NORTHERN TRUST

ASSET MANAGEMENT

Capital Market Assumptions

10-YEAR OUTLOOK: 2026 EDITION

RELEASED DECEMBER 2025

Global economies are navigating a period of persistent inflation, uneven growth and mounting fiscal pressures. Aging populations and rising debt are straining public finances, while technological disruption accelerates change across industries. In this context, we believe three transformative themes will define the investment and economic landscape, and influence market performance in the coming decade.

With **Rising Innovation**, **Declining Demographics**, breakthroughs in artificial intelligence (AI), automation and robotics promise to boost productivity and offset demographic challenges. These advances may also transform labor markets as we know them. Meanwhile, with **The Global Shift to Self-Reliance**, intensifying protectionism and global political frictions are driving countries to seek economic and technological self-sufficiency, spurring domestic innovation and strategic alliances.

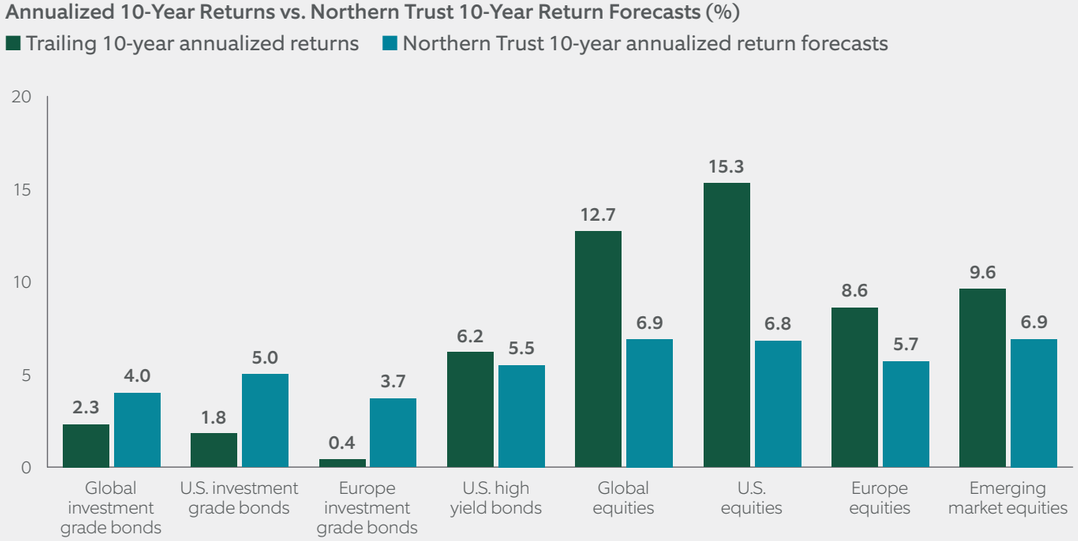
These shifts are unfolding as **Debts and Deficits Loom Large**, which may hamper growth prospects and constrain policy choices. Investors must carefully monitor the interplay of innovation, self-reliance and fiscal health, as these forces reshape market performance (**Exhibit 1**) and global growth, presenting both risks and opportunities for the decade ahead.

EXHIBIT 1

Bonds Higher, Equities Lower

We expect interest rates to normalize, supporting higher bond returns. Equity returns likely won't maintain the outsized returns of the last 10 years as we expect economic and revenue growth to slow.

Annualized 10-Year Returns vs. Northern Trust 10-Year Return Forecasts (%)



Source: Northern Trust Asset Management, Factset. Annualized return data in local currency from September 30, 2015 to September 30, 2025. See section 11 for reference Indices associated with each asset class and glossary for index definitions. Past performance does not guarantee future results.

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1 Economic Outlook: Rising to the Challenge

The economic outlook for the decade ahead (**Exhibit 2**) is first informed by the decade to date. The global economy has shown incredible resilience in the face of wars, crises and policy shocks. High inflation rattled confidence but did not kill momentum in consumption and investment. Growth has been tested, with many economies barely treading water. Yet forecasts of recession proved premature. Across markets, employment and wages grew, and consumers found their footing.

We believe developed markets will rise to the challenge of adapting to a world order without a single leader. Emerging markets, by contrast, may find adaptation more difficult as their globalization-driven growth model comes under strain.

The Global Shift to Self-Reliance bodes well for domestic investment and employment, but it keeps inflation risks elevated (**Exhibit 3**). **Rising Innovation**, **Declining Demographics** likely will continue apace, with rising productivity poised to support ongoing business investment and sustainable wage gains. We expect economies will rely on productivity to counterbalance the outlook of declining demographics. Labor shortages and fiscal imbalances are prominent risks to the outlook. As **Debts and Deficits Loom Large**, public investment opportunities may be crowded out.

Some trends to watch in the near-term:

U.S.: Tariff costs are working their way to final prices gradually, but we think they will be a one-time shock. Firm wages may keep inflation above target thereafter. The employment outlook will vary by sector, with favorable policy for the construction and manufacturing sectors offset by challenges in healthcare, higher education and federal government. We expect the Federal Reserve to prioritize its inflation mandate and hold rates steady after one additional rate cut to start the year.

Europe: We believe the eurozone economy will gain momentum from improving consumption backed by tight labor markets and supportive monetary conditions. Still, growth may fall short of potential, constrained by U.S. tariff impacts, weak external demand and uneven fiscal capacity. While Germany's fiscal expansion will provide some support, French and Italian governments remain restrained by weak public finances. In the U.K., underlying momentum has waned as consumers have pulled back and businesses remained hesitant to invest.

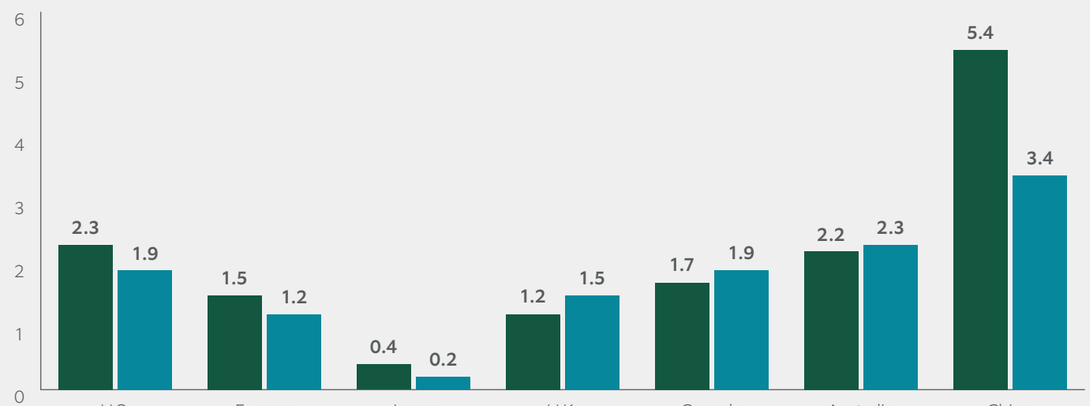
Japan: Resilient domestic demand has supported the Japanese economy in the face of challenges from U.S. tariffs. Private consumption and capital expenditure are growing, and we expect these forces to remain the primary drivers of gradually improving growth. The government's steer toward fiscal expansion, coupled with a growth strategy centered on strategic investments in areas such as AI, may offer additional support.

EXHIBIT 2

A Changing Economic Order

Developed markets likely will adapt to a world order without a single leader, while emerging markets could struggle.

Northern Trust 10-Year Annualized Real Gross Domestic Product Growth Forecasts (%)



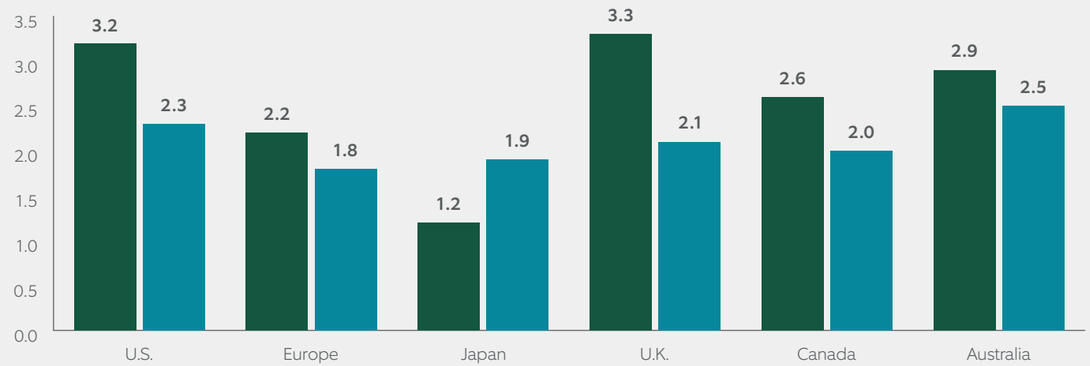
Source: Northern Trust Asset Management, IMF, Oxford Economics. Data from calendar years 2016 to 2025. **Historical trends are not predictive of future results.**

EXHIBIT 3

Inflation Settling

While we expect inflation to fall from elevated levels, the global shift to self-reliance creates inflation risks.

Northern Trust 10-Year Annualized Inflation Forecasts (%)



Source: Northern Trust Asset Management, IMF, Oxford Economics. Data from calendar years 2016 to 2025. All regions use headline CPI as the inflation metric. **Historical trends are not predictive of future results.**

2 Theme: Rising Innovation, Declining Demographics

Rapid advances in AI, automation and robotics are reshaping productivity and labor markets. These technologies offer new opportunities and help offset aging populations, but also create risks of job displacement.

Investors should track these shifts closely, as they may drive sector performance and economic growth. Strategic investments in leading AI and automation firms could yield strong returns, but require careful analysis of which industries will benefit or face disruption. As advances in robotics and automation promise to reshape the nature of work and longevity, another critical factor influencing the workforce is healthcare, one of the biggest drivers of productive lifespans. Technology can assist healthcare to maintain and extend physical and cognitive abilities, thus improving labor force participation and/or productivity.[1] Federal Drug Administration approvals of AI-enabled medical devices jumped from six in 2015 to 235 in 2024.[2] Applications of AI are improving medical research and leading to improved health outcomes and earlier diagnosis. Further, the World Economic Forum (WEF) projects growing working-age populations could add 9 million jobs globally by 2030.[3]

Beyond advancing productivity through healthier, longer working lives, we believe AI's role in developing humanoid robotics to reduce the physical burdens of work will see significant advancements over our 10-year horizon. And it is not just robotics. Automation, such as the expansion of self-driving vehicles, is on the rise. Effective robotics, combined with automation, could be hugely productive, and potentially transforming labor markets as we know them. The WEF also projects robotics and autonomous systems could produce a net loss of 4.8 million global jobs by 2030.[4]

How do we balance these gains and losses, especially when we consider the International Monetary Fund (IMF) estimates almost 40% of global employment is exposed to AI, including 60% for advanced economies (**Exhibit 4**)? [5] History suggests that by replacing parts of the aging workforce, the existing workforce can refocus. For example, 60% of today's workers are in jobs that didn't exist in 1940 and 85% of employment growth since 1940 is in technology-driven, new positions.[6] Technology creates new jobs, but retraining and redeployment will need to be a key consideration.

Potential examples of changes in the workforce are already evident. A new "digital workforce" is arising with digital agents aiding mundane tasks. For example, consider the impact of AI on professions such as doctors and teachers by removing administrative burdens and allowing more focus on core functions. There could also be new jobs in AI technology, ethics and governance. Indeed, there is little evidence thus far that AI is leading to large labor disruption, although job mixes are changing.[7]

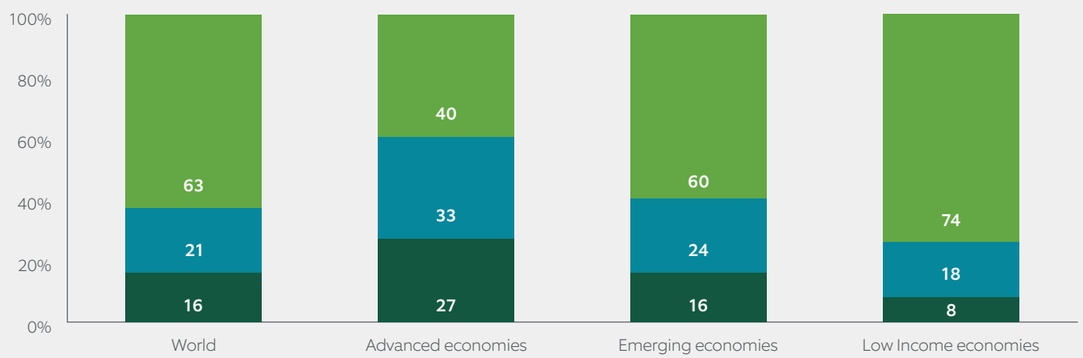
The impact of robotics, automation and AI should be gross domestic product (GDP) up, inflation down. However, GDP doesn't measure the full impact of AI, other than direct spending on things like robotics. We may need to consider alternative measures in the future, such as company earnings, profit margins and sales-per-employee ratio, where these impacts may reveal themselves.

Population aging is broadly associated with lower GDP growth, due to the combination of a declining labor force as well as declining productivity. Improvements in healthcare and longer productive working lives could offset declines. But the impact to inflation from population aging is a point of contention. Influential studies exist to promote both inflationary and disinflationary factors as the old age share shifts with time. [8]

EXHIBIT 4

AI Likely to Forge a New Economy for Workers

Nearly 40% of jobs worldwide — and 60% in advanced economies — are now exposed to AI. For investors, this signals a major shift: AI adoption is poised to drive productivity gains and fundamentally reshape labor markets, creating both risks and opportunities across sectors.



Source: International Labor Organization (ILO), and IMF staff calculations, January 2024. Share of employment within each country group is calculated as the working-age-population-weighted average.

[1] The IMF reports the average cognitive ability of a 70 year old in 2022 was consistent with that of a 53 year old in 2000, and same frailty as a 56 year old. Source: International Monetary Fund (IMF). World Economic Outlook: A Critical Juncture Amid Policy Shifts. Washington, DC. April 2025.

[2] Source: U.S. Food & Drug Administration (FDA). AI-Enabled Medical Devices List. Washington, DC. As of May 30, 2025. Note: 148 devices were approved year-to-date through May 30, 2025.

[3] Source: World Economic Forum (WEF). Future of Jobs Report 2025. Geneva. January 2025.

[4] ibid.

[5] Source: Georgieva, K. "AI Will Transform The Global Economy. Let's Make Sure It Benefits Humanity," IMF Blog, January 14, 2024.

[6] Sources: Autor, D., Chin, C., Salomons, A., and B. Seegmiller. "New Frontiers: The Origins and Content of New Work, 1940–2018." NBER Working Paper 30389, August 2022. https://doi.org/10.3386/w30389; Briggs, J. and D. Kodnani. "The Potentially Large Effects of Artificial Intelligence on Economic Growth." Goldman Sachs Global Economics Analyst. March 26, 2023.

[7] Source: Gimble, M. et al. "Evaluating the Impact of AI on the Labor Market: Current State of Affairs," The Yale Budget Lab, October 1, 2025.

[8] de Albuquerque, P., Caiado, J., and A. Pereira. 2020. Population aging and inflation: evidence from panel cointegration. Journal of Applied Economics, 23(1), 469–484. https://doi.org/10.1080/15140326.2020.1795518.

3 Theme: The Global Shift to Self-Reliance

Countries and regions are facing a rapidly evolving global landscape, prompting governments to act swiftly to secure their economic and security interests. Nowhere is the drive toward self-reliance more evident than in international trade, where protectionist policies and regional agreements are reshaping the flow of goods and capital. Investors should closely monitor these developments, as they may unlock potential in sectors such as domestic manufacturing, infrastructure and technology.

With U.S. effective tariff rates hitting levels not seen in 80 years (**Exhibit 5**), non-U.S. governments are seeking to reduce uncertainty from protectionist U.S. trade measures. U.S. trade measures are creating new impetus to expand and deepen regional, bilateral and multilateral agreements, while forcing countries and regions to look inward to reduce internal hurdles to trade, growth and increased competitiveness.

Most critically, protectionism is shifting what seemed to be a U.S.–China competition for AI leadership, to effectively a new global "arms race" for AI, with various governments focusing on development of new technologies. The global AI race requires further considerations of energy independence, critical minerals and materials supply, along with AI chip access and development. We covered critical mineral supplies in our recent piece, AI's Long-Term Potential: More Upside Than Downside, so we won't go into detail here.[9]

We will note that governments are looking to secure new sources of these materials and minerals, and stockpiling them may introduce a price insensitive/inelastic buyer into the market.

Significantly, energy development and dominance are prerequisites for AI dominance and are proving to be one of the greatest strategic challenges of our time.[10] Not only could the ability to produce sufficient energy hit barriers, the ability to transport it is also a major question. Ironically, AI development may help solve this challenge by optimizing energy use. Additionally, longer term energy requirements may be overstated as many forecasts do not assume greater energy efficiencies in each generation of chips, or software optimizations reducing energy loads for queries. Regardless, energy will remain a key focus as long as demand from data centers exists.

Finally, the supply of AI chips is a pinch point, as much of the current supply of semiconductors and advanced chips are manufactured in Taiwan.[11]

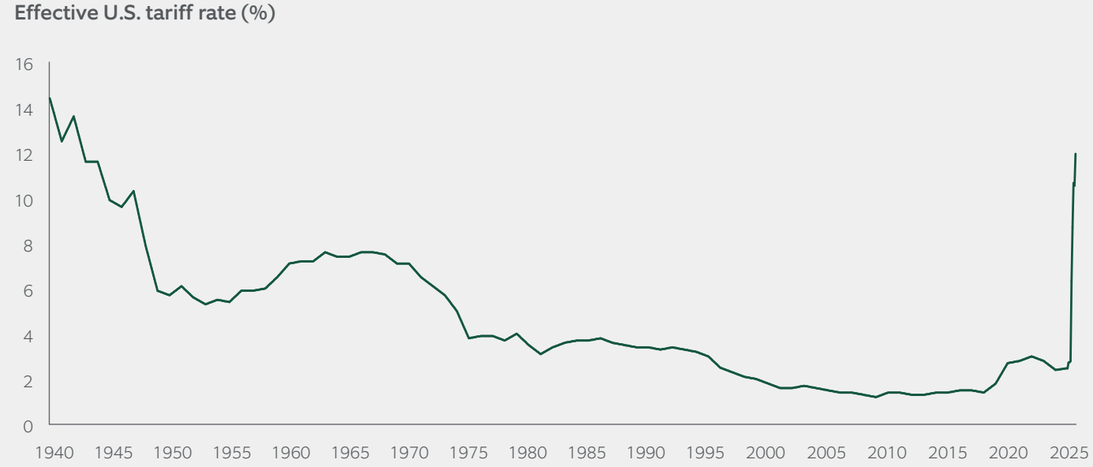
This provides impetus for the homeshoring of chip production, particularly when we consider AI's key role in self-reliance for defense.[12] In a potentially more fractured world, defense intersects with robotics and development of autonomous transport, drones and other novel technologies such as potential quantum computing breakthroughs. Producing advanced technologies securely and independently, or forming trade pacts to ensure their production, would benefit local economies and could be a major driver moving forward.

We expect protectionism will lower global growth, particularly in the near term, though the race for AI, as well as spending commitments on defense, could raise it. Protectionism is potentially inflationary as tariffs combined with lower competition can raise price pressures. Energy and electricity needs are also inflationary, as are inelastic buyers of critical minerals.

EXHIBIT 5

Higher U.S. Tariffs Push Self-Reliance

With US effective tariff rates hitting levels not seen in about 80 years, the rest of the world is seeking to reduce uncertainty from protectionist U.S. trade measures.



Source: Northern Trust Asset Management, Macrobond, Tax Foundation, U.S. Census Bureau. Monthly data from January 1940 to August 2025. Data through 2024 are historical rates from the Tax Foundation. Monthly data from January 2025 to August 2025 is based on calculated duties using U.S. Census Bureau data. **Historical trends are not predictive of future results.**

[9] See our recent piece AI's Long-Term Potential: More Upside Than Downside for more on critical minerals.

[10] Global electricity demand for data centers is projected to surpass 1200 terawatt-hours by 2035. Source: BloombergNEF. New Energy Outlook 2025. April 15, 2025.

[11] Source: U.S. International Trade Commission. Taiwan—The Silicon Island. Executive Briefing on Trade, February 2024.

[12] North Atlantic Treaty Organization (NATO) partners recently committed to increasing spending to 5% of GDP annually, and much focus will be on how those spending goals are met.

4 Theme: Debt and Deficits Loom Large

Despite solid economic recoveries and rebounds in employment since the pandemic, fiscal deficits across many leading developed markets (Exhibit 6) continue to exceed pre-2020 levels. This persistent gap underscores significant threats to sustained economic expansion.

Of particular note, the growing impact of demographics on debts and deficits is concerning. Governments with aging populations require increased public spending on social security and healthcare, while receiving reduced tax revenues as people retire, putting upward pressure on debt absent substantial policy adjustments. Another potential source of higher deficits is defense, given new NATO spending commitments and **The Global Shift to Self-Reliance** theme.

For the world's largest economy, the question becomes: Can the U.S. grow its way out of increasing debt? There are reasons for hope. The U.S. is a dominant player in the technology sector, currently propelled by AI investment and innovation. And while concerns exist around AI "hype" and circular AI deals,[13] the U.S. may be in a fortunate position to benefit further from "U.S. exceptionalism", potentially translating into productivity and, therefore, economic growth. In the end, productivity is key, with the AI boom the main potential driver. Further, the throughput of AI productivity could broaden gains to other sectors and industries, as they adopt new tools and technology.

Indeed, U.S. Congressional Budget Office (CBO) growth estimates may be too low, and may not be accounting properly for AI-driven productivity gains.[14] The internet boom may provide a historic parallel, when, between 1996–2000, labor productivity rose to 2.8% annually, up from just 1.0% between 1991–1996.[15] Might history rhyme? Tariffs are also referred to as a new ongoing source of government revenue, potentially reducing deficits and debt. However, the sustainability of that revenue is not without debate. That is, it may be logical to assume that if tariffs are successful in promoting homeshoring, there will be fewer imports, and therefore less tariff revenue.

Outside of the U.S., many countries are struggling with debt burdens amid demographic change. The prime example is France's long-term, negative trajectory driven by large deficits, growing debt and strong societal pushback against measures that could help improve the situation, such as raising the retirement age. Markets have viewed events unfavorably, with 10-year yields in France rising and converging with those of Italy, which has historically suffered chronic debt-to-GDP concerns.[16] This is the prime example for much needed thoughtful policy change, combined with a willing populace, to alter the trajectory for debt in many countries.

Growing debts are poor for growth, as resources are rediverted from innovation and productive spending to repayment of debt and associated interest costs. In addition, they limit support policymakers can provide in times of economic downturns. Rising debt may also add to inflationary pressures. We will, therefore, be carefully evaluating developments and investment opportunities as they relate to this theme moving forward.

[13] Source: Weil, J. "Is the Flurry of Circular AI Deals a Win-Win – or Sign of a Bubble," *The Wall Street Journal*, October 22, 2025.

[14] Source: Congressional Budget Office. *The Long-Term Budget Outlook: 2025 to 2055*. March 27, 2025.

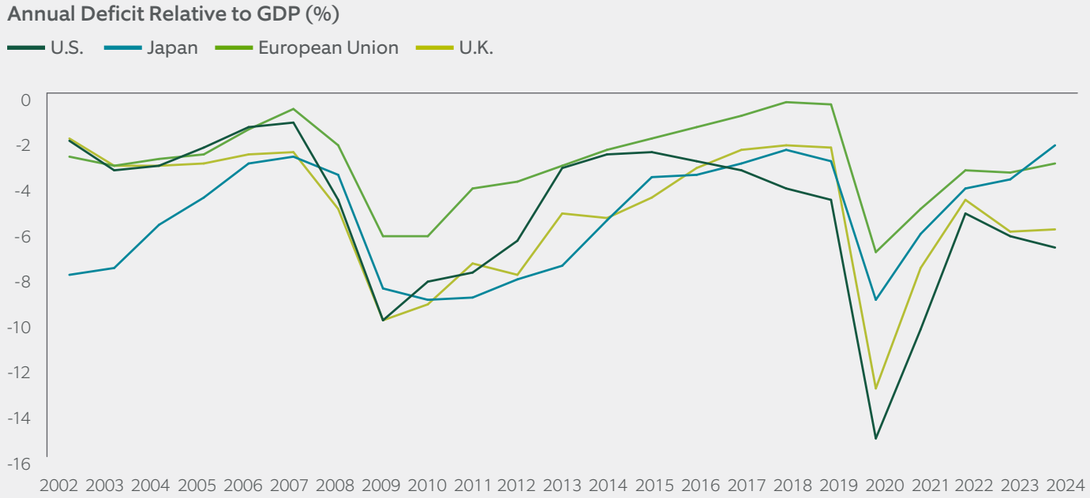
[15] Source: Jorgenson, D., Ho, M., and K. Stiroh. 2008. "A Retrospective Look at the U.S. Productivity Growth Resurgence." *Journal of Economic Perspectives* 22 (1): 3–24. DOI: 10.1257/jep.22.1.3

[16] Source: Factset, 10yr benchmark bonds for France and Italy, data retrieved October 10, 2025.

EXHIBIT 6

Persistent Deficits

Deficits across developed markets are exceeding pre-pandemic levels despite solid economic recoveries and rebounds in employment.



Source: Northern Trust Asset Management, Macrobond, U.S. Bureau of Economic Analysis (BEA), U.S. Department of Treasury, Japan Ministry of Finance, U.K. Office for National Statistics, European Central Bank. Annual data from 2002 to 2024. Deficits are defined as follows: U.S. - federal government budget balance; Japan - general government budget fiscal balance; eurozone - government deficit; U.K. - net borrowing. **Historical trends are not predictive of future results**.

5 Special Considerations

Strong Institutions and Central Bank Independence

Strong, independent economic institutions are key to prosperous economies. Many democracies' economic institutions, including central banks, are structured to act independently of elected officials. Moreover, the independence of economic institutions from political power is paramount to economic development as, without checks on political power, holders of that power are more likely to opt for a set of economic policies benefiting themselves at the detriment of society.[17] The Federal Reserve is arguably the most important economic institution in the world. Thus, maintaining the Fed's independence is a focus for investors. U.S. President Donald Trump's political rhetoric and pressure on the Fed to lower interest rates is raising Fed independence as a risk case as any lack of independence would hinder the ability of the Fed from focusing on its non-political, dual mandate of price stability and maximum employment. This is an issue we are keeping a close eye on due to the major role the Fed plays in the global economy and markets.

Diverging Climate Approaches

As noted in our **The Global Shift to Self-Reliance** theme, energy production to support AI development and usage will be a huge economic focus for years to come. It is important here to consider the divergent approaches taken by the U.S. and China on this front. In the U.S., abrupt policy shifts are turning the focus to gas turbines and nuclear power, and away from renewables. Indeed, the U.S. is using liquid natural gas export/purchases as a lever in tariff negotiations with its trading partners. China is continuing an "all of the above approach", all while extending their massive lead in renewable energy development and dominating clean-tech exports.[18] These divergent approaches will have implications for industries beyond AI, such as the automotive sector when considering electric vehicle production, which should be kept front of mind by investors. The U.S. shift also has major implications for investors looking to reduce portfolio's carbon emissions as technology companies, often considered low emitters, may likely rely heavily on fossil fuels to power data centers.[19]

Savings Equitization

Governments are becoming more aware of the aging demographics we outlined in our **Rising Innovation, Declining Demographics** theme. Their awareness includes the need to encourage equitization of savings for retirement, as one way to address the pressing risk case of "*Can they grow rich before they grow old?*". There is a savings gap in many countries that will lead to pension crises unless measures are taken now to dramatically increase savings needed for retirement. Therefore governments are encouraging individuals to move cash savings into equity investments. A prime example is Japan's expanded Nippon Individual Savings Account (NISA) program, designed to encourage long-term equity participation. As long as equities grow at a much higher rate than cash, as we forecast, this should act to help close some of the savings gap. When individuals save cash rather than investing, it can stifle economic growth. By encouraging equitization, not only can countries potentially address some of their pension concerns, but the flow of capital can also contribute positively to productivity, economic growth and overall investor returns.

Stablecoins

Stablecoins are a specific type of cryptocurrency designed to hold a stable value relative to another asset, for example the U.S. dollar. The U.S. Genius Act, legislation from 2025 that established a regulatory system for stablecoins, may promote their mainstream use. The tokenized nature of stablecoins is valuable, in that transactions can occur much faster on blockchain than in the traditional banking sector. It is also notable that stablecoin legislation potentially creates demand for Treasurys, as the Genius Act specifies requirements for 100% backing, which includes Treasury bills. In some cases this could simply shift demand from one place to another (for example, if investors shift from money market funds to stablecoins), but demand for Treasurys could increase if stablecoin flows are coming from outside of the U.S. Such shifts could also cause new friction and competition in the financial system.[20] Regardless, stablecoins will be an area of interest for the foreseeable future.

Currency Debasement and Scarce Assets

Gold, Bitcoin and currency debasement are currently top of mind topics in the asset management industry, and all interact with our 2026 themes. One way countries deal with higher debt, as in our **Debt and Deficits Loom Large** theme, is through money supply growth. An outcome of monetary supply growth is currency debasement, leading to a loss of purchasing power. Assets that protect purchasing power are scarce, have supply constraints, and can't replicate as fast as the currency they're priced in. U.S. stocks are an example, as share buybacks have kept the supply constrained. Other examples are Bitcoin and gold. Both have a limited supply, and current heightened demand. Part of this demand is driven by a desire for a more neutral reserve assets in line with our **The Global Shift to Self-Reliance** theme, wherein, governments and countries realize they must control their own assets. As a result, sanction free neutral reserve assets are in demand by central banks, a trend that accelerated after sanctions were imposed on Russia following the 2022 invasion of Ukraine.[21] In fact, gold overtook the euro as the second-largest reserve asset by the end of 2024 (second only to US$).[22] As such we will be monitoring developments for these assets moving forward.

[17] Source: Acemoglu, D., Johnson, S., and J. Robinson. 2005. Chapter 6 Institutions as a Fundamental Cause of Long-Run Growth. *Handbook of Economic Growth*, Vol. 1 (A), 385–472. https://doi.org/10.1016/S1574-0684(05)01006-3.

[18] The first 7 months of 2025, China installed 277 gigawatt-hours of just wind and solar energy, 4X more than the U.S. installed from all sources. Source: Uberti, D., Ballard, E., and B. Spegele. "The U.S. Is Forfeiting the Clean-Energy Race to China," *The Wall Street Journal*, September 21, 2025. Corrected September 22, 2025.

[19] Goldman Sachs recently estimated 60% of data center demand will be met with fossil fuels, increasing greenhouse gas emissions by 215–220 million tons by 2030. Source: How AI is Transforming Data Centers and Ramping Up Power Demand. Goldman Sachs Research. August 29, 2025.

[20] Source: Boyle, R. "Stablecoins: Mint Conditions," Northern Trust Weekly Economic Commentary, October 10, 2025.

[21] Source: Uberti, D. and J. Pitcher. "A New Wall Street Trade Is Powering Gold and Hitting Currencies," *The Wall Street Journal*, October 7, 2025.

[22] Source: Hoppe. J. "Gold Surpasses Euro as Second-Largest Global Reserve Asset, ECB Says," *The Wall Street Journal*, June 11, 2025.

6 Fixed Income Forecast

We believe global fixed income market performance will improve over the next decade as interest rates gradually normalize. Inflation likely will decline toward central bank targets of 2% and we think economic growth will remain slow to moderate.

We expect short-term Treasury rates to decline from current restrictive levels, leading the U.S. yield curve to steepen modestly (**Exhibit 7**) as the 10-year Treasury yield faces upward pressure but avoids material expansion in term premiums. We see European and Japanese yield curves shifting upward to more historically normal levels while the U.K. curve may steepen as short term rates ease.

Interest Rates

We anticipate the 10-year Treasury yield settling around a nominal rate of approximately 4.3%, broadly in line with consensus expectations. Elevated correlations between stocks and bonds, lingering inflation and policy uncertainty are all factors placing upward pressure on term premiums. We expect these trends to persist, but not dramatically worsen.

As short rates come down and long-term rates stabilize, the shorter end of the U.S. yield curve likely will transition from inverted toward a more normal upward slope. We view a gentle steepening as the most likely path. Importantly, a steeper Treasury curve enhances roll return for investors, offering a modest improvement over prior year forecasts.

We acknowledge two prominent downside risks in the U.S.: 1) a fiscal crisis and 2) a loss of confidence in the U.S. dollar. These worst-case scenarios are not in our base case, but investors should closely monitor them.

Tied to our **Debt & Deficits Loom Large** theme: While debt-to-GDP (gross domestic product) is high, we expect the U.S. will manage its fiscal trajectory through a combination of growth and policy adjustments. We believe the U.S. Treasury's ability to finance deficits at reasonable rates remains intact.

Similarly, we consider the risk of lower confidence in the U.S. dollar a low probability. The U.S.-dollar-based global financial system has proven resilient. Even with **The Global Shift to Self-Reliance** pushing some countries to explore alternative reserve assets, such as **Scarce Assets** we discuss in **Special Considerations**, the U.S. dollar remains preeminent in global trade and finance.

U.S. Return Forecasts

Cash

We expect declines in the short end of the yield curve as the Federal Reserve is projected to cut the fed funds rate from restrictive to neutral levels slightly above 3%, and expect cash returns to average 3.3%.

Investment Grade Bonds

Declines in the short end of the yield curve with some appreciation in the 10-year yield support improved roll returns, though we anticipate minimal change in intermediate Treasury yields and expect investment grade bonds to deliver stable returns. With limited impact from interest rate changes, we expect intermediate-duration Treasury, securitized and aggregate bond returns to approximate starting point yields plus some roll return, which benefits from some steepening in the Treasury curve.

We anticipate only a gradual uptick in investment grade credit spreads, resulting in total returns of about 5% per year for high-quality corporate bonds. Corporate fundamentals are entering this period from a position of strength: default rates are near historic lows and interest coverage ratios remain solid. We expect credit spreads to widen slightly from current tight levels but stay below long-term averages given stable growth and corporate profitability.

For context, U.S. investment grade option-adjusted spreads (OAS) are around 0.75% now, versus a 20-year average of about 1.5%.[23] Our forecast envisions spreads drifting toward that long-run average as financing costs normalize. Such a move would be a headwind to investment grade bond prices, but we expect a modest impact offset by enhanced coupon income. Investment grade intermediate-term bond forecasts align largely with starting yields plus roll return, with negligible impact from interest rate adjustments.

High Yield Bonds

Yields have declined to 6.7%, representing a lower starting-point yield from prior years. We expect high yield OAS to widen somewhat as well, trending towards long-term norms. Still, we expect spreads to remain moderate by historical standards, reflecting that credit quality in the high yield universe has improved.

EXHIBIT 7

Normalizing Yield Curves

We expect global yield curves to normalize over the next decade with more normal inflation levels and central bank rates.



Source: Northern Trust Asset Management, FactSet. Data as of September 30, 2025. German yields, often cited as the euro area benchmark, are used as a proxy for Europe. The 10-year forward rates represent Northern Trust's expectations of rates in 10 years. Please see important forecast disclosures on page 37. **Historical trends are not predictive of future results.**

[23] Source: FactSet. As of September 30, 2025.

Our base case assumes default rates rise mildly in coming years, toward long-term averages of around 2.75% annually. Barring a severe recession (which we do not foresee), we expect the high yield market to avoid an avalanche of defaults. With starting yields below 7%, after subtracting defaults and accounting for slightly wider spreads, we project U.S. high yield bonds to return on the order of 5.5% annually over the next 10 years. While lower than the historical standard, it still represents a meaningful premium over government bonds.

Europe, U.K. and Japan Return Forecasts

All three regions face subdued economic growth over the next decade. We forecast real GDP growth of 1.2% on average over the next 10 years for the eurozone, 1.5% for the U.K. and 0.2% for Japan. These modest growth rates reflect structural headwinds. These include Europe's aging workforce and hefty energy transition costs, the U.K.'s productivity challenges and Japan's persistent demographic decline. In the eurozone and the U.K., headline inflation likely will settle near 2% and stay around that level thereafter. We see Japan's inflation, which has recently perked up above 2%, averaging slightly below 2%. This is a notable change from the deflationary past, but still under the pace of other regions.

The outlooks for Europe, the U.K. and Japan are bound by common themes of the global macro landscape. **Rising Innovation, Declining Demographics** is especially pertinent: Aging populations are a drag (Europe/Japan labor forces shrink), but efforts in automation and AI could offset some decline. For example, Japan's push into robotics and the U.K.'s tech sector development aim to bolster productivity in the face of demographic pressure.

The Global Shift to Self-Reliance also plays a role — Europe's need for energy independence and re-shored supply chains might keep inflation a tad higher than the pre-2020 era. However, our forecast already incorporates that, with eurozone inflation hovering just under 2% mid-term. Finally, **Debt & Deficits Loom Large**: Japan's public debt is the highest of the three. While we do not foresee a crisis, it reinforces the Bank of Japan's (BoJ) cautious tightening path.

These themes underscore our forecasts (**Exhibit 9**): steady but unspectacular growth, contained inflation and gradually normalizing interest rates. Investors in European, U.K. and Japanese bonds can thus expect decent income with low volatility, making these markets once again reliable ballast. The bottom line is an encouraging one: Financial conditions in all three regions are moving back to normal, with central banks achieving their inflation objectives and bond yields reverting to levels that offer positive real returns without undue risk.

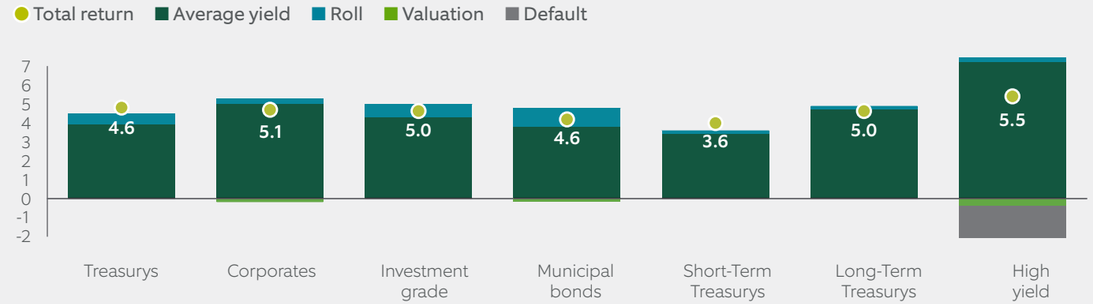
A major theme for all three markets is the normalization of interest rates and yield curves. We forecast 10-year German Bund yields in the mid-3% range and 10-year U.K. gilt yields of 4.5%–5%, versus short rates around 2% (eurozone) and mid 3% (U.K.) — implying a normal positive term spread. We forecast the BoJ gradually raising its short-term policy rate to about 1.5% over the next several years, up from 0.5% currently. Likewise, the cap on 10-year Japanese government bond yields has lifted, and we see the 10-year yield rising toward about 2.5% in the medium-term. Even with these increases, Japan's yield curve may remain amongst the lowest globally, but importantly it should no longer be flat. We anticipate a modestly positive slope.

EXHIBIT 8

Fixed Income Stability

We anticipate stable returns for investment grade and high yield bonds, supported by resilient fundamentals and gradual spread normalization backed by steady economic growth and contained inflation.

Northern Trust 10-Year Annualized U.S. Fixed Income Return Forecasts (%)



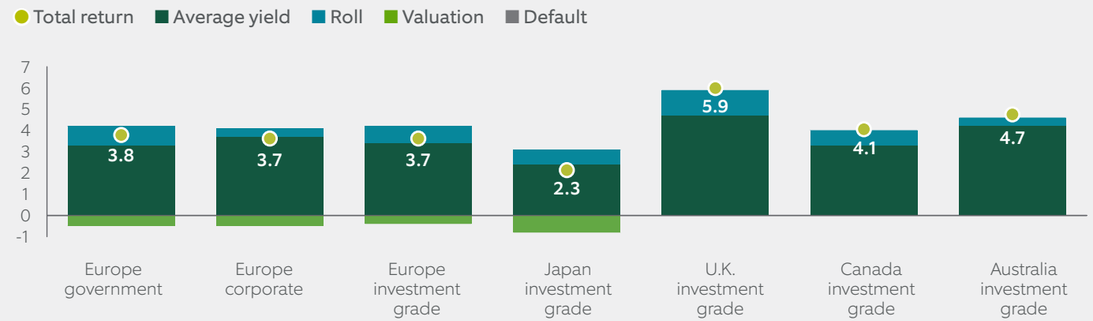
Source: Northern Trust Asset Management, FactSet. Average yield calculated as yield to worst, which is the yield on a callable bond, where the issuer may pay off a bond before its maturity date, that assumes a bond is called at the earliest opportunity. Please see index proxies and important forecast disclosures on pages 34 and 37. It is not possible to invest directly in any index.

EXHIBIT 9

Positive Returns Without Undue Risk

Steady but unspectacular economic growth, contained inflation and normalized interest rates support bond returns outside the U.S.

Northern Trust 10-Year Annualized Fixed Income Return Forecasts (%)



Source: Northern Trust Asset Management, FactSet. Average yield calculated as yield to worst, which is the yield on a callable bond, where the issuer may pay off a bond before its maturity date, that assumes a bond is called at the earliest opportunity. Please see index proxies and important forecast disclosures on pages 34 and 37. It is not possible to invest directly in any index.

7 Equity Forecasts

We began our equity forecasting process with a quantitative analysis to understand which variables drive equity returns over time, using a modified version of the Grinold-Kroner expected return model.[24]

We modified the model by breaking down expected earnings growth into revenue growth and profit margin growth. We applied this model to developed markets and emerging markets, with regional forecasts based on country forecasts weighted by market size. Globally, key fundamental components of the model — such as revenue growth, profit margins and valuations — have increased thus serving as a higher starting point for the next 10 years.

Key Forecast Building Blocks

1 | **Revenue growth** is based on our economic growth forecasts multiplied by an expected revenue elasticity to GDP and weighted by each equity index's geographic exposures.

2 | **Share count** reflects the expected change in the outstanding shares in an index due to repurchases or new issuance.

3 | **Profit margin** represents companies' ability to turn revenue per share into earnings through profit margins.

4 | **Valuation impact** is based on expected changes in price-to-earnings ratios.

5 | **Dividend yield** estimates are based on current levels, adjusted for any expected changes to the amount of cash companies return to shareholders.

Equity Returns: The Last 10 Years

Revenue growth, profit margins and dividend yields were the key positive contributors to equity returns over the last 10 years across developed markets (DMs) and emerging markets (EMs). In **Exhibit 10**, we see revenue growth (in dark green) can vary by geography. Over the last 10 years, the U.S. revenue growth contributed 5.8% to total returns — among the highest of the DMs. Revenue growth in EMs also contributed 5.8%. EMs not only experienced a high 10-year nominal GDP growth of 6.7%, but also a high revenue elasticity ratio at 0.75. This implies the heightened sensitivity of companies' revenue to changes in GDP for countries where each company collects revenue globally. For comparison, the U.S. experienced historical 10-year growth in nominal GDP of 5.4% and an elasticity ratio of 0.77.

Changes in share count is an increasingly strong driver of returns, both positive and negative. In the U.S., broad share buybacks contributed positively to the annual return by 0.7% in the last decade.[25] Buybacks result in fewer shares outstanding in the market, and those fewer shares are thus higher valued, leading to higher equity performance. In contrast, EMs experienced strong share dilution over the last decade, reducing the annual equity return by about 5%, a sizeable negative contribution, with emerging markets returning 9.6% overall.

Average profit margins expanded positively across markets. In the U.S., the profit margin grew over the last 16 years to 14%. For the last decade, profit margin growth contributed about 3% annually to the U.S. equity return. A 3% contribution occurred across most other DMs and EMs, with the exception of Australia, where with a 1% profit margin contributed to their local market returns.

Price-to-earnings (PE) multiples also expanded broadly across most DMs and EMs over the last decade — most evident in the U.S., contributing 4.1% of total U.S. equity returns. This is partly driven by the shift in sectoral composition of the MSCI USA Index, where the technology sector increasingly dominates and is made up of stocks with generally higher multiples.

The last component of performance is dividends, which contributed about 1.2% annually to the U.S. equity return over the past 10 years. Globally, dividends contributed 1.7%, partly driven by the Europe's higher average dividend yield of about 3%.

U.S. Forecast

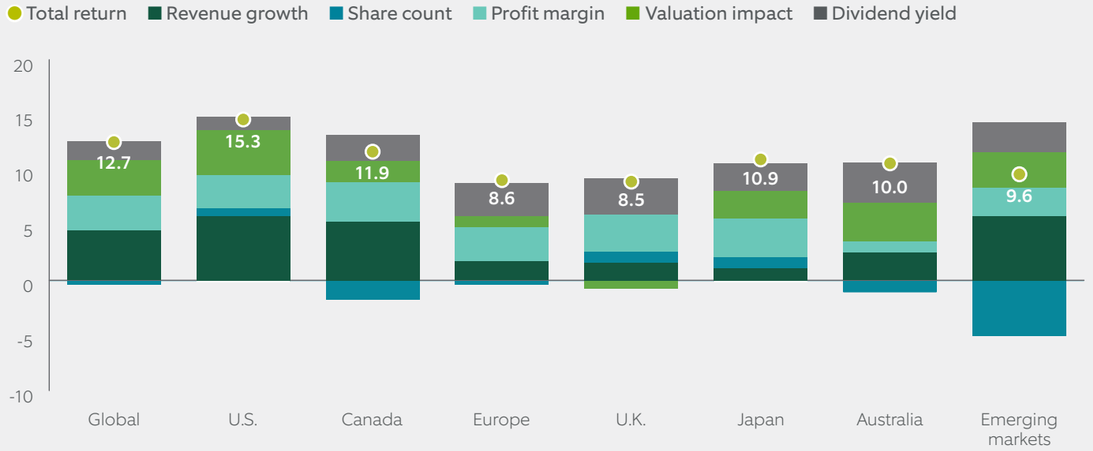
We expect revenues of U.S. companies to increase 3.5% a year on average over the next 10 years — 2.3% less than the last decade, but still healthy growth from an absolute perspective. We expect share change to remain relatively flat and profit margins to expand at about 1.6%, thus contributing 1.6% to expected U.S. equity returns. Despite this expansion, our profit margin forecast is lower relative to the last 10 years. We believe the dueling

EXHIBIT 10

U.S.-Led Equity Performance

Strong sales growth and profit margins supported the U.S. 15.3% return over the last 10 years.

10-Year Annualized Equity Return Contribution by Country (%)



Source: Northern Trust, Factset, data from September 30, 2015 to September 30, 2025. Index performance returns do not reflect any management fees, transaction costs or expenses. It is not possible to invest directly in any index. **Past performance is not indicative of future results.**

[24] The Grinold-Kroner model calculates the total expected return for a stock as the sum of returns from dividends, earnings growth and stock price changes. See Richard Grinold and Kenneth Kroner, The Equity Risk Premium, Investment Insights (Barclays Global Investors, July 2002).

[25] Source: FactSet, MSCI USA Index. Represents Share Outstanding change from September 30, 2015 to September 30, 2025.

forces of **Rising Innovation, Declining Demographics** will somewhat offset each other. On one hand, we expect productivity gains, and therefore margin expansion, from artificial intelligence to drive profit margins. On the other hand, we expect demographic challenges from aging populations and a declining labor force to dampen growth.

Despite our view that technology companies will support high PE multiples, we expect something of a valuation multiple contraction. Current PEs are at the top end of the percentile rank and we don't believe they will sustainably break current levels. However, as we expect earnings to strengthen via positive revenue and profit margin growth, we think investors will be mindful of the prices they pay for those earnings, thus driving the expected contraction from current levels. We believe that the dividend yield will increase to 2% as select large cap technology stocks start to pay dividends as they mature over the next 10 years. These components drive our U.S. equity 10-year annualized return forecast to 6.8% (**Exhibit 11**).

U.S. Small Cap Forecast

We anticipate strong growth for U.S. small caps, supported by the relatively strong U.S. economy and America-first policies backed by **The Global Shift to Self-Reliance**. Over three-quarters of small cap sales come from the U.S. versus nearly 60% for large caps.[26] Also, falling interest rates support small caps because of their higher dependence on floating-rate debt.

We expect small cap revenue to grow at 4.3% annualized over than next 10 years, outpacing large caps that are more reliant on sales outside the U.S.[27] We expect profit margins to continue to expand, albeit with more volatility than in the past 10 years, at a pace of 0.9% a year on average. Small cap valuations are currently discounted versus large caps, and we anticipate past growth to continue with a valuation expansion of 0.2% a year. Adding in an expected dividend yield contribution of 1.5% brings our return forecast for U.S. small caps to 7.0% annualized for the next 10 years.

U.K. Forecast

Rolling 10-year economic growth for the U.K. fell short of U.S. growth for the last five calendar years echoing the relative performance pattern observed in the region's stock market. The U.S. GDP grew at an average 10-year annualized nominal rate of 4.6% for the last five calendar years versus 3.7% in the U.K.[28] Similar over the next 10 years, we expect the U.K. to grow 3.6% nominally versus 4.2% for the U.S.

On average, U.K. companies historically turned 21% of economic growth into revenue the last 10-years versus the 77% elasticity ratio in the U.S.[29] As the country's Invest 2035 initiative starts taking shape, we expect revenue elasticity to improve in the next 10 years, driving up the expected revenue growth to 2.4%. While the U.K.'s PE multiples were a negative contributor to returns over the last 10 years versus the U.S., we expect a slight expansion of 0.1%, driven by investor confidence in the success of this initiative. However, we don't anticipate past profit margin growth of 3.3% to be sustainable. We believe margins will vary over the next 10-year averaging to current levels.[30] With an expected dividend yield of 3.6%, this brings our expected 10-year annualized return forecast for the U.K. to 6.2%.

[26] Source: Morningstar Direct. Company revenue breakdown of index constituents as of 9/30/2025.
[27] Source: Morningstar Direct. Company revenue breakdown of index constituents as of 9/30/2025.
[28] Source: IMF, gross domestic product average of last five calendar years of rolling 10-year nominal gross domestic product, 2021 to 2025 (estimated).
[29] Source: FactSet, IMF. As of September 30, 2025.
[30] Source: FactSet, MSCI UK Index. As of September 30, 2025.
[31] Sources: Morningstar Direct; FactSet. As of September 30, 2025.
[32] Source: FactSet, MSCI Europe ex-UK Index. As of September 30, 2025.
[33] ibid., [34] ibid.
[35] Source: FactSet, as of September 30, 2025.

Europe ex-U.K. Forecast

Although the Europe ex-U.K. region may not be at the forefront of AI innovation, there are a number of catalysts that could drive positive returns for investors. The region is trading at a discount relative to the U.S. and valuation multiple expansions contributed 1% to equity returns in the last 10 years.[31] We expect continued, but somewhat muted, multiple expansion of 0.3% as investors, particularly value-oriented investors, take advantage of that discount. The region generated 63% of revenues outside developed Europe but was only able to translate 17% of economic growth in countries they do business with, into revenues in the last 10 years.

We estimate a slightly detracted revenue contribution of 1.7% in the next 10 years.[32] Initiatives such as the NextGenerationEU and green transition funding could stimulate infrastructure, digitalization and clean energy sectors, but we don't anticipate that this is enough of a catalyst to maintain historical 10-year profit margin growth of 3.1% over the next 10 years.[33] We estimate a future net profit margin expansion of 0.9%.

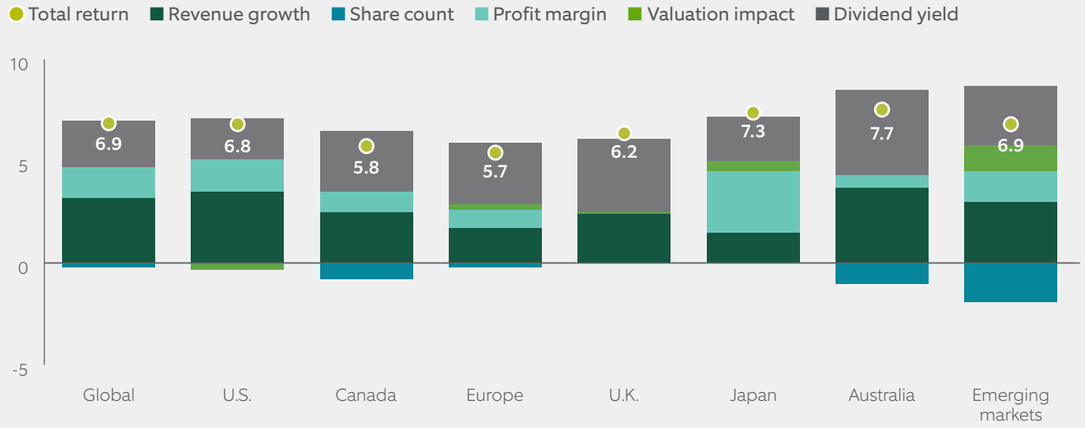
Past share change had a negative impact to historical 10-year returns but we estimate going forward a slightly improved dilution impact of -0.2% as we expect companies to increase share issuance.[34] The Europe ex-U.K. region offered a healthy dividend yield of 3%,[35] which we've maintained in our forecast model. This dividend yield is attractive in an expected low-rate and/or potentially volatile market. Taking a product of all these components results in the region's expected return of 5.7%.

EXHIBIT 11

U.S., Japan and Australia Lead

AI may drive U.S. returns, structural reforms back Japanese equities and Australia's resource-rich economy could support equities.

Northern Trust 10-Year Annualized Equity Return Forecasts by Country/Region (%)



Source: Northern Trust Asset Management. "Shares count" means the effect on equity returns from share issuance or repurchases. Index performance returns do not reflect any management fees, transaction costs or expenses. It is not possible to invest directly in any index. Forecast as of September 30, 2025. Please see important forecast disclosures on page 37. **Past performance is not indicative of future results.**

Japan

We expect Japan to benefit from a series of structural, macroeconomic and capital market catalysts. Nominal GDP growth was 1.6% a year on average over the past 10 years but 56% of company revenues are foreign. With an elasticity ratio of 0.21, both the domestic and foreign revenues contributed 1.1% annualized to equity returns over the past 10 years. We expect nominal economic growth of 2.1% a year, no change in composition of revenue sources, and a revenue elasticity ratio to GDP of 0.42, therefore a revenue growth contribution of 1.5% annually to expected equity returns.[36]

Share buybacks aided past annual returns by 1% as companies improved capital efficiency, valuations and improved returns to shareholders. However, as households consider shifting from cash savings to investments in equities (i.e., the NISA program discussed in **Savings Equitization** of the **Special Considerations** section), we anticipate that some companies will drive share issuance to ease access, resulting in a net effect of 0% shares changes a year. We expect the 10-year trailing profit margin growth of ~3%[37] to continue in the next 10 years, driven by Japan's competitive advantages in semiconductors, robotics and automation aligned with our theme of **Rising Innovation**, **Declining Demographics**.

Although valuations ramped up the past 10 years at 2.5%,[38] we think that will slow down as global investors who want to take advantage of the AI theme would look to the U.S. or AI developer countries as opposed to Japan. Further, U.S. tariffs tied to **The Global Shift to Self-Reliance** theme have triggered uncertainty for Japan's equity markets and the yen, resulting in a forecast of just a 0.5% annual valuation expansion for Japanese equities over 10 years. With a forecasted dividend yield of 2.2%, that brings our Japan 10-year annualized equity return forecast to 7.3%.

Australia

Australia's banking sector continues to be a dominant force in local equity markets. The country is also rich in natural resources, a key driver for **The Global Shift to Self-Reliance**. Australian companies benefit from demand from China and India, and from the U.S., which is looking to diversify sources of critical minerals. The last 10 years, revenue growth contributed 2.5% to total returns.[39] We see that increasing to 3.7% over the next 10 years because of strengthening natural resource demand from China and India.

Company share issuance historically trended upwards since the 1980s and we don't anticipate any break in that trend, so we expect dilution to detract 1% from annual returns over to the next 10 years. We foresee further pressure on margins, especially in the resource sector, and as a reference point, net margins contributed 1% to equity returns over the last 10 years. However, we think the technology and healthcare sectors will carry the weight under our theme of **Rising Innovation**, **Declining Demographics**, adding a slight 0.6% contribution to our annual return forecast.[40] We believe Australia will be more on the "adopters" end of the AI spectrum, which could aid in operational efficiencies that can assist in contributing to profit margins.

Valuations have also ramped up by 3.5% over the last 10 years, to the highest level since the early 2000s. But we don't anticipate further expansion, and instead expect a halt at 0% change in multiples.[41] Adding in our dividend yield estimate of 4.2%, leads us to a 7.7% expected return in the next 10 years.

Emerging Markets

We expect strong revenue growth to continue in emerging markets, but at a slower pace relative to the last 10 years. The last decade, revenue growth contributed close to 6% to annual equity returns.[42] We're now expecting about 3% going forward, and a lot of that reduction is due to a very different economic outlook versus the last 10 years. In fact, we believe emerging Asia will drive revenue growth, offset some by emerging markets in Latin America, Europe, the Middle East and Africa.

Similar to the last 10 years, we are fairly optimistic on the profit margin growth and valuation expansion, with annual growth rates of 1.5% and 1.3%, respectively. We estimate dividend yields in EMs will remain relatively strong at 2.9%. As they have over the last 10 years, we expect share issuance to detract 1.9% from annual equity returns, bringing down the region's total expected return to be 6.9%, on par with the expected performance in DMs.

[36] Source: FactSet, MSCI Japan Index. As of September 30, 2025.
[37] ibid., [38] ibid.
[39] Source: FactSet, MSCI Australia Index. As of September 30, 2025.
[40] ibid., [41] ibid.
[42] Source: FactSet MSCI EM Index. As of September 30, 2025.

8 Real Asset Forecasts

The primary real assets sectors (global natural resources, real estate and infrastructure) can be thought of as a hybrid between fixed income and equities, offering characteristics of both. In comparison to broader equities, real assets typically have higher current yields and greater stability of cash flows. Further, these asset classes offer elements of inflation protection and interest rate sensitivity.

Although expected earnings growth for real assets may lag equities over longer periods of time, their stability and diversification benefits can provide valuable exposure within an investment portfolio. While we expect inflation could be contained, risks remain. Inflation could be triggered by rising debt, as discussed in our **Debt and Deficits Loom Large** theme, as well as by surges in energy prices or high demand for critical minerals, as noted in **The Global Shift to Self-Reliance**. Real estate and infrastructure offer additional risk exposures for portfolio diversification and higher yields than traditional equities, and could both potentially benefit from the **Rising Innovation**, **Falling Demographics** theme (**Exhibit 12**).

Global Natural Resources

We believe strong fundamentals (persistent cash flows, tight commodity markets, stronger balance sheets and lower capital expenditures) will support natural resources as a hedge against higher inflation and escalation of conflicts around the world. We expect natural resource firms to benefit from **The Global Shift to Self-Reliance**. Commodity producers may struggle to keep pace with demand for electricity from data centers and electric vehicles. The manufacturing of rare earth magnets and AI chips used in advanced defense and robotics will also likely expand demand.

Additionally, despite the **Diverging Climate Approaches** outlined in the **Special Considerations**, we expect global natural resource companies to support energy transition via innovation. Finally, as investors contend with global political risks, natural resources also may serve to mitigate disruptions to energy supplies (Russia–Ukraine war) and agricultural production (the biggest exporters of food commodities are most vulnerable to flooding and drought).

We forecast a 6.4% annualized return, supported by strong expected revenue growth of 3.2% (our highest expected revenue growth among real assets). We expect net profit margins and valuations to stay flat, accompanied by a healthy yield of 3.4%.

Global Infrastructure

Infrastructure companies are likely to benefit from two of our themes: **Rising Innovation, Declining Demographics** and **The Global Shift to Self-Reliance**. We expect increasing global power demand to drive growth, particularly for the global utility sector.

Future declines in interest rates should benefit listed infrastructure because of its reliance on debt. Further, over the 10-year forecast horizon, a transition into sustainable infrastructure solutions may support growth. Infrastructure can serve as a partial inflation hedge because companies often engage in longer duration contracts tied to inflation.

Our forecast for listed infrastructure includes a slight valuation expansion as we expect investors to pay more for infrastructure earnings given the asset class's positive longer-term outlook. We forecast a 6.7% annualized return over the next 10 years.

Global Real Estate

We believe falling interest rates will stifle declines in commercial real estate deal volumes and pricing observed over the past few years, contributing to our positive outlook. Further, non-traditional sectors likely will spark long-term, structural growth. We expect our **Rising Innovation**, **Declining Demographics** theme to increase demand for data centers supporting AI, e-commerce warehouses, healthcare real estate for aging populations, and residential real estate to mitigate housing shortages.

In the U.S., office landlords are still contending with high structural vacancy rates, despite signs of stabilization and selective recovery in certain markets. Further, regional banks face increasing pressure to shrink their exposure to the sectors driven by regulatory scrutiny, market stress and credit risk concerns. We expect alternative lenders to continue to step in to provide credit in these instances.

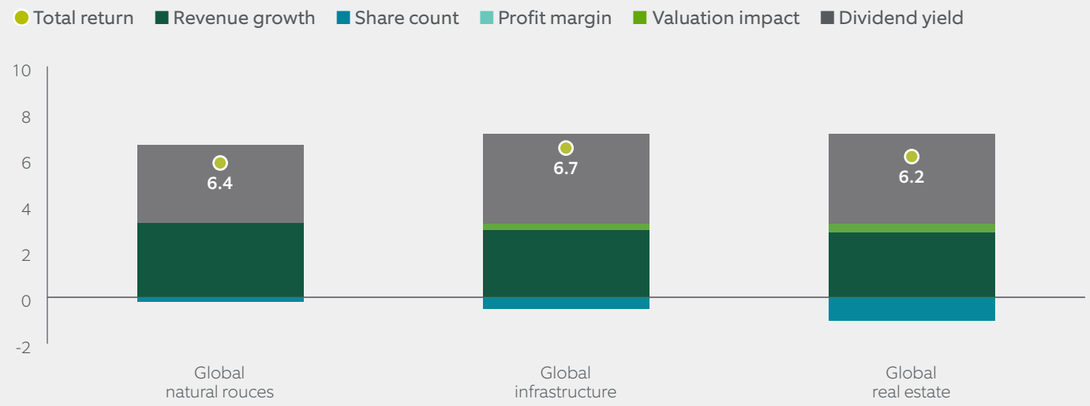
We expect a 6.2% annualized return over the next 10 years, assuming revenue growth of 2.8%, flat profit margin growth, a robust 3.9% dividend yield and a slight valuation expansion of 0.4%. We see dilution detracting 1.0% from the annual return as companies will continue to issue shares to spur growth due to limited free cash flow.

EXHIBIT 12

Global Infrastructure Leadership

We expect increasing global power demand to drive growth in global listed infrastructure, particularly for the global utility sector.

Northern Trust Real Assets 10-Year Annualized Equity Return Forecasts (%)



Source: Northern Trust Asset Management, Bloomberg. Forecasts are as of September 30, 2025. Please see index proxies and important forecast disclosures on pages 35 and 37. It is not possible to invest directly in any index.

9 Private Market Forecasts

Private Credit

Private credit likely will continue to capture market share in the lower middle market as traditional bank lenders' appetite for smaller businesses wane. Private credit markets are tied to our **Rising Innovation**, **Falling Demographics** theme as they are playing a major role in financing AI data center buildouts, especially companies that prefer to stay private. We also expect declining interest rates will provide a tailwind for merger and acquisition (M&A) activity, especially for private equity sponsors that continue to sit on record levels of dry powder. Although we expect lower rates to compress yields to some extent, we believe private credit deployment will increase in conjunction with the expected pickup in M&A activity.

Our private credit return assumption shifted slightly downward from our 2025 forecast. We maintain a similar private-public market spread of 2.5% from the previous year's estimate. However, our public fixed income market proxy (global high yield) forecast fell 0.20% versus previous year. This reduces the overall private credit asset class expected return down from 8.4% to 8.2% (**Exhibit 13**).

We validated this forecast with a review of the underlying sectors within private credit. We expect subordinated capital to return 7.7% annually over 10 years, with senior debt at 7.6% and credit opportunities at 8.7%. As we factor in the asset weights per sector at 21%, 26% and 53% respectively, this aligns back to our overall private credit annual return forecast of 8.2%.

Private Equity and Venture Capital

We foresee falling interest rates and strong fundamentals supporting private equity's buyout and growth sectors. The average rolling 10-year private equity spread over public equity is 7.2% for buyout and 8.7% for growth equity.[43] This has contracted more recently to about half of those historical spreads, due to the strong tech-led public equity rally, a decline in private equity deals and a period of high interest rates. We expect that to continue with an average annual spread of 3.3% in the next 10 years.

For venture capital, we expect AI and other technological developments such as quantum computing to drive a high volume of deals. The average rolling 10-year venture capital return spread over public markets is 7.8%, but now sits at a compressed lower level of 3.8%.[44] We anticipate that contraction to continue with an average annual spread of 3.6% a year over the next 10 years.

With those spreads, we forecast a 10.2% annualized return for private equity and venture capital combined, which includes a 10.5% expected return for venture capital and 10.2% return for both buyout and growth equity sectors. Underlying that 10.2% return, we forecast the U.S. region to drive the asset class at an 11.1% return, followed by ex-U.S. with 9.4% and emerging markets at 6.9%. With current weights at 65%, 25% and 10% respectively, this loops back to our 10.2% expected return as a validation exercise.

Private Natural Resources

Historically, the average rolling 10-year spread of private natural resources over public is 3.4%, although this was largely driven by wider spreads before 2000.[45] Post 2000, the rolling 10-year spread has been persistently negative. Private natural resources are positioned to outperform their public counterpart over the next decade due to several structural advantages and market trends. There is access to institutional-quality private funds across energy infrastructure, agriculture, timberland and mining. There are also sustainability projects that offers exposure to emerging sectors and sustainable assets often less accessible in public indices that tend to be dominated by large-cap fossil fuel companies. With the drive in demand for commodities for AI and regionally by economic development in China and India, we expect the private-to-public spread to improve to 1.5%, leading to a 10-year annual forecast of 7.9%.

Private Infrastructure

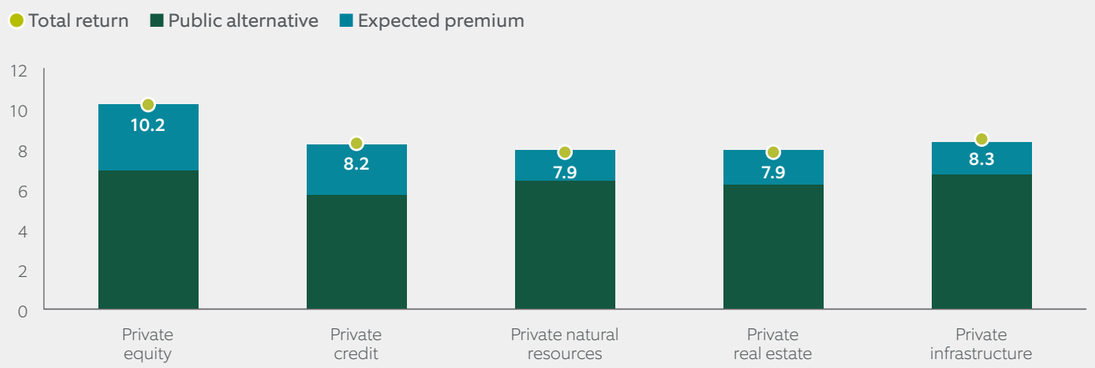
Infrastructure investment is a major contributor to the success of AI, including the hardware AI requires and the power to run the hardware. Private infrastructure assets tied to renewables, data centers and fiber networks more directly link to our themes than its public market counterpart and will likely play a larger role in **Rising Innovation**, **Falling Demographics**. The average rolling 10-year spread of private versus public is 1.4%.[46] We expect that to increase to 1.6% due to exposure in high-growth sectors (e.g., digital infrastructure and renewables) while it's public market counterpart deals with concentration in mature sectors and limits in capturing emerging opportunities. This leads to a 10-year annualized return forecast of 8.3%.

EXHIBIT 13

Falling Rates Likely a Boost for Private Equity

We foresee falling interest rates and strong fundamentals supporting private equity's buyout and growth sectors.

Northern Trust 10-Year Annualized Private Investments Return Forecasts (%)



Source: Northern Trust Asset Management, Bloomberg. Forecasts are as of September 30, 2025. Please see important forecast disclosures on page 37.

[43] Sources: Morningstar Direct, MSCI ACWI Index, Cambridge Associates Buyout & Growth Equity Index. As of March 31, 2025.
[44] ibid.
[45] Sources: Morningstar Direct, S&P Global Natural Resources, Cambridge Associates Natural Resources Index. As of September 30, 2025.
[46] Sources: Morningstar Direct, S&P Global Infrastructure Index, Cambridge Associates Private Infrastructure Index. As of September 30, 2025.

Private Real Estate

We believe private real estate will play a major role in our **Rising Innovation**, **Following Demographics** theme, with AI data-center expansion on the innovation side and healthcare facilities on the demographics side.

We divide private real estate into two sectors: value-add and opportunistic. These sectors are underrepresented in public real estate indices which are typically concentrated in large-cap listed property companies, thus limiting exposure to emerging sectors. Value-add typically comprises underperforming or mismanaged properties requiring renovations, tenant-replacing, or real estate that has been inefficiently managed. We expect value-add strategies to more easily pivot to growth sectors such as e-commerce, data centers, multifamily housing and energy efficiency retrofits. The sector had a historical rolling 10-year spread of 1.2% versus public real estate and we expect that spread to slightly increase to 1.5%.[47]

The opportunistic sector focuses on higher risk, higher reward projects involving ground-up development, distressed assets or complex capital structures where investors rely less on yield and more on growth opportunities. Unlike their public market counterparts, these strategies allow managers to manufacture core properties and sell them at premium valuations for excess returns beyond what would be achieved in public markets. We expect opportunistic strategies to also pivot into high-demand sectors such as data centers, cold storage, and mixed-use redevelopments . The historical rolling 10-year annual spread over public in the opportunistic sector is 2.5%,[48] but our forecast is slightly muted at 1.9%. This sector depends heavily on a very strong growth outlook unlike our slow-to-moderate outlook over the next 10 years. This could limit the number of opportunistic deals and with the heavier hurdles faced with ground-up development (unlike working with existing assets in the value-add space), we would expect a slight private-to-public spread compression versus historical levels.

Factoring the market weight of value add at 35% and opportunistic at 65% with forecasted returns of 7.7% and 8.1% respectively, our private real estate annual forecast for the next 10 years is 7.9%.

Hedge Funds

Alpha generation was in persistent decline, falling to -0.4% in the decade ended 2020. This decade to date, alpha improved to -0.1%. The caveat of reviewing peer averages as a proxy for the asset class is the wide dispersion of the underlying funds that make up the peers. Therefore, due diligence and a robust process of fund selection is extremely important.

The HFRI Fund Weighted Composite includes more than 800 funds that reported returns from January 2020 through September 2025. Of these funds, there is a return spread of 3.53% between the second- and third-quartile funds, ranked by performance. Similarly, there's nearly a 4.3% annualized return spread between third- and fourth-quartile funds. While the average hedge fund showed negligible alpha in the model, proper manager selection can lead to more attractive returns. We expect the durable global economy and market resilience over the next 10 years to prove favorable for some hedge fund strategies.

Additionally, while alpha through the lens of a factor model has been near zero for the 2020s, a hypothetical 60/40 portfolio of 60% global equities (MSCI ACWI Index) and 40% U.S. investment-grade bonds (Bloomberg U.S. Aggregate Index) would have improved returns and lowered risk with an allocation to hedge funds (HFRI Fund Weighted Composite).

The 60/40 portfolio would have had a return of 7.6% with a standard deviation of 11.6% from January 2020 through September 2025. A portfolio of 20% hedge funds, 48% global equities and 32% U.S. bonds would have returned 7.7% with a 10.5% standard deviation. Additionally, the 60/40 portfolio would have had a max drawdown of 21.3% while the portfolio with hedge would have had a max drawdown of just 18.4%.

Exhibit 14 shows our forecasts for different types of hedge funds. Our most promising forecast goes to macro funds, which invest in equities, fixed income, currencies and commodities based on economic variables and capital flows. Their unconstrained nature allows macro investors to exploit opportunities in **The Global Shift to Self-Reliance** and lean in on momentum from **Rising Innovation**, **Declining Demographics**.

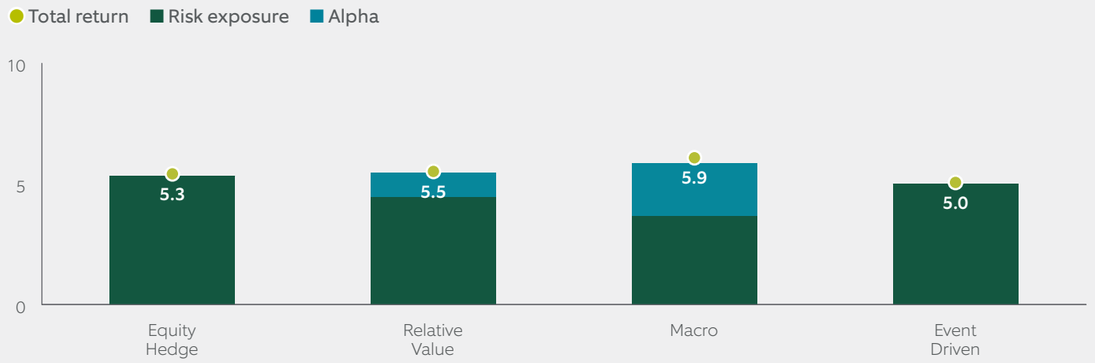
Relative value funds could also take advantage of arbitrage opportunities that stem from global political tensions. When combining the forecasts for each strategy sleeve according to the most recent asset values, we forecast an annualized return of 5.4% for hedge funds overall over the next 10 years.

EXHIBIT 14

Unconstrained Advantage

The unconstrained nature of macro funds allow investors to exploit opportunities from our three investment themes.

Northern Trust 10-Year Forecasted Hedge Fund Return by Strategy (%)



Source: Northern Trust Asset Management, Bloomberg. Forecasts are as of September 30, 2025. See definitions for the types of hedge funds in glossary. Please see important forecast disclosures on page 37.

[47] Sources: Morningstar Direct, MSCI ACWI IMI Core Real Estate Index, Cambridge Associates Real Estate Value Add Index. As of September 30, 2025.

[48] Sources: Morningstar Direct, MSCI ACWI IMI Core Real Estate Index vs Cambridge Associates Real Estate Opportunistic Index. As of September 30, 2025.

10 How Have We Done?

We are frequently asked about the accuracy of our forecasts. In response, Exhibit 15 shows our forecasts from five years ago (before the 2024 edition, we created five-year forecasts) versus actual results. We review our accuracy across the major asset classes: cash, fixed income (investment grade and high yield) and equities (developed and emerging markets).

We then aggregated the asset classes at the portfolio level — including the risk asset portfolio, the risk-control portfolio and the strategic asset allocation (SAA) portfolio (a balanced mix of the two component portfolios). In addition, we provide the actual returns alongside the forecasts from our 2020 five-year forecasts across all asset classes and all regions within each asset class.

Results

The five-year forecasts we published in 2020 carried over the optimistic view in fixed income from prior years while being conservative in equity estimates. In the first calendar years of the five-year period, all fixed income assets were on pace to outperform our forecasts. However, as noted in last year's report, inflation and rising rates in 2022 roiled bond markets, resulting in a 13.0% loss in the Bloomberg U.S. Aggregate Bond Index for the year. The bond market recovered in the following two years, but not enough to catch up with our forecast. However, our forecast for global high yield was in line with actual results, off only 0.01%.

In equity markets, our 2020 five-year forecast was too pessimistic — U.S. equities returned 15.9% versus a 4.7% forecast, while emerging markets returned 9.8% versus our 5.4% forecast. Little did we suspect the huge optimism fueling the AI boom.

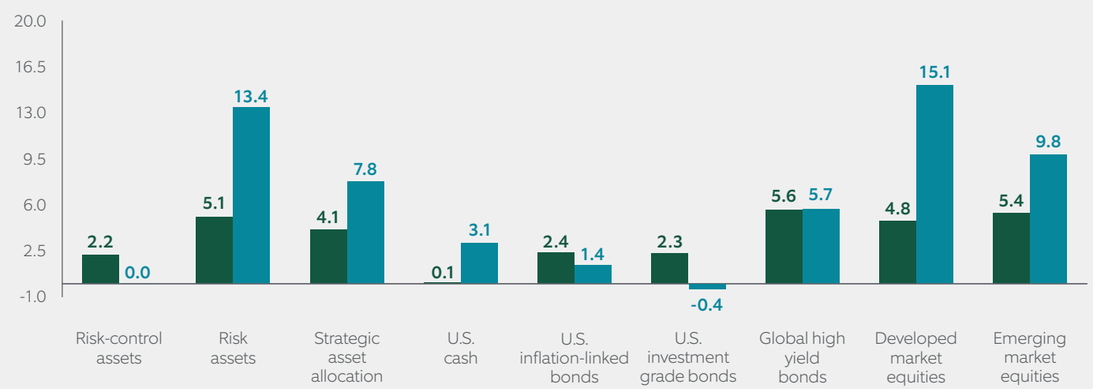
At the portfolio level, a combination of too optimistic risk-control forecasts and very pessimistic risk asset forecasts put our 4.1% forecast in 2020 below the 7.9% actual. The risk asset portfolio's actual return of 13.4% outpaced our forecasted 5.1%. This was thanks to the strong developed and emerging market equity returns and the strength of real assets, particularly natural resources and infrastructure. Natural resources fulfilled its role in the earlier parts of the five-year period, characterized by growing and ultimately problematic inflation pressures.

EXHIBIT 15

Checking in on Our 2020 Forecasts

Inflation and rising rates roiled the bond markets making our risk-control forecast too optimistic, while the AI boom boosted equities (risk assets) more than we expected.

2020-2025 Five-Year Annualized Returns vs. Forecasts (%)



Source: Northern Trust Asset Management, Bloomberg. Annualized return data in local currency from September 30, 2020 to September 30, 2025. **Past performance does not guarantee future results.**

11 Northern Trust Detailed Long-Term Return Forecasts

All Returns in % Annualized				Long-Term Return Forecast by CMA Year						10-Year Actual Return
		Asset Class	Proxy Index	2026	2025	2024	2023	2022	2021	
FIXED INCOME	U.S.	Cash	3-Month U.S. T-Bill	3.3	3.3	2.9	2.8	0.3	0.1	2.1
		Inflation Linked	Bloomberg U.S. TIPS	4.4	4.0	4.4	3.4	2.2	2.4	3.0
		Government	Bloomberg U.S. Treasury	4.6	4.3	4.1	3.1	2.2	1.9	1.2
		Corporates	Bloomberg U.S. Corporate	5.1	5.2	5.5	4.7	2.6	2.7	3.1
		Investment Grade	Bloomberg U.S. Aggregate	5.0	4.7	4.7	3.7	2.4	2.3	1.8
		High Yield	Bloomberg U.S. High Yield	5.5	5.6	6.7	7.4	3.5	5.5	6.2
		Municipal	Bloomberg Municipal	4.6	4.0	3.6	3.2	2.0	2.6	2.3
	Canada	Cash	3-Month Canada T-Bill	2.5	3.0	2.4	3.3	0.2	0.2	1.8
		Inflation Linked	FTSE Canada Real Return Bond	3.5	2.5	3.5	3.5	2.0	2.2	1.9
		Government	FTSE Canada All Government	4.0	3.4	3.8	3.6	2.4	1.8	1.6
		Corporates	FTSE Canada All Corporate	4.3	4.2	5.2	5.0	2.5	2.5	3.2
		Investment Grade	FTSE Canada Universe	4.1	3.6	4.2	3.9	2.4	1.9	2.0
		High Yield	ICE Bof/AML Canadian High Yield	5.5	5.6	6.0	6.0	3.8	5.2	6.5
	Europe	Cash	3-Month German Bunds	2.0	2.1	1.5	0.3	-0.4	-0.5	0.7
		Inflation Linked	Bloomberg Euro Inf. Linked	4.7	3.0	2.0	2.2	1.0	1.5	1.7
		Government	Bloomberg Euro Agg Goverment	3.8	2.9	3.1	N/A	N/A	N/A	0.1
		Corporates	Bloomberg Euro Agg Corporate	3.7	3.5	4.2	N/A	N/A	N/A	1.6
		Investment Grade	Bloomberg Euro Aggregate	3.7	3.1	3.4	2.1	1.0	1.0	0.4
	U.K.	Cash	3-Month Gilts	3.4	3.5	2.6	2.1	0.2	0.1	1.6
		Inflation Linked	Bloomberg Inflation Linked Gilt	5.4	3.2	4.0	3.3	1.0	1.3	-1.0
		Government	Bloomberg Sterling Agg Gilts	5.9	4.8	N/A	N/A	N/A	N/A	-0.7
		Corporates	Bloomberg Sterling Agg Corporate	6.1	5.6	N/A	N/A	N/A	N/A	2.5
		Investment Grade	Bloomberg Sterling Aggregate	5.9	4.9	4.9	2.9	1.5	1.3	0.1
	Japan	Cash	3-Month JGB	1.4	0.8	0.3	0.1	-0.1	-0.1	0.0
		Inflation Linked	Bloomberg Inflation Linked JGB	1.8	1.5	0.0	0.1	0.2	0.5	0.7
		Government	Bloomberg Global Japan	2.2	1.4	N/A	N/A	N/A	N/A	-0.6
		Corporates	Bloomberg Global Japan Corporate	4.8	4.4	N/A	N/A	N/A	N/A	4.0
		Investment Grade	Bloomberg Japanese Aggregate	2.3	1.4	0.2	0.3	0.2	0.2	-0.6
	Australia	Cash	3-Month Australian Gov't Bond	3.2	4.0	3.0	3.2	0.3	0.2	2.2
		Inflation Linked	Bloomberg Inflation Linked Aus	5.2	4.2	4.0	N/A	N/A	N/A	2.5
		Government	Bloomberg Global Australia	4.6	4.3	4.0	N/A	N/A	N/A	1.8
		Corporates	Bloomberg Global Corporate - Aus.	4.8	5.4	5.6	N/A	N/A	N/A	3.4
		Investment Grade	Bloomberg AUD Aggregate	4.7	4.5	4.2	3.7	1.5	1.2	2.2
	Global	Inflation Linked	Bloomberg Global Inflation Linked	4.7	3.3	3.6	2.9	0.5	1.8	2.3
		Government	Bloomberg Global Treasury	3.7	3.2	3.1	2.2	1.4	1.5	2.0
		Corporates	Bloomberg Global Agg Corporate	4.7	4.7	5.1	4.2	2.0	2.2	2.4
		Investment Grade	Bloomberg Global Aggregate	4.0	3.6	3.7	2.7	1.5	1.6	2.3
		High Yield	Bloomberg Global High Yield	5.7	5.9	7.2	7.5	4.0	5.6	6.0

All Returns in % Annualized				Long-Term Return Forecast by CMA Year						10-Year Actual Return
		Asset Class	Proxy Index	2026	2025	2024	2023	2022	2021	
EQUITIES	Developed markets	U.S.	MSCI USA	6.8	7.5	6.3	6.0	4.3	4.7	15.3
		U.S. Small Cap	Russell 2000	7.0	9.6	7.5	7.3	5.3	5.8	9.8
		Canada	MSCI Canada	5.8	5.3	6.9	6.6	5.2	4.5	11.9
		Europe	MSCI Europe ex U.K.	5.7	5.2	6.0	6.1	4.7	5.4	8.6
		U.K.	MSCI U.K.	6.2	4.4	6.8	7.5	6.2	5.6	8.5
		Japan	MSCI Japan	7.3	6.0	6.0	6.3	4.1	3.8	10.9
		Australia	MSCI Australia	7.7	8.2	7.2	6.4	4.7	5.8	10.0
	Region	Developed Markets	MSCI World	6.8	7.1	6.3	6.2	4.5	4.8	13.2
		Emerging Markets	MSCI Emerging Markets	6.9	6.4	5.9	5.8	5.3	5.4	9.6
		Global Equities	MSCI AC World	6.9	7.1	6.3	6.1	4.6	4.9	12.7
REAL ASSETS	Global	Natural Resources	S&P Global Natural Resources	6.4	6.2	7.9	7.3	5.0	3.6	10.4
		Listed Real Estate	MSCI ACWI IMI Core Real Estate	6.2	6.3	8.3	6.8	5.1	6.3	4.9
		Listed Infrastructure	S&P Global Infrastructure	6.7	6.6	6.4	6.0	5.5	5.8	8.9
ALTERNATIVES	Global	Private Natural Resources	Cambridge Assoc. Natural Resources	7.9	8.3	9.4	9.3	7.0	4.6	4.2
		Private Real Estate	Cambridge Assoc. Real Estate	7.9	7.3	9.7	9.8	8.0	8.4	7.0
		Private Infrastructure	Cambridge Assoc. Infrastructure	8.3	8.4	9.4	9.0	8.5	8.8	10.9
		Private Equity	Cambridge Assoc. Private Equity & Venture Capital	10.2	10.1	9.6	9.6	7.6	7.9	13.7
		Venture Capital	Cambridge Assoc. Venture Capital	10.5	11.6	10.8	11.0	8.5	8.9	13.2
		Buyout	Cambridge Assoc. Buyout	10.2	9.5	9.4	9.5	7.3	7.6	14.0
		Growth	Cambridge Assoc. Growth	10.2	11.0	10.2	10.3	8.0	8.4	13.2
		Private Credit	Cambridge Assoc. Private Credit	8.2	8.4	6.9	6.5	6.0	7.6	8.3
		Hedge Funds	HFRI Fund Weighted	5.4	5.5	4.5	5.4	2.9	2.6	6.4
		HF-Equity Hedge	HFRI Equity Hedge	5.3	5.4	5.0	4.9	3.3	2.2	8.0
		HF-Relative Value	HFRI Relative Value	5.5	5.6	5.8	6.0	3.5	3.2	5.1
		HF-Macro	HFRI Macro	5.9	6.0	5.6	5.1	3.5	2.3	3.6
		HF-Event Driven	HFRI Event Driven	5.0	5.1	4.9	6.2	3.3	3.3	6.8

Source: Northern Trust Asset Management. Starting with the 2024 edition, we changed the long-term investment horizon to 10 years from five years. For each CMA edition, the long term forecast period is as follows: 2026 (9/30/2025 to 9/30/2035), 2025 (9/30/2024 to 9/30/2034), 2024 (6/30/2023 to 6/30/2033), 2023 (6/30/2022 to 6/30/2027), 2022 (6/30/2021 to 6/30/2026), 2021 (6/30/2020 to 6/30/2025). Forecasts listed here represent total return forecasts for primary asset classes, annualized using geometric averages. Forecasted returns are based on estimates and reflect subjective judgments and assumptions. They are not necessarily indicative of future performance, which could differ substantially. 10-year actual returns are listed in local currency (with the exception of real assets, which are in USD) and annualized for the 10-year period ending 9/30/2025. Past performance does not guarantee future results. Index performance returns do not reflect any management fees, transaction costs or expenses. It is not possible to invest directly in any index. Indexes are the property of their respective owners, all rights reserved. Please see important forecast disclosures on page 37.

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Glossary and Index Definitions

Glossary

Alpha: Alpha is the additional return a portfolio or strategy provides beyond what would be expected for the amount of risk it takes.

Artificial Intelligence: The capability of computer systems or algorithms to imitate intelligent human behavior.

Correlation: Correlation is the extent of which two securities move with each other, where highly correlated securities have similar return patterns. Low correlation between securities often contributes to diversification, a way to lower portfolio risk.

Credit quality: Credit quality measures a company's ability to repay its debt. Investors evaluate credit quality to determine the risk of investing in bonds.

Credit spread: Often the difference between yields of a corporate bond and a government bond, such as a Treasury, of similar maturity. Investors demand additional yield as extra compensation for assuming the risk of default.

Duration: Duration measures the sensitivity of a security or portfolio to changes in interest rates. It often is used as a measure of risk to interest rate moves for fixed income securities and funds.

Credit spread: The ratio is the percentage change in corporate revenue divided by percentage growth of an economy.

Elasticity to GDP ratio: Annualized dividend income from a stock divided by the stock price.

Equity hedge strategy: Equity hedge strategies are hedge funds that maintain positions both long and short in primarily equity and equity derivative securities. In long transactions, the buyer purchases a security and gains from the total return of the security. Short selling is a transaction in which borrowed securities are sold with the intention to repurchase them at a lower price at a later date and return them to the lender, representing a gain for the short seller. A derivative is a financial instrument in which the value depends on the value of an underlying asset or factor such as a stock price, an interest rate, or exchange rate.

Event-driven hedge fund strategy: Event-driven funds invest based on views around mergers, restructurings, distress and other corporate actions.

Interest coverage ratio: The ratio of earnings to interest expenses, as an indicator of the ability of a company to make interest payments.

Macro hedge fund: These funds invest in equities, fixed income, currencies and commodities based on economic variables and capital flows.

Nominal GDP growth: Economic growth that doesn't take inflation into account.

Option-adjusted spread: A type of yield spread that considers changes in the term structure and alternative estimates of the volatility of interest rates.

Private credit: Private credit investors loan money to companies that may have trouble obtaining bank loans or raising debt on the public market. They can offer relatively attractive returns versus other debt, but they also can be more illiquid and risky.

Private equity: Stakes or ownership in businesses that do not trade on public stock markets.

Real GDP growth: Economic growth less inflation.

Relative value hedge fund: These funds invest where they believe there is a valuation discrepancy in the relationship between multiple securities.

Revenue elasticity: The extent to which corporate revenue growth or decline is sensitive to changes in economic growth or decline.

Roll return: The impact to return generated from rebalancing to a constant duration.

Share dilution: When companies issues new shares, the action reduces the proportion of ownership by current shareholders. This also can be called ownership dilution.

Starting yield: The yield of a bond or bond index at the beginning of a period, often to be compared to a yield at the end of a period.

Tail risk: The risk of investment losses in extreme events.

Term spread: The difference in yields between bonds of different maturities.

Treasury bills: U.S. government bonds with maturities of less than a year.

Valuations: The process of determining the value of an asset based on the analysis of variables related to investment returns or comparisons with similar assets.

Venture capital: The equity financing of new or growing private companies.

Yield curve: The relationship between yields and maturities, usually for government-issued bonds.

Yield curve steepening: When the difference between short-term yields and long-term yields increases.

Index Definitions

Bloomberg U.S. High Yield Index: The index measures the performance of the U.S. dollar-denominated high-yield fixed-rate corporate bond market.

Cambridge Associates Infrastructure Index: The index measures the performance of private infrastructure funds, including fully liquidated partnerships.

Cambridge Associates Real Estate Opportunistic Index: The index measures the performance of private, opportunistic real estate funds, including fully liquidated partnerships.

Cambridge Associates Real Estate Value Add Index: The index measures the performance of private, value-add real estate funds, including fully liquidated partnerships.

HFRI Fund Weighted Composite Index: The index measures the performance globally of single-manager hedge funds, excluding funds of hedge funds, on an equal-weighted basis.

MSCI All Country World Index (ACWI): The index is a global equity index that includes large- and mid-cap companies from developed markets and emerging markets.

MSCI ACWI IMI Core Real Estate Index: The stock index measures the performance of large-, mid-and small-cap stocks in developed and emerging-market countries engaged in the ownership, development and management of real estate.

MSCI Emerging Markets Index: The index measures the performance of large- and mid- cap companies in 24 emerging-market countries.

MSCI Europe ex U.K. Index: The index is designed to measure the performance of large- and mid-cap companies in Europe excluding the U.K.

MSCI USA Index: The index is designed to measure the performance of the large- and mid-cap companies in the U.S.

S&P Global Natural Resources Index: The stock index measure the performance of the largest publicly traded companies across three primary commodity-related sectors: agribusiness, energy, and metals and mining.

S&P Global Infrastructure Index: The stock index measures the performance of companies globally infrastructure industry, including three distinct infrastructure clusters: energy, transportation and utilities.