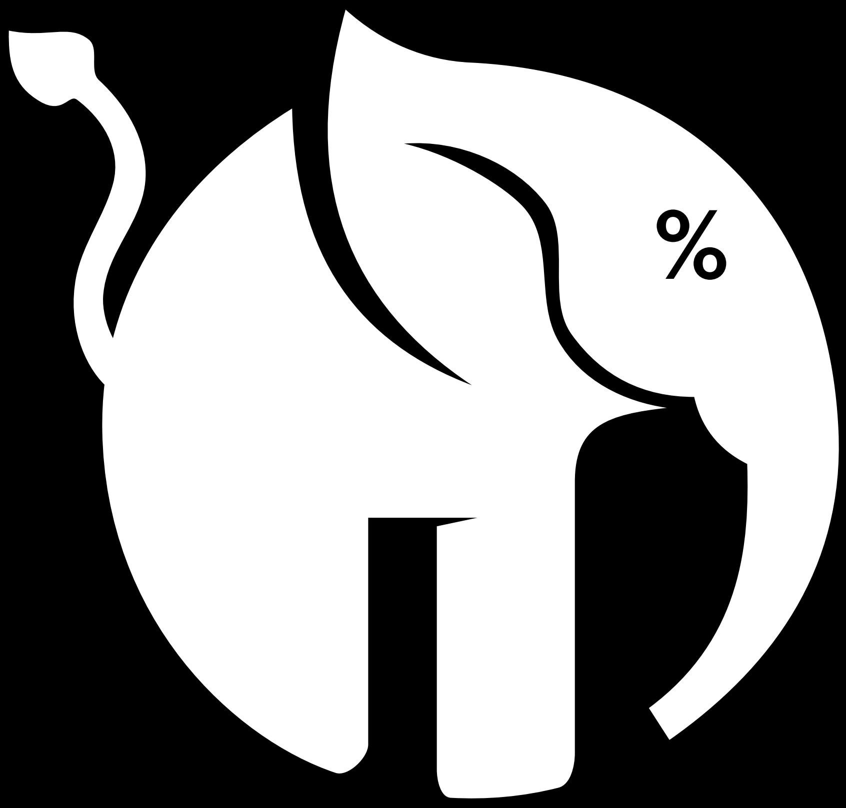
The White Elephant



Monthly Perspectives // August 2021

15 minutes

The White Elephant

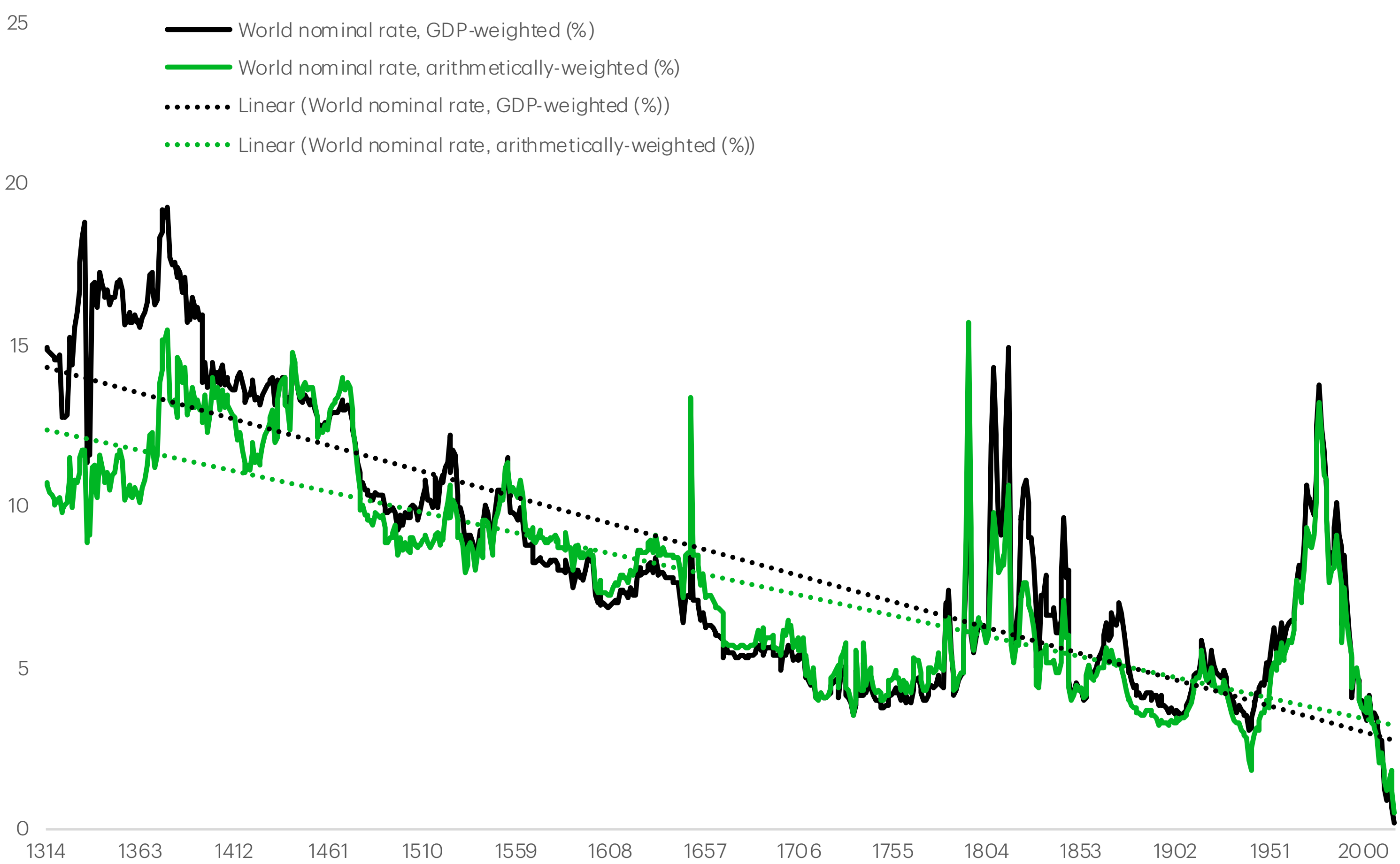
Brad Simpson, Chief Wealth Strategist | TD Wealth

There's a white elephant in the room and ignoring it won't make it go away. It used to be that an investor with modest ambitions could achieve a desired return without taking on much (or any) risk because governments were always willing to provide a reasonable rate of return for their bonds. Today that just isn't the case. In this brave new world of near-zero rates, avoiding all risk by over-allocating into government bonds is a recipe for unmet expectations. This is no revelation, of course. Since the 2008 financial crisis, two questions have been top-of-mind for investors:

1. **How do you achieve a respectable income without taking on too much risk?**
2. **If some risk is required, what's the right trade-off for reasonable income?**

If this seems like an age-old dilemma, that's because it really is. Sure, we all remember rates skyrocketing in the '80s, but from a historical perspective, that was just a blip. Taking into account a broader swath of human history (Figure 1), you find that rates paid by governments to the governed have actually been falling for a long, long time — *about 700 years!* That's approaching a millennium of progressively easy money as more and more investors lend more and more money to their governments.

Figure 1: Yields have been falling for 700 years!



Source: The Bank of England, as of December 2020

Throughout this period, the conventional view has often been that rates couldn't get much lower. While clearly this was wrong, this time, there may be some truth to the statement. After all, in terms of psychological barriers, zero, is pretty hard to beat. Any lower would require us to completely reimagine the global financial system. So, yes, rates are likely to rise from here. That being said, reversing the momentum of a pendulum that has been swinging for 700 years doesn't happen overnight, so we don't expect a rapid rise anytime soon.

Are we in for another '80s-style blip in the wake of the pandemic? At first glance, it may seem like the kind of crisis that leads to a spike in rates, but taking a slightly deeper dive into fundamental factors that affect interest rates, we believe that the net impact of the pandemic will actually be negative (Figure 2) for the foreseeable future, for two reasons.

Figure 2: Factors impacting interest rates

Macro Fundamental	Trends and Impact	Net Impact on Interest Rates
Demographics	Higher proportion of elderly people who dissave (+)	▼
	Increased savings from workers (-)	
	Higher capital-output ratio (-)	
Productivity	Lower productivity growth (-)	▼
Inequality	More savings for the wealthier (-)	▼
Preferences	Underinvestment due to short-termism (-)	▼
	Higher precautionary savings due to economic scarring (-)	
Inflation	Inflation upward surprise (+)	▲
Monetary Policy	Further central bank cuts (-)	▼
Bond market net supply	Higher demand from emerging markets, pension plans and QE (-)	▼
	Higher supply due to fiscal funding needs (+)	

Source: TD Wealth as of June 2021.

First, while the public sector is dissaving (i.e., running larger fiscal deficits), the private sector — both individuals and companies — is likely to want to save more for years to come. This happened after the previous four recessions, with the response particularly large after the global financial crisis. Following this current recession, we expect households to maintain higher-than-average levels of savings, particularly in the form of liquid assets such as cash and bonds. Also, companies will likely strive to increase cash on their balance sheet and reduce net leverage. Thus, increased private-sector savings should provide a powerful offset to higher public-sector deficits.

Second, to ensure that higher government debt doesn't push bond yields significantly higher, central banks will likely keep short-term interest rates low and cap intermediate and longer-term bond yields via large-scale asset purchases or more targeted purchases to control the yield curve. With debt-to-GDP ratios expected to be significantly higher after the pandemic, monetary policy will likely have an important role to play in helping governments cope with the debt in ways other than outright default or recessionary austerity.

There is a precedent in modern history for how this can be done: Following the Second World War, the Fed kept in place a lid on long-term Treasury yields (at 2.5%) that had been originally implemented when the U.S. joined the war. Thus, the Fed helped keep government borrowing costs low during the post-war economic boom and high inflation. With nominal GDP growth significantly exceeding the nominal interest rate on public debt, the debt-to-GDP ratio deflated without harmful consequences for the real economy.

Today, what began as a policy want has become a policy need, the price of which is a "debt trap" for governments that will be very hard to escape. What this means for investors, particularly for those who need income, is that they may need to make some changes to the way they invest, which for many people is a really hard thing to do. The first step towards change is admitting there is a problem. The second step is to determine the issues. Third is to consider plausible options. Fourth is to set the plan based on the new knowledge and wisdom. Fifth is to execute the plan. Let's start with step one by admitting there is a problem, analyzing it and moving towards a solution.

Impact on the Investor

If you are 65 today and started saving for retirement 30 years ago, there is a strong likelihood that you've already done the math. Putting the entirety of your nest egg into a laddered bond portfolio, how much could you expect to receive on an annual basis? The trouble is, rates have changed dramatically since the time you started saving. Thirty years ago, you might have calculated that, with a 10-year ladder and $1 million in savings, you could expect to receive income of around 7% a year, or $70,000.

Today, the best-laid plans of risk-averse investors are simply no longer feasible. Take that same scenario and apply today's interest rates, and the grave reality is clear: With a 10-year laddered *Government bond portfolio yielding just 1.23%, investors could expect to earn just $12,300 a year (Figure 3) for a $1 million investment* — not enough for even the most frugal of retirements.

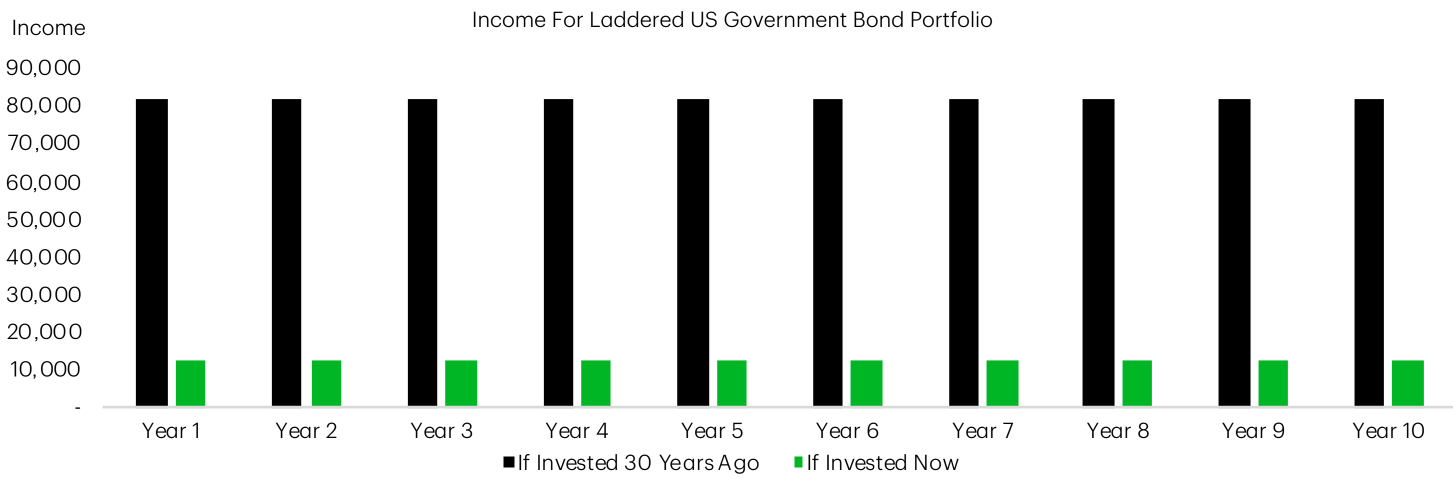
What is risk? And what is it not?

The pandemic and ensuing zero-rate environment has left income investors scrambling, often towards investments that carry heightened risk and volatility. But before we all wade into the risky waters, ask yourself this: what is risk really? For investment purposes, the risk of a rapid depreciation comes from owning investments with high volatility and low diversification. Most investors, in turn, have been taught that the way to mitigate this risk is by balancing two basic offsetting asset classes: supposedly risky equities and supposedly secure fixed income. Hence the traditional 60/40 that eventually leads to a 20/80 as the client's need for security rises.

This strategy for balancing risk is going to face significant headwinds in our new financial environment. Grand distortions inside the financial system, thanks to unprecedented monetary policy, have led to heightened periods of volatility and times where even supposed hedges fail to provide much diversification. Equities and corporate bonds, for instance, can both be exposed to the performance of a single underlying factor, such as corporate performance. Because these "risk factors" may be shared by supposedly offsetting assets, a portfolio allocated in this manner lacks true diversification. Traditional asset allocation also incorrectly assumes that similar assets share similar risks. For instance, high-yield credit and government bonds are both classified as fixed income but have risk differentials that are significantly different.

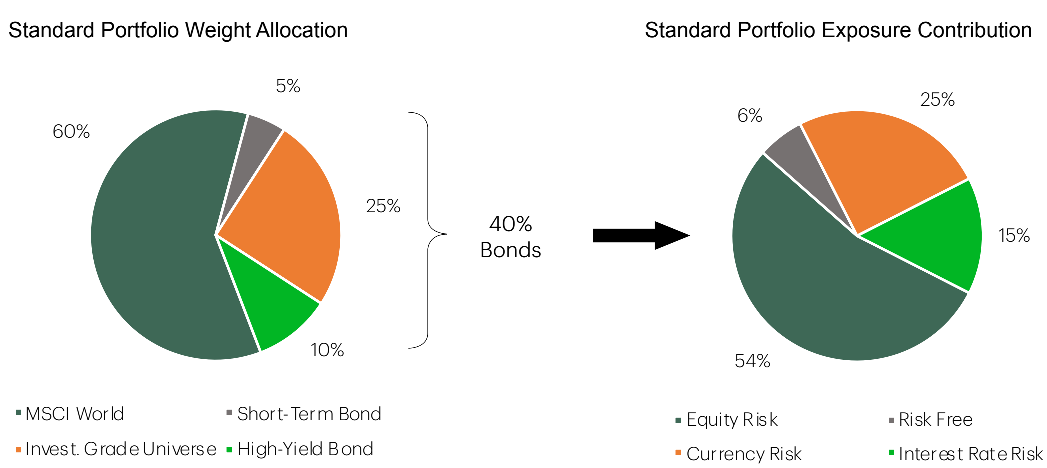
We believe true diversification should have an economic rationale, which is why we look beyond basic asset labels when setting our allocations, focusing instead on economic variables like risk factors. If a portfolio has exposure to only one economic variable, it is not diversified (Figure 4).

Figure 3: Plain vanilla fixed income is not going to cut it



Source: TD Wealth, as of August 23, 2021.

Figure 4: Different assets, the same risk



Source: TD Wealth, TDAM as of May 2019

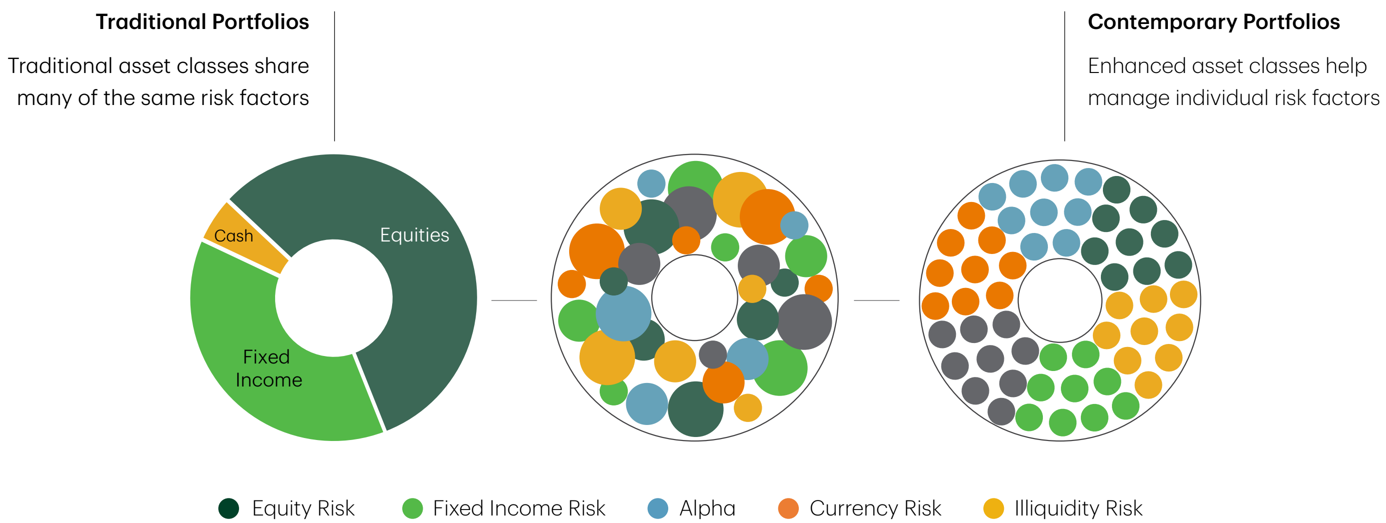
The risk factors we use have sub-components such as value, growth, cap-size and region that can enhance portfolio diversification (Figure 5). In turn, a risk-optimized portfolio using various factors is expected to provide a smoother return profile with fewer drawdowns and less downside volatility, while delivering potentially higher returns.

Risk-factor diversification is not a new concept, nor one that's used specifically for individual clients. Major financial institutions managing pensions and endowments have been rapidly shifting their investment strategy away from traditional asset allocation toward a broader asset allocation that includes alternatives and real assets, combined with risk-factor diversification. We think this combined approach makes sense for clients as well.

Investing for Income: Bonds, etc.

Let's start by acknowledging that, for fixed income investors in actively managed fixed income portfolios, this is a tough time. As of writing, the Canadian 10-year was yielding 1.15%, which by most estimates amounts to a negative return after inflation. The good news is, fixed income is not just domestic government bonds. There's a whole spectrum of options to choose from, including investment-grade corporate, emerging-market debt and high-yield (Figure 6). Choosing among them will depend on the priority placed on capital preservation, income generation and diversification.

Figure 5: Asset vs. Risk Diversification



Source: TD Wealth

Figure 6: The fixed income universe provides a spectrum of options

	Income	Capital Preservation	Diversification
	Yield (%)	Historical Maximum Monthly Drawdown (%)*	Median Monthly Returns when S&P 500 had greater than 5% correction**
Canada Government Bonds (1-3 Years)	0.38	-0.66%	0.54%
US Investment Grade Corporate Bonds (0-3 Years)	0.65	-4.36%	-0.10%
Canadian Government Bonds	0.85	-2.76%	1.64%
US Securitized	1.59	-2.14%	0.96%
Canadian Provincial Bonds	1.69	-3.63%	1.46%
Canada Government Bonds (15+ Years)	1.69	-7.06%	3.27%
US Investment Grade Corporate Bonds	2.04	-5.28%	0.43%
US Leveraged Loans	4.01	-12.07%	-1.22%
Emerging Market Debt (US Denominated)	4.16	-16.95%	-0.83%
US High Yield Corporate Bonds	4.64	-15.91%	-1.74%

Source: FactSet as of July 31, 2021. * For the period January 2007 to July 2021. ** For the period January 2010 to July 2021.

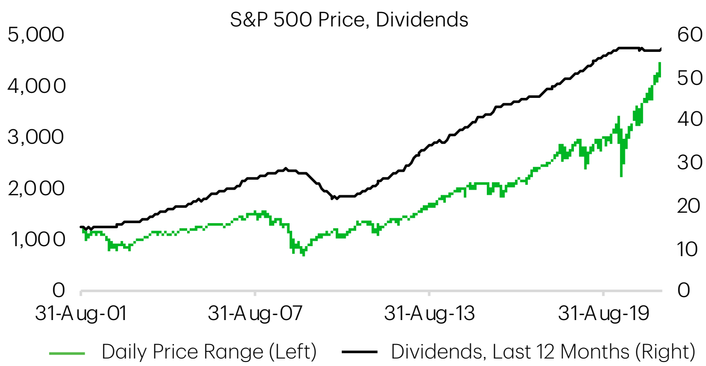
For a short-term investment horizon, with highest priority on capital preservation, we favour shorter-duration corporate and agency-backed bonds, given that these sub-assets generally have lower drawdowns, with positive yields and income.

For a medium-term horizon, during which portfolios may be able to recover from drawdowns, we favour high-quality corporate and government-backed bonds like Canadian provincials, which provide both ballast and diversification.

For a long-term horizon, the role of fixed income shifts primarily to income and diversification. In this scenario, we favour high-yield corporates, bank loans and emerging-market debt to deliver income and growth.

While multi-asset portfolios will be tweaked to take on more risk in today's high-growth environment, the role of fixed income as a whole has not diminished: longer-term government bonds continue to provide enhanced downside protection should markets sell off. Of course, it's prudent to evaluate losses from fixed income investments with longer maturities, but we should not completely discard the diversifying benefits of these fixed income instruments due merely to poor returns in a pro-risk environment.

Figure 7: Dividend Growth on the S&P 500



Source: FactSet as of August 18, 2021

Historically, it has been easier to exploit pro-growth environments than it has been to prepare for severe risk-off scenarios. Even as we move towards shorter-duration allocations and riskier solutions, we need to remain vigilant of the inherent drawdown risks. Instead of evaluating fixed income by weighing possible returns versus volatility, we should consider the kind of drawdowns acceptable to clients who are investing in fixed income and evaluate probable income versus probable drawdowns.

Investing for Income: Stocks

Common equity is not usually the asset class investors think of when looking for income, but with interest rates plumbing all-time lows — both in the government and corporate bond markets — well-positioned investors may want to consider it.

One of the better strategies when looking for income from common equities is to invest in companies with growing dividends. This isn't nearly as exciting as investing in growth stocks, but the objective here is not to generate quick returns; rather, it is to generate a relatively stable income stream. And the advantage of dividend growth is that the growth helps offset, or maybe even fully offsets, the erosion in real income resulting from inflation.

For people who need to generate income to live, this kind of dividend growth strategy will never replace a fixed income portfolio, but it can be used to enhance yields within such a portfolio. Given the increased risks, though, a few years of liquidity should be held in reserve to guard against equity-market drawdowns, since it can take a few years to recover from a crash. For instance, after the S&P 500 rose to a peak in October 2007, it took five and a half years to recover (Figure 7). Similarly, dividends peaked in late 2008 on a trailing basis and fell nearly 25% before recovering four years later.

Why do you need fixed income, anyway?

Most fixed income investments, in today's policy environment, are yielding extremely low rates — below even a percentage point after inflation is taken into account. So why hold them at all?

First of all, we need to accept that fixed income portfolios aren't meant to capture upside risk. That's not really what they're designed to do. Rather, fixed income investments perform three important functions in a portfolio: (1) providing stable income; (2) preserving capital, due to their lower drawdowns; and (3) diversification, due to their negative correlation with stocks.

Solving the income puzzle, however, requires investors to look beyond government bonds since they alone are unable to perform all three functions perfectly. Short-duration government bonds may provide benefits from a capital preservation or diversification perspective, but they won't provide a lot of income. High-yield corporate bonds, meanwhile, come with attractive yields but bear significant risks (Figure 6).

It's also important to appreciate that, while returns on most fixed income products may seem negligible, they may in fact exceed those of a risk-bearing portfolio, at least from a risk-adjusted perspective. So, for clients who cannot afford to take risks, they may still serve a purpose. Ultimately, a balance will need to be struck.

Risk mitigation and control are key, then, to pursuing this strategy. Common equity alone cannot solve the income problem. Within the common-equity portion of the portfolio, more names and smaller position sizes can help mitigate risk. At the same time, avoiding some of the more cyclical areas of the market could help to reduce the level of drawdown seen in times of crisis — both in terms of the equity portfolio as well as the income stream it produces.

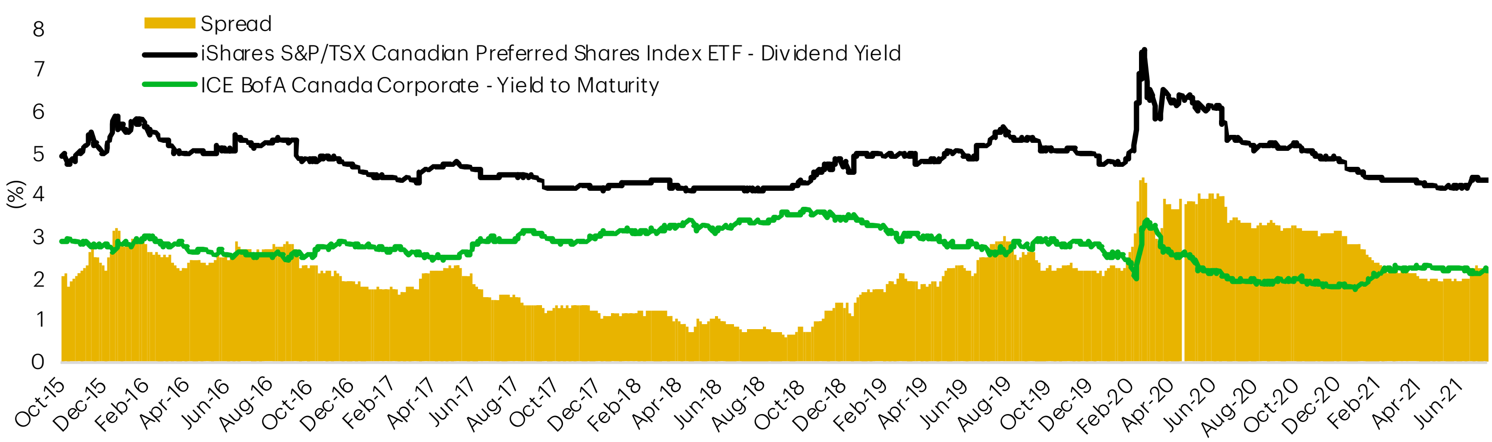
One side benefit of this strategy, at least for Canadian investors, is that dividends and capital gains are taxed at a lower rate than ordinary income and the income stream coming from fixed income instruments.

Preferred Shares. Another tool in the arsenal of the income investor is the preferred share, and specifically rate-resets, which are an effective and tax-efficient tool to enhance portfolio yield while providing a hedge against rising rates. That makes them a good complement to a fixed income portfolio.

For example, using the dividend yield on the iShares S&P/TSX Canadian Preferred Shares Index ETF (CPD) as a proxy, preferred shares have, on average, paid more than 200 basis points over Canadian corporate bond yields over the past five years. And when we factor in the tax treatment of dividend income versus interest income, the yield advantage of preferred shares increases further. As of August 13, 2021, the dividend yield on CPD was 4.36% compared to 2.18% for Canadian corporate bonds (Figure 8).

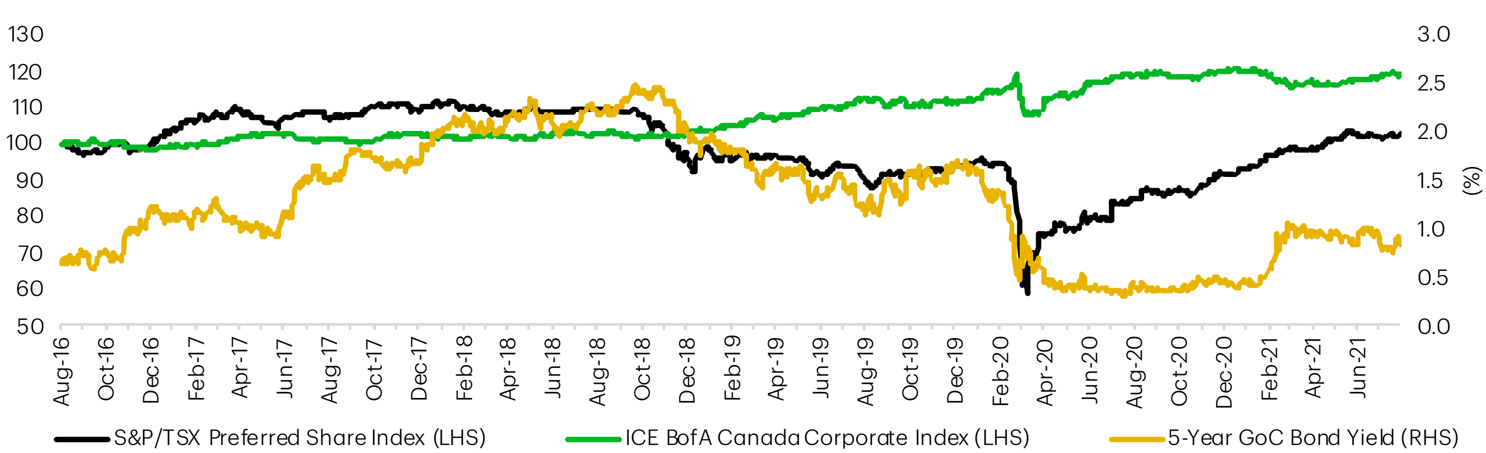
Given the fact that interest rates are near record lows and are more likely to increase in the medium term, it's important to include fixed and floating rate-resets as a hedge against higher rates (Figure 9). As interest rates increase, dividends on variable-rate preferred shares reset higher. In the short-term, the correlation between preferred share prices and interest rates may not seem strong, mainly because there are other factors that influence prices, such as changes in credit spreads (investor sentiment) and other market dynamics. However, preferred share prices reflect expectations of interest rates rather than short-term movements, so the correlation is stronger over long periods of time. Consequently, as interest rates increase, variable-rate preferred shares are expected to move higher and offset the pressure on bonds in an investor's portfolio.

Figure 8: Preferred shares yield exceeds corporate bonds



Source: FactSet as of August 13, 2021

Figure 9: Variable-rate preferred shares offer hedge



Source: Bloomberg Finance as of August 13, 2021

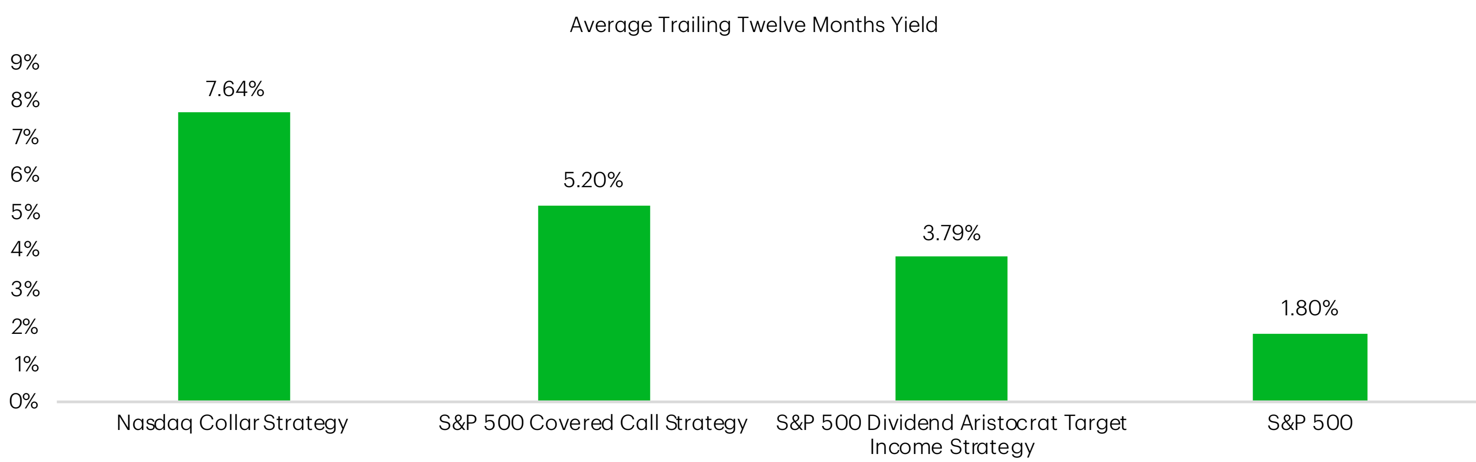
Investors should be mindful, however, that adding preferred shares to a portfolio increases volatility and reduces liquidity. To mitigate these risks, investors are encouraged to maintain exposure to investment-grade securities with a sizeable outstanding value.

Managed Equity Investments. In recent years, many funds and ETFs have emerged that deploy complex option-writing strategies (such as covered calls, collars, target income, etc.) that can be used to enhance income (Figure 10 and 11). Typically, these strategies are used in portfolios with long positions in stocks or passive ETFs tracking broad indices. They may curb total returns because they often involve selling call options on long positions in order to earn premium; however, they may also help reduce volatility because the premiums on option-writing strategies increase when market volatility is high.

These strategies can be hard for the lay person to understand, and investors are encouraged to speak to their advisors. Both covered-call and target-income strategies, for instance, involve selling call options (for a premium) on the underlying asset. The target-income strategy aims for a specific income range, usually between 3% and 4%. A collar strategy involves selling calls on the long position while hedging risks by purchasing puts on the underlying assets — hence providing both low volatility and downside protection.

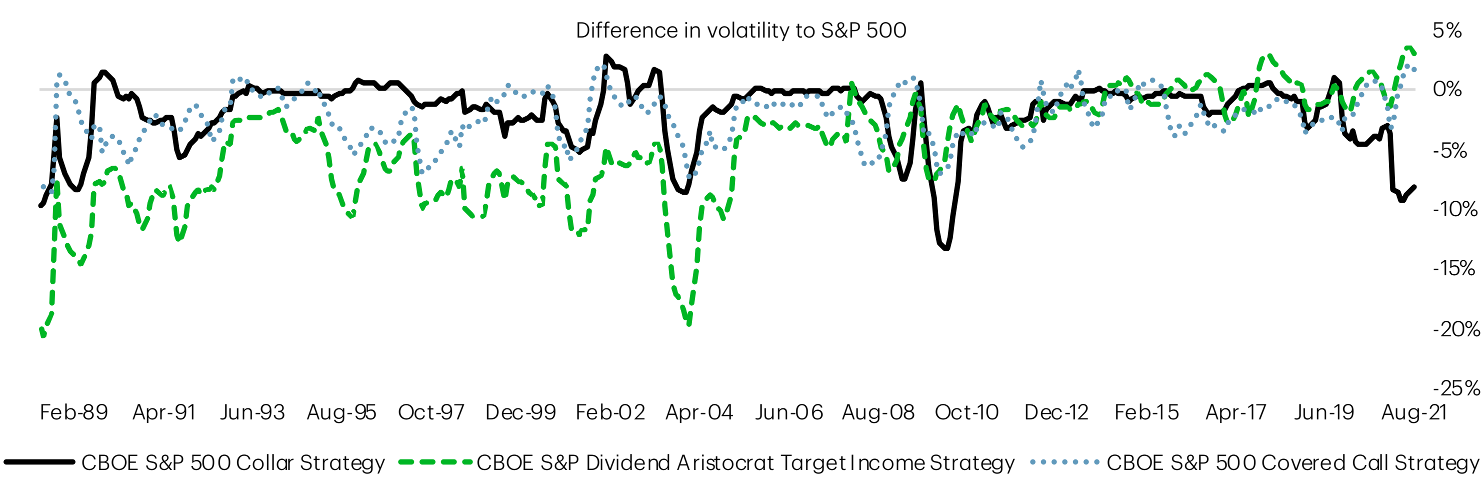
These strategies can provide lower volatility and higher yields relative to a portfolio of long-only equities (Figures 10 and 11). Other option-writing strategies can also provide a stable source of income, and they are often combined with fixed income in order to provide enhanced risk management. Most often we believe in constructing portfolios that are well optimized from a total-return perspective; however, for conservative clients who require a steady source of income to fund their liquidity needs, these strategies can serve as a one-stop solution.

Figure 10: Attractive Yields on Option-Writing



Source: Bloomberg as of August 16, 2021

Figure 11: More Income, Less Volatility



Source: Bloomberg as of August 16, 2021

Investing for Income: Alternatives

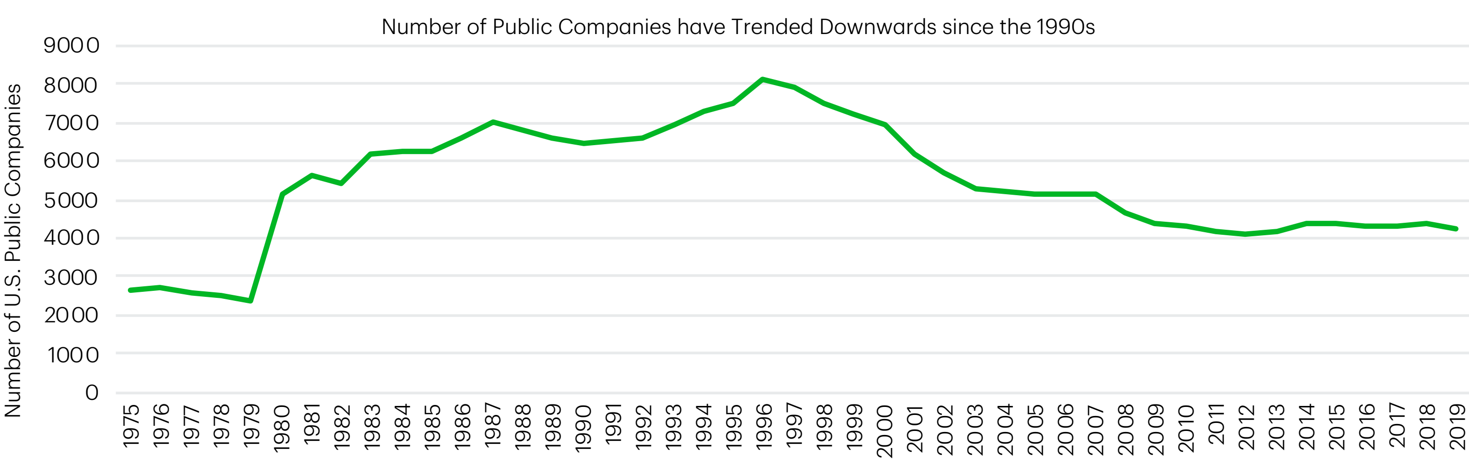
Another possibility is to look outside the public markets altogether, an increasingly popular option for both investors and companies seeking capital. The symbiosis here is self-perpetuating; as demand for private equity rises, more and more companies are opting to stay private. In fact, the number of public issuers in the U.S. has been trending downwards since peaking in the 1990s (Figure 12), and according to a 2017 study by the National Venture Capital Association, 85% of venture-backed companies end up getting acquired privately instead of navigating the traditional IPO route.

Private debt offers investors access to a growing pool of issuers otherwise unavailable in the public markets. In addition to a larger capital pool, private debt holds a yield advantage over its public counterparts due to the "illiquidity risk premium" (i.e., private debt is often harder to trade and as a result commands a higher return for this illiquidity). According to Towers-Willis, this illiquidity premium may be worth 0.5 to 2 percentage points per year over public yields, and potentially more for very long-horizon investors (Figure 13).

Beyond private debt, there are other fixed income alternatives to consider. For example, real assets have been traditionally considered a bond proxy due to the contractual nature of their cash flows and their propensity to provide a steady yield. Moreover, spreads between real estate yields and global bonds have widened over the past 12 months; bond yields have fallen precipitously while real estate yields have not.

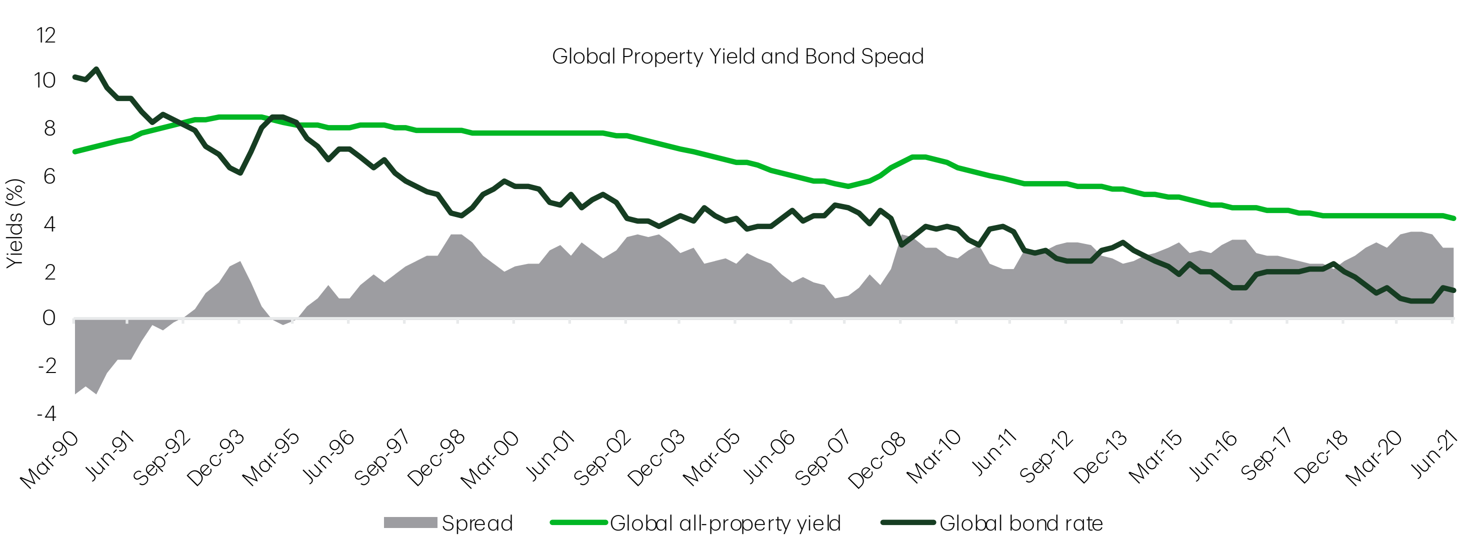
Lastly, alternative strategies with low market exposure, such as market-neutral strategies, can provide total-return and volatility figures similar to traditional fixed income, with some protection during periods of volatility due to the presence of short positions that rise in value as the underlying stock price sinks.

Figure 12: Fewer New Public Companies



Source: World Bank, 2019

Figure 13: Global Property Yield and Global Bond Rate Spread



Source: CBRE Research, National Sources & Macrobond, Q2 2021

Intractable, Not Impossible

Low interest rates are the white elephant in the room. Not talking about it isn't going to change the fact that it's there. We fundamentally believe that investment is about the process of decision-making, not the decisions themselves. You can make one or two bad decisions with a good result, but you can't make a series of bad decisions over the long-term and not have it end badly. Chasing yield or ignoring just how low interest rates are isn't going to make it better.

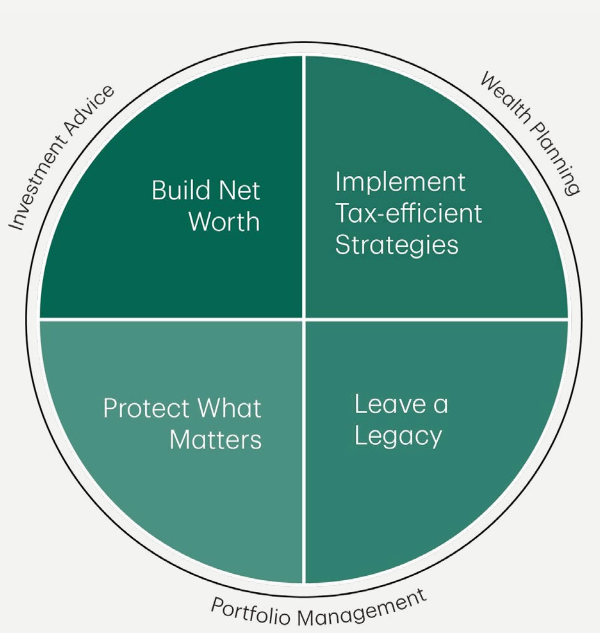
Unfortunately, investors are often put in a position of making these decisions without any formal process. Our solution for investment challenges like low interest rates: have an investment philosophy, a guiding set of principles that will work in a world that is in a state of constant change, often with dramatic impact on financial markets. At TD Wealth, we call that philosophy "Risk Priority Management," and it provides the foundation for how we make decisions. This article, for example, is based on our seventh principle:

Provide for lifetimes over market cycles. Rarely are goals only about maximizing the value of investments or producing income over a single period of time. A goal might be to maintain the same standard of living or save for retirement. In the case of entrepreneurs, to prepare for the sale of their business or for retirees utilize tax efficient and hedged strategies for income. Another goal may be the purchase of personal-use real estate or the funding of a child's education. Passing on a proportion of wealth, setting up a philanthropic foundation are all considerations.

We think a good starting point for any financial goal is to lay the foundation of a plan. While it's hard to be definitive, most investors share four common objectives: (1) growing and protecting their wealth; (2) minimizing taxes paid; (3) making sure that what they hold dear is covered if something goes wrong; and (4) leaving some sort of footprint that will make a difference when they are no longer inhabiting this planet (Figure 14).

Instead of a one-size-fits-all solution, like the yield of a bond, investors need to consider their primary objectives, and where it makes sense, create a specific portfolio to match the need for each objective (Figure 14). For investors who choose not to manage their portfolios this way, there will be a need for constant change, and change is never easy. It all starts with admitting there is a white elephant in the room; after that first step, each one gets better and better.

Figure 14: Matching Investor Goals to Goals-Based Portfolios



Source: TD Wealth

Market Performance

Canadian Indices ($CA) Return	Index	(%) 1 Month	(%) 3 Months	(%) YTD	(%) 1 Year	(%) 3 Years	(%) 5 Years	(%) 10 Years	(%) 20 Years
S&P/TSX Composite (TR)	75,483	0.80	6.86	18.23	29.14	10.67	10.10	7.80	7.82
S&P/TSX Composite (PR)	20,288	0.61	6.17	16.37	25.47	7.27	6.83	4.60	4.97
S&P/TSX 60 (TR)	3,679	0.84	7.56	19.59	29.50	11.06	10.92	8.48	7.99
S&P/TSX SmallCap (TR)	1,291	-2.68	1.97	16.57	42.97	8.62	5.62	3.23	0.05
U.S. Indices ($US) Return									
S&P 500 (TR)	9,155	2.38	5.50	17.99	36.45	18.16	17.35	15.35	8.79
S&P 500 (PR)	4,395	2.27	5.12	17.02	34.37	15.99	15.12	13.02	6.66
Dow Jones Industrial (PR)	34,935	1.25	3.13	14.14	32.19	11.19	13.64	11.15	6.18
NASDAQ Composite (PR)	14,673	1.16	5.08	13.85	36.55	24.13	23.24	18.20	10.40
Russell 2000 (TR)	11,468	-3.61	-1.54	13.29	51.97	11.49	14.28	12.34	9.36
U.S. Indices ($CA) Return									
S&P 500 (TR)	11,410	2.94	7.02	15.49	26.85	16.45	16.29	18.47	7.68
S&P 500 (PR)	5,478	2.84	6.64	14.54	24.92	14.32	14.08	16.09	5.57
Dow Jones Industrial (PR)	43,539	1.81	4.62	11.73	22.90	9.59	12.61	14.16	5.10
NASDAQ Composite (PR)	18,286	1.72	6.60	11.43	26.95	22.34	22.12	21.40	9.28
Russell 2000 (TR)	14,292	-3.08	-0.12	10.89	41.29	9.88	13.25	15.38	8.25
MSCI Indices ($US) Total Return									
World	13,413	1.82	4.92	15.38	35.67	15.09	14.90	11.66	8.01
EAFE (Europe, Australasia, Far East)	10,297	0.76	3.00	10.01	30.86	8.16	9.87	6.63	6.39
EM (Emerging Markets)	3,064	-6.67	-4.29	0.41	21.00	8.31	10.77	3.97	10.42
MSCI Indices ($CA) Total Return									
World	16,717	2.37	6.43	12.94	26.14	13.43	13.86	14.69	6.90
EAFE (Europe, Australasia, Far East)	12,833	1.32	4.49	7.68	21.66	6.60	8.87	9.52	5.30
EM (Emerging Markets)	3,819	-6.16	-2.90	-1.72	12.50	6.75	9.77	6.79	9.29

Currency									
Canadian Dollar ($US/$CA)	80.24	-0.55	-1.43	2.16	7.56	1.46	0.91	-2.64	1.03
Regional Indices (Native Currency, PR)									
London FTSE 100 (UK)	7,032	-0.07	0.90	8.85	19.24	-3.18	0.90	1.92	1.21
Hang Seng (Hong Kong)	25,961	-9.94	-9.62	-4.66	5.55	-3.16	3.47	1.47	3.80
Nikkei 225 (Japan)	27,284	-5.24	-5.31	-0.59	25.67	6.55	10.49	10.74	4.25

Benchmark Bond Yields	3 Months	5 Yrs	10 Yrs	30 Yrs
Government of Canada Yields	0.14	0.98	1.39	1.84
U.S. Treasury Yields	0.05	0.89	1.47	2.09

Canadian Bond Indices ($CA) Total Return	Index	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
FTSE TMX Canada Universe Bond Index	1,179	0.96	1.62	-3.46	-2.33	4.16	2.64	3.90
FTSE TMX Canadian Short Term Bond Index (1-5 Years)	767	-0.20	0.07	-0.52	0.71	3.06	1.94	2.30
FTSE TMX Canadian Mid Term Bond Index (5-10)	1,288	0.50	1.50	-3.00	-1.34	4.70	2.58	4.25
FTSE TMX Long Term Bond Index (10+ Years)	1,997	2.81	3.70	-7.37	-6.69	5.11	3.49	5.96

HFRI Indices ($US) Total Return								
HFRI Fund Weighted Composite Index	18,216	0.52	4.13	10.11	27.52	8.72	7.95	5.12
HFRI Fund of Funds Composite Index	7,425	0.51	2.85	4.93	18.27	6.31	6.12	3.85
HFRI Event-Driven (Total) Index	20,711	0.57	3.92	11.66	30.07	7.96	8.36	5.51
HFRI Equity Hedge Index	29,671	0.96	4.97	12.10	36.68	11.32	10.85	6.47
HFRI Equity Market Neutral Index	5,915	0.65	3.14	5.10	7.83	1.79	2.64	2.63
HFRI Macro (Total) Index	17,416	-0.73	3.78	8.11	14.71	5.82	3.18	2.03
HFRI Relative Value (Total) Index	13,959	0.54	2.66	6.47	15.38	5.01	5.36	4.75
HFRI Indices ($CA) Total Return								
HFRI Fund Weighted Composite Index	22,603	3.35	2.76	7.01	16.21	6.65	6.98	7.81
HFRI Fund of Funds Composite Index	9,213	3.34	1.50	1.97	7.77	4.29	5.17	6.51
HFRI Event-Driven (Total) Index	25,698	3.40	2.55	8.51	18.53	5.90	7.39	8.21
HFRI Equity Hedge Index	36,815	3.80	3.59	8.94	24.56	9.20	9.86	9.19
HFRI Equity Market Neutral Index	7,339	3.49	1.79	2.14	-1.74	-0.15	1.72	5.25
HFRI Macro (Total) Index	21,609	2.07	2.42	5.06	4.53	3.80	2.25	4.63
HFRI Relative Value (Total) Index	17,320	3.37	1.31	3.47	5.15	3.01	4.41	7.43

Sources: TD Securities Inc., Bloomberg Finance L.P. TR: total return, PR: price return., As of July 30, 2021.

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