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No Pressure, No Diamonds

In the 1953 film *Gentlemen Prefer Blondes*, Marilyn Monroe sang it best, “...but square-cut or pear-shaped, these rocks don't lose their shape, diamonds are a girl's best friend”. Since then, men and women alike have been splurging on jewellery with diamonds to celebrate everything from engagements and weddings to birthdays and so much more. However, while many appreciate the beauty of a flawless diamond, few truly understand the extreme pressures required to create such diamonds in nature. To keep it simple, diamonds are formed hundreds of miles below the earth's surface in the mantle, where temperatures can reach as high as 3700° Celsius (or 6692° Fahrenheit). It is here where carbon atoms bond together to form crystals, which over the course of many hundreds and even thousands of years, grow into the transparent, beautiful diamonds which many of us gift to our loved ones each year. While these extreme pressures are absolutely necessary to create diamonds (which as a reminder, is the hardest natural material on earth), this process is quite similar to what is necessary when it comes to investing and especially as it relates to building diamond-like investment portfolios (i.e., high pressure + long-term time horizon).

And while it may be difficult for many of us to see the bigger picture and maintain a long-term investment perspective given the volatile start to the year, which we acknowledge is especially difficult when the news flow is dominated by a long list of worrisome headlines (e.g., calls for an imminent recession/hard-landing, job losses, market collapse, etc.), **we remind investors, that some of the most beautiful and flawless diamonds on earth were formed under very extreme pressures and over very long periods of time!**

In comparison and as we demonstrate below, the S&P/TSX index over the very long-term (i.e., since the 1980s) has managed to generate returns of ~9.5% per year on average, despite facing many volatile/high pressure years since then.

Annual Returns for the S&P/TSX Index since the 1980s

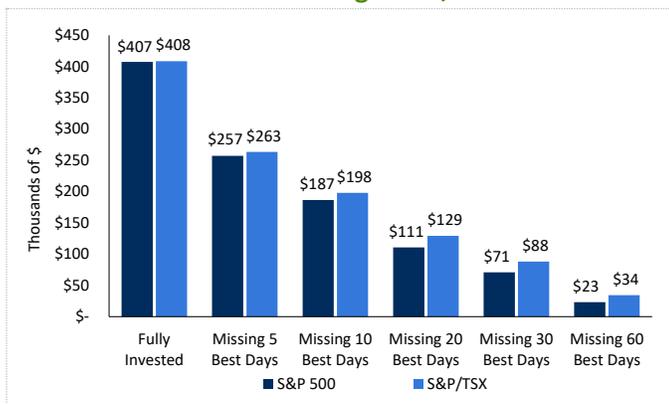


Source: FactSet; Raymond James Ltd.; Data as of June 24, 2022.

An Evolving Wall of Worries...

While it may be tempting to avoid all periods of volatility/sharp sell-offs in the market cycle by selling when the going gets tough and re-entering when things improve, we remind investors that this strategy of “timing the market” has proven to be rather difficult for even the smartest and most experienced minds to execute effectively. Moreover, we believe a more prudent strategy is to **stay invested** and **seek out opportunities to buy at more attractive valuations** – historically this has been a much better strategy to deploy for investors over the long-term.

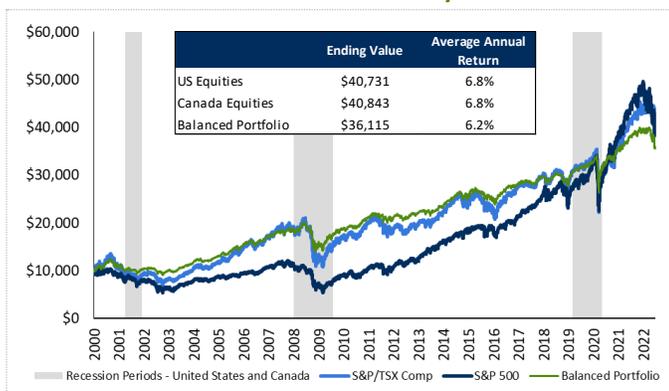
Markets Have Rewarded Long-Term, Patient Investors



Source: FactSet; Raymond James Ltd.; Data as of June 27, 2022. Illustration is based on S&P 500 Total Return Index and S&P/TSX Composite Total Return Index from January 1, 2000 to June 27, 2022. Does not take into account income taxes payable by the investor that would have reduced returns.

For example, excluding the impacts of buying low amid market sell-offs, which many astute investors typically do, both the S&P 500 and the S&P/TSX indices have generated total returns of ~7.0%, on an annualized basis over the past ~20 years.

20 Yr. Return for the S&P 500 & S&P/TSX Index



Source: FactSet; Data as of June 27, 2022. For illustration purposes only. Start investing on January 1, 2000 with an initial investment of \$10,000. S&P 500 TR Index (US Equities); S&P/TSX Composite TR Index (Canadian Equities); The asset allocation of the Balanced Portfolio is 60% S&P/TSX Composite TR Index and 40% FTSE Canadian Government Bond.

We also remind investors that this 20-year period was not all “sunshine and rainbows”. Rather, it consisted of the Dot-com bubble and subsequent burst, the 9/11 terrorist attacks, the 2007-2008 financial crisis, plus the deep recession which followed, the annexation of Crimea in 2014, and more recently, the COVID-19 pandemic and the Russian invasion of Ukraine. While the outlook remains unclear today, we continue to suggest investors ignore the noise and utilize periods of volatility, including periods of heightened uncertainty, to add to their portfolios. Maintaining well diversified portfolios can also help to minimize the drawdowns in portfolios during periods of heightened volatility.

Market Moving Headlines Over the Past 20 years

Year	S&P 500	S&P/TSX	Headline
2000	\$1,320.28	\$8,933.68	Y2K aftermath Tech bubble
2001	\$1,148.08	\$7,688.41	Recession, 9/11
2002	\$879.82	\$6,614.54	Corporate Accounting Scandals
2003	\$1,111.92	\$8,220.89	Bush Jr. declares War in Iraq
2004	\$1,211.92	\$9,246.65	U.S. has massive trade & budget deficit
2005	\$1,248.29	\$11,272.26	Record oil & gas prices
2006	\$1,418.30	\$12,908.39	Housing bubble bursts
2007	\$1,468.36	\$13,833.06	Sub-prime loan crisis
2008	\$903.25	\$8,987.70	Banking and credit crisis
2009	\$1,115.10	\$11,746.11	Jobs Recession
2010	\$1,257.64	\$13,443.22	Sovereign debt crisis
2011	\$1,257.60	\$11,955.09	Eurozone crisis
2012	\$1,426.19	\$12,433.53	U.S. fiscal cliff
2013	\$1,848.36	\$13,621.55	Federal Reserve begins to taper
2014	\$2,058.90	\$14,632.44	Ebola outbreak Annexation by Russia
2015	\$2,043.94	\$13,009.95	Commodity sell off
2016	\$2,238.83	\$15,287.59	Brexit
2017	\$2,673.61	\$16,209.13	Oil Price Decline
2018	\$2,506.85	\$14,322.86	Equity Markets Sell Off
2019	\$3,230.78	\$17,063.43	U.S.-China Trade War
2020	\$3,756.07	\$17,433.36	COVID-19 Pandemic
2021	\$4,766.18	\$21,222.84	Record Inflation

Source: Raymond James Ltd.; Date as of December 31, 2021.

Final Thoughts for Investors

Remain selective and stay invested! And also remember:

- **It pays to stay invested** - avoid the temptations to time the market; it is a losing proposition for even the smartest and brightest minds.
- **Ignore the headlines/noise** and remember to be “fearful when others are greedy and greedy when others are fearful”.
- **Stay rational** when markets/investors appear to be behaving irrationally (i.e., buy-low vs. selling-low).
- **Ignore your emotional tendencies and stick to your long-term plan**; otherwise, you may end up buying-high and selling-low.
- **Volatility/market sell-offs should be expected** and are normal even during broader bull market cycles!
- **Diversification + asset allocation = 😊**

Nadeem Kassam, MBA, CFA, Head of Investment Strategy
Eve Zhou, Multi-Asset Analyst

Incorporating Risk Metrics into the Stock Selection Process

Give the surge in volatility which we expect will likely persist into year-end, we opted to take a quantitative look at stocks within the S&P 100 and S&P/TSX, to find opportunities with the best risk-to-reward ratio. In this analysis, we will use both the Sharpe ratio and Cornish-Fisher value-at-risk (VaR) ratio to understand the risk-adjusted returns over the past 10 years (annualized), and the risk of loss, respectively.

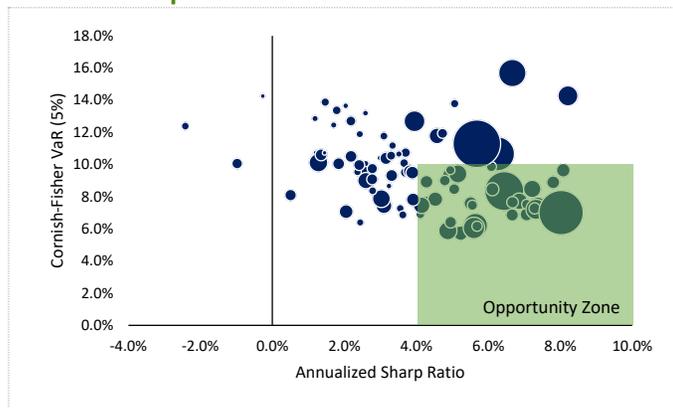
Methodology & Screening Process

We collected the monthly returns for individual stocks over the past 10-years, and excluded companies that did not have a full set of historical data. This process resulted in 96% and 83% of constituents of the S&P 100 and S&P/TSX, respectively. We then ranked the companies using their Sharpe ratios, which is a measure of an investment’s return for every unit of volatility or total risk. The second metric we used is the Cornish-Fisher VaR, which measures the risk of loss for an investment over a specific period. Using this data, we filter for companies that had an annualized Sharpe ratio greater than 4%, and a 5% probability of losing less than 10% in a month. Our goal using these tools was to identify companies which historically offered the greatest risk-adjusted returns, and a risk of loss less than 10% (monthly).

Quantitative Findings

In the following graphs, we have plotted the Sharpe ratios and VaR of each of the constituents for the S&P 100 and S&P/TSX, respectively. For each data point, the size of the circle represents the market capitalization of the company. For both the S&P 100 and S&P/TSX, it can be seen that large caps all else equal, exhibit better Sharpe ratios than smaller and medium-sized firms.

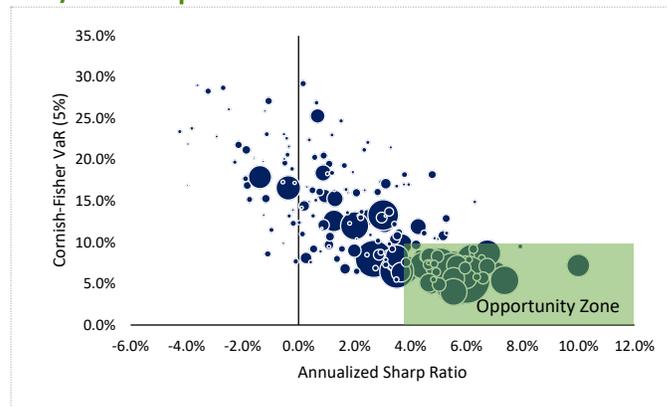
S&P 100 Sharpe Ratio versus Cornish-Fisher VaR



Source: Raymond James Ltd., FactSet., Data as of May 31 2022

Looking at the S&P 100, we identified 47 firms that met our criteria, with the top five being **Thermo Fisher Scientific Inc. (TMO-US)**, **Broadcom (AVGO-US)**, **Microsoft (MSFT-US)**, **UnitedHealth Group (UNH-US)**, and **Adobe (ADBE-US)**. When we look at the averages of constituents at a sector level, health care, information technology (IT), communication services, and utilities ranked the best, which supports the idea of these sectors carrying lower-risk characteristics.

S&P/TSX Sharpe Ratio versus Cornish-Fisher VaR



Source: Raymond James Ltd., FactSet., Data as of May 31 2022

For the S&P/TSX, we identified 54 firms that met our screening criteria, with the top five being **Constellation Software (CSU-CA)**, **Cargojet (CJT-CA)**, **Thomson Reuters (TRI-CA)**, **Waste Connections (WCN-CA)**, and **Boyd Group Services (BYD-CA)**. On a sector level, information technology and consumer staples were the only sectors that met our criteria, with the majority exhibiting average Sharpe ratios below 4%, on an annualized basis.

Key Takeaways

In the current market environment, using risk metrics can add another layer of due diligence to the security selection process. Incorporating more quantitative methods, like the concepts discussed above, can help **remove the emotional biases** when it comes to investing. It is important to note that this is not a substitute for understanding the fundamentals behind companies and/or their growth prospects. Given the complex nature of markets today, we advise investors to look for companies that exhibit quality characteristics which trade at reasonable valuations. Adding tools like the Sharpe ratio and VaR will help investors understand the historical risk-reward profile of each investment before deciding to take a position in the name.

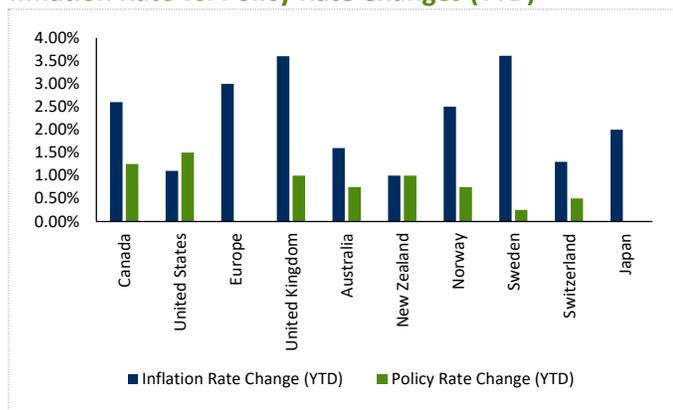
Peter Tewolde
Equity Specialist

Heavy Is the Head That Wears the Crown

Before we look ahead to what may await us, let us unpack some of the developments we have seen in the foreign exchange space during the first half of the year. There is clearly no lack of larger macro themes at play here – rampant levels of inflation, a shaky growth outlook, aggressive monetary tightening, the ongoing Russia/Ukraine conflict and the spillover effect on Europe, and a rally in commodities. As these themes continue to ebb and flow over the coming months, the USD will be sitting center stage playing the hit “safety-hedge” tune we all have come to expect from the greenback.

Inflation is all the rage these days, and rightfully so. The following chart illustrates the year-to-date (YTD) percentage change in the inflation rate across the G10 and changes in central bank policy rates. It shows what central banks are up against and the pace at which they have responded to contain these inflationary impulses. The United States is leading the way with the Federal Reserve (Fed) hiking rates by 1.50% since the beginning of the year, while the European Union has remained put, but is expected to kick off its tightening cycle at its July meeting. While a relatively more aggressive Fed has benefited the USD as broad risk aversion takes hold, we believe divergences in growth outlooks for global economies may begin to weigh on the USD next year should the US economy lose its growth edge versus its G10 peers. The market is currently pricing in a roughly 30% probability of a recession in the United States over the next 12 months, with consensus expectations for growth next year putting the United States behind the likes of China, Europe and Canada just to name a few.

Inflation Rate vs. Policy Rate Changes (YTD)

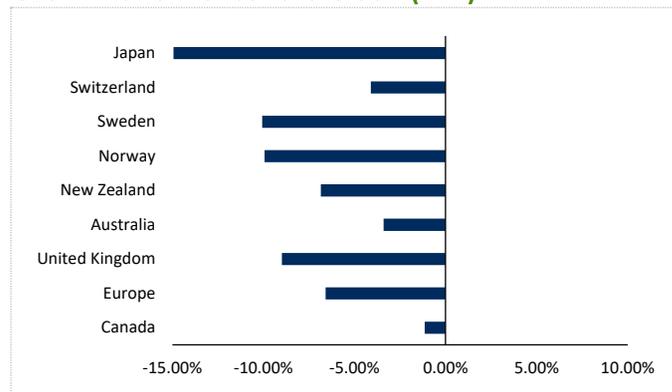


Source: FactSet; Data as of June 24, 2022

The following chart shows how the G10 foreign exchange bloc has fared against the USD YTD. The USD made significant gains

against the Japanese yen given the ever-growing monetary policy divergence between the Fed and Bank of Japan, which was not surprising. CAD however was the only major currency to go toe-to-toe with the USD and not get dragged through the mud, relatively speaking. Rising oil prices, a hawkish Bank of Canada (BoC) that is more or less mirroring the aggressiveness of the Fed, coupled with a relatively positive domestic growth outlook has contained some of the relative strength in the USD. US/Canadian yield spreads on the short-end have also narrowed in CAD’s favour, as the market continues to price in aggressive action by the BoC. As a result, not that surprising to see that the USD/CAD exchange rate has remained pinned within a tight trading range of 1.25-1.30 this year. Improvement in Canada’s terms of trade as commodity prices rally should also remain supportive for CAD. Oil prices are expected to remain on the firmer side, which may be further exacerbated by reports that both Saudi Arabia and the United Arab Emirates have warned about decreasing spare capacity across global energy markets. Even President Biden’s continued release from the United States’ strategic oil reserve, which dipped below 500 million barrels for the first time since 1986, has been unable to ease oil prices.

G10 FX Performance vs. the USD (YTD)



Source: FactSet; Data as of June 24, 2022

Putting it all together, we anticipate the broader USD to trade modestly on the firmer side over the immediate short-term as aggressive tightening by the Fed and slowing global growth expectations may continue to feed into the deterioration of risk sentiment. This may actually present opportunities to fade the move, given some of the downside risks brewing for the USD over the longer term. The DXY US Dollar Index is trading above its highs from the early days of the pandemic at the time of writing, with many now convinced that the dollar is too expensive and that these gains may not be sustainable over the longer term.

Ajay Virk, CFA, CMT
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Follow the Paper Trail: Managed Money Fund Flows

To gain a better sense of market sentiment for each asset class and sector, analyzing fund flows can be a great tool. Interestingly, the top YTD inflow categories were distinct for each investment vehicle. For funds, the top inflow categories include Canadian fixed income, global equity, and global equity balanced. Whereas for ETFs, the top categories include US equity, Canadian equity and global corporate fixed income.

Mutual Fund Flows

While the Canadian bond market isn't the most extensive category for corporate credit, it is fairly robust in terms of high quality government securities. By looking at the flows in Canadian fixed income, it appears investors have turned to domestic active bond strategies to help reduce volatility. While there are many passive ETF strategies investors can choose from to construct an appropriate bond sleeve for a given portfolio, it can be valuable to outsource this sleeve to a dedicated fixed income manager to provide a more value added experience/alpha. The flows moving into this category will continue to be monitored for what will likely be an eventful next six months in fixed income markets.

Leading Categories for Mutual Fund Flows vs. Comparable ETF Flows YTD

Name	Funds (\$M)	ETFs (\$M)
Canadian Fixed Income	5,631	487
Global Equity	5,106	1,248
Global Equity Balanced	3,160	698

Source: Morningstar, Raymond James Ltd. Data as of May 31, 2022.

ETF Flows

Another interesting takeaway for the first five months of the year has been the flows out of Canadian equity *mutual funds* and the flows into Canadian equity *ETFs*. While this is not a direct substitute, some of these outflows might indicate that investors are looking at adding market exposure given how broad the sell-off has been in 2022.

In addition, Canadian money market strategies have seen a surge in flows - particularly within ETF vehicles. With rising rates on the horizon and continued volatility across fixed income and equity markets, it appears investors may turn to high-interest savings ETFs to set aside cash as part of an overall defensive strategy. This can also serve as a convenient liquidity vehicle to take advantage of potential market opportunities down the road.

Leading Categories for ETF Flows vs. Comparable Mutual Fund Flows YTD

Name	ETFs (\$M)	Funds (\$M)
US Equity	4,395.0	2,239.0
Canadian Equity	4,238.0	(2,556.9)
Global Corporate Fixed Income	1,292.0	1,402.0

Source: Morningstar, Raymond James Ltd. Data as of May 31, 2022.

YTD ETF & Fund Flows

Name	ETFs (\$M)	Funds (\$M)	Combined (\$M)
US Equity	4,395.00	2,239.48	6,634.74
Global Equity	1,248.00	5,106.39	6,355.36
Canadian Fixed Income	487.10	5,631.42	6,118.52
Global Equity Balanced	698.97	3,160.63	3,859.59
Global Corporate Fixed Income	1,292.01	1,402.19	2,694.20
Global Neutral Balanced	241.40	2,408.50	2,649.90
Canadian Dividend & Income Equity	1,136.15	1,395.97	2,532.13
International Equity	880.89	1,138.22	2,019.11
Canadian Equity	4,238.16	(2,555.88)	1,682.28
Canadian Money Market	1,080.77	482.98	1,563.75
Global Fixed Income Balanced	15.53	1,413.91	1,429.44
Energy Equity	492.49	603.70	1,096.19
Financial Services Equity	520.12	132.09	652.21
Canadian Neutral Balanced	2.59	508.57	511.16
Global Infrastructure Equity	250.48	171.93	422.41
Canadian Corporate Fixed Income	(404.26)	789.86	385.59
High Yield Fixed Income	730.69	(355.18)	375.51
North American Equity	(4.57)	379.42	374.86
European Equity	298.09	52.27	350.36
Canadian Long Term Fixed Income	162.94	96.10	259.04
Emerging Markets Equity	(349.75)	583.14	233.40
Floating Rate Loans	25.89	174.11	199.99
Greater China Equity	33.23	(8.96)	24.28
Asia Pacific Equity	-	(19.37)	(19.37)
US Money Market	163.18	(193.37)	(30.19)
Natural Resources Equity	(226.10)	154.63	(71.46)
Real Estate Equity	(164.62)	66.35	(98.27)
Global Small/Mid Cap Equity	96.19	(210.52)	(114.33)
Precious Metals Equity	(50.57)	(92.17)	(142.74)
Canadian Equity Balanced	56.56	(211.11)	(154.55)
Canadian Small/Mid Cap Equity	(34.37)	(204.58)	(238.96)
US Small/Mid Cap Equity	(203.05)	(400.03)	(603.08)
Global Fixed Income	452.97	(1,162.99)	(710.02)
Emerging Markets Fixed Income	(67.41)	(651.85)	(719.26)
Preferred Share Fixed Income	(447.17)	(281.37)	(728.54)
Canadian Short Term Fixed Income	(221.48)	(640.27)	(861.75)
Canadian Fixed Income Balanced	98.81	(3,559.02)	(3,460.21)

Source: Morningstar, Raymond James Ltd. Data as of May 31, 2022.

The Bottom Line

By reviewing mutual fund and ETF flows, it is important to note that they do not net out equally. The assets redeemed from mutual funds and ETFs could have moved into alternative strategies, GICs or used to help pay down debt. Lastly, portfolio rebalancing and early tax-loss harvesting may be other reasons for recent category outflows. As for the remainder of the year, only time will tell and we will just have to go with the flow!

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Some Like It Hot, but Others Not So Much

The Bank of Canada (BoC) has aggressively raised rates in the first six months of 2022 with the hopes of restoring price stability to markets. These increases took the overnight rate from 0.25% to 1.50%, with more hikes expected in the second half of 2022. Rising interest rates have a negative impact on bond prices due to their inverse relationship with one another – as rates rise bond prices fall, all else equal. To illustrate, the FTSE Canada Universe Bond Index has experienced a **decline** of 12.23% in the first half of 2022, while interest rates have **risen** across the entire yield curve. Looking ahead, we expect inflation to remain elevated with interest rates likely to rise further, forcing bondholders to navigate an environment we have not seen in quite some time.

Overnight Rates: Consensus expectations are forecasting an overnight rate of ~3.40% by the end of 2022 (vs. 1.50% today). If these expectations come to fruition, yields across the curve will likely follow suit, but to varying degrees. However, we anticipate that the yield curve will stay uncharacteristically flat (narrow spread between short and long-dated maturities). We note, from a historical context, today’s rates are still relatively low with the Government of Canada (GoC) 10-year yield near its 25-year average of 3.34%.

10 Year GoC Bond Yield Popped Higher



Source: Raymond James Ltd.; Data as of June 24, 2022

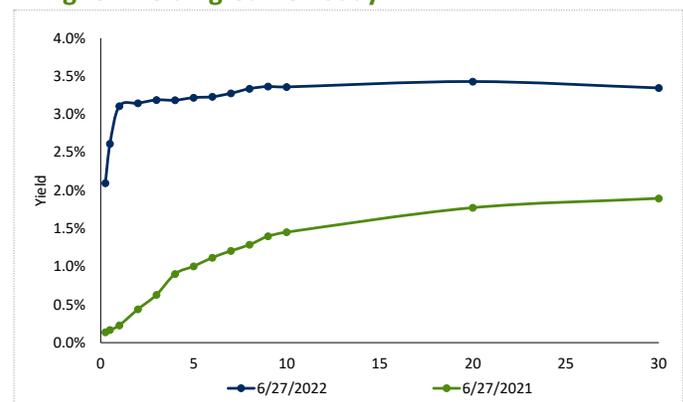
Yield Curve Inversion: For a brief period during the month of June, the yield on the 2-year bond was higher than the yield on the 10-year bond. A shorter-termed bond offering a higher yield than a longer-termed bond is called inversion, and some market participants track yield spreads (e.g., the difference between the 10-year bond yield and the 3-month yield and/or the 10-year bond yield and the 2-year bond yield) to gauge the probability of a recession over the next 12 months. It is important to note that although every past recession has been

preceded by a yield curve inversion, not every inversion has resulted in a recession. In addition, an inverted yield curve is just one of many indicators that could signal a recession on the horizon. A normal or positively sloping yield curve offers higher yields for longer maturities and lower for shorter maturities – all else equal. However, different parts of the yield curve are impacted by several factors beyond just supply/demand fundamentals. For example, short-term yields are largely impacted by central bank monetary policy, whereas long-term bond yields are affected by macro-economic factors. As a result, there can be periods where the lack of alignment results in yield curves which deviate from normal.

Investing Today

Existing bondholders should expect to see the price of their fixed income securities fall further if rates continue to rise. However, if investors were intending to hold these securities until they mature, there is no need to change the game plan amid all the uncertainty/worrisome headlines. Barring a default of an issuer, bonds mature at their face value, even if the path to get there is characterized by large swings in price.

A Higher-Yielding Curve Today



Source: Raymond James Ltd.; Data as of June 27, 2022

Today’s higher rates are, in our opinion, a buying opportunity. Many investors over the past several years have stuck to the sidelines due to very low yields across fixed income markets, but now could be the time to begin deploying capital. For example, rates on guaranteed investment certificates, or GICs, are substantially higher from a year ago, with a one-year GICs offering a yield of 3.79% vs. 0.95% previously (or +280 basis points). Bond yields may continue to fluctuate in 2022, but we are of the view that the majority of the move is likely behind us.

Charlotte Jakubowicz, CMT
Vice President, Fixed Income & Currencies

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