NORTHERN TRUST
ASSET MANAGEMENT

FIVE-YEAR MARKET OUTLOOK: LOWER RETURNS CHALLENGE PUBLIC FUND & TAFT-HARTLEY PLANS

Our 2023 Capital Market Assumptions Five-Year Outlook explored our return forecasts and long-term investment themes. With below-average returns expected over the next five years, getting asset allocation right will be paramount in maintaining funded status. Our forward-looking, historically aware approach to developing long-term return forecasts across asset classes can aid pension plans as they tackle their strategic portfolio construction decisions.

Slow Growth Transitions and **Inflation Recalibration** are the two key strategic themes impacting plan sponsors over the next five years.

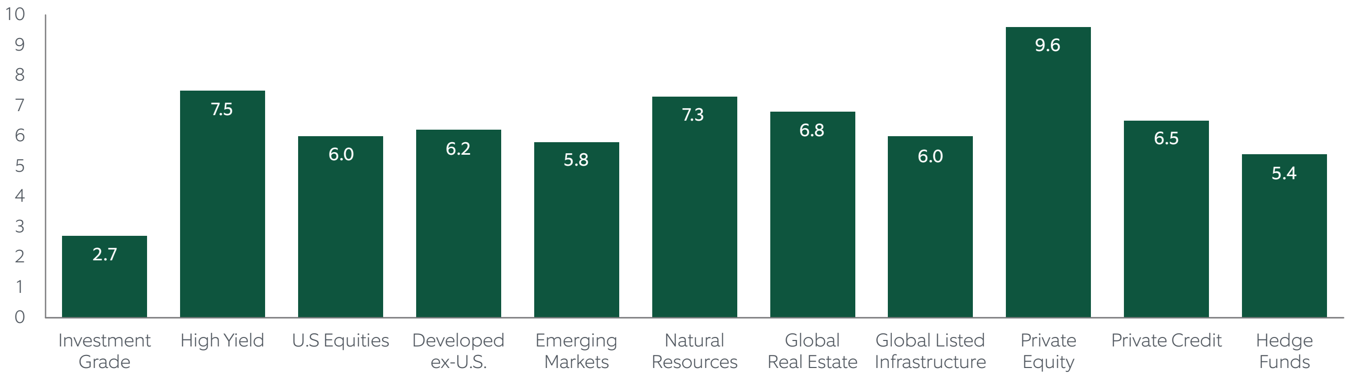
We expect slower economic growth and higher interest rates to result in below-average five-year returns for most asset classes used by pension plans **(Exhibit 1)**. Equity returns are challenged by a lower valuation ceiling and profit margin compression because of higher interest rates. Below-average returns would create hurdles for pension funds looking to build cost-efficient, lower-risk portfolios with adequate performance over the next five years.

To overcome this challenge, we anticipate that pensions will continue to favor private investments such as private equity and private credit for diversification and higher returns. Private investments potentially provide attractive premiums relative to public markets. However, the wide return dispersion among strategies means the manager selection is paramount.

We see **Slow Growth Transitions** and **Inflation Recalibration** as the two key strategic themes impacting a plan sponsor's ability to balance their risk, return and cash contributions relative to their plan's obligations over the next five years.

EXHIBIT 1: FIVE-YEAR FORECASTS FOR KEY ASSET CLASSES

Annualized Return (%)



Northern Trust Asset Management, Bloomberg. Annualized return data in local currency from 6/30/2017 to 6/30/2022. 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.

SLOW GROWTH TRANSITIONS

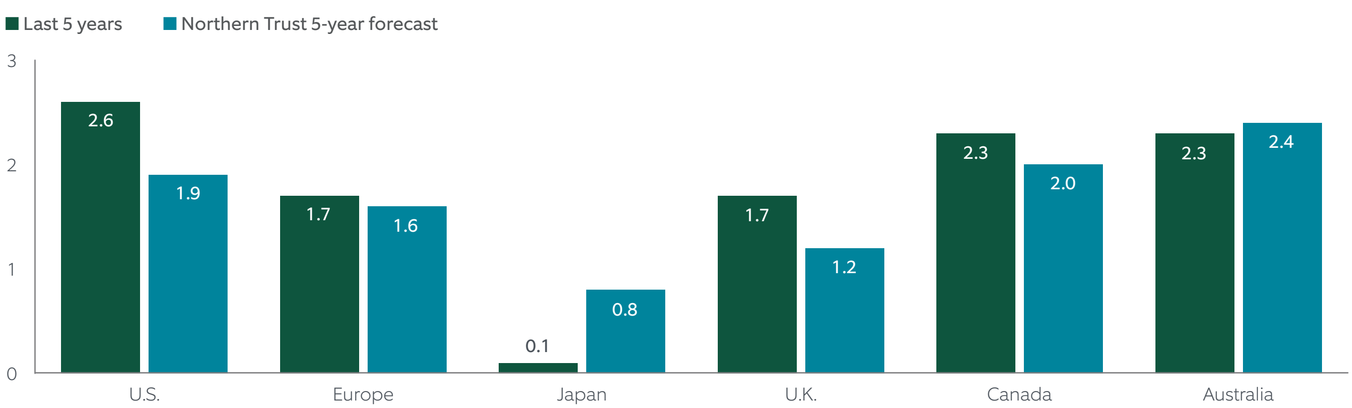
The shifts from pandemic to endemic, globalization to regionalization, and fossil fuels to renewable energy represent economic challenges for a global economy already facing high debt and changing demographics. Retirement parties are now more common as baby boomers exit the workforce, and debt is structurally high after pandemic stimulus increased global debt by 30 percentage points in 2020.[1] These slow transitions will likely lead to continued slow growth.

As shown in **Exhibit 2,** we expect 2.6% annualized real global economic growth over the next five years. Our 1.9% U.S. forecast marks a notable slowdown from the past five years, but is still ahead of most other advanced economies, largely due to better demographics.

EXHIBIT 2: GOOD WHILE IT LASTED

We think the past two years' stimulus-boosted growth will revert to previous slow form.

Annualized Real GDP Growth (%)



Source: Northern Trust Asset Management, Bloomberg. Data from 3/31/2017 to 3/31/2022.

[1]Source: Brookings Institution, 2020.

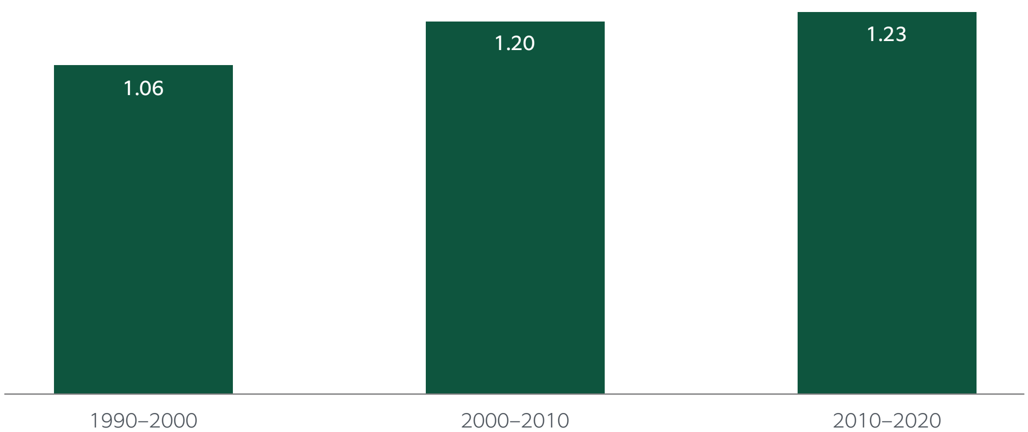
Key Considerations for Pension Plans

As slow economic transitions unfold over the next five years, market volatility and uncertainty will likely remain high, due to slower growth expectations. Various economic factors, including weakened economic growth and lingering supply chain issues, are new to investors and add to the potential for negative market surprises given this combination of market concerns is historically unprecedented, especially given the push towards economic globalization in recent decades. Lower volatility equities have historically demonstrated asymmetric returns, meaning they tend to capture more upside when equities gain than downside when equities fall, as shown in **Exhibit 3.** This has increased the chance of outperformance amid turbulent markets.

EXHIBIT 3: THE ASYMMETRIC RETURN PROFILE OF LOW VOLATILITY STOCKS

Over the past three decades, the ratio of upside capture to downside capture in the Russell 1000 Index has increased, a return profile that makes outperformance more likely during turbulent markets.

Up/Down Capture Ratio of Low Volatility Equities[2]



	1990–2000	2000–2010	2010–2020
Up Market Capture Ratio	82%	66%	84%
Down Market Capture Ratio	78%	55%	68%
Up/Down Capture Ratio	**1.06**	**1.20**	**1.23**

[2]Low Volatility research portfolios are formed by selecting the bottom 30% of securities ranked by trailing 1-year daily volatility. Research portfolios are capitalization weighted and rebalanced quarterly.

Source: Northern Trust Asset Management, FactSet, Russell 1000 Universe, 12/31/1989 through 12/31/2019. For illustrative purposes only. Past performance is no guarantee of 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.

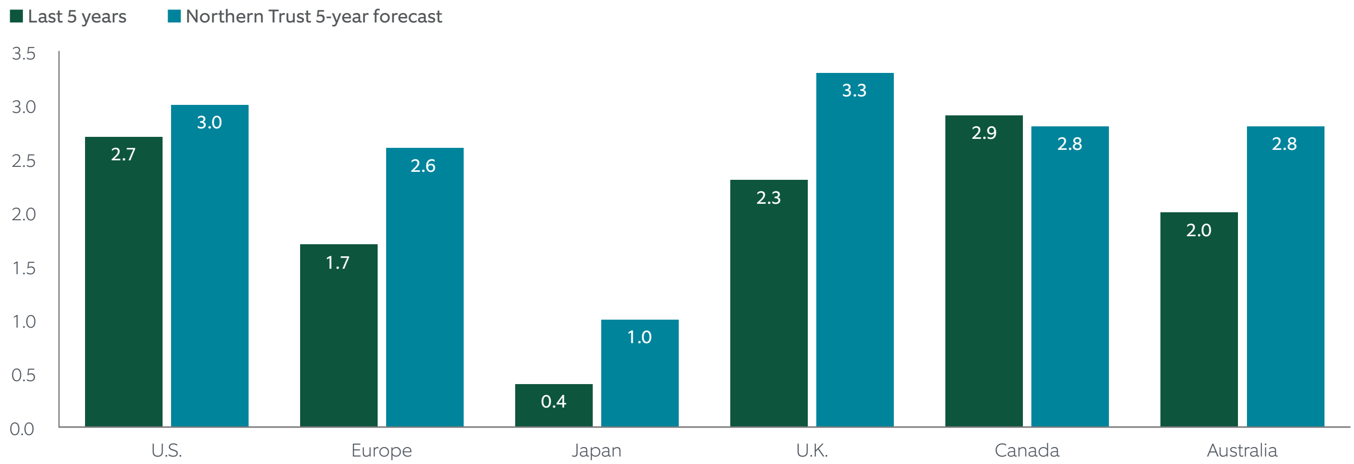
INFLATION RECALIBRATION

Post pandemic global supply chain complications and worker shortages left a bigger mark than expected on inflation. Still, many investors and policymakers believed inflation was "transitory" and would eventually revert to normal levels. This all changed with the war in Ukraine, which triggered soaring food and energy prices. The inflation genie escaped the bottle and putting the genie back will take some time. Still, we believe the worst has passed and we expect inflation to moderate gradually.

EXHIBIT 4: THE END OF AN ERA

The Stuckflation regime is over, replaced by a period of recalibration back toward target levels.

Annualized Inflation (%)



Source: Northern Trust Asset Management, Bloomberg. Data from 3/31/2017 to 3/31/2022. All regions use headline Consumer Price Index as the inflation metric..

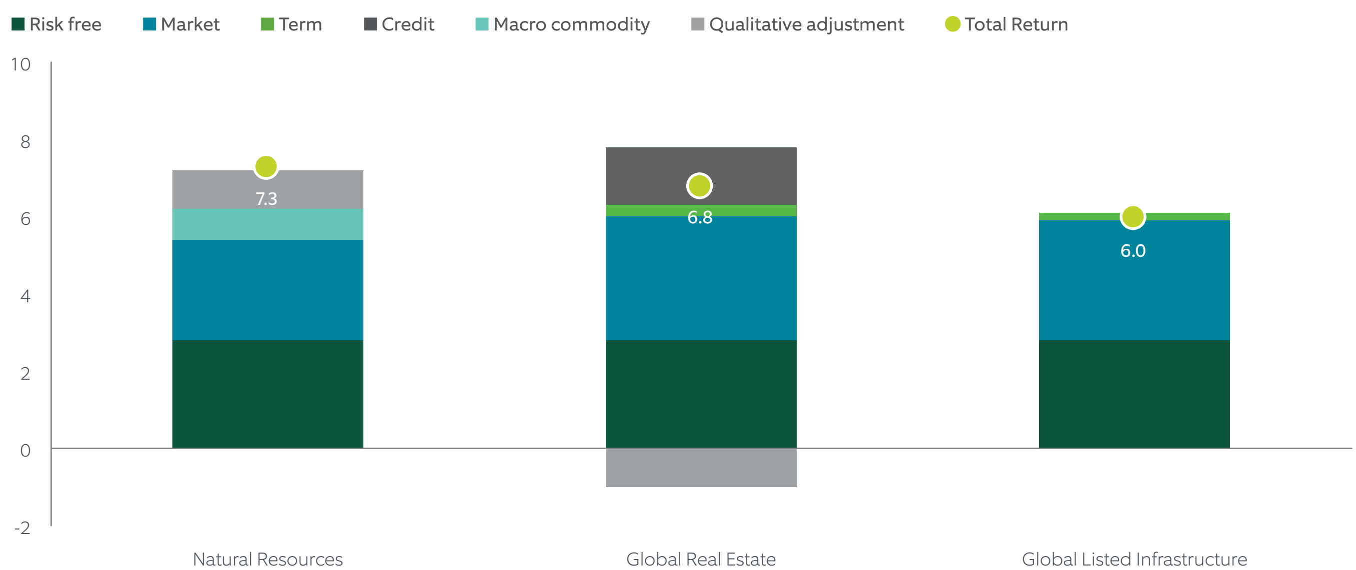
Key Considerations for Pension Plans

With likely elevated inflation for a while, plans need to reassess the risks inflation creates in their portfolios. Real assets can provide protection against unexpected inflation, while real estate and listed infrastructure offer additional risk exposures for portfolio diversification and higher yields than traditional equities.

EXHIBIT 5: DIVERSIFICATION ON DISPLAY

Real assets should shine in a more uncertain and higher inflationary risk regime.

Northern Trust Five-Year Annualized Real Assets Return Forecast (%)



Source: Northern Trust Asset Management, Bloomberg.

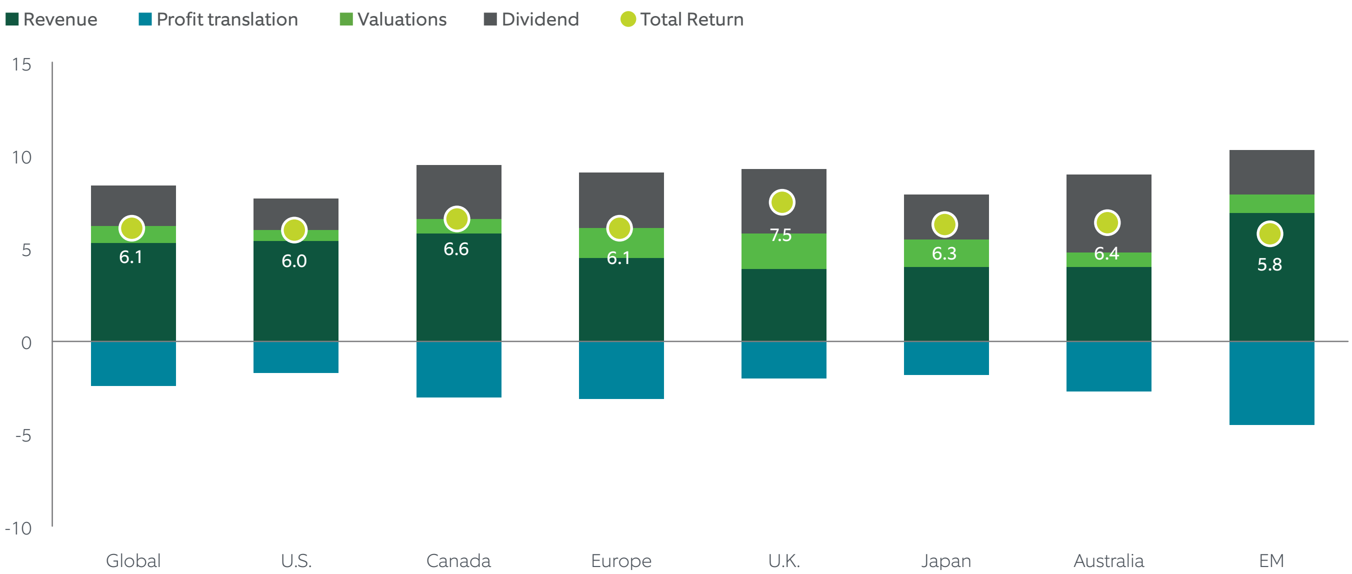
FINAL THOUGHT: BE CREATIVE WITH RISK

We anticipate some deterioration in the challenging equity environment ahead with developed market corporate profit margins at historically high levels.

Plans will need to be nimble and dynamic with their risk budgets in order to hit their short- and long-term return targets. Given slow growth and elevated inflation, plans can look to private markets or low volatility strategies to close the forecasted return gap from their equity allocations over the next five years (see **Exhibit 6**).

EXHIBIT 6: NEXT FIVE-YEAR FORECASTS ARE LOWER

Northern Trust Five-Year Annualized Equity Return Forecast by Country (%)



Source: Northern Trust Asset Management. EM is emerging markets.

ABOUT NORTHERN TRUST ASSET MANAGEMENT

Northern Trust Asset Management is a global investment manager that helps investors navigate changing market environments, so they can confidently realize their long-term objectives.

Entrusted with more than $1 trillion of assets,[3] we understand that investing ultimately serves a greater purpose and believe investors should be compensated for the risks they take — in all market environments and any investment strategy. That's why we combine robust capital markets research, expert portfolio construction and comprehensive risk management to craft innovative and efficient solutions that deliver targeted investment outcomes.

As engaged contributors to our communities, we consider it a great privilege to serve our investors and our communities with integrity, respect, and transparency.

Explore Our Full Five-Year Outlook

Explore our long-term asset class return expectations and forecasts at **capitalmarketassumptions.com.** Visit today to:

- Gain valuable insights from our investment experts
- Get exclusive access to our full research paper
- Explore our detailed return/risk and correlation matrix

[3]As of June 30, 2022.

northerntrust.com