CIBC ASSET MANAGEMENT

LONG-TERM STRATEGIC ASSET ALLOCATION

Luc de la Durantaye, CFA
Asset Allocation and Currency Management
CIBC Asset Management Inc.

Jerry Lu, CFA , FRM, CAIA
Investment Management Research
CIBC Asset Management Inc.

Michael Sager, PhD
Multi-Asset and Currency Management
CIBC Asset Management Inc.
michael.sager@cibc.com

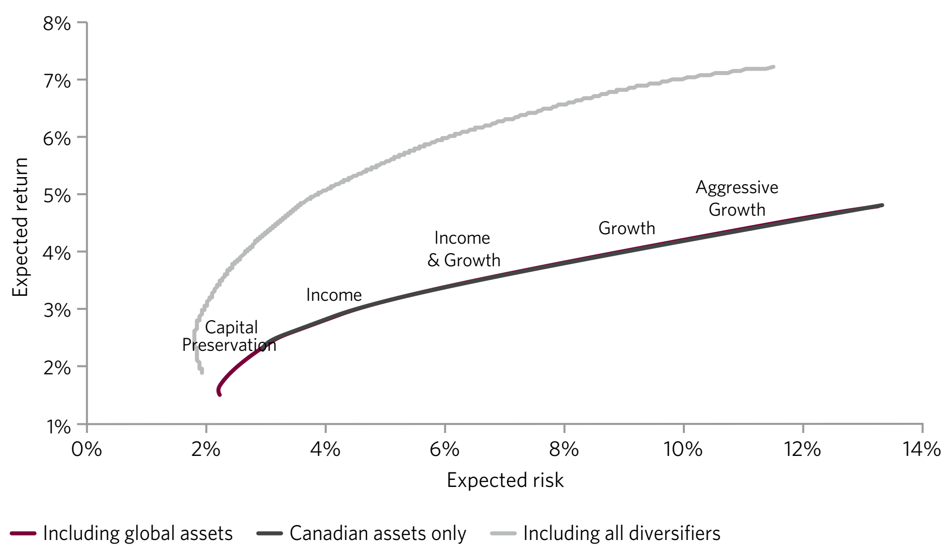
We gratefully acknowledge the contribution of Vjosana Klosi.

March 2022

Objective: To provide a stable, long-term asset allocation strategy that incorporates individual investor objectives and risk tolerance, ignoring short-term market noise.

Inside this paper

Efficient frontier (2022 forward-looking estimates)



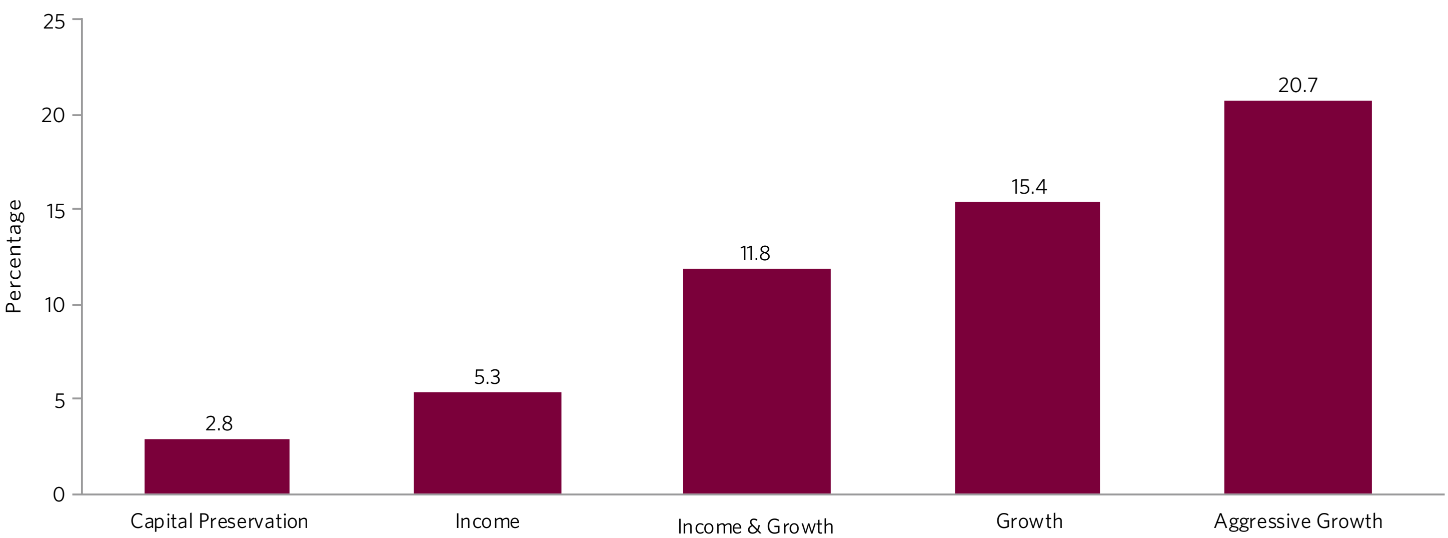
Source: CIBC Asset Management Inc.

Highlights

- The long-term strategic asset allocation (LTSAA) model incorporates the CIBC Asset Management Multi-Asset and Currency Management team's forward-looking asset class views for the next 10 years. These long term views are complemented by tactical short-term opportunities aimed at enhancing risk-adjusted returns.
- Our five investor profiles continued to generate strong performance in 2021. Annual returns ranged from 2.8% for the most conservative profile (Capital Preservation) to 20.7% for the most aggressive profile (Aggressive Growth).
- An expected removal of monetary stimulus and the risk of a further rise in bond yields in most developing countries leads us to continue to emphasize the importance of diversification to minimize portfolio risk and navigate associated headwinds. We maintain a broad global asset allocation model within credit, global equities and emerging markets to further improve expected risk-adjusted returns for each investor profile.

- Also, with a focus on diversification, investor interest in a number of alternative asset classes continues to increase. We have augmented our traditional portfolios with allocations to several alternative investments, including private equity, real assets, and liquid alternatives. These will further broaden asset allocation and provide additional sources of expected return and diversification, reflecting relatively attractive correlations to public equities.
- Global investors inherit currency risk. It is important for each investor to determine how this risk impacts their portfolio and the merits of currency hedging. From a Canadian investor's perspective, portfolio risk is typically lowered by maintaining global equity exposure unhedged. The picture is more equivocal for global fixed income. In isolation, the volatility of unhedged global fixed income is substantially higher than hedged.
- Investors whose Canadian equity allocation is in line with Canada's global market cap weight may decide to hedge global fixed income exposure. While this is also frequently the choice of investors with relatively short investment horizons, it is not the case for our recommended LTAA portfolios, which exhibit a distinct Canadian equity tilt. This tilt causes the currency exposure inherited from global fixed income to act as a diversifier to the volatility of Canadian equity. Accordingly, we maintain all inherited currency exposure unhedged in LTAA portfolios[1].
- Adjusting long-term allocations based on short-term market volatility or price momentum may constrain investors' ability to achieve their long-term financial goals. Investors should remain diversified and invested to reduce unnecessary risks. This can be accomplished by regularly reviewing and rebalancing portfolios to ensure allocations remain consistent with long-term financial goals.

2021 five investor profile performance



Source: Bloomberg, CIBC Asset Management Inc., as of December 31, 2021.

Capital market review

The economic recovery continued in 2021, showcasing the economy's resilience through a global pandemic, supported by the global vaccination campaign and supportive monetary and fiscal policies. A strong recovery was accompanied by positive earnings growth, which contributed to a third consecutive year of double-digit returns for global equities; the MSCI World Index increased 21.3% CAD (22.4% USD) in 2021. Supply bottlenecks in early 2021 combined with higher energy prices boosted commodity prices, as measured by the S&P GSCI commodity index, which returned 37.1% USD (35.8% in CAD).

Inflation represents a key risk to the investment outlook. More recently, the source of inflation risk has broadened to include increasingly tight labour markets. This risk has resulted in increasingly hawkish central bank rhetoric, and a repricing higher of market participants' expectations of future monetary policy tightening. Allied with continued risks associated with Covid and government regulations and real estate sector defaults in China, this led to an increase in market volatility.

U.S. equity markets posted a third consecutive year of returns above 20% USD. The S&P 500 Index ended the year at an all-time high following a return of 28.7% USD (27.6% in CAD), and the Nasdaq Composite Index increased by 22.2% USD (21.1% CAD). Increasing inflation and moderating growth sentiment presented some challenges for U.S. equities. However, markets benefited from strong corporate earnings and profitability, continued monetary support, high accumulated savings, and strong retail sales. All 11 sectors of the S&P index realized positive returns in 2021. Cyclical and value-oriented sectors such as energy, real estate and financials led performance, returning 54.6%, 46.2%, and 35.0% USD (53.3%, 45.0%, 33.9% CAD) respectively. Valuations remain relatively high for growth stocks, and at year-end, the forward P/E ratio for the Russell 1000 Growth Index was 30.6, nearly twice the Russell 1000 Value Index ratio of 15.8. Strength in the tech sector increased the value of U.S. large-cap and mega-cap stocks, helping the Russell 1000 Index realize a return of 26.5% USD (25.4% CAD). This contrasts with a return of 14.8% USD (13.8% CAD) for the Russell 2000 Index.

In Canada, strong real economic activity, tightening labour market conditions, and broadening inflation pressures prompted the Bank of Canada (BoC) to end its quantitative easing in the second half of 2021 and pivot to a more hawkish policy stance. Reflecting the strong economic tailwind, the S&P/TSX Composite Index also performed strongly, returning 25.1% for the year. The TSX energy sector led sector performance with a gain of 48.9% CAD, spurred on by a rise of 55.0% USD in WTI oil prices. This was followed by the real estate (37.4%) and financial sectors (36.5%).

International equities, as proxied by the MSCI EAFE Index, trailed U.S. and Canadian markets by a wide margin, returning 10.8% CAD (11.8% USD) in 2021. Eurozone GDP recovered to pre-pandemic levels, supported by favourable consumption and investment spending trends and supportive fiscal policy, including the EU recovery fund and suspension of budget deficit limits. However, eurozone equity markets were particularly impacted by the Delta Covid variant, as well as supply bottlenecks and rising inflation pressures. Brexit tensions remained a risk for the region, as do upcoming elections in Italy and France. The MSCI Europe Index returned 16.0% CAD (25.9% EUR) for the year, outpacing other MSCI EAFE markets. An element of European market underperformance reflected a relatively high concentration in more traditional value sectors such as financials, materials, and industrials. The U.K. FTSE 100 Index returned 16.3% in CAD (18.4% in GBP) in 2021.

The MSCI Emerging Markets (EM) Index returned -3.1% CAD (-2.2% USD) for 2021, one of the few areas of negative returns among equity markets in the year. China was the main contributor to this underperformance, with the MSCI Zhong Hua Index returning -19.9% CAD (-19.2% USD). Chinese GDP growth slowed, due to pandemic-related economic restrictions, slower credit growth, and increased regulation that spurred defaults in the property sector. The three top- performing Emerging Markets were Czechia, the United Arab Emirates, and Saudi Arabia; the latter two were supported by a rally in energy and other commodity prices. Emerging markets experienced a style reversal as highly valued Chinese growth stocks were subject to regulation targeting a reallocation of resources away from these names, negatively impacting valuations.

Equity market performance (%, CAD)

Asset Class	Index	2021	2020	2019	2018	2017	2016
Canadian Equity	S&P/TSX Composite	25.2	5.6	22.8	-8.9	9.1	21.1
U.S. Equity	S&P 500	27.6	16.3	24.8	4.2	13.8	8.1
Global Equity	MSCI World	21.3	14.5	21.9	0.1	15.0	4.4
International Equity	MSCI EAFE	10.8	6.4	16.5	-5.6	17.4	-2.0
Emerging Markets	MSCI Emerging Markets	-3.1	16.6	12.9	-6.5	28.7	7.7
US Small Cap	Russell 2000	13.8	17.9	19.2	-3.0	7.1	17.1

Source: Bloomberg, CIBC Asset Management Inc., as of December 31, 2021.

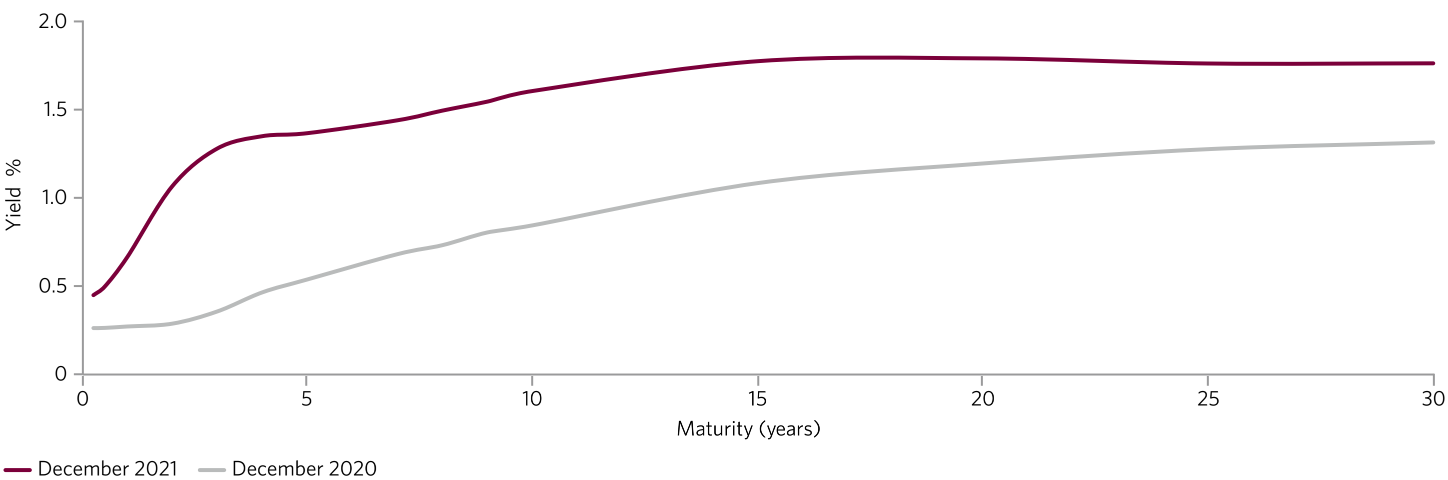
Global fixed income markets posted negative results for 2021, as a whole, as broadening inflation pressures and expectations for less accommodative monetary policy across developed markets pushed bond yields higher, particularly in Q4 and into 2022. The U.S. 10-year Treasury yield reached 2% at the beginning of February 2022, and the yield curve has become increasingly flat. Canadian government bond yields rose to similar levels. Real yields remained in negative territory; the U.S. 10-year real yield ended 2021 at -1.04%. The Bloomberg Barclays Global Aggregate Bond Index declined 5.5% CAD (4.7% USD) for the year. The FTSE Canada All Corporate Bond Index declined 1.3% CAD.

Bond market performance (%, CAD)

Asset Class	Index	2021	2020	2019	2018	2017	2016
Canadian Bonds	FTSE Canada Universe Bond	-2.5	8.7	6.9	1.4	2.5	1.7
Canadian Government Bonds	FTSE Canada All Government Bond	-3.0	8.7	6.4	1.5	2.2	0.9
Canadian Corporate Bonds	FTSE Canada All Corporate Bond	-1.3	8.7	8.1	1.1	3.4	3.7
U.S. Bonds	Barclays U.S. Aggregate Bond	-2.4	5.6	3.2	9.0	-3.3	-0.9
Global Bonds	Barclays Global Aggregate Bond	-5.5	7.3	1.4	7.7	0.4	-1.5
U.S. High-Yield	Bank of America Merrill Lynch BB-B US Cash Pay High Yield Index	3.7	4.6	9.3	6.8	-0.1	10.8
Canadian Cash	FTSE Canada 91 Day T-Bill	0.2	0.9	1.6	1.4	0.6	0.5

Source: FTSE Russell, Bloomberg, CIBC Asset Management Inc.

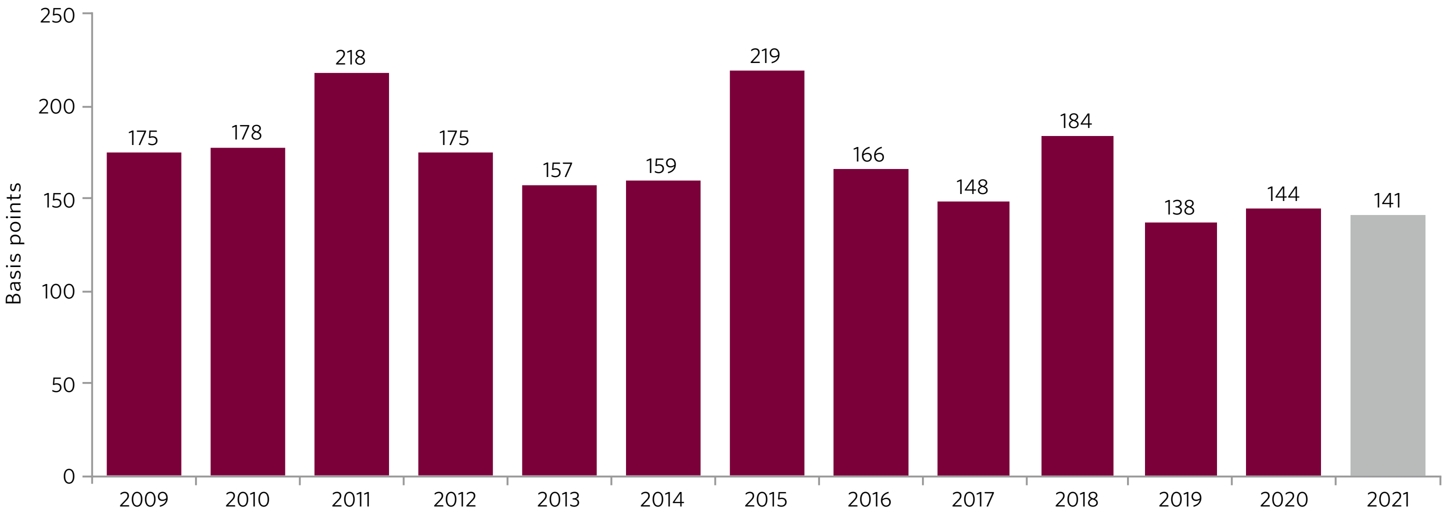
End-of-year government of Canada yield curve



Source: Bloomberg, CIBC Asset Management Inc., as of December 31, 2021.

In terms of fixed income sector performance, the long-term segment of the Treasury market experienced the largest headwind. High-yield, real-return, and floating-rate loans outperformed other market segments. Investment-grade and high-yield balance sheets improved, leading companies to de-lever and spreads to tighten. The Bank of America Merrill Lynch BB-B US Cash Pay High Yield Index (CAD) Index rose 3.7% (4.6% USD) in 2021, driven by a supportive credit environment. Valuation risk remained elevated, given relatively tight credit spreads and the prospect of higher risk-free rates. However, market volatility was relatively contained due to positive earnings, ratings upgrades, and low defaults in the high-yield space. One key risk to credit performance globally is a significant increase in credit outflows.

End-of-year Canadian BBB credit spreads[2]



Source: Bloomberg, CIBC Asset Management Inc., as of December 31, 2021.

Investor profile performance

Using the returns of major asset class indexes as proxies, balanced investors across our five investor profiles enjoyed strong performance in 2021. The methodology for these investor profiles is explained in subsequent asset allocation sections.

Calendar year investor profile performance[3] (%, CAD)

Profile	2021	2020	2019	2018	2017	2016
Capital Preservation	2.8	6.6	7.6	1.6	3.1	4.2
Income	5.3	7.4	10.2	1.0	4.4	5.6
Income and Growth	11.8	8.5	13.8	0.3	6.1	7.2
Growth	15.4	9.7	16.3	0.1	8.6	7.8
Aggressive Growth	20.7	11.0	20.3	-1.2	11.5	9.0

Source: Bloomberg, CIBC Asset Management Inc. as of December 31, 2021.

Strategic asset allocation

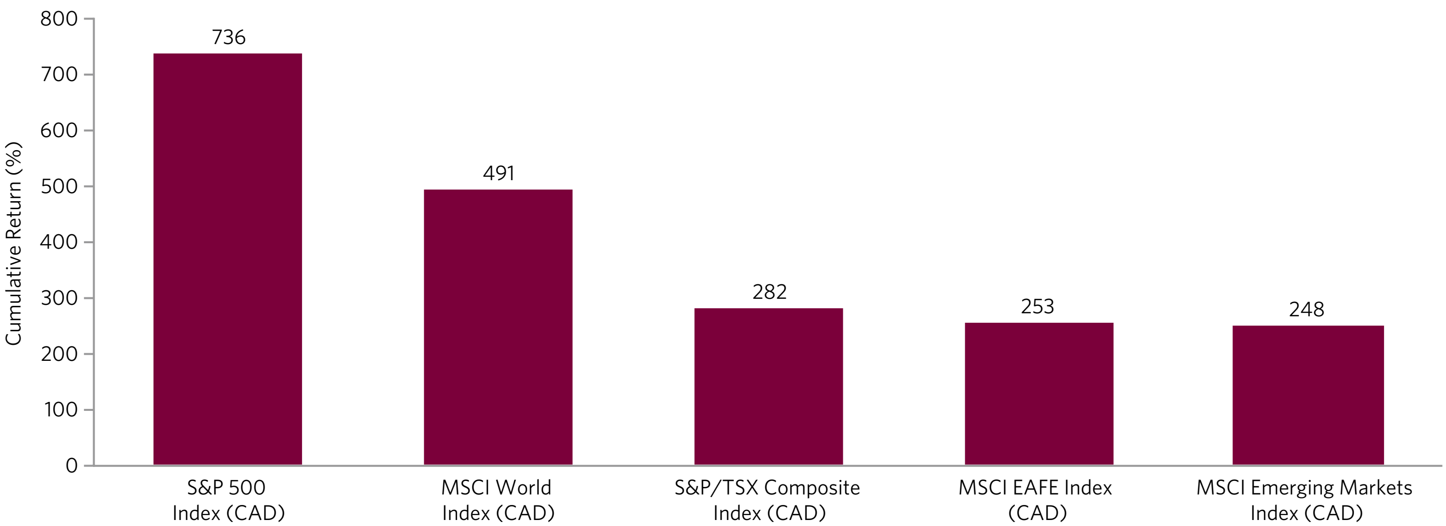
The importance of strategic asset allocation

There are a wide number of asset classes available to investors. Choosing the right combination to include in a portfolio to meet specific investor objectives is challenging. Below, we outline a number of ways that strategic asset allocation can help investors maximize long-term returns and achieve long-term investment goals.

Home country bias[4]

Canadian investors often exhibit a pronounced home country bias; the proportion of domestic equities they hold in portfolios is materially higher than the country's weight in global equity indexes. According to a Vanguard study, the allocation that Canadian investors make to domestic equities inside of their stock portfolios is 60%[5], whereas Canada represents only 3% of the MSCI ACWI Index, which means there is a 57% home country bias built in. Home country bias exposes Canadian investors to uncompensated portfolio risks, including excessive concentration in three highly correlated sectors—financials, energy, and industrials—that represent nearly 60% of the S&P/TSX Composite Index. As shown in the table below, performance of the Canadian stock market has lagged the S&P 500 and MSCI World indexes since the beginning of the bull market in March 2009, but has exceeded the MSCI EAFE and Emerging Market indexes.

Canadian equities vs. developed markets cumulative performance (March 1, 2009 to December 31, 2021)



Source: Bloomberg, CIBC Asset Management Inc. as of December 31, 2021.

Diversification by asset class

In the long run, investors who do not allocate to a broad set of asset classes can miss the benefits of efficiency—higher return per unit of risk—that can be achieved in a more diversified portfolio. While many conservative investors prefer the safety of cash over other asset classes, appropriate diversification has been shown to outperform most individual asset classes, and particularly cash, on a risk-adjusted basis over the long term. Investing in a broad mix of asset classes will ensure at least some participation in the highest performing asset classes at any given time.

Annual returns for major asset classes[6]

2021	2020	2019	2018	2017	2016	2015	2014
US Equity 27.6%	Emerging Market Equity 16.6%	US Equity 24.8%	Global Fixed Income 7.7%	Emerging Market Equity 28.7%	Canadian Equity 21.1%	Emerging Market Fixed Income 22.1%	Real Assets 24.5%
Canadian Equity 25.2%	US Equity 16.3%	Canadian Equity 22.8%	US High Yield 6.8%	International Equity 17.4%	US High Yield 10.8%	US Equity 21.6%	US Equity 23.9%
Real Assets 14.1%	Canadian Fixed Income 8.7%	Real Assets 18.1%	US Equity 4.2%	US Equity 13.8%	US Equity 8.1%	International Equity 19.5%	Emerging Market Fixed Income 15.7%
International Equity 10.8%	Global Fixed Income 7.3%	International Equity 16.5%	Emerging Market Fixed Income 3.2%	Canadian Equity 9.1%	Emerging Market Equity 7.7%	US High Yield 16.5%	US High Yield 12.8%
US High Yield 3.7%	International Equity 6.4%	Emerging Market Equity 12.9%	Real Assets 1.9%	Real Assets 5.6%	Emerging Market Fixed Income 5.8%	Global Fixed Income 16.1%	Canadian Equity 10.5%
Money Market 0.1%	Canadian Equity 5.6%	US High Yield 9.3%	Canadian Fixed Income 1.4%	Canadian Fixed Income 2.5%	Real Assets 5.3%	Real Assets 10.4%	Global Fixed Income 9.7%
Canadian Fixed Income -2.5%	Emerging Market Fixed Income 5.2%	Emerging Market Fixed Income 6.9%	Money Market 1.4%	Emerging Market Fixed Income 1.2%	Canadian Fixed Income 1.7%	Canadian Fixed Income 3.5%	Canadian Fixed Income 8.8%
Emerging Market Equity -3.1%	US High Yield 4.6%	Canadian Fixed Income 6.9%	International Equity -5.6%	Money Market 0.7%	Money Market 0.5%	Emerging Market Equity 2.4%	Emerging Market Equity 7.0%
Emerging Market Fixed Income -5.3%	Money Market 0.4%	Money Market 1.7%	Emerging Market Equity -6.5%	Global Fixed Income 0.3%	Global Fixed Income -1.4%	Money Market 0.5%	International Equity 4.1%
Global Fixed Income -5.5%	Real Assets -7.8%	Global Fixed Income 1.4%	Canadian Equity -8.9%	US High Yield -0.1%	International Equity -2.0%	Canadian Equity -8.3%	Money Market 0.9%

Source: Bloomberg, CIBC Asset Management Inc. as of December 31, 2021.

Investor behaviour gap

Behavioural finance studies have demonstrated that investors tend to be influenced by emotions and trends. Instead of adhering to a long-term asset allocation, investors tend to chase performance within select asset classes, industries or geographies. This behaviour has been shown to result in long-term underperformance relative to a more diversified and regularly rebalanced asset allocation. As illustrated in the chart below, the average of total returns investors actually receive versus benchmark fund performance over five separate 10-year periods ending in each year from 2016 to 2020 are consistently negative, with this underperformance due to investor patterns of buying and selling funds. In general, the performance gap widens around dramatic market reversals, such as at the end of 2018; fund outflows increase, meaning that investors miss out on subsequent market rebounds. In addition, investors tend to enter newer asset classes at the wrong time, close to local performance peaks.

Overall, trying to time markets by reacting to pessimistic or exuberant headlines can lead to suboptimal portfolio construction and returns. Sticking to a long-term strategic asset mix can help mitigate the negative impact of these tendencies and improve expected performance.

Investor performance gap by U.S. category group, (10 year returns, USD %)

Source: Morningstar Study: "Why Fund Returns Are Lower Than You Might Think." August 30, 2021, Performance Data as of December 31, 2021. 2021 Morningstar Research Inc. All Rights Reserved. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete, or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information. Past performance is no guarantee of future results.

Strategic asset allocation methodology

Our asset allocation recommendations are based on a three-step process.

First, we establish a global asset allocation model based on traditional asset classes: Canadian money market, Canadian equities; global equities; Canadian fixed income; global fixed income; and high-yield bonds[7].

Second, we extend the global model to include a broader asset mix. This is expected to improve the portfolio's risk-adjusted returns. In addition to the traditional major asset classes, we include real assets, emerging market equities and debt, floating rate loans, and multi-sector fixed income. We recommend funding these asset classes with reallocations from equities and bonds. The inclusion of these additional asset classes causes the efficient frontier to shift up and to the left, with higher long-term expected returns and less risk, as measured by standard deviation.

Third, we consider including alternative asset classes and strategies, including private assets and absolute return strategies. This is expected to generate a further diversification benefit in the case of liquid alternatives, and an additional source of return in the case of private investments.

High-Yield Bonds

As a hybrid asset class with both debt and equity characteristics, an allocation to high-yield bonds can provide diversification benefits to a balanced portfolio. High-yield debt offers an additional credit spread versus investment-grade issuers to compensate investors for accepting exposure to additional risk when investing in this asset class. In addition to credit performance, high-yield debt provides diversification by virtue of typically having less duration risk versus traditional bonds; the average duration of U.S. high-yield bonds is 4.0 years, versus 7.5 years for global bonds[8]. Lower duration is synonymous with a lower sensitivity to interest rate movements. Consequently, the performance of high-yield debt should be less vulnerable than government bonds in a rising-rate environment.

Floating Rate Loans

Floating-rate loans are debt instruments with a variable interest rate component and a relatively high fixed credit spread. The variable component is reset on a scheduled and frequent basis based on market rates. When interest rates rise, the interest paid by a floating-rate loan will also rise, thus providing portfolio protection in this market environment. Floating-rate debt is typically rated below investment-grade, providing a credit risk profile similar to high yield. However, floating-rate loans represent a senior/secured claim against the issuing company, and holders of the loans have first claim on the company's assets in the event of default. From a diversification viewpoint, floating-rate loans have low-to-negative correlation to traditional investment-grade fixed income and equity asset classes, suggesting that inclusion of this asset class can lead to an improvement in expected portfolio performance.

Floating rate loans were the best performing credit asset class in 2021, returning 4.5%, as proxied by the Credit Suisse Leveraged Loans Index—compared to 3.7% for high-yield bonds (CAD returns). The outlook for this asset class remains constructive, given its ability to provide a hedge against a further rise in interest rates. Loan performance historically remains positive in the early stages of the credit cycle as increased interest expenses are offset by continued growth in earnings. Current positive corporate fundamentals will also be favourable to loans. However, should growth moderate as expected, tighter financial conditions may weigh on corporate earnings and coverage ratios could start declining.

Emerging Markets Equities

Emerging market (EM) equity is an increasing component of many investors' long-term asset allocation plans. Emerging markets contribute 55% of global GDP, versus 37% for developed markets. This trend is likely to continue due to higher expected EM country growth rates versus the developed world. As the EM middle class and consumer base expands, growth is expected to benefit from growing consumer purchasing power and shifts in spending patterns. A combination of improved living standards through higher wages, access to higher-quality education and improved technology are changing the sectoral composition of economies, with service-oriented industries slowly comprising a higher portion of the economy. This has led to rapid growth in technology, with 52% of global growth in tech revenues and 84% of patents originating from Asian markets. In addition, a commitment to green energy by governments in Taiwan, Hong Kong and China should be supportive of domestic economies and green energy stocks.

Higher expected returns for emerging markets are accompanied by increased risk versus developed countries. In the short-run, EM will be negatively impacted by an expected slowdown in cyclical growth resulting from fiscal challenges related to the cost of the pandemic, supply chain disruptions, elevated energy prices, the negative impact on currencies from rising interest rates globally, and, most importantly, heightened geopolitical risks from the Russian invasion of Ukraine.

Emerging Market Debt

In exchange for exhibiting higher risk than developed market sovereign debt, emerging market debt (EMD) can offer higher yields and exposure to stronger long-term growth, as well as lower volatility than EM equities. Debt markets in emerging countries have room for significant growth, as indicated by the growing global economic impact of these countries. EMD also offers diversification benefits due to a relatively low correlation with other fixed income asset classes.

Consensus return forecasts for this asset class are relatively high, and CIBC Asset Management expects that EMD will be among the highest-performing asset classes over the next 10 years.

Alternative investments

In the search for additional sources of diversifying return, investors are increasingly turning to alternative asset classes. Consensus estimates suggest the size of alternative markets will continue to grow robustly and become an increasingly important component of investment portfolios. Alternatives have been shown to improve the efficiency of balanced portfolios by increasing expected returns in the case of private assets, or by managing downside risk in the case of liquid alternatives.

Real Assets[9]

Real asset strategies can improve diversification through exposure to both infrastructure and real estate assets.

Infrastructure investments provide the benefits of stable cash flows, based on essential services with relatively low competition, and long-term returns that are highly correlated to economic growth. Regulated infrastructure can serve as an inflation hedge as associated revenues are directly correlated to inflation.

The pandemic had a mixed impact on the performance of infrastructure. Sectors dependent on the transportation of people, such as toll roads, rails and airports, were negatively impacted. By contrast, utilities, renewables and logistics were only marginally impacted. In the long run, economic growth will positively impact more cyclical sectors such as transportation infrastructure, while regulated sectors will be positively impacted by increased demand for assets with long-dated contractual agreements that can offer portfolio diversification in a low-yield environment.

Investment in real estate also offers exposure to long-term growth and high dividend income streams. Dividends in real estate typically come in the form of relatively stable rents paid to real estate investment trust (REIT) companies. In the current environment, REIT investments provide an attractive return premium, as supply shortages are expected to continue for both rental and sale properties. Relative valuations have increased as the asset class experienced a recovery after underperformance at the onset of the pandemic crisis. This crisis impacted sectors within real estate in several ways that will likely alter the sectoral composition of the asset class over the long term. For instance, growth in e-commerce is negatively impacting shopping malls, but has expanded opportunities for warehouses, logistics, and data centers. Similarly, the trend towards working from home will likely adversely impact performance of the office real estate sector.

Higher inflation expectations, at least in the short term, will likely exert a mixed impact on the performance of real estate assets. To the extent that growth remains positive and interest rates increase at a measured pace, as we expect, real estate will likely continue to deliver positive risk-adjusted returns while providing some protection against inflation. However, should interest rates increase at a much faster rate than currently expected, the ability to meet credit obligations may be challenged, which would negatively impact performance of this asset class.

Private Assets

The search for yield and the demand for alternatives to traditional publicly traded equities has led to considerable growth in private investments. Private assets' net asset value has grown more than ninefold since 2000, and three times as fast as global public equities[10]. Private equity firms can take advantage of otherwise inaccessible growth opportunities in emerging investment themes such as disruptive technology, e-commerce, and sustainable investing initiatives.

Liquidity risk is the main characteristic that differentiates public and private investments, and the main contributor to additional expected returns available in private assets. As such, when considering the addition of private assets to a portfolio, investors should fully understand the associated unique liquidity features and constraints. Private investments are often most suitable for long-term investors, as access to committed funds may be restricted or subject to additional fees. Demand for liquidity is often more pronounced at times of market declines, which can, in turn, increase the correlation between public and private investments. Non-market based methodologies associated with the valuation of private assets—which contrast with constant pricing and re-pricing in publicly traded markets—can reduce the calculated volatility of private investments, but can potentially understate investment risks. The involvement of experienced and specialized investors is key to managing downside risk.

Liquid Alternatives

Liquid alternatives use a combination of traditional public asset classes, derivatives, and leverage to create a more attractive risk profile with comparable expected returns. The underlying securities are more frequently priced than private investments. The high liquidity of liquid alternatives makes them a potentially good complement to private investments.

Liquid alternatives can be grouped into the following asset classes: long-short equity; managed futures; global macro; distressed securities; arbitrage (convertibles, bonds, mergers, structured products); and multi-asset strategies. These strategies are expected to be relatively uncorrelated to one another and to traditional assets and, as a result, can be a good source of portfolio diversification.

CIBC's Multi-Asset Absolute Return Strategy (MAARS)[11] is an absolute-return strategy that differs from long-only solutions that invest in traditional asset classes benchmarked to market indexes. The addition of a benchmark-agnostic absolute-return strategy can potentially reduce the equity risk of balanced portfolios and achieve a smoother investment experience. It can also provide greater liquidity compared to other alternative investments.

Long-term capital market assumptions

At the core of our strategic asset allocation methodology is the CIBC Asset Management Multi-Asset and Currency Management team's 10-year forward-looking return estimates. We believe that long-term, forward-looking estimates best capture the impact of the current and potential global economic and financial environment on asset markets and portfolios. Our asset allocation process is described as follows:

Expected return and risk methodology

We use a macroeconomic textbook framework to construct our projections, in which GDP growth is a function of labour and capital inputs, as well as total factor productivity. A key feature of our approach is that we augment the textbook specification to take into account the negative impact of monetary policy renormalization in a context of elevated indebtedness across major economies. Core insights include the following:

- The global economy is expected to grow at an annualized rate of 3% in the next decade, which is approximately 1% lower than the average annualized growth rate realized in the decade prior to the pandemic. Growth will be negatively impacted by adverse demographics in developed markets. In addition, innovation has concentrated in sectors such as entertainment and communication devices, which have not exerted a positive impact on labour productivity growth.

- Rising inflation risks have triggered a hawkish pivot by central banks. Despite inflation expectations rising quickly, policy normalization is likely to be relatively limited, due to: rising debt burdens as a percentage of GDP; the negative growth impact of adverse demographics; and long-term inflation expectations that remain anchored to long-term central bank target rates. As a result, the size of many central bank balance sheets, enlarged by large-scale quantitative easing, are expected to remain at elevated levels.

Government bonds in advanced economies are showing signs of divergence. Canadian government bond yields have risen substantially since last year's forecasts, consistent with a higher expected return. Global government bonds are expected to continue to deliver relatively low returns due to low starting yields and a negative currency impact. Longer-term bonds are not expected to provide a duration-risk premium, resulting in anemic future expected returns. Emerging market sovereign bonds are expected to offer a meaningful risk premium, while the performance of high-yield bonds will likely be restrained by tight credit spreads, which have a negative impact on valuation.

Expected annual returns are comparable for Canadian and International equities, and lower for U.S. equities due to loftier P/E ratios and relative valuations. Also a potential headwind for U.S. equities, increasing profit margins that drove earnings growth in recent years may not be sustained. We expect international equity returns to average 5.1% annually in the next 10 years. Returns are somewhat limited by lower earnings-growth prospects due to a normalization of historically elevated profit margins and income growth. However, valuations are a much smaller concern than in the U.S. or Canada. EM equity remains the most attractive asset class over the long-term, underpinned by higher earnings growth, sales growth and smaller margin variations.

Long-term capital market expected returns

We calculate asset class expected returns based on the following framework[12]:

RETURN = Current income + Growth in income + Change in value

Where:

- [Current Income] is the coupon yield (fixed income), or the dividend yield (equity).
- [Growth in Income] refers to earnings growth. This only applies for equity.
- [Change in Value] is the impact of varying interest rates (fixed income), or cyclically-adjusted P/E ratios converging towards their long-term equilibrium value (equity).

Expected volatilities and correlations

In estimating expected volatilities and correlations, we select a time period that will produce stable estimates and capture multiple economic cycles. An excessively long timeframe may inadequately capture structural changes to asset classes. Conversely, a timeframe that is too short may not capture asset class idiosyncrasies over a full business cycle. Accordingly, our framework encompasses 15 years of historical data, spanning periods of both recession and expansion across a full business cycle; this compares with 14 years used in last year's estimates.

2022 expected long-term asset class returns and risk

Our analytical framework results in the following long-term asset class expected returns and risks (in CAD):

Expected long-term asset class risk and returns (%, CAD)

Expected Return/Risk	Global Equity	Int'l Equity	U.S. Equity	Cdn Equity	Real Estate Equity	Infrastr. Equity	EM Equity	Global Fixed Income	Cdn Fixed Income	Money Market	U.S. H-Y Debt	EM Debt	MAARS Proxy (alt.)	Private Equity (alt.)
Expected return 2022	4.0	5.1	2.6	4.8	4.7	4.1	9.6	1.6	2.4	1.3	2.7	8.5	6.3	7.4
Expected returns 2021	5.2	5.8	3.8	7.4	5.4	7.9	9.9	0.4	0.8	1.3	2.5	6.6	6.3	8.3
Expected risk	11.5	12.7	11.7	13.4	16.1	10.4	15.8	8.7	3.9	0.4	8.4	8.8	5.7	7.7

Source: CIBC Asset Management Inc. Data as of January 31, 2022.

Strategic asset allocation process

Our asset allocation process is built on the principle that each combination of equities, bonds and cash will generate a different expected risk and return outcome. In this section, we determine an optimal allocation for each asset class, based on our long-term expectations for return and risk.

2022 recommendations

The asset allocation table below illustrates recommended global strategic allocations based on our broadest set of asset classes. Expected returns are lower than realized in 2021 for riskier investor profiles, but higher for lower-risk profiles. These outcomes reflect an improvement in expected returns for fixed income asset classes, but a deterioration for equities. Given improved expected returns for Canadian bonds, we recommend a reduction in the short-duration tilt of lower-risk portfolio profiles through a re-allocation to Canadian bonds from money markets and short-term equivalents.

Within equities, we continue to recommend a balanced and diversified allocation between Canadian and global markets. The economic boost provided by the unprecedented global stimulus in response to the Covid-19 pandemic has reached its peak, and earnings momentum is expected to decline. Inflation risk and geopolitical tensions have increased investment risk and suggest the need for an increased focus on style and country diversification, as well as downside-risk management.

Despite recent price corrections, valuations remain a headwind to future returns. U.S. equities continue to be the most richly valued asset class relative to other equity markets and its own long-term cyclically adjusted price-to-earnings (CAPE) fair value. By contrast, long-term expected returns in EM equities are relatively high, despite increased near-term growth risks, EM equities remain undervalued relative to their long-term CAPE fair value.

CIBC Asset Management's long-term expected return estimates are higher for emerging economies (+9.6%) than for Canada (+4.8%) or, particularly, the U.S. (+2.6%). Canadian and international equities remain attractive relative to U.S. markets, particularly in an inflationary environment. Both these equity markets have higher exposure to cyclical sectors—73.1% for Canada, as proxied by the S&P/TSX Composite Index, and 45.2% for international, as proxied by the MSCI EAFE Index—that largely derives from financials, materials, energy and industrials; all of these sectors are expected to benefit from rising rates as long as earnings and economic growth remain positive.

Despite this relatively favourable outlook, there are risks. We are cautious of the increased risk in Canada from being overly concentrated in relatively few traditional value sectors. For European economies and international equities, the Russian invasion of Ukraine has increased investment risk. Despite our positive long-term view of the asset class, the impact of a potential regional energy crisis will reduce expected profits for the industrial sector, while a potential decline in yields could hinder returns to the financial sector.

One of the challenges in balanced portfolios is the increasing correlation between fixed income and equities. Traditional fixed income will continue to provide protection during an equity market drawdown; however, in inflationary environments, this protection is more muted.

Within fixed income, relatively riskier segments, such as high yield, floating-rate loans and emerging markets debt, offer higher yields and shorter duration. The credit cycle remains constructive and coverage ratios remain high. However, expectations for higher rates and wider spreads suggest a more neutral stance on the asset class. Floating-rate loans can provide lower volatility and improved interest rate sensitivity relative to high-yield bonds. We have maintained an unchanged allocation to high-yield bonds.

2022 asset allocation for Canadian investors, including global assets (%, CAD)

Profiles	Global Equities	Cdn Equities	Global Bonds	Cdn Bonds	U.S. High Yield	Canadian Cash	Expected Return[13]	Expected Volatility
Capital Preservation	5	15	20	35 (+5)	5	20 (-5)	2.5	3.4
Income	10	20	20	30 (+5)	10	10 (-5)	2.8	4.6
Income & Growth	25	30	15 (+5)	15	10	5 (-5)	3.4	7.1
Growth	40	30	10	5	10	5	3.7	8.5
Aggressive Growth	60	30	0	0	10	0	4.2	10.6

Source: CIBC Asset Management Inc. Data as of January 31, 2022.

For clients investing in Canadian asset classes only, we maintain the same allocation as last year (see table below).

Recommended asset allocation using domestic only assets (%)

Profiles	Cdn Equities	Cdn Bonds	Cdn. Cash	Expected Return	Expected Volatility
Capital Preservation	18	60	22	2.6	3.3
Income	30	60	10	3.0	4.6
Income & Growth	50	45	5	3.5	6.9
Growth	70	25	5	4.0	9.4
Aggressive Growth	85	15	0	4.4	11.4

Source: CIBC Asset Management Inc. Data as of January 31, 2022.

2022 asset allocation including diversifiers

In the search for additional expected return and lower downside risk, investors should consider a broad set of diversified asset classes. Increased diversification is the key to lowering risk while maximizing the probability of achieving long-term return targets. In this section, we provide guidance on options to re-allocate portfolio capital from existing asset classes into a number of diversifying investments

2022 Asset allocation recommendation with diversified asset classes (%)

Asset Allocation (%)	Exp. Std. Dev.	Exp. Return	Int'l Equity	U.S. Equity	Cdn Equity	Global Fixed Income	Cdn Fixed Income	Money Market Fixed	HY & Floating Rate Debt	Multi-Sector or Proxy	EM Market Bonds	Real Assets	MAARs Proxy	EM Equity	Private Equity
Income	4.5	3.0	5	10	15	10	25 (+5)	15	5 (-5)	5	5	5	5	0	0
Income & Growth	6.2	3.7	10	15	18	7	15 (+5)	10	5(-5)	5	5	5	3	5	2
Growth	6.8	4.3	12	15	20	8	5	5	5(-2)	5	5	7 (+2)	0	5	10
Aggressive Growth	8.3	5.2	15	20	20	0	0	0	5(-2)	5	5	7 (+2)	0	10	15

Source: CIBC Asset Management Inc. Data as of January 31, 2022.

Summary of risk & return profiles (%)

Asset Class Constraint	Risk Profile	Expected Standard Deviation	Expected Return
Canadian Assets Only	Capital Preservation	4.0	2.8
	Income	5.7	3.2
	Income & Growth	8.2	3.8
	Growth	10.1	4.1
	Aggressive Growth	12.1	4.6
Including Global Assets	Capital Preservation	3.4	2.5
	Income	4.6	2.8
	Income & Growth	7.1	3.4
	Growth	8.5	3.7
	Aggressive Growth	10.6	4.2
Including All Diversifiers	Income	4.5	3.1
	Income & Growth	6.3	3.7
	Growth	6.9	4.4
	Aggressive Growth	8.4	5.2

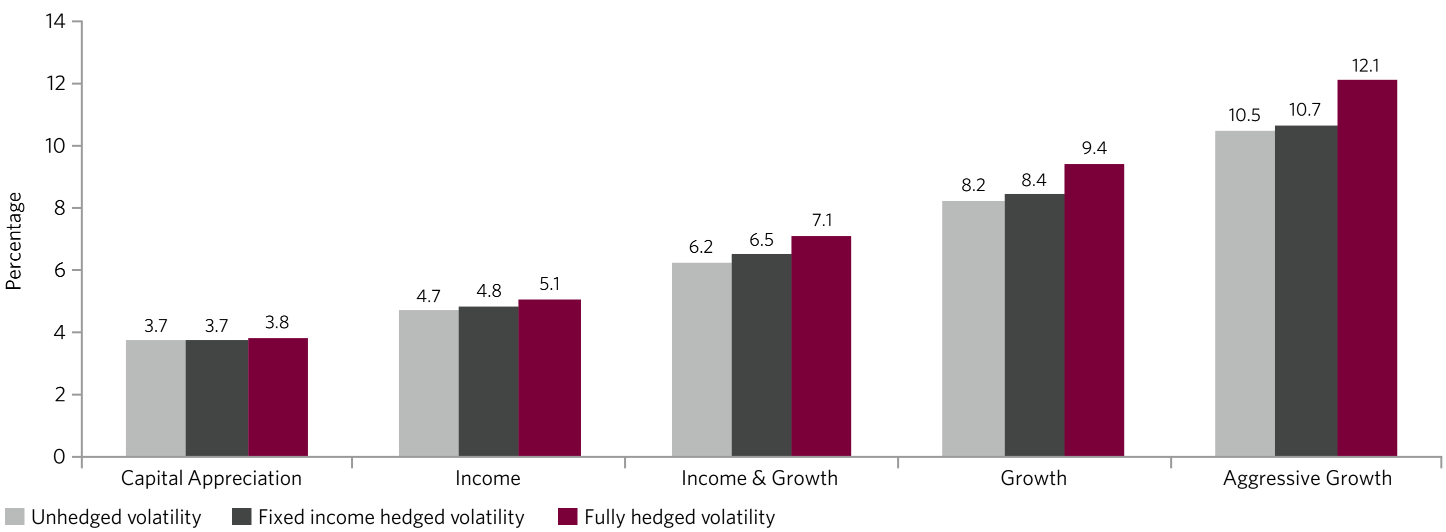
Source: CIBC Asset Management Inc. Data as of January 31, 2022.

Currency impact for Canadian investors

Currency exposure is relatively volatile. Exchange rate fluctuations can meaningfully impact portfolio performance in any reporting period. In 2018, for example, the Canadian dollar depreciated 7.7% against the U.S. dollar, and fully hedged portfolios underperformed unhedged portfolios by 2.2% for the Capital Preservation profile, and by 6.0% for the Aggressive Growth profile. In 2019, by contrast, the Canadian dollar appreciated 5.3% against the U.S. dollar, and fully hedged portfolios underperformed unhedged portfolios by 1.7% for the Capital Preservation profile, and by 3.8% for the Aggressive Growth profile.

From a strategic asset allocation perspective, it is important to consider long-term performance, and look through short-term volatility. From this perspective, developed currency exposure has no expected long-term return. This means that investors should determine their attitude towards currency hedging based primarily upon any potential diversification benefit that may accrue. As discussed above, our recommended LTAA portfolios exhibit a tilt in favour of Canadian equity relative to its weight in global market indexes. This tilt causes the currency exposure inherited from global fixed income to act as a diversifier to the volatility of Canadian equity. It leads us to recommend leaving all inherited currency exposure in these portfolios unhedged. As the following chart highlights, unhedged LTAA portfolios exhibit the lowest risk for all investor profiles.

Historical volatility for unhedged and hedged portfolios (December 1990 to December 2021)



Foreign Exposure	Capital Preservation	Income	Income & Growth	Growth	Aggressive Growth
Foreign Exposure In Fixed Income	25	30	25	25	10
Foreign Exposure In Equity	5	10	25	35	60
Total Foreign Exposure	30	40	50	60	70

Source: CIBC Asset Management Inc. for model portfolio weights; Bloomberg for index returns as proxies for asset class performance. Data as of December 31, 2021.

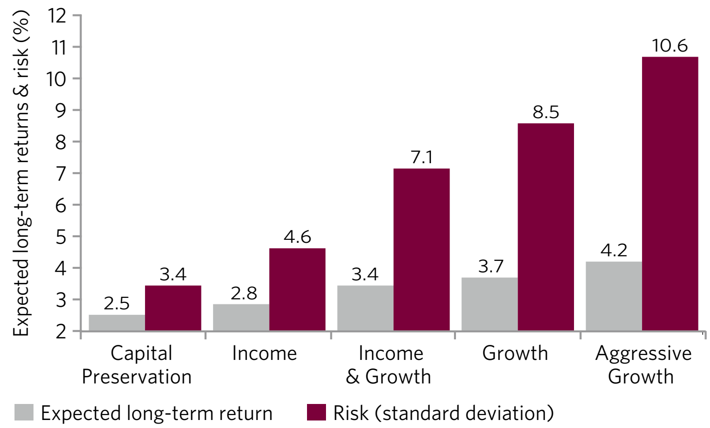
Finding the optimal profile

Investor goals and risk tolerance, time horizon, financial situation, income needs, liquidity preference, tax considerations, unique circumstances, and attitude toward global investing are all variables that should be considered in determining an appropriate investment profile. Importantly, risk tolerance should not be based on the last 12 months of performance and volatility, but instead on longer periods that better coincide with the investor's effective horizon. Investors need to be comfortable with the volatility of their asset allocation in all potential market conditions through a full market cycle.

The search for an optimal investor profile begins with a risk/return analysis. Risk and return characteristics must be viewed in tandem, as each provides an essential piece of the asset allocation puzzle. The expected return must be sufficient to achieve the investor's long-term goals, while the risk must be tolerable.

The risk measures discussed throughout this paper can help investors decide on the suitability of each profile. Historically, over the long term, equities have outperformed bonds and bonds have outperformed cash; but outperformance comes with the cost of higher risk, as measured by the volatility, or standard deviation, of returns. Our five investor profiles, ranging from Capital Preservation to Aggressive Growth, exhibit incrementally higher expected return and volatility, as shown below.

Globally diversified investor profile expected returns and risk (updated 2022)



Source: CIBC Asset Management Inc. Data as of January 31, 2022.

The following tables summarize the historical and expected returns for the five investor risk profiles. The ranges of performance illustrate the short-term volatility risk, as well as the benefit of remaining invested for the long run. The longer the investment horizon, the lower the likelihood of experiencing negative average returns.

Investor profile allocations and returns (%, September 1986 to December 2021)

Profiles	Global Equities	Canadian Equities	Global Bonds	Canadian Bonds	U.S. High Yield	Cash	Expected Return	Expected Std. Dev.	Historical Return[14]	Historical Std. Dev.
Capital Preservation	5	15	20	35 (+5)	5	20(-5)	2.5	3.4	6.5	3.8
Income	10	20	20	30 (+5)	10	10 (-5)	2.8	4.6	7.1	4.8
Income & Growth	25	30	15 (+5)	15	10	5 (-5)	3.4	7.1	7.7	6.5
Growth	40	30	10	5	10	5	3.7	8.5	8.1	8.6
Aggressive Growth	60	30	0	0	10	0	4.2	10.6	8.6	11.0

Source: CIBC Asset Management Inc. Data as of December 31, 2021.

Annualized return variability September 1986 to December 2021 (%, not annualized if less than 1 year)

Profiles	Monthly best	Monthly worst	3 month best	3 month worst	6 month best	6 month worst	1 year best	1 year worst	3 years best	3 years worst	5 years best	5 years worst	10 years best	10 years worst	% neg. month
Capital Preservation	4.7	-4.2	7.1	-4.0	11.6	-4.2	19.8	-1.1	15.6	2.4	12.5	2.9	11.1	4.1	30.2
Income	5.5	-5.7	7.9	-7.4	14.0	-8.4	23.2	-5.0	17.1	0.6	13.7	1.9	12.3	3.4	31.4
Income & Growth	6.2	-7.6	10.0	-12.3	16.9	-14.8	26.9	-11.5	18.3	-3.2	15.0	0.4	13.8	2.2	32.8
Growth	7.8	-11.1	14.0	-16.5	20.8	-21.5	31.0	-18.5	19.4	-8.1	17.4	-1.7	15.3	0.4	34.9
Aggressive Growth	9.2	-15.6	17.9	-22.8	26.6	-29.9	35.7	-27.8	21.2	-13.2	19.5	-3.4	16.7	-1.2	35.1

Source: CIBC Asset Management Inc. Data as of December 31, 2021.

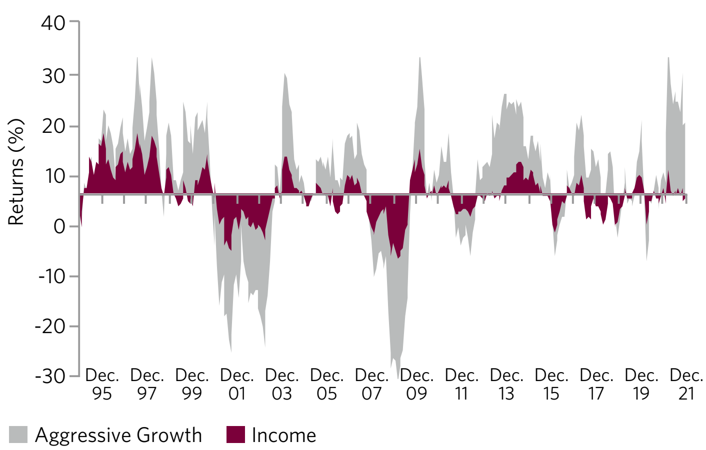
Risk analysis of investor profiles

Different measurements may be used to quantify risk. There is no preferred method, but combining various risk measurements provides a more comprehensive analysis of the risk characteristics of an investment portfolio.

Standard deviation is one of the most commonly used risk measurements in investment theory, as it measures the variability around historical or expected returns. The lower the observed standard deviation, the lower the risk.

The historical annual standard deviation is 11.0% for the Aggressive Growth portfolio and 4.8% for the Income portfolio. Clearly, returns are more variable for the Aggressive Growth profile. However, with a starting investment of $1000 on August 31, 1986, the Aggressive Growth investors' capital would have grown to $18,636 by the end of 2021, with an annualized 8.6% return. This is materially higher than the capital of the Income investor, which would have grown to $11,282 at an annualized 7.12% return. The variability chart below demonstrates risk for two investor profiles over the past 35 years.

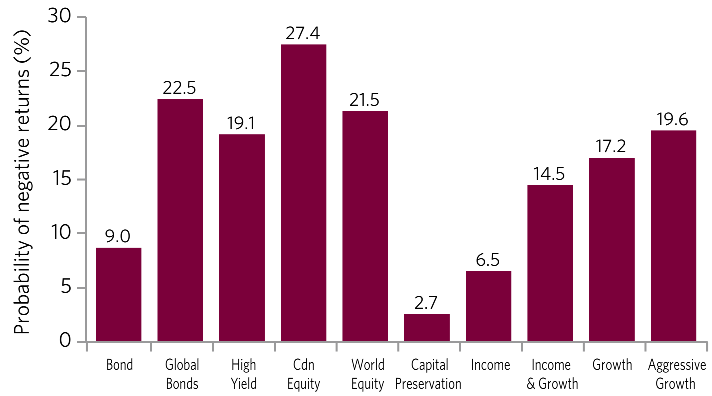
Variability in one-year historical returns for the Income and Aggressive Growth profiles (September 1986 to December 2021)



Source: CIBC Asset Management Inc., Bloomberg. Data as of December 31, 2021.

Another measure of risk is the probability of negative returns over a specific period. As shown in the chart below, the Capital Preservation portfolio has only a 2.7% probability of losing money over a one-year period, while the Growth portfolio has a much higher probability, at 17.2%.

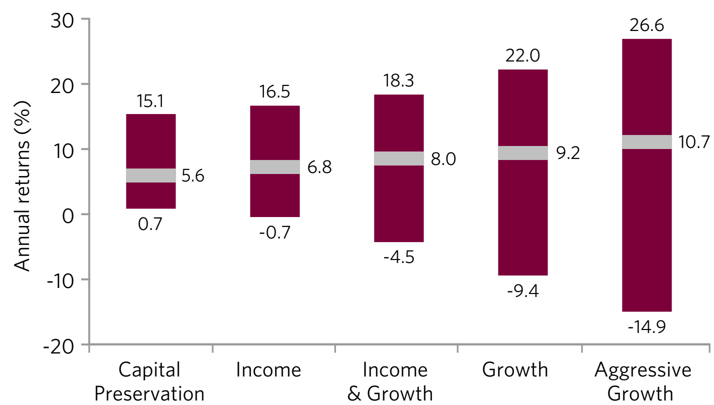
Probability of negative annual returns in a one-year period (September 1986 to December 2021)



Source: CIBC Asset Management Inc., Bloomberg. Data as of December 31, 2021.

One problem with measuring risk as the probability of negative returns in a given period is that it does not address the magnitude of the associated potential loss. A particular investment may have a small chance of experiencing a loss, but if the loss occurs, it may be larger than the investor can tolerate. Return percentile is another risk measurement that combines the probability of loss occurrence with the magnitude of the corresponding return. The table below shows the 5th, 50th and 95th annual return percentiles for our five investor profiles from September, 1986, through December, 2021.

5th, 50th and 95th annual return percentiles (September 1986 to December 2021)



Source: CIBC Asset Management Inc., Bloomberg. Data as of December 31, 2021.

Another risk measure calculates the maximum time period taken by each profile to traverse from peak capital value to trough and back to the original peak again during the prior 35 years. Impressively, it has never taken the most conservative Capital Preservation profile more than one year to recover in the last 35 years. Conversely, the Aggressive Growth profile endured four drawdowns with an associated recovery period of more than a year, and two periods that required more than three years for portfolio capital to regain its previous peak. The maximum period observed for the Aggressive Growth profile to recover was 73 months, after the dot.com bubble of 2000. Once again, this analysis demonstrates the importance of time horizon when determining an appropriate investor profile.

Frequency of Extended Recovery Periods (September 1986 to December 2021)

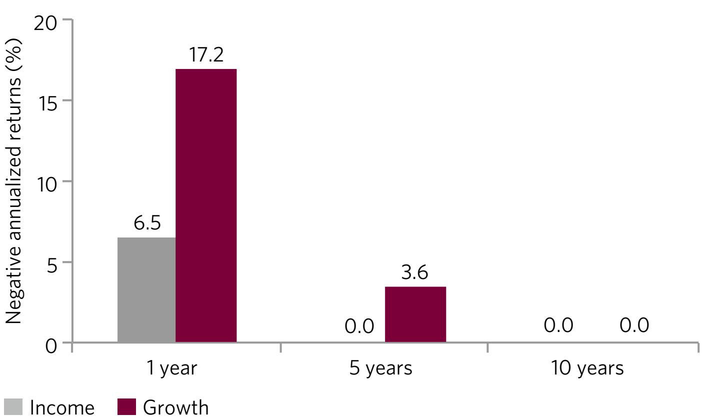
Asset Allocation	3 or more years to recover	2 to 3 years to recover	1 to 2 years to recover
Capital Preservation	0	0	1
Income	0	1	1
Income & Growth	2	0	2
Growth	2	0	2
Aggressive Growth	2	0	2

Source: CIBC Asset Management Inc. Data as of December 31, 2021.

Remain diversified and fully invested

Investors are advised to set long-term financial goals and maintain a disciplined asset allocation approach. This will help them meet their long-term goals in accordance with their risk profiles. Seeking to time market participation typically prevents investors from achieving their long-term goals, as risk decreases over a longer time horizon. This stylized fact should encourage investor patience, as the probability of realizing a loss diminishes with time. Based on the past 35 years, the probability of realizing a negative return for the Income and Growth profiles are 6.5% and 17.2%, respectively, on a one-year basis; these probabilities decrease to 0.0% and 3.6%, respectively, on a five-year basis, and to 0.0% for both profiles over a ten-year period.

Percentage of negative annualized returns for the Income and Growth profiles (September 1986 to December 2021)



Source: CIBC Asset Management Inc. Data as of December 31, 2021.

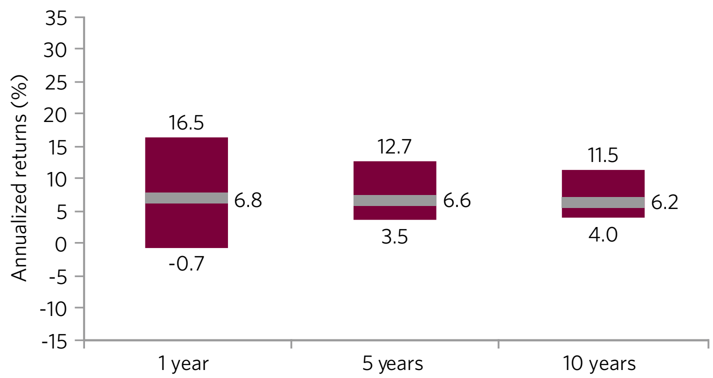
Investing is a long journey that requires careful planning and disciplined implementation to reduce the potential for emotional and inefficient responses to volatility. Investors should not allow short-term market movements to alter their approach.

In any short-term period, investors may face higher volatility and negative returns. However, this should not discourage them from investing—volatility tends to decrease in the long run, and returns tend to revert to a narrower band around a long-term average.

Supported by these data, investors should establish a link between time horizon and their risk profile.

For example, investors with a five-year time horizon may be most comfortable investing in the Income portfolio

5th, 50th & 95th annualized return percentile over time (September 1986 to December 2021)



Source: CIBC Asset Management Inc., Bloomberg. Data as of December 31, 2021.

Based on the past 35 years of historical returns, this portfolio has exhibited a 50% chance of achieving an annualized return of 6.6% or better over any discrete five-year period; it has exhibited only a 5% chance of an annualized return of less than 3.5% over the same investment window.

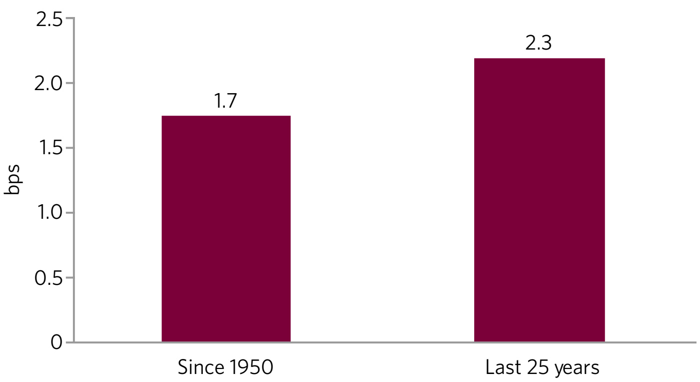
We can compare this outcome to the expected performance of Canadian money markets. The annual expected return for this asset class is 1.3%. The probability over a one-year period of achieving an annualized return less than 1.3% is 12.6%. In other words, over the last 35 years, the historical one-year return for the Income portfolio was greater than the current Canadian money market expected return 87% of the time. If we extend the analysis to a five-year holding period—over the past 35 years, the Income portfolio never experienced annualized rolling returns lower than 1.3%; its lowest 5-year annualized return was 2.0%, which occurred during the 2008/9 Global Financial Crisis.

These data should give pause to risk-averse investors with a five-year time horizon who have a disproportionately high allocation to savings accounts or cash. Many risk-averse investors believe that cash is a safer investment than the Income portfolio in any given five-year period. This may not be the case, particularly when taking historical probabilities and opportunity costs (upside volatility) into account.

Equities produce the best returns over the long-term

In periods of strong equity market returns, investors can be tempted to establish or maintain very high allocations to equities in an effort to capture further gains. However, investors may not account for the fact that the higher potential returns are associated with higher risk. Conversely, in periods of weak equity market returns, investors can be tempted to allocate away from equities to reduce the risk of further short-term losses. In all scenarios, investors should heed the long history of capital markets and maintain a disciplined, long-term asset allocation, taking into account their time horizon, liquidity needs, and risk tolerance.

Bonds mitigate risk during equity drawdowns (1950 to 2021)
Average monthly return of Canadian bonds per 100 bps of TSX sell off

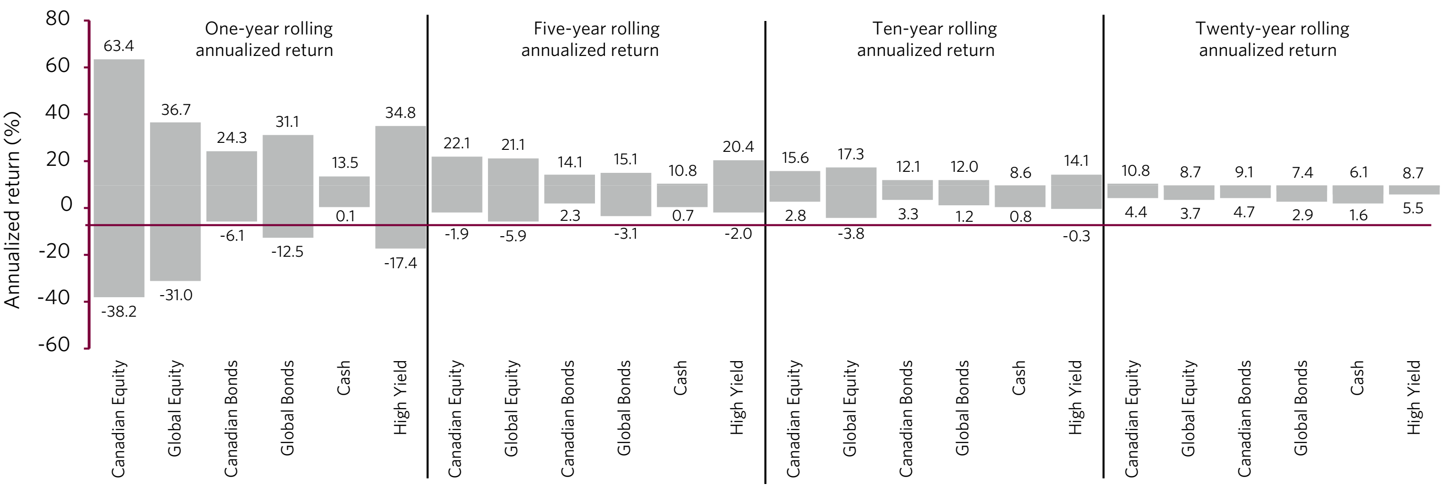


Source: CIBC Asset Management Inc., Bloomberg. Data as of December 31, 2021.

Most investors would agree that, in the short term, equities are more volatile than bonds and cash. In general, investors with very short-term goals may be better served by guaranteed investments. A well-diversified portfolio should include an allocation to bonds, as they continue to be an effective shock absorber and offer stability relative to a portfolio's equity holdings.

However, in the long run, equities have been the superior asset class for investment growth. The worst 20-year period for Canadian equities—during which they realized an annualized return of 4.4%—is not too dissimilar to the average performance of the Canadian bond market (6.9%) over the last 35 years. And over this period, Canadian equities have outperformed Canadian bonds 72% of the time on a 10-year rolling basis and 85% of the time on a 20-year rolling basis.

Worst and best annualized asset class returns (September 1986 to December 2021)



Source: CIBC Asset Management Inc., Bloomberg. Data as of December 31, 2021.

Conclusion

Following the initial pandemic drawdown in early 2020, markets rebounded, posting some of the strongest returns of a near-decade-long expansion. Looking forward, we expect increased market volatility relative to the post-crisis period. More volatility, or risk, has a powerful impact on investor sentiment. Similarly, behavioral psychology has shown that investors often seek to increase equity weightings at or near market peaks and to reduce or eliminate equities near market troughs. Long-term experience has shown that discipline is paramount in difficult market environments and diversification can be a powerful tool to manage volatility. Although equities have historically provided higher returns than bonds, bonds remain an important part of a well-diversified portfolio, as they can help offset the risks inherent in equity returns.

Our research suggests that the risk/return profile of a traditional balanced global portfolio can also be improved by the addition of other asset classes that exhibit relatively low correlations to traditional equities and bonds. These include global debt, high-yield debt, multi-sector fixed income strategies, global real assets, and alternatives such as private equity and absolute return strategies.

Long-term strategic asset allocation has allowed investors to reduce their overly concentrated exposures to familiar asset classes and home country biases, and to take advantage of enhanced return opportunities by investing in a diversified asset mix. Diversification also helps to ensure at least some market participation in the most attractive asset classes at any given time.

While challenging investment environments can disrupt expectations in the short-term, we believe that careful analysis of historical market data, prudent and logical forward-looking views, and a well-thought-out and disciplined asset mix focused on long-term outcomes, will continue to be critical inputs to investing success.

Tactical asset allocation opportunities

Global Outlook

Difficult navigation conditions ahead
In retrospect, 2021 turned out to be another very good year for global investors. There was no stopping the bull-market in risky assets, thanks in large part to still prudent policymakers. Indeed, last year, while the global economy strongly recovered, the global liquidity tap stayed wide open. Unfortunately, the story will likely be very different in 2022. All around the world, inflation is showing its ugly head. While developments on the pandemic front might still be a reason for concern, policymakers have no other choice but to take a hawkish turn. The first step is obviously for governments to clean up their fiscal houses by considerably reducing the size of their deficits, and for monetary authorities to reduce, or taper, purchases of government debt securities. The second step is trickier, as it consists of moving away from the near-zero rate policy. The challenge here is to deliver the right amount of policy rate hikes at the right speed so that the global economy realizes a soft landing, not a hard one.

Alternative scenarios

In one scenario (no more pent-up demand), after a strong government-induced spending binge, the consumer runs out of fuel. Disposable income takes a big hit as government transfers shrink. The excess savings that the consumer was forced to accumulate during the lockdown are insufficient to make up for the fiscal drag. Consumers have already front-loaded purchases of durable goods and inflation has eroded purchasing power. Although we do not expect a recession in this scenario, growth slows down significantly and falls short of consensus expectations. Corporate earnings will disappoint and equity markets will generate negative returns. Bond yields will decline toward the bottom of their trading range as central banks need to reaffirm a commitment to policy support.

In another scenario (persistent inflation), the supply bottlenecks created by the pandemic prove to be hard to fix. The tightness in inventories and the global supply chain mean a disruption in one place can create supply shortages all along the chain. Limited supply is met by solid demand as the global economy benefits from ongoing reopening. Inflation persists in housing, commodities, and goods, and spreads to labour costs. Initially, this scenario will likely be positive for cyclical assets such as equities and commodities, as they typically benefit from the robust growth. But eventually markets will face the fact that central banks are falling behind the curve and the expected increase in policy tightening triggers a market correction. Nominal bond yields under this scenario would move up sharply as both real yields and inflation breakevens move higher.

Equity Market outlook

The consensus expectation for 2022 earnings growth is 7%. Profit margins are at historically high levels and are not expected to increase again in 2022, so sales will have to do all the heavy lifting. However, sales rarely exhibit strong growth outside of periods that immediately follow recessions. As such, equity returns will likely be much lower than they have been in the last 2 years. Chinese and Asian equities diverged from the rest of the equity market in 2021, and realized negative returns in response to a slowdown in the Chinese economic cycle driven by a negative credit impulse. The impact of this factor was amplified by a tightening of regulations in the technology and real estate sectors.

There are now signs that the effects of policy tightening have reached their pain threshold. The Chinese government has started to ease policy to provide at least some support to the economy, and more easing is likely, concurrent to the beginning of tightening in developed markets. With relatively attractive valuations, this could be an environment that favours emerging markets over developed markets.

Fixed Income

With the U.S. Federal Reserve expected to continue nomalizing monetary policy in 2022, including raising its policy interest rate, we expect a wider trading range for U.S. 10-year yields to prevail this year, between 1.10% and 2.10%. Cross currents should restrain bond yields from trending clearly in one direction or the other. Range-trading remains our favoured strategy. On one hand, the prospects of reduced bond-purchase programs by major central banks might allow long-term yields to move higher in the early part of the year. However, further out the probability of a deeper global cyclical slowdown than generally expected have increased since our last forecast, suggesting a limit to the extent of any rise in yields.

Regional economic outlook

United States

With headline CPI running in excess of 7% in early 2022, inflation is overshooting the comfort zone of the U.S. Federal reserve Board(Fed) by a wide margin. As a result, the Fed has no other choice but to embark on a faster monetary policy renormalization path than previously expected. This means tapering faster than initially planned to allow for an earlier first increase of its policy interest rate in 2022. Just how much faster the Fed will be renormalizing will, to a large extent, depend on the build-up of cost-push inflationary pressures in the economy, as measured by unit labour costs. If our forecast materializes, labour market conditions will continue to tighten over the next year. Tight labour market conditions typically come with higher wage inflation. This is not necessarily bad news—as long as productivity growth also stays elevated to keep unit labour costs in check. Unfortunately, this is easier said than done. Over the last decade, U.S. productivity growth has averaged only +1.4% on a year-over-year basis. We did see an impressive productivity resurgence in 2020 and early 2021 as businesses in the U.S., as well as in other parts of the world, learned to cope with the pandemic shock by adopting new processes and technologies. Unfortunately, this positive shock has so far proved to be transitory, and productivity growth has since sharply decelerated, turning negative in the second half of 2021.

More importantly, the post-pandemic positive productivity shock pales in comparison with the structural negative demographic shock that is impacting most countries in the developed world. America is no exception, with the 55 & over age cohort accounting for a very large and fast-rising component of the working age population (37%). As the dependency ratio continues trending higher over coming years, productivity growth is more likely to disappoint than to surprise on the upside. Pressure will be mount on the inflation-fighting Fed to deliver a faster and potentially messier policy renormalization. The faster the Fed goes, the higher the odds of a policy mistake.

Europe

The consensus view expects European Central Bank (ECB) policy renormalization to be slower than that of the Fed and other developed market central banks. Developments on the inflation front are not as preoccupying in the eurozone as they are in the United States. This is because the surge in inflation observed in late 2021 has been almost entirely driven by energy prices. From this perspective, the most likely outcome is for an energy-led deceleration in the eurozone's headline inflation rate over the next 12 months, albeit current geo-political risks present upside risks to this relatively sanguine view. The ECB is less concerned than the Fed on cost-push inflation pressures; high wage inflation is expected to be largely offset by high productivity growth, keeping unit labour costs broadly in check.

If all goes to plan, the ECB will only slowly renormalize its policy stance. This would imply no policy rate hike over the next twelve months, an end to the Pandemic Emergency Purchase Programme (PEPP) in March, a temporary increase in the purchase of debt securities to cushion the impact of the end of the PEPP, and provision of a final tranche of the TLTRO III lending scheme to banks in June 2022. The risk to this outlook focuses on more energy price inflation than expected, as well as a build-up in cost-push inflationary pressures more intense than the ECB projects due to lackluster productivity growth. If one or both of these risks is realized, the ECB will take a hawkish turn earlier than generally expected.

China
We turned more bearish on China in the last quarter of 2021, reflecting expectations of falling housing activity and surging liquidity concerns for real estate developers. While stringent macroprudential rules reining in real estate activity will most likely be loosened, they should remain restrictive due to other policy objectives. These include re-allocating investment in high-tech and green-energy industries, limiting the build-up of housing oversupply, and preventing a further deterioration of affordability. The consumer should remain another cause of growth disappointment. Income and consumption have remained lackluster, despite buoyant foreign demand and limited virus outbreaks thus far. For fiscal policy, the shortage of new and profitable infrastructure projects, along with the stratospheric amount of special local government bonds issued last year, limit the magnitude of the positive spending impulse authorities can deliver. Instead, front-loading decarbonization investment—solar panels, wind energy, and smart grids—is the path we expect policymakers to take, with an acceleration of green-energy investment equivalent to about 0.5-1.0% of GDP expected in 2022, which would lift growth in the second half of the year.

Canada
The state of the labour market increasingly resembles the situation in 2019, suggesting that wage pressures should continue to build up in the coming year. Another important economic development has been the surge in inflation. Canadian headline inflation was at 4.7% y/y in November 2021, its highest level in 30 years, while the three core inflation measures of the Bank of Canada (BoC) were also at record highs. The high level of inflation, which is now believed to be more persistent than previously expected, puts the central bank in an uncomfortable position. As a result, the BoC ended its Quantitative Easing Program and shifted its forward guidance at the end of last year. All of this roughly coincided with the renewal of the BoC monetary policy mandate. Last December, the central bank announced that it will keep inflation as its main mandate objective, but it also introduced requirements to consider the labour market in order to support maximum sustainable employment. As a result, the BoC now has a dual inflation and employment mandate. Considering the level of inflation and the fact that the slack in the Canadian labour market is eroding quickly, we are now expecting the BoC to increase its policy rate by 75 basis points in 2022. Canadian households remain heavily indebted and sensitive to interest rate increases. Consumption should therefore moderate, and so should the housing market. We expect real GDP growth to slow from around 4.8% in 2021 to 2.7% in 2022. Inflation is expected to decelerate over the coming year, finishing the year slightly above the BoC's 2% target.

Ukraine Crisis

The implications of the conflict in Ukraine for the global economy and financial markets remains highly uncertain. There will likely be both direct and indirect economic effects. The crisis and related sanctions imposed on Russia will negatively affect international trade. But this direct impact will likely be relatively small given that Russia contributes less than 2% of the global economy. Indirect effects on growth will likely be more impactful. These will include the expected negative impact on economic activity of higher commodity prices, including energy and food, in response to scarcer supplies – Russia and Ukraine are major producers and exporters of many commodities – as well as the likely negative impact of the conflict on business and household confidence, which will adversely affect spending plans of corporates and individuals. Tightening financial conditions also have negative implications for the growth outlook.

The prospects for Canadian assets are relatively favourable in this environment. Exposure of the Canadian economy to Russia is low. As an exporter of commodities, Canada's trade balance will benefit from higher commodity prices. Canada's equity market has a favourable composition, with high-dividend-paying stocks, energy stocks, and commodity stocks. Canadian government bonds are of the highest quality and can be attractive to foreign investors in a risk averse environment. In addition, The Canadian dollar is somewhat undervalued and will likely be supported by higher commodity prices.

Let's Connect

Should you have any questions about this report or anything else, please do not hesitate to connect:

Michael Sager, Ph.D.
Multi-Asset and Currency Management
CIBC Asset Management Inc.
michael.sager@cibc.com
416 980-6301

1 One drawback to this recommendation is that it obscures the underlying behavior of individual asset classes in the portfolio. Investors who prefer to avoid this opacity may choose to hedge global fixed income exposure, at the cost of higher portfolio volatility.

2 The Canadian corporate credit spread is the difference between the yield of the Canada BBB Corporate Bond (Curve BS169) and that of the Canada Government Strips (Curve BI568). Source: Bloomberg.

3 "Making Canadian Portfolios Strong and Free of Home Country Bias", CIBC Asset Management Inc.

4 "Home Bias and the Canadian Investor", Vanguard, 2018.

5 Rebalanced on a calendar year end basis using Strategic Asset Allocation recommendations based on IMR Long-Term Strategic Asset Allocation papers (2016-2021).

6 Proxy indexes for these asset classes are: S&P/TSX Composite Index for Canadian Equity; S&P 500 Index for US Equity; MSCI EAFE Index for International Equity; MSCI Emerging Markets Index for EM Equity; FTSE Canada Universe Bond Index for Canadian Fixed Income; Bloomberg Barclays Global Aggregate Bond Index for Global Fixed Income; Bank of America Merrill Lynch BB-B US Cash Pay High Yield Index for US High Yield; JPM Emerging Markets Bond Index Plus for EM Bonds; Bank of Canada 91 Day T-bill Index for Cash; 50% Dow Jones Brookfield Global Infrastructure Index, 40% FTSE EPRA/NAREIT Developed Real Estate Net Index, 7% Bank of America Merrill Lynch Global High Yield Index, 3% Bank of America Merrill Lynch Global Broad Market Corporate Index for Real Assets.

7 Proxy indexes for these asset classes are: FTSE Canada 91 Day T-Bills Index for cash; FTSE Canada Universe Bond Index for Canadian bonds since inception (1990), and All Government Canadian Bonds with 10yr + maturity prior to 1990; Barclay's Global Aggregate Bond Index for Global Bonds since inception (1990), the JP Morgan Global Government Bond Ex Canada index prior to 1990; Bank of America Merrill Lynch BB-B US Cash Pay High Yield Index since inception (Sep 1988), Merrill Lynch U.S. High yield Master II Index for Sep 1986 – Aug 1988; S&P/TSX Composite Index for Canadian Equity; MSCI World Index for Global Equity.

8 High yield is represented by the Bank of America Merrill Lynch BB-B US Cash Pay High Yield Index, Global Bonds is represented by the Bloomberg Barclays Global Aggregate Index. Duration as of December 31st, 2021.

9 Real Assets returns are approximated by a blend of 40% Real Estate Equities (FTSE EPRA/NAREIT Developed Real Estate Index), 50% Infrastructure Equities (Dow Jones Brookfield Global Infrastructure Index) and 10% Real Asset Debt (70% Bank of America Merrill Lynch Global High yield Index + 30% Bank of America Merrill Lynch Global Corporate Index)

10 McKinsey and Company, 2021, "A year of disruption in the private markets, McKinsey Global Private Markets Review 2021", Exhibit 13: "Growth of global PE net asset value and public market capitalization"

11 Absolute Return Strategy returns is approximated by using the MAARs Proxy index and an expected return of 5% above Canadian cash. MAARs Proxy is simulated performance history calculated using the following methodology: Most strategies encompassed by the Representative Account have been managed by the Multi-Asset and Currency team for at least 10 years. Most strategies encompassed by the Representative Account are linked to a representative CIBC Asset Management account. For strategies where no representative account exists, an external strategy or model simulation has been used.

12 A more detailed explanation can be found in "Long Term Capital Market Returns", Éric Morin et. Al., February 2022

13 Expected Returns and Expected Standard Deviations for the component asset classes are based on 10-year forecast returns as explained in Long-Term Capital Markets Assumptions section of the paper.

14 Historical performance for each risk profile is based on historical returns for the component asset classes based on proxy indices monthly rebalanced to the 2021 Long Term strategic global allocation recommendation.

455E 03/22