

CAPITAL MARKET ASSUMPTIONS

FIVE-YEAR OUTLOOK 2023 EDITION Every year, Northern Trust's
Capital Market Assumptions
Working Group develops forwardlooking, historically aware forecasts
for global economic activity and
financial market returns that drive
our five-year asset class return
expectations and inform our
asset allocation decisions.

All of this comes together in the form of our long-term strategic asset allocations, which are used by institutional and individual investors worldwide.

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CAPITAL MARKET ASSUMPTIONS

FIVE-YEAR OUTLOOK: 2023 EDITION

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We expect market returns to drift modestly below long-term historical averages. Lower stock valuations may provide some support, but higher interest rates likely will limit how high valuations can go. Higher yields support bond returns, but we expect flatter global yield curves to cap further gains. Our six key investment themes inform these forecasts.

Six key themes have emerged for our five-year outlook.

- SLOW GROWTH TRANSITIONS Slow transitions pandemic to endemic; globalization to regionalization; and fossil fuels to renewables mean investors must navigate a challenging global economy with high debt and unfavorable demographics. Slow transitions will likely lead to continued slow growth.
- INFLATION RECALIBRATION Just as investors thought pandemic-related inflation would settle down, the war in Ukraine forced them to recalibrate their inflation assumptions. Automation and digitization still produce powerful disinflationary forces, but they will likely need time to overcome recent supply shocks.
- MONETARY DROUGHT The monetary flood has evaporated, and the next five years may bring much drier financial conditions. Investors must adjust for higher interest rates in their decision-making and no longer depend on central banks to rescue the economy.
- REGIONAL REBUILDING BLOCS Countries are rebuilding their economic and military security by limiting their dependence on imports such as energy and technology, especially from political adversaries. Investors will decide whether or how best to deglobalize their portfolios accordingly.
- GREEN TRANSITION STILL A GO Russia's energy battle with Europe triggered a search for other sources climate-friendly or not. While this may delay the green transition, the focus on national energy security and high fossil fuel prices creates potential investment opportunities for renewable energy.
- NOT SO NEGATIVE Higher interest rates including a move out of negative territory for Europe and Japan bring investors closer to positive real after-inflation cash returns. This is good for economic functioning and savers, but a risk for other investment returns.

2023 FIVE-YEAR ASSET CLASS OUTLOOK

Our five-year themes identify the trends we see affecting the markets and economy over the next five years, providing the foundation for our asset class outlooks.

We expect *Slow Growth Transitions* as we go through an *Inflation Recalibration* and a *Monetary Drought* — certainly when compared to the recent central bank flood. Globalization will likely evolve into *Regional Rebuilding Blocs* focused on energy security, but the *Green Transition is Still a Go*. Lastly, with interest rates *Not So Negative*, we finally exit a very odd period in economic and market history.

Fixed Income

Bonds, aided by higher yields, may bounce back some from historically high losses, but we expect modest performance. Flat yield curves likely mean dependence on coupon payments, due to little price appreciation. High yield bonds could benefit from higher credit spreads and stable fundamentals.

Equities

Lower valuations provide some support, but higher interest rates likely will cap the upside for valuations. Further, historically high corporate profit margins face deterioration with inflation and a slowing economy. China's COVID-19 struggles increase the likelihood of economic shutdowns, a risk for emerging markets.

Real Assets

With the inflation surge, inflation-sensitive real assets play an increasingly key role in a diversified portfolio. We expect all real assets to perform well over five years, but surging commodity prices because of shortages make natural resources particularly attractive.

Alternatives

Private investments provide premiums over public market counterparts. Hedge funds recently have shown more potential to deliver alpha¹. The wide return dispersion among strategies means the manager selection process remains paramount.

FIXED INCOME

OUTLOOK: HIGHER RATES AT LAST

We see bond performance, aided by higher yields, bouncing back some from historically high losses, but still we expect modest performance. Flat global yield curves likely mean more dependence on coupon payments and little support from price appreciation.

Interest Rates

While Inflation Recalibration and Monetary Drought set the stage for short-end rates to move and stay higher, Slow Growth Transitions will likely cap longer term rates at fairly low levels by most historical comparisons. U.S. rates in particular should also be capped by demographics and insatiable fixed income demand globally.

Investment Grade Bonds

Over the past 40 years, the five-year annualized U.S. investment grade return has averaged 0.6% higher than the starting-point yield, or the yield at the beginning of the forecast period². This "outperformance" has been driven by generally positive yield curves and the perpetual nature of fixed income indexes, as new higher yielding bonds replace lower yielding maturing bonds. However, with today's flat yield curves, we expect returns to only match yield to maturity.

High Yield Bonds

Default risk shows up most with high yield bonds, where five-year returns have trailed starting-point yields by a historical average of 1.3%³. Over the next five years, *Slow Growth Transitions* may act as a headwind. But better index quality, solid interest coverage ratios and reduced issuance may prevent a materially worse outcome. A 2% cut to the June 30 yield of 9.5% results in a 7.5% global high yield forecast.

2.7%

GLOBAL INVESTMENT
GRADE BONDS ANNUALIZED
RETURN FORECAST

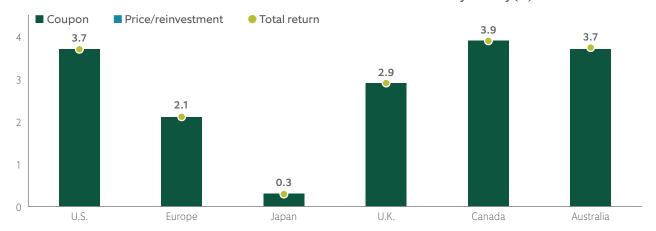
7.5%

GLOBAL HIGH YIELD BONDS ANNUALIZED RETURN FORECAST

CLIPPING COUPONS

Flat yield curves and appropriately priced securities mean we expect returns to match yield to maturity.

Northern Trust Five-Year Annualized Investment Grade Fixed Income Return Forecast by Country (%)



Source: Northern Trust Asset Management, Bloomberg. Coupon return calculated as yield to worst on June 30, 2022.

EQUITIES

OUTLOOK: MID-SINGLE-DIGIT RETURNS

Potentially higher interest rates — which tend to depress valuations — and deteriorating corporate profit margins may work against equities. In emerging markets, China's struggles with COVID-19 increase the risk to economic growth.

Developed Equities

Our five-year annualized forecast for developed market equities is 6.2%, compared to the 8.8% return of the past five years. As for corporate fundamentals that drive the forecast, higher inflation can encourage sales growth, so we expect sales to rise 5.1% on an annualized basis over the next five years versus 4.0% over the last five years. But what matters is the bottom line, and inflation also may increase costs and compress profit margins. Given the increasing likelihood of a more difficult economy, we believe profit margins will deteriorate somewhat to around 11% from the historically high level of 11.8%. Valuations are coming off the highs of recent years, partly because of previous low interest rates. But we still expect valuations to rise to 15 times earnings, above the current level of 14.5, providing some boost to returns.

Emerging Markets Equities

We expect emerging market equities to return 5.8% annualized over the next five years versus 4.7% over the past five years. Economic and financial uncertainties, in particular in China, may keep valuations low at about 11 times forward earnings, though somewhat higher than current valuations to add 1% to the forecasted return. Meanwhile, we see high sales growth of 6.9%, but we think chronic share dilution and profit margin pressures will cut into returns.

6.1%

GLOBAL EQUITIES ANNUALIZED RETURN FORECAST

6.2%

DEVELOPED MARKET EQUITIES ANNUALIZED RETURN FORECAST

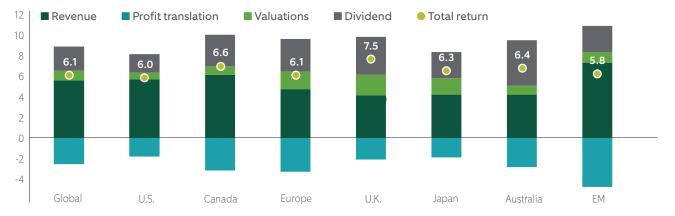
5.8%

EMERGING MARKET
EQUITIES ANNUALIZED
RETURN FORECAST

FIVE-YEAR FORECASTS ARE LOWER — BUT ACCEPTABLE

We think high profit margins will shrink, but lower valuations will revert higher - allowing decent returns.

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



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

REAL ASSETS

OUTLOOK: NATURAL RESOURCES ATTRACTIVE

Natural resources can protect against unexpected inflation, while real estate and infrastructure offer additional portfolio diversification and higher yields than traditional equities.

Natural Resources

Supply-chain disruptions (Inflation Recalibration) and demand to secure critical resources (Regional Rebuilding Blocs) should support commodity prices for years. Further, reduced investment in commodity production has underpinned tight commodity markets for years now. Green Transition Still a Go may continue to cap longer term financial incentives for capital investment in "dirty" resources, but it does at least recognize the need for a more inclusive energy strategy.

Global Real Estate

The work-from-home trend and e-commerce have lessened demand for office and retail space. We think developers will repurpose these spaces into buildings such as warehouses, condominiums and apartments, which have higher returns on investment. But repurposing takes time, and rising *Not So Negative* interest rates may drag down advancement on these projects.

Global Listed Infrastructure

Infrastructure's historical ability to limit losses in down markets will likely be valued amid higher volatility. We think elevated commodity prices will provide some support to the energy and utilities sectors. Industrial companies may benefit from the reshuffling of supply chains (*Regional Rebuilding Blocs*). Higher interest rates may weigh on the asset class a bit, but with those higher rates will also come more attractive income yields.

7.3%

NATURAL RESOURCES ANNUALIZED RETURN FORECAST

6.8%

GLOBAL REAL ESTATE ANNUALIZED RETURN FORECAST

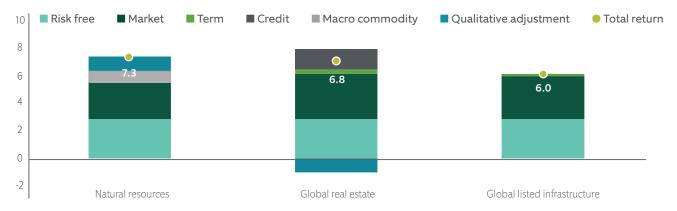
6.0%

GLOBAL LISTED
INFRASTRUCTURE
ANNUALIZED RETURN
FORECAST

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. **Definitions: risk free** - theoretical rate of return of an investment with zero risk, **market** - exposure to global equity movements, **term** - exposure to interest rate movements, **credit** - exposure to default risk, **macro commodity** - exposure to commodity price movements, **qualitative adjustment** - modifications to the quantitative model, specifically relating to natural resources and global real estate.

ALTERNATIVES

OUTLOOK: APPEALING PREMIUMS FOR SOME INVESTORS

Alternatives can enhance portfolio performance and diversification, but through a wide range of strategies with broad performance dispersion. As a result, manager selection is extremely important.

Private Investments

Private equity, broadly speaking, continues to offer material return premiums to equities. A 3.5% return premium, which represents a 2% "haircut" from the historical 5.5% return premium, drives our 9.6% five-year annualized return forecast. The lower premium addresses the modest concerns we have over increasing money flows into private equity to capture potentially reduced investment opportunities. We believe opportunities remain, but the higher price of entry driven by private-equity demand warrants a haircut.

Using a similar approach, we calculate return premiums across private real assets. We assign a 2% premium to our public-equity-based natural resources forecast to arrive at a 9.3% return forecast. Direct real estate also earns a 2% premium (8.8% total return forecast) to public real estate equities, while private infrastructure earns a 3% premium (9.0%) to infrastructure stocks. Private credit data shows historical returns of 2% over high yield bond returns, but adding 2% to our already-elevated high yield forecast is the wrong comparison at the moment. Our 6.5% private credit annualized return forecast is more appropriately compared to our 9.6% private equity forecast.

Hedge Funds

Alpha generation by the decade had been in decline, falling from an annualized 7.1% in the 1990s to 3.0% in the 2000s — and then barely positive in the 2010s. Thus far this decade, hedge funds' alpha has increased to 3.8%. The blend of more alpha and lower return premiums, as cash returns creep higher, has increased hedge funds' potential role in the diversified portfolio for cases where hedge fund investing is appropriate.

9.6%

PRIVATE EQUITY
ANNUALIZED RETURN
FORECAST

5.4%

HEDGE FUND ANNUALIZED RETURN FORECAST

FOUR PREMIUMS AND A DISCOUNT

Private credit — still an attractive income provider — has a difficult comparison with high yield.

Northern Trust Five-Year Annualized Private Investments Return Forecast (%)



Source: Northern Trust Asset Management, Bloomberg.

DETAILED FIVE-YEAR ASSET CLASS RETURN FORECASTS

	All Returns in % Annualized			5-Year Return Forecasts by CMA Year						5-Year
		Asset Class	Proxy Index	2023	2022	2021*	2019	2018	2017	Actual Return
		Cash	3-Month U.S. T-Bill	2.8	0.3	0.1	1.1	2.2	1.7	1.1
	U.S.	Inflation linked	Bloomberg U.S. TIPS	3.4	2.2	2.4	2.6	2.9	3.0	3.2
		Investment grade	Bloomberg U.S. Aggregate	3.7	2.4	2.3	3.0	3.6	3.2	0.9
		High yield	Bloomberg U.S. High Yield	7.4	3.5	5.5	5.0	4.9	4.8	2.1
		Municipal	Bloomberg Municipal	3.2	2.0	2.6	2.4	3.2	3.2	1.5
Fixed Income	Canada	Cash	3-Month Canada T-Bill	3.3	0.2	0.2	0.7	1.6	1.3	1.0
		Inflation linked	FTSE Canada Real Return Bond	3.5	2.0	2.2	2.0	2.3	2.5	0.7
		Investment grade	FTSE Canada Universe	3.9	2.4	1.9	2.6	2.9	2.5	0.2
		High yield	BofAML Canadian High Yield	6.0	3.8	5.2	4.5	4.5	4.5	4.0
	Europe	Cash	3-Month German Bunds	0.3	-0.4	-0.5	-0.3	-0.3	-0.2	-0.7
		Inflation linked	Bloomberg Euro Inf. Linked	2.2	1.0	1.5	1.0	1.2	1.5	2.3
		Investment grade	Bloomberg Euro Aggregate	2.1	1.0	1.0	1.2	1.8	1.5	-0.9
Fixed	U.K.	Cash	3-Month Gilts	2.1	0.2	0.1	0.3	0.9	0.5	0.5
		Inflation linked	Bloomberg Inflation Linked Gilt	3.3	1.0	1.3	2.2	1.7	1.6	-0.5
		Investment grade	Bloomberg Sterling Aggregate	2.9	1.5	1.3	2.2	2.5	2.5	-0.6
	Japan	Cash	3-Month JGB	0.1	-0.1	-0.1	-0.1	0.0	-0.1	-0.2
		Inflation linked	Bloomberg Inflation Linked JGB	0.1	0.2	0.5	0.2	0.5	0.8	0.8
		Investment grade	Bloomberg Japanese Aggregate	0.3	0.2	0.2	0.2	0.5	0.7	-0.3
	Global Aus.	Cash	3-Month Australia Gov't Bond	3.2	0.3	0.2	0.8	2.5	2.4	1.0
		Investment grade	Bloomberg Australian Composite	3.7	1.5	1.2	2.2	3.5	3.2	0.7
		Inflation linked	Bloomberg Global Inflation Linked	2.9	1.5	1.8	2.0	2.0	2.2	2.5
		Investment grade	Bloomberg Global Aggregate	2.7	1.6	1.6	2.1	2.7	2.2	1.2
		High yield	Bloomberg Global High Yield	7.5	4.0	5.6	4.8	4.6	4.5	0.1
Equities	Developed markets	U.S.	MSCI United States	6.0	4.3	4.7	5.7	5.8	5.9	11.2
		Canada	MSCI Canada	6.6	5.2	4.5	4.5	5.5	6.0	7.5
		Europe	MSCI Europe ex U.K.	6.1	4.7	5.4	6.0	6.3	7.2	4.5
		U.K.	MSCI United Kingdom	7.5	6.2	5.6	7.4	6.3	6.6	3.7
		Japan	MSCI Japan	6.3	4.1	3.8	4.5	6.0	6.0	6.1
		Australia	MSCI Australia	6.4	4.7	5.8	5.7	7.7	7.7	7.0
	Agg.	Developed markets	MSCI World	6.2	4.5	4.8	5.7	6.0	6.4	8.8
		Emerging markets	MSCI Emerging Markets	5.8	5.3	5.4	6.1	8.3	8.4	4.7
		Global equities	MSCI All Country World	6.1	4.6	4.9	5.8	6.2	6.9	8.3
	Global	Natural resources	S&P Global Natural Resources	7.3	5.0	3.6	6.1	7.2	7.4	8.9
Real		Listed real estate	MSCI ACWI IMI Core Real Estate	6.8	5.1	6.3	6.3	6.0	6.1	2.5
		Listed infrastructure	S&P Global Infrastructure	6.0	5.5	5.8	5.8	5.4	5.8	4.8
		Private equity	Cambridge Global Private Equity	9.6	7.6	7.9	7.7	8.0	8.4	N/A
Alts		Private credit	Cambridge Global Private Credit	6.5	6.0	7.6	6.8	6.6	6.5	N/A
		Hedge funds	HFRI Fund Weighted Comp	5.4	2.9	2.6	3.7	4.3	4.4	5.7

Naming convention of five-year outlook was changed to the forward year, so the 2021 edition was published in 2020. For each CMA edition, the five-year forecast period is as follows in parentheses: 2023 (June 2022-June 2027), 2022 (June 2021-June 2026), 2021 (June 2020-June 2025), 2019 (June 2019-June 2024), 2018 (June 2018-June 2023), 2017 (June 2017-June 2022). 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. Five-year actual returns are listed in local currency (with the exception of real assets, which are in USD) and annualized for the five-year period ending 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 no guarantee of future results.

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Explore Our Full Five-Year Outlook

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



How helpful was this paper?







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- ¹ Alpha is risk-adjusted outperformance
- ²Source: Bloomberg, based on data from March 1976 to June 2022
- ³ Source: Bloomberg, based on data from January 1990 to June 2022

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