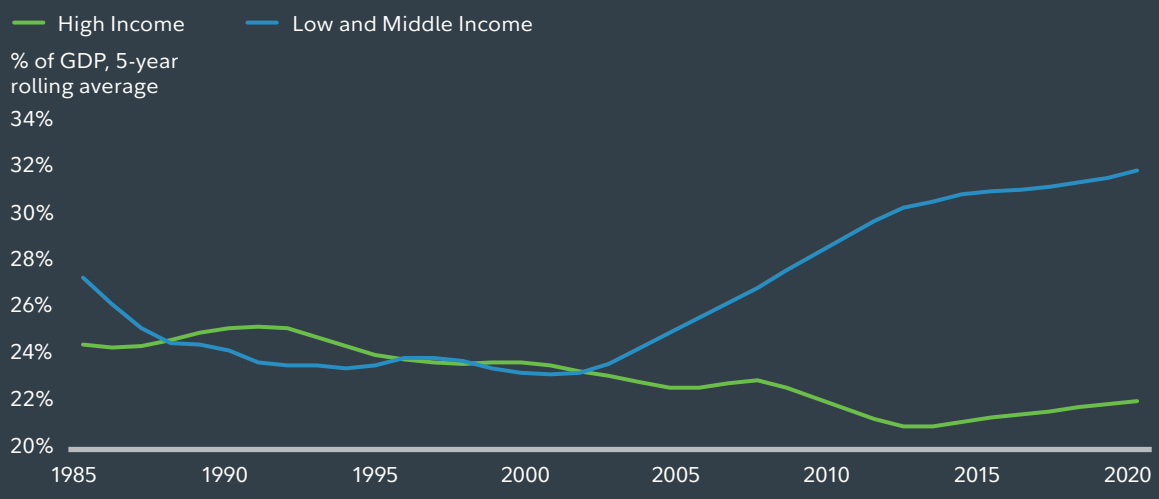
One potential source of a productivity upside is investment activity, such as expenditures on research and development, public infrastructure, and corporate capital outlays. Fixed capital formation has long been on the decline in high-income economies (Exhibit 7). While middle-income emerging markets, driven largely by the economic rise of China, experienced a sustained upturn in fixed capital formation over the past two decades, the pace has slowed. Even though the response is not immediate, investments can serve as catalysts for productivity gains in the future.

We believe our models do a reasonable job of forecasting how the long-term structure of economies may be more conducive to innovation and productivity gains, but they can't predict the idiosyncratic catalysts that may cause investments to accelerate. However, we see potential for an upside scenario driven by higher capital spending linked to recent breakthroughs in artificial intelligence technologies, the necessity of addressing climate change and the energy transition, and geopolitical regionalization efforts including reshoring, onshoring, and near-shoring. Read our paper, "A Strategic Allocator's Guide to Productivity and Profits," for a more detailed discussion about how these factors affect productivity, profits, and the secular investment landscape.

We see potential for an upside scenario driven by higher capital spending linked to recent breakthroughs in artificial intelligence technologies.

EXHIBIT 7: Investment growth has trended higher in low- and middle-income countries.

Gross Fixed Capital Formation by Country Income Level



World Bank defines high-income countries based on gross national income per capita over $13,205. Low-income and middle-income countries are under this threshold. Compiled using annual data. Source: World Bank, Haver Analytics, Fidelity Investments (AART), as of 12/31/21.

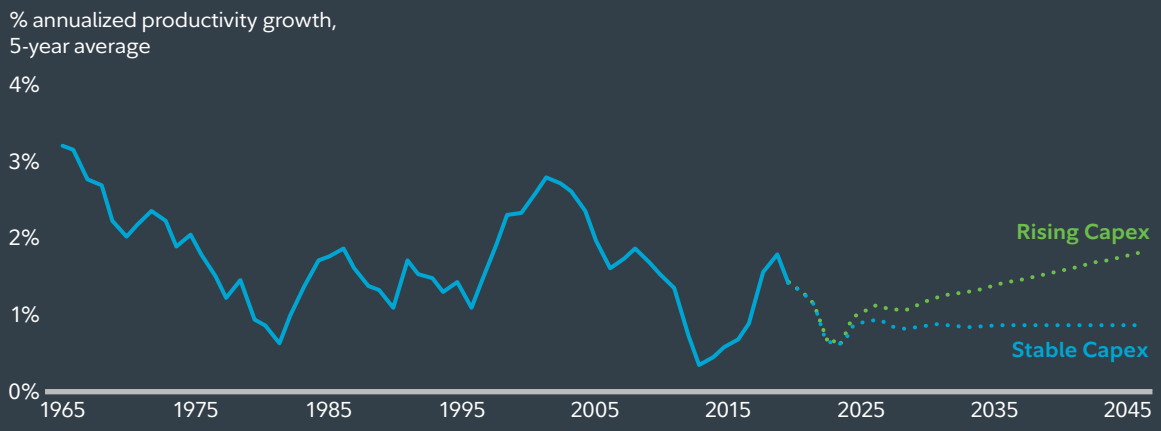
How much productivity acceleration upside is there and how impactful will it be from a macro standpoint? The answer is nearly impossible to forecast with accuracy, but we'll show that the potential upside is meaningful through an illustrative scenario for the U.S.

Let's assume the upper bound of a U.S. capex acceleration might be a return to the peak capex growth rates of roughly 50% of earnings before interest, taxes, depreciation, and amortization (EBITDA). Then we'll assume that acceleration would occur over the next three decades. If we then take into consideration the dynamics of how higher capex affects productivity, the rise to a 50% capex/EBITDA ratio would imply a boost of about 1% per year in real GDP per hour (Exhibit 8).

Of course, such a massive increase in capex likely represents a high upper bound of the range of scenarios that may unfold. A lower-bound scenario would be that the capex/EBITDA ratio stagnates at its historically depressed level of about 30%, which would keep U.S. GDP growth near our current baseline estimate of 1.7%.

Exhibit 8: Higher capex could boost productivity growth above baseline expectations.

Scenarios of Capex and Productivity Trends, 5-Year Averages



Productivity is real GDP per hour. Capex is aggregated across top 3,000 publicly traded companies (ex. financials and real estate). Scenarios are generated by a time-series model connecting capex to productivity. Chart compiled using annual data. Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Fidelity Investments (AART), as of 12/31/22.

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.
- Asset allocation strategies that can be selective across a broad, global opportunity set may have the greatest potential to take advantage of future growth prospects.

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Endnotes

[1] Angus Maddison (Groningen Growth and Development Centre).

[2] See especially Gordon, also Cowen and Jones.

[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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The 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.

Fidelity Thought Leadership Vice President Mike Tarsala provided editorial direction.

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