CUMBERLAND
Private Wealth

March 31, 2022

First Quarter Review

NORTH AMERICAN EQUITY STRATEGY

While both the S&P500 and the TSX initially pulled backed at the beginning of the year as valuation multiples contracted, the resource heavy TSX outperformed the S&P500 during the first quarter of 2022 with the help of commodity price inflation. During the quarter, the S&P500 total return index was down -4.60% in US dollars. Adjusting for currency, the S&P500 returned -5.86% in Canadian dollars, as the Canadian dollar appreciated about 0.8 cents, closing the quarter at US$0.7995. The TSX total return was +3.82%. There was no shortage of reasons for the selloff in the S&P500, which actually entered correction territory (down more than -10%) through the first two months of 2022 before rebounding in March.

Between rampant inflation due to rising commodity prices, rising interest rates, companies issuing negative earnings guidance and the tragic situation in the Ukraine, there is a lot to be concerned about. We should probably throw COVID-19 in there as well although it's now one of the further things in investors' minds.

Exhibit 1: Federal Reserve: Summary of Economic Projections

Percent

Variable	Median[1]			
	2022	2023	2024	Longer run
Change in real GDP	2.8	2.2	2.0	1.8
December projection	4.0	2.2	2.0	1.8
Unemployment rate	3.5	3.5	3.6	4.0
December projection	3.5	3.5	3.5	4.0
PCE inflation	4.3	2.7	2.3	2.0
December projection	2.6	2.3	2.1	2.0
Core PCE inflation[4]	4.1	2.6	2.3	
December projection	2.7	2.3	2.1	
Memo: Projected appropriate policy path				
Federal funds rate	1.9	2.8	2.8	2.4
December projection	0.9	1.6	2.1	2.5

Source: Federal Open Market Committee

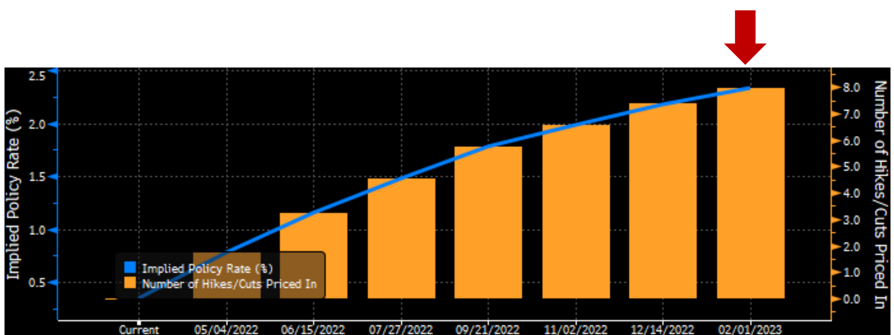
Exhibit 1 reviews the Summary of Economic Projections

Exhibit 1 reviews the **Summary of Economic Projections** of the Federal Open Market Committee (FOMC) from the March 2022 meeting. The Federal Reserve (Fed) hiked rates by 25 basis points as expected and acknowledged ongoing interest rates increases will be appropriate. With the firming in monetary policy, the Fed expects inflation to return to its 2% objective. However, as indicated in the chart above, their own projections have PCE (Personal Consumption Expenditures) inflation running above their longer-term objective into 2024. Looking at the Fed's median projection for the Federal funds rate, it suggests 7 or 8 interest rate hikes in 2022 followed by 3 or 4 rate hikes in 2023.

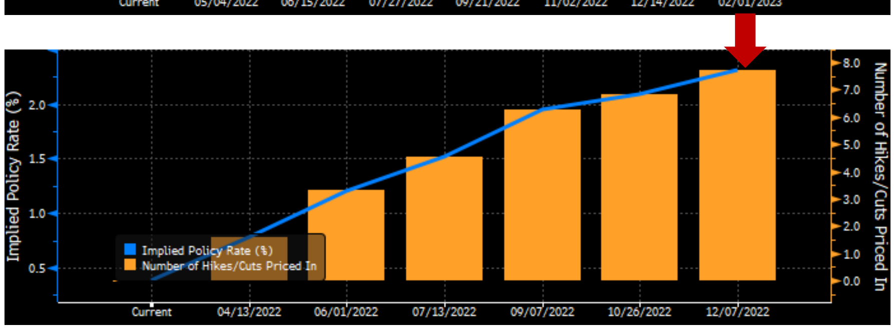
The two charts in **Exhibit 2** show what the futures curve is building in for rate hikes in both the US and Canada over the next 12 months. As shown, the futures curve implies a probability of 8 rate hikes in the US and 8 in Canada. Clearly, future inflation and employment data will be key; however, supply chain bottlenecks are beginning to ease up and we should begin to see more favorable inflation comparables as we move through 2022.

Exhibit 2:
Implied Interest Rates & Rate Hikes

Federal Reserve



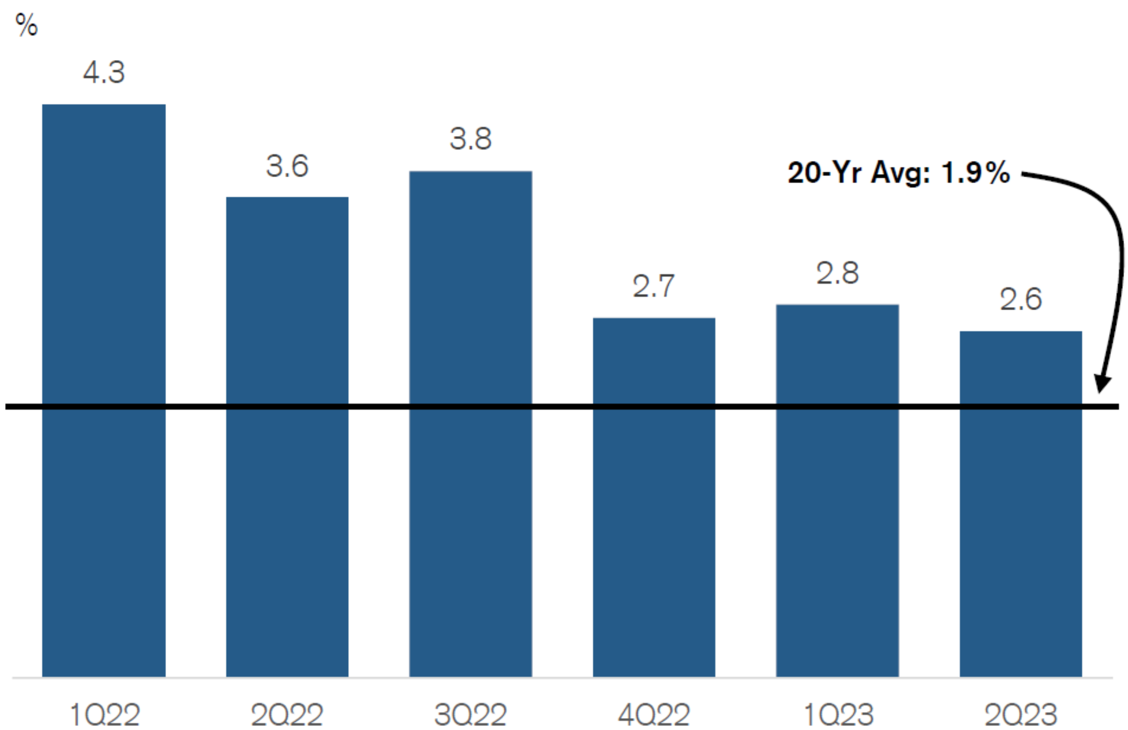
Bank of Canada



Source: Bloomberg

Notwithstanding the expected interest rate increases, the unemployment rate is forecasted by the Fed to remain close to 50 year lows of 3.5%, which seems a stretch in our opinion, Real GDP for 2022 is expected come down from the previous December projection of 4.0% to 2.8%. However, 2.8% is still well above the long term 20-year average of 1.9% in **Exhibit 3**, which shows the consensus projection for real GDP in 2022 and the first part of 2023.

Exhibit 3: Consensus Real GDP Forecasts



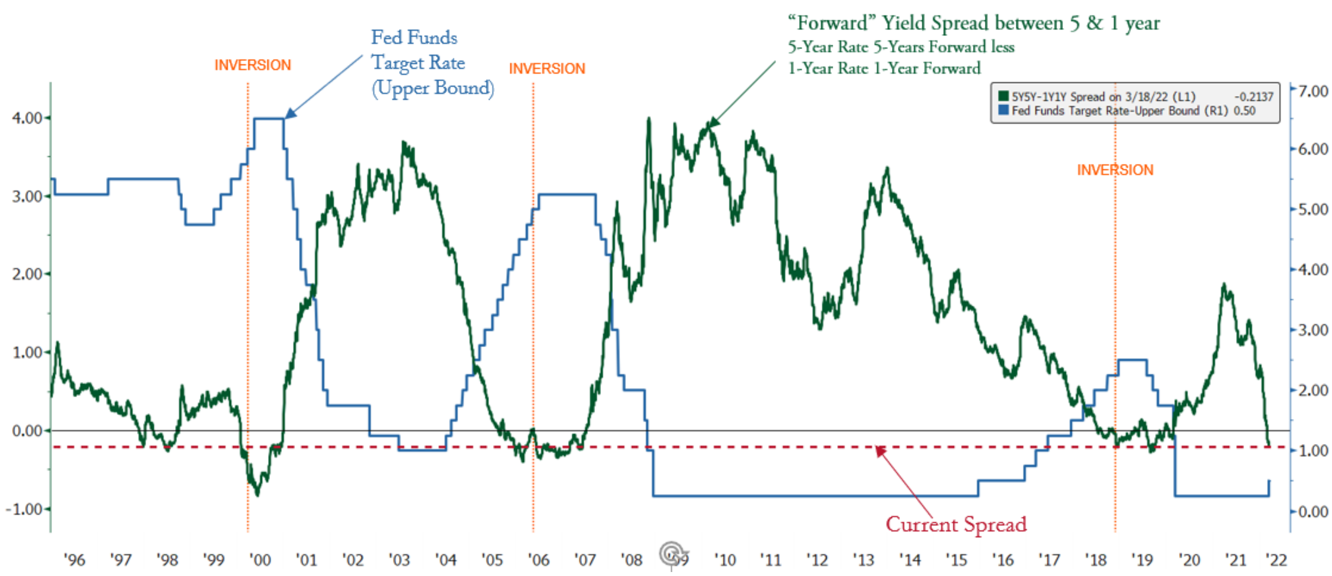
Source: Credit Suisse

The bottom line is that interest rates are rising this year and probably next year too. However, with strong aggregate demand, labour markets, payroll and job growth and household and business balance sheets, the odds of a recession in the next twelve months are low according to the Fed. And as such, the Fed believes the market can withstand a less accommodative monetary policy.

Exhibit 4 compares the Federal Funds target rate (in blue) to the to 5 year-1 year forward US Treasury yield curve spread (in green) going back to the mid 1990's. What we are attempting to show here is that forward yield curve inversion (i.e. short rates being higher than long rates or the green line falling below zero) typically happens at the end of the hiking cycle (as marked by the orange vertical lines).

However, since the green line is falling below zero now, it means the yield curve is already inverting just as the rate hikes are beginning. This could be an indication that several Fed rate hikes are already priced into the bond market and if that is in fact the case, the recent increase in long term Treasury yields may be closer to a peak than a trough, which has implications for valuations in the stock market.

Exhibit 4:
"Forward" Yield Curve & Fed Funds Rate

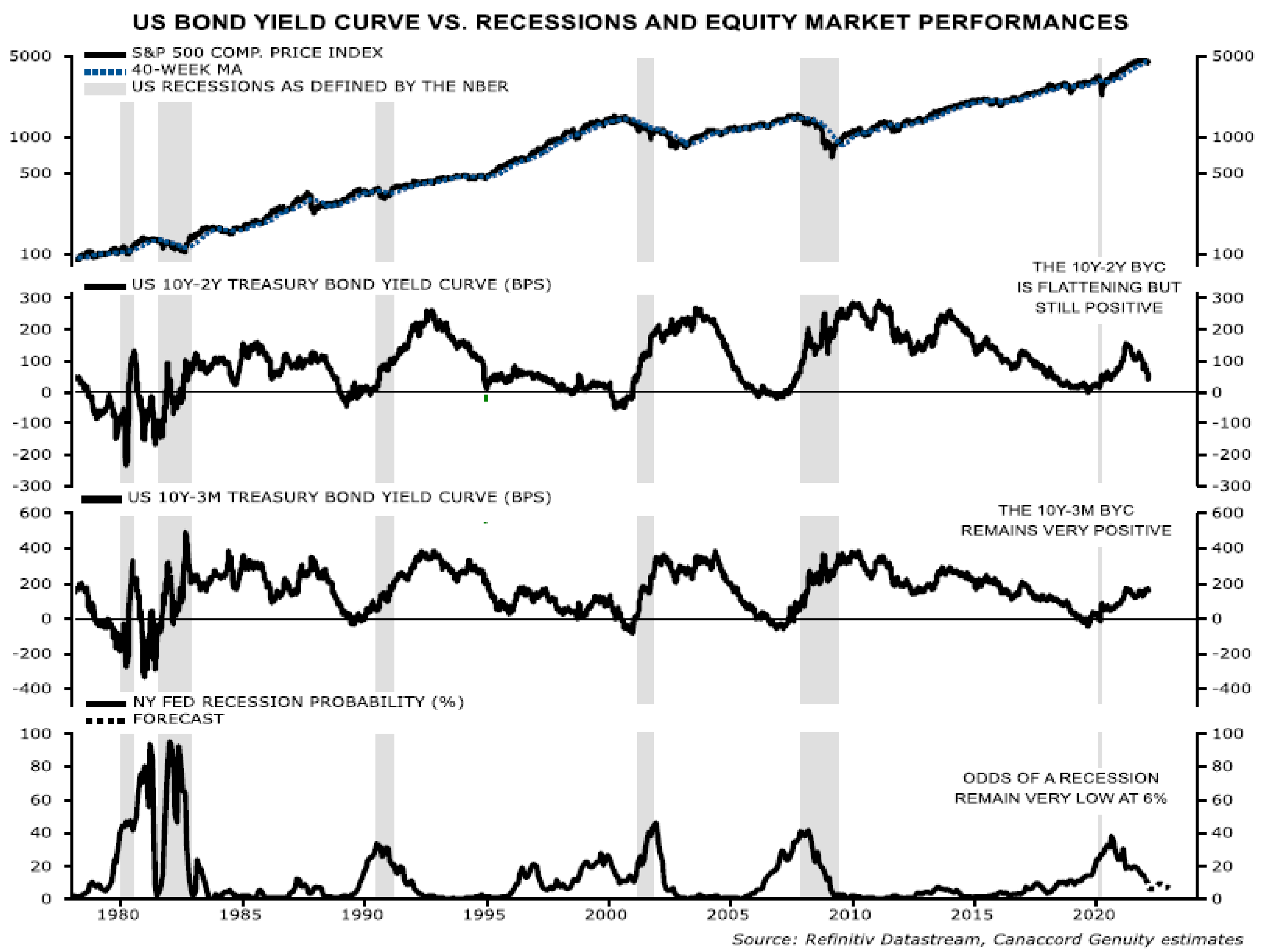


Source: Bloomberg
Spread is the difference between KIMWFF01 Index & KIMWFF05 Index (Fitted Instantaneous Forward Rates) corresponding to the Fed's Kim & Wright (KW) model that estimates a term structure model for U.S interest rates FDTR Index is the Fed Funds Target Rates – Upper Bound: short-term interest rate targeted by the Fed's FOMC

Exhibit 5 compares the 10-2 year and 10-3 month US bond yield curves to equity market performance going back to 1980 with recessions marked in grey. Historically, these two yield curve indicators have also been useful at predicting the timing of the next recession. As indicated in the chart, the 10-2 is flattening but still slightly positive, however the 10-3 month spread remains quite positive. The bottom clip shows the "New York Fed Probability of a Recession" indicator which uses the 10 year Treasury yield minus the 3 month T-bill rate.

This has essentially consistently predicted every U.S. recession since 1950 with only one "false" signal" with a lead time of 4 to 6 quarters. Currently this Fed model assigns the probability of a recession low at less than 10%. This might suggest that the volatility in the first quarter was more likely a healthy correction rather than the beginning of a prolonged or significant bear market.

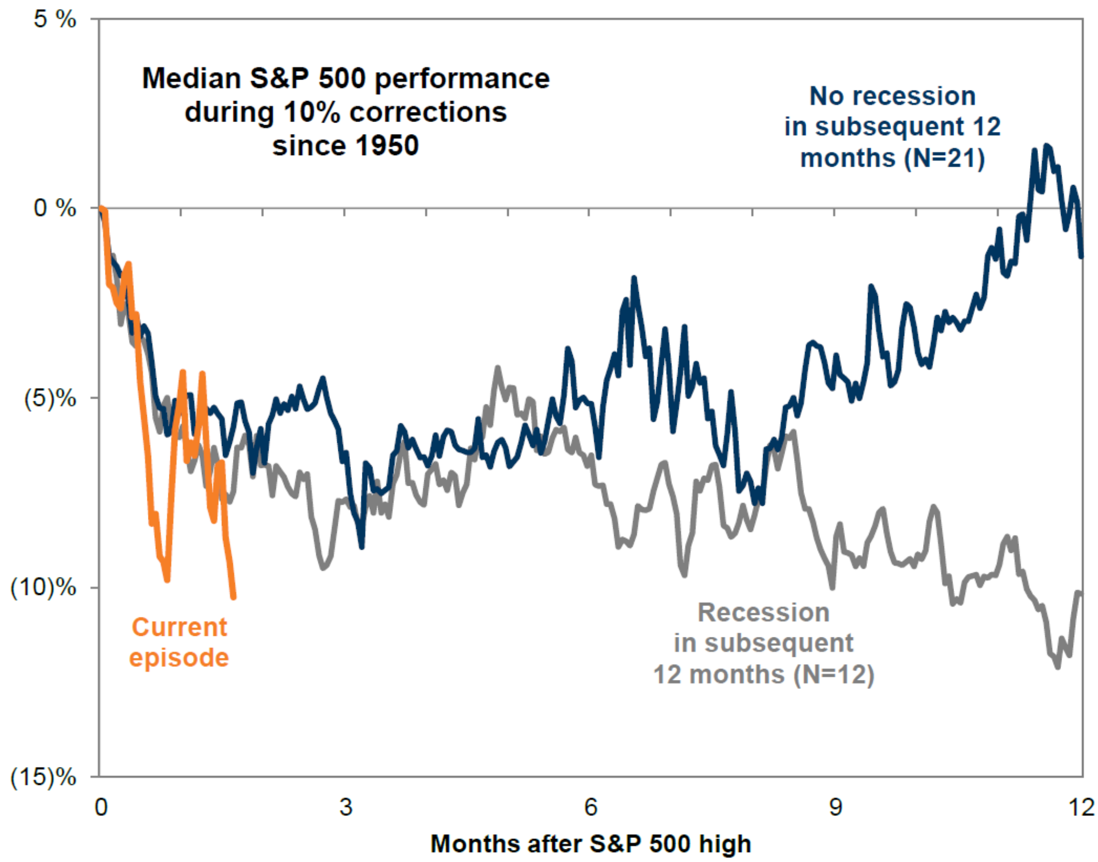
Exhibit 5:
US Bond Yield Curve vs. Recessions and Equity Market Performances



Source: Canaccord Genuity, Refinitiv Datastream

Exhibit 6 compares the historical path of the S&P500 around 10% corrections going back to the 1950's. As indicated in the chart, the subsequent performance of the S&P500 depends on whether there is a recession on the horizon or not. In the recession scenario, history suggests markets may not fall much further from here within 12 months from the start of the correction. As discussed above however, we do not believe a recession in the next 12 months is likely (neither does the Fed), and if history is any indication, then the market should recover from the pullback we saw during the first quarter.

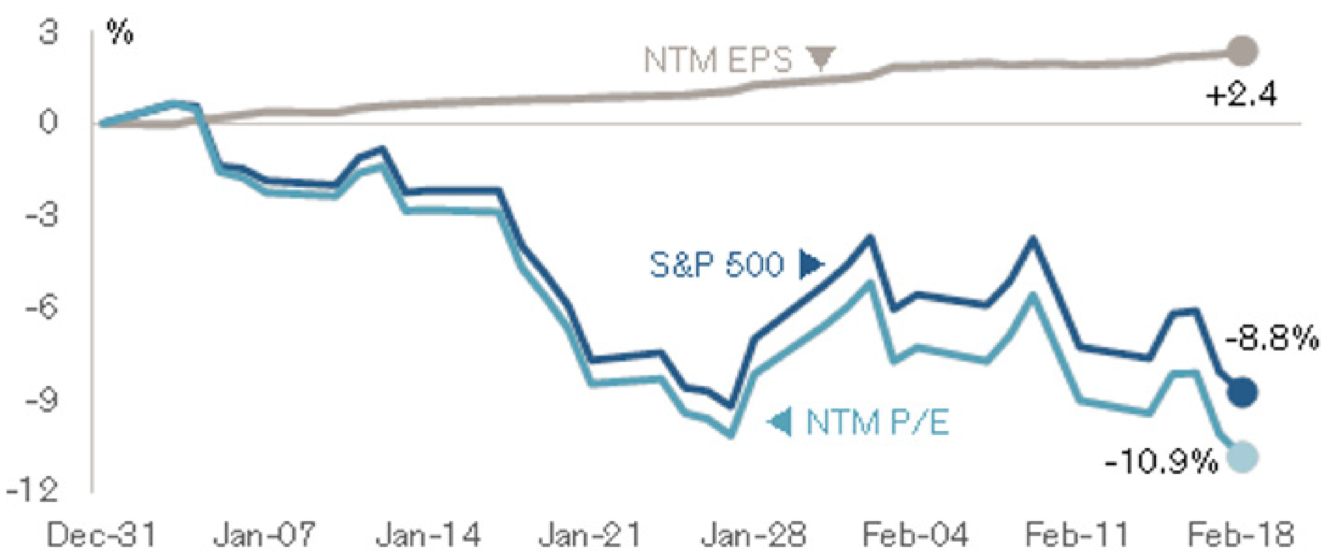
Exhibit 6:
S&P500 Earnings Estimates and ERP Implied Earnings



Source: Goldman Sachs, The Daily Shot

The valuation impact on the market can be seen in the chart below **(Exhibit 7)**. As bond yields rise (or interest rates go up) so do earnings yields, which are the inverse of the Price Earnings multiple. The light blue line (-14.7%) represents the 12m Forward Price Earnings multiple for the S&P500, which has seen a reasonably significant contraction in the first two months of 2022 causing the market selloff for the S&P500 (dark blue line). The main reason for this, we believe, is the move in the ten-year Treasury yield having increased from 1.51% at December 31st to 2.38% at the time of writing. However, this is only one component of what drives valuation for the S&P500 as the direction of earnings growth is also critical. The good news is that forward 12m earnings estimates are still rising as shown by the top grey line. And if the move in interest rates is more or less factored into the market, there is room for forward earnings growth to carry the market higher from here.

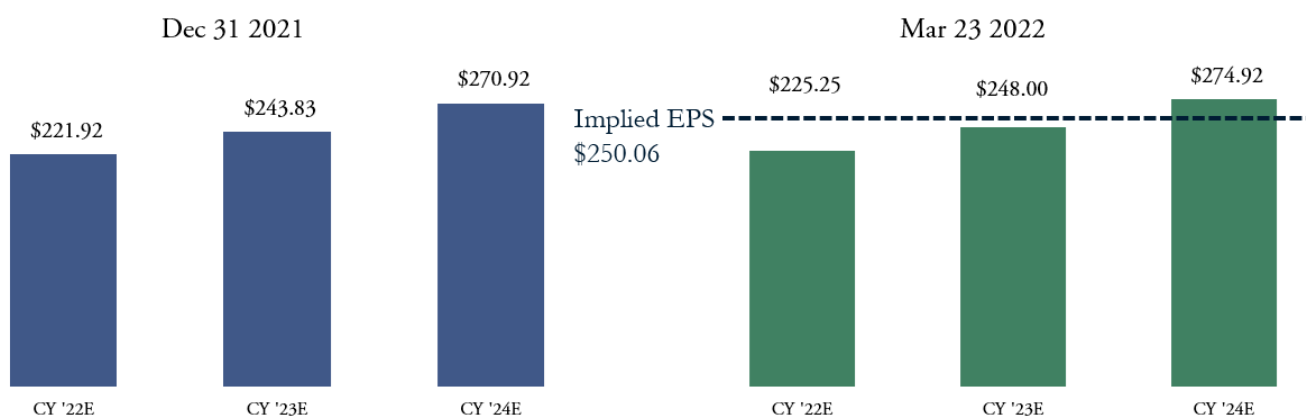
Exhibit 7:
Percent Change in S&P 500 Index, EPS and P/E - YTD



Source: Credit Suisse

Exhibit 8 shows the consensus forward calendar earnings for the S&P500 for 2022 through 2024 as of December 31st 2021 and end of March 2022. The estimates show robust earnings growth of over 10% looking out to 2023 and 2024, supported by the fact that estimates have continued to increase for each calendar year since December 31st 2021. We also compare consensus estimates to our current equity risk premium (ERP) implied earnings model as this takes into account valuation compression caused by rising interest rates. As indicated in the chart, the ERP implied earnings are currently discounting 2023 calendar earnings, which is not unusual as we move forward through 2022 and suggests the valuation is reasonably balanced.

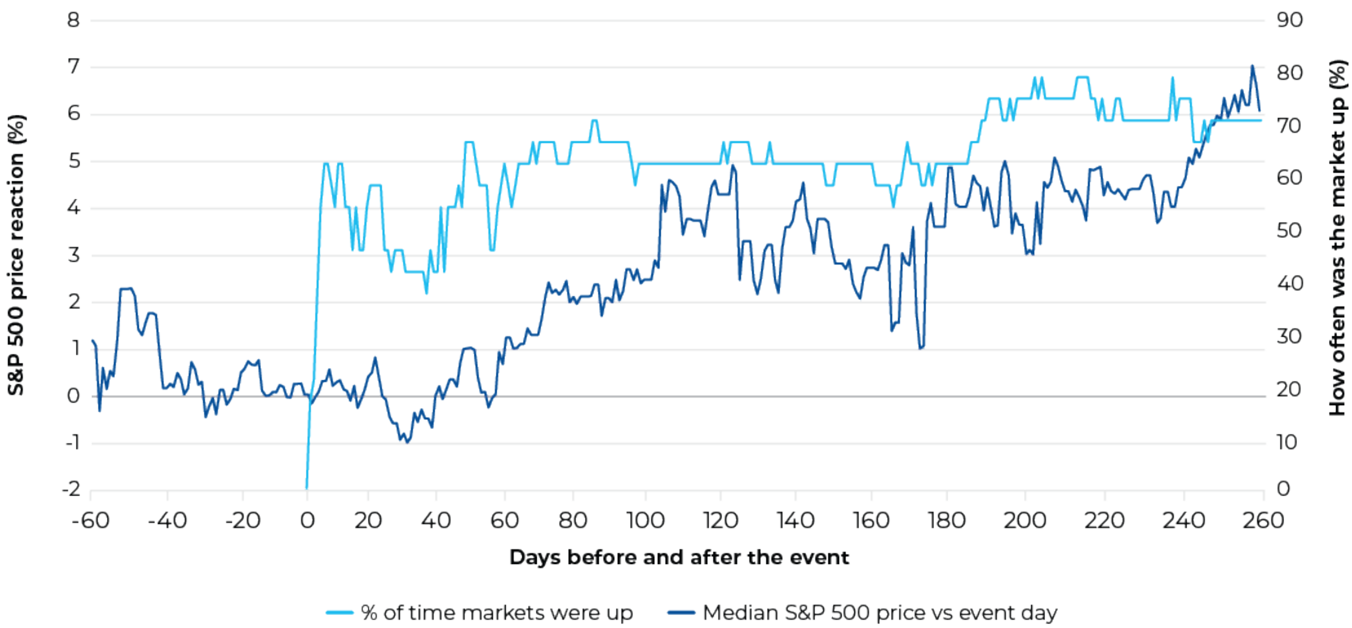
Exhibit 8:
Implied EPS



Source: Factset / Bloomberg / Cumberland Asset Mix Valuation 03/23/2022Implied EPS uses close 3/23/2022 for SPX Index 4511.61, average spread 3.16%, 10-year UST bond yield 2.38%

While the path that the Russia Ukraine conflict will take is unknown at this time, history has shown that the S&P500 response to geopolitical events tends to be relatively short-lived. When the conflict initially broke out, we examined the Russian annexation of Crimea in 2014, which appeared to be a close comparison. At that time in 2014, 10-year US Treasuries were also rising and the S&P500 pulled back about -12.5% before the annexation similar to the occurrences through the first two months of 2022. 2014 also corresponded to the beginning of the last tapering cycle where the Fed reduced its bond buying program from $85 billion to zero similar to today's $120 billion bond buying reduction program. Overall, the market ended up almost 14% higher in 2014 even with the 12.5% correction. Given that today's conflict is still unresolved, **Exhibit 9** compares the S&P500 to 24 different geopolitical events over the past 80 years both before and after the start of the event. It indicates that markets tend to look through geopolitical events a lot faster than the events get resolved, with a frequency of being higher 70% of the time.

Exhibit 9:
Markets get over Geopolitical Events a lot Faster Than the Events Resolve

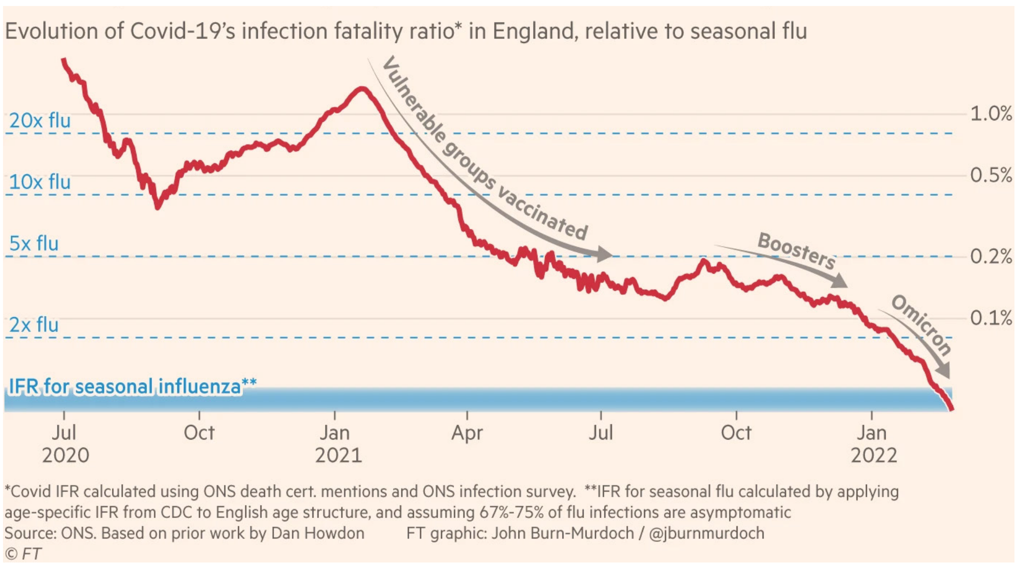


24 geopolitical events from wars to terrorism over past 80 years

Source: Purpose Investments

Finally, the last issue we want to review is COVID-19. **Exhibit 10** shows the infection fatality ratio in England relative to the seasonal flu. What it suggests is that with the progression of vacinations, boosters, natural immunity, better treatment and virus evolution, COVID-19 is currently slightly less lethal on average than the seasonal flu. While we cannot predict how the virus will evolve and more lethal variants are possible, it seems that COVID is moving further and further from investors minds as the likelihood of future widespread lockdowns falls.

Exhibit 10:
Covid has Grown Gradually Less Lethal Over the Pandemic, Mainly Due to Immunity and is Now Slightly Less Lethal Than the Flu on Average



Source: SoberLook, Daily Shot

Asset Allocation for our North American Equity Strategy As at March 31, 2022	
Equities	93%
Fixed Income	0%
Cash	7%

During the quarter, our overall equity exposure decreased by 4% to 93% from 97% at December 31st. Our US equity exposure decreased from 50% to 43% while our Canadian exposure increased from 47% to 50%. Cash increased from 4% to 7%. It is important to remind you that many of our clients' portfolios are invested in our North American plus International Equity strategy, meaning that the actual weights of US and Canada within the portfolio's total equity holdings will be proportionately less than this given the allocation to international companies.

In the current environment, we continue to position the portfolio toward value-oriented stocks to benefit from the economic recovery that is underway, while maintaining exposure to growth stocks at just under 1/3 of the portfolio. More specifically, our current allocation to growth stocks, which typically rely on trends independent of an improving economy, is about 29% down from 33% at December 31st; while that of value stocks, which are more dependent upon and should benefit from an economic recovery, are up slightly at 60% from 58% at December 31st. Staples, which we don't classify as either growth or value, make up the balance of our equity exposure.

During the first quarter of this year, we added two new stock positions including CAE Inc. and Linde. CAE has two strong tailwinds at its back - airline traffic recovery through its pilot training business and increased NATO defense spending which, as a result of recent acquisitions, are now about one half of its business. CAE should also continue to benefit as NATO countries ramp-up their defense budgets going forward. Linde is a company that produces atmospheric and process gases sold to customers in the Healthcare, Food & Beverage, Manufacturing Chemicals and Electronics market. This market is oligopolistic within which three competitors control 70% of the global market, which affords them pricing power. During the quarter, Linde announced a 10% dividend increase and a new $10 billion share repurchase program.

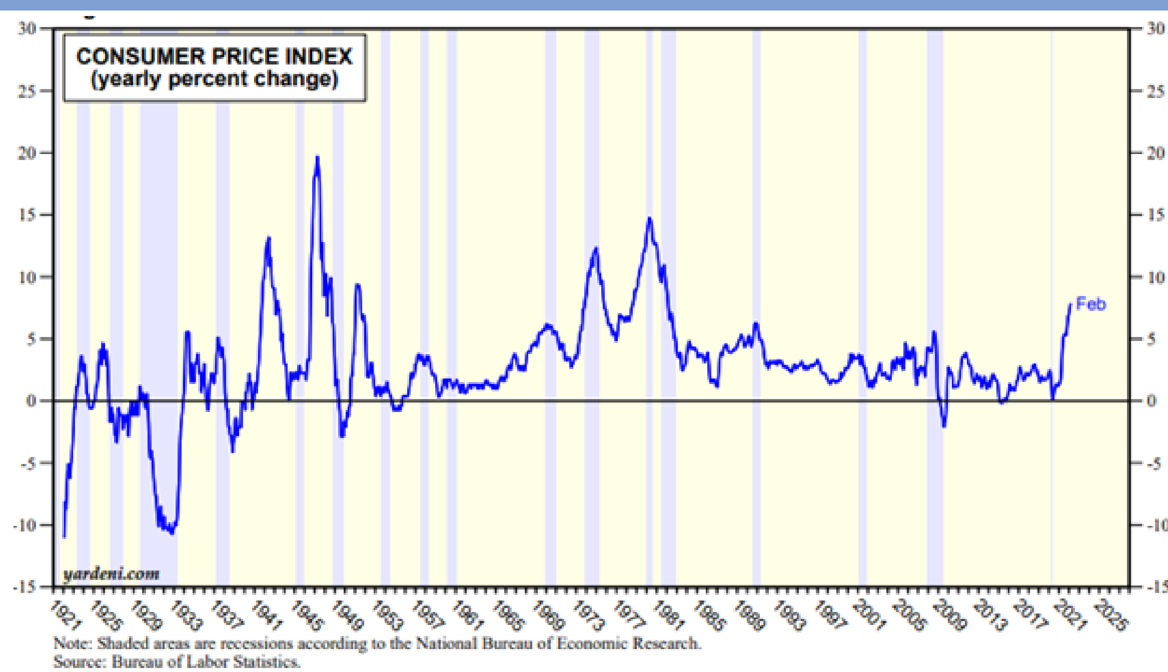
A complete review of the business and fundamental outlook for each company can be found in **Appendix 1**.

Closing Comments and Outlook

In closing, we attempted to cover some of the issues facing equity market investors currently, including inflation and how the Federal Reserve is addressing it, rising interest rates and the possible impact on the market going forward, the possibility of negative earnings surprises, the Ukraine situation and COVID-19. While we hope the latter two issues sort themselves out in a positive way, unless there is all out nuclear war, we don't think the long-term effects of either of these will overwhelm the markets.

However, the inflation factor, whether it is supply chain-related or more recently driven by the Ukraine situation, is in the crosshairs of the Fed's actions. The difference this time versus others is there is no Fed Put. In other words, the last time the Federal Reserve went too far in raising interest rates in 2018, which caused a market sell-off of -19.6% in the fourth quarter, it quickly reversed its position and the market recovered rapidly. However, the CPI inflation rate at that time was 1.9% not 7.9% as it is today, meaning there is a much greater need to raise rates. Also, given that we currently have a strong economy with an exceptionally strong labour market, the Fed has the ability to raise rates and there is a risk they go too far/too fast again which could tip the US economy into recession. **Exhibit 11** shows the historical impact that recessions have on demand and the resulting CPI inflation data. Unfortunately, recessions do work at killing inflation! They are just not the desired outcome.

Exhibit 11:
Consumer Price Index



Source: Ed Yardeni

Right now, based on what appears to be priced into the bond market in terms of interest rate increases, the impact of inflation on the shape of the yield curve and its corresponding impact on equity valuations so far, we see the picture as balanced. In other words, it appears that overall, there is a lot of monetary tightening built into this equation. In addition, given the overall strength of the economy and the double-digit accelerating earnings growth picture, we are prepared to wait this evolving environment out and see whether the Fed can manage a soft landing. In the meantime, we have raised some cash and detuned the volatility of the portfolio with a focus on high quality companies with sustainable earnings growth.

Peter Jackson
Chief Investment Officer
March 31, 2022

APPENDIX 1

NEW EQUITY INVESTMENTS:

NORTH AMERICAN EQUITY MANDATE

CANADA

CAE Inc.

CAE has two strong tailwinds at its back - airline traffic recovery and increased NATO defense spending. CAE is the leading training provider for civil aviation and defense markets. It has pilot training facilities around the world and provides military training to NATO countries and other allies. CAE's civil pilot training business will benefit as airlines prepare for a return to normal coming out of the pandemic. CAE's defense training business will benefit as NATO countries increase their defense spending to at least two percent of GDP. Most exciting, however, is the new level of profitability we expect CAE to be able to achieve after it rationalized facilities and expenses during the pandemic slowdown. We expect operating margins to pleasantly surprise investors going forward.

UNITED STATES

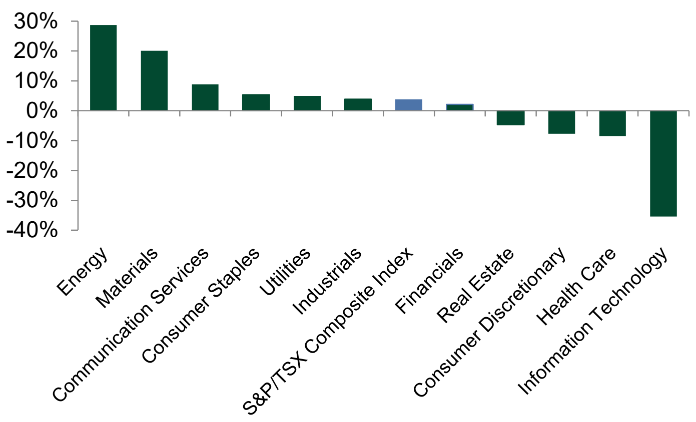
Linde

Linde is a company that produces gases. These gases include atmospheric gases (such as oxygen, nitrogen, argon) and process gases (such as carbon dioxide, helium, hydrogen). These gases are sold to customers in industries including Healthcare, Food & Beverage, Manufacturing, Chemicals and Electronics. Linde and two other competitors control approximately 70% of the global market. Due to the lack of competition, Linde is generally able to increase prices and pass through higher input costs to customers. Linde is also positioned to benefit from the move from fossil fuels to lower emission energy sources, a trend that may only be strengthened by the war in Ukraine. The company has been producing hydrogen for decades and is currently evaluating over 240 potential projects in carbon capture and Blue/Green Hydrogen. Sustainalytics has assigned Linde an ESG risk rating of "Negligible" and ranks Linde in the top two percentiles in terms of all companies globally for ESG risk. Finally, the company has been returning cash to shareholders. On February 28, 2022, Linde announced a 10% increase in the company's quarterly dividend and a new $10 billion share repurchase program. For these reasons, we think Linde is an attractive investment.

APPENDIX 2

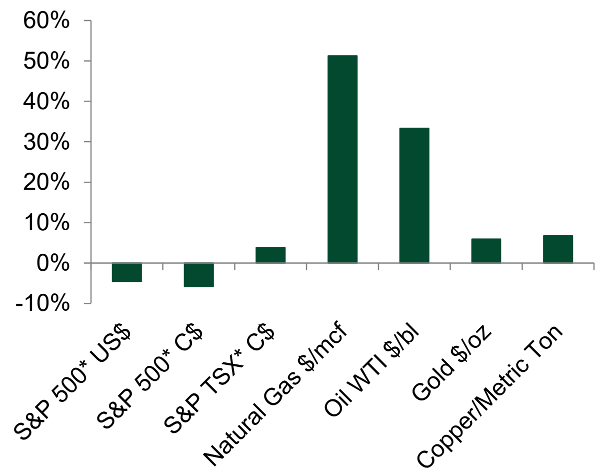
PERFORMANCE CHARTS

S&P TSX (C$ Total Returns)
Quarter Ending March 31, 2022



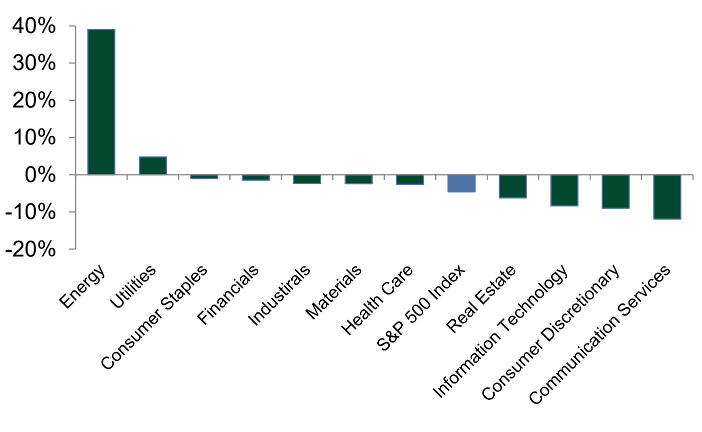
Source: TD Securities

Quarter % Change
Quarter Ending March 31, 2022



Source:Bloomberg *Total Returns

S&P 500 (US$ Total Returns)
Quarter Ending March 31, 2022



Source: TD Securities

*Cumberland and Cumberland Private Wealth refer to Cumberland Private Wealth Management Inc. (CPWM) and Cumberland Investment Counsel Inc. (CIC). CIC acts as sub-advisor to certain CPWM investment mandates.