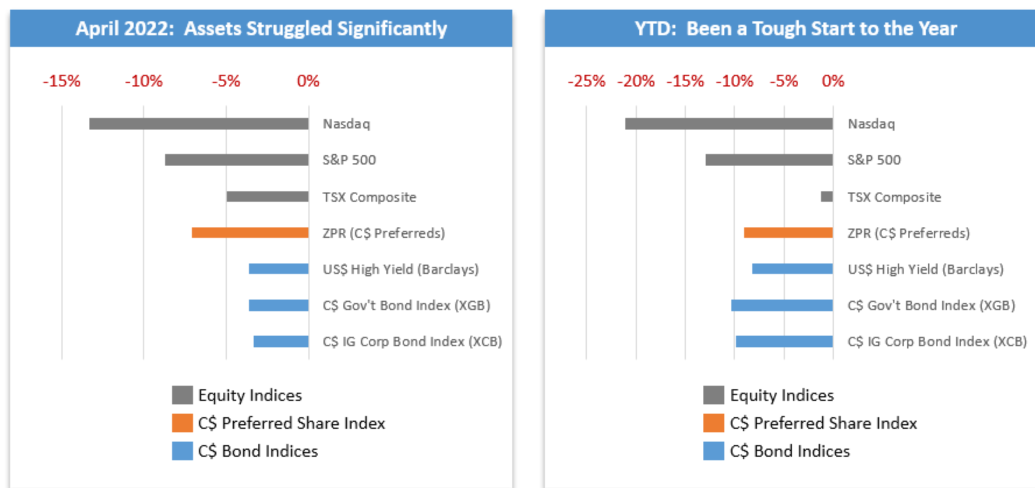
Historical Performance	1 yr	3 yr	5 yr	ITD
Arrow EC Income Advantage Alternative FD	-0.56	3.30	3.53	3.07

Returns as of April 30, 2022

In April, key market driving themes that have led to weakness thus far in 2022, continued to weigh on markets: inflation, central bank tightening, geopolitical tensions, and equity valuations/earnings. As such, virtually every asset class, outside of the commodities sector, had very disappointing returns. Interest rates spiked again, as markets priced in more aggressive hiking schedules for the major central banks, leading to additional losses within fixed income. The expedited tightening of monetary policy created weakness within equity markets as well, which, combined with disappointing earnings (including a few big Tech names), resulted in NASDAQ closing -13.3% and S&P500 -8.7% on the month. Canadian equities faired well by comparison, as the S&P TSX was down only -4.9%, due to the outperformance of energy and commodities. The charts below outline April's results on the left and YTD results on the right. They summarize the returns of all major Canadian indices (equities, preferred shares and fixed income) and highlight the positive correlation that currently exists across most major markets – unfortunately, thus far in 2022, this positive correlation is to the downside.

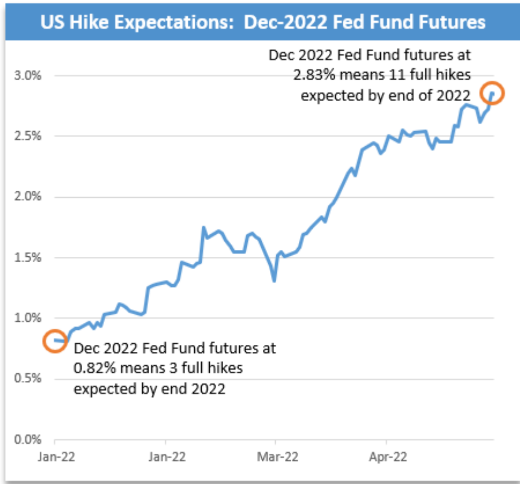


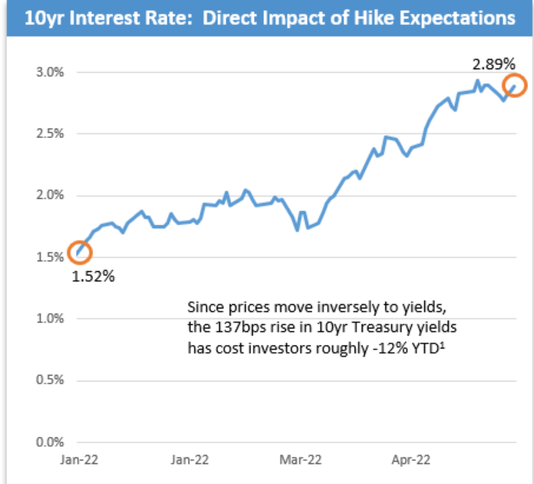
INTEREST RATES SURGED HIGHER (PRICES DROPPED) AS SIGNIFICANTLY MORE RATE HIKES WERE PRICED INTO THE MARKET

In April, the rates market priced a much faster tightening cycle, as global central banks are scrambling to raise rates from the extreme, never before experienced lows that were set during the height of the COVID-19 crisis. There is a rush to get closer to even a neutral level of interest rates, let alone an even higher, more appropriate level to help manage inflation, which is currently running out of control.

So how exactly do central banks impact interest rates so directly? Let's use the US as an example. The Federal Reserve (Fed) sets the Fed funds rate at their FOMC meetings. This Fed Funds Rate is the basis for all borrowing levels within the economy, as it sets the rate at which commercial banks borrow and lend their excess reserves to each other overnight. The below left shows the change in Fed Funds Futures, or the market's expectations for where the actual level of the Fed Funds Rate will be by Dec 2022. On Jan 1st the Fed Funds Rate was 0.08% (basically zero) and the Fed Funds Futures (for Dec 2022 contract) was at 0.82%. This means the market was expecting 3 hikes, as each 'hike' is a 25bp move. Fast forward to end of April, the Fed Funds Future contract (Dec 2022) is now trading at 2.83% or pricing in a total of 11 hikes in 2022. This means in 4 short months, market expectations have gone from only expecting 3 hikes this year to now expecting 11 full hikes –a massive move and change in expected timing of policy implementation to higher levels of rates.

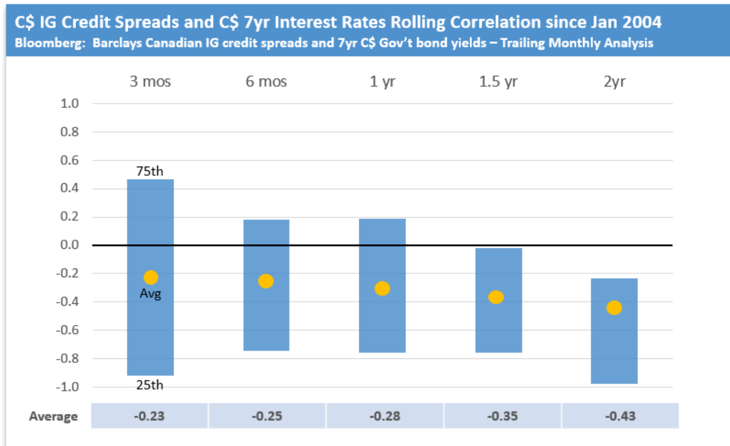
The direct relationship between Fed Funds and interest rates is clearly defined, as these extremely short-dated futures represent the starting point for pricing the U.S. Treasury yield curve from T-bills to long-term (30yr+) bonds. The chart at right shows the change in 10yr US Treasury bond yields over the same period as the Fed Funds Futures chart did at left. Ten year yields have risen by 137bps since the start of the year. This rise in rates has cost investors approximately -12%. No doubt a shocking loss to investors, who are holding a Treasury bond, guaranteed by the government of the United States, and widely referred to as a "risk-free" asset.





RATE RISE SHOULD BE SUPPORTIVE FOR CREDIT SPREADS GIVEN HISTORIC NEGATIVE CORRELATION

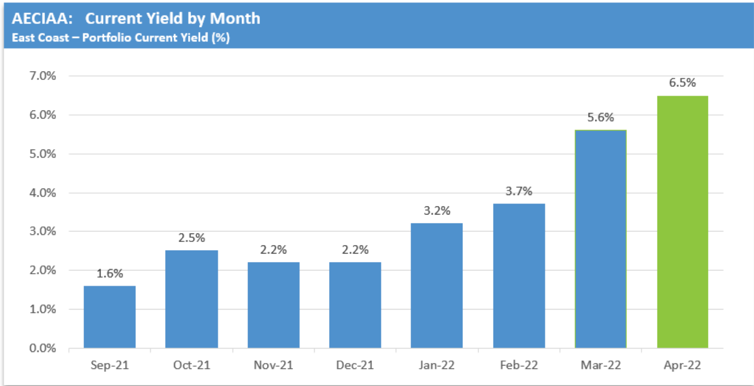
Investment grade (IG) credit spreads typically rally (compress) when interest rates sell-off (rise). We ran an analysis comparing the monthly moves of interest rates (7r GoC yields) and IG credit spreads (C$ Barclays Credit Index) with very similar duration to gauge the potential impact. The chart at right shows our findings – that interest rates and credit spreads have been negatively correlated since the credit spread data series inception (2004). The various trailing periods are along the X-axis, and the bars represent the 25th to 75th correlation percentile in each period, with an orange dot on the average (and displayed numerically along the bottom of chart). For example, using a one-year trailing period, the majority of 12-mos correlation periods analyzed were negatively correlated, with the 25th to 75th percentile range (blue bar) ranging between +0.18 correlation to -0.76 correlation, with an average correlation of negative -0.28. While negative correlation exists on average in as little as three months, the blue bar range is much greater, as the negative correlation is shown to strengthen as the period lengthens. Given this historic negative correlation, as the extreme rate volatility subsides, we believe the recent sell-off in rates will be supportive for credit spreads.

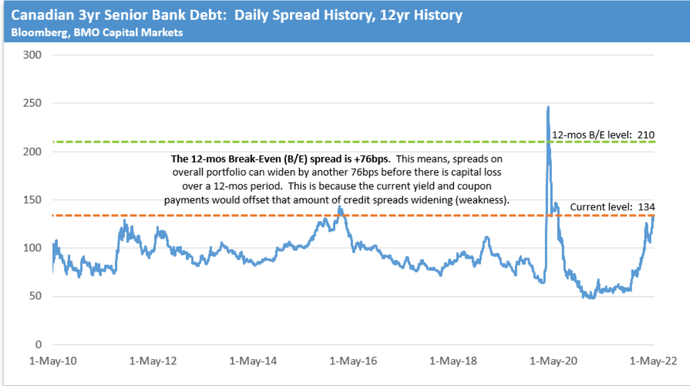


Risk asset weakness in early April spilled over into the investment grade credit space as well. The chart at left shows the daily credit spread of Canadian 3-yr senior bank debt, which we are using given the tenure is closest to our average asset term (maturity) of 2.2yr. It serves as a visual reminder of the net move wider (weaker) in spreads that has happened recently. This chart shows 12yrs of data, or 3,100 trading days. There have only been two brief periods where spreads have traded weaker (wider) than current levels.

During the oil crisis of 2016, C$ 3yr senior bank credit traded weaker than today's levels for 24 trading days and during the COVID-19 liquidity crisis, spreads traded weaker for 61 trading days. Over the last 12yrs there have been very few days where high-quality, investment grade exposure has traded more cheaply than right now. While we may continue to see credit spread volatility, and even weakness, in the near term; the probability of spreads rallying (tightening) from current levels is statistically very high, given historic levels. Bottom line - we believe the opportunity in IG credit is fantastic - from both a yield and capital gains perspective.

As investors know, our PMs began removing portfolio protection and adding exposure in Q1 2022. Below, the chart at left, shows our portfolio's change in current yield since Sept 2021, while at our most defensive. The current yield represents the return an investor would expect to earn over the course of one year. As spreads have widened, we have added additional exposure, and current yield has increased to 6.5%. While the increase in yield means price of assets has dropped, entering the period from a defensive position has meant the rise in credit spreads (yields) has cost investors only minimally to date. We are happy with our current yield, as it is comprised of high-quality, investment grade credits with an average life of 2.2yrs. Given the potential for further market volatility and the relatively tight risk premiums, we do not believe investors are being adequately compensated for taking additional default risk of high yield at this time. With spreads at such wide levels, we have been deploying our capital in the current market as we believe we are now getting paid for the capital we are putting at risk. These wider spreads and higher portfolio yields have resulted in a very sizeable 'buffer' for investor capital protection if spreads weaken (widen) further. The 12-mos forward break-even (B/E) is +76bps. This means spreads on the overall portfolio can widen by approximately 76bps before there would be a loss for investors over the next 12-mos period. If we look at the C$ 3yr senior bank debt spread chart again (below right), we have now added a visual green line at +210bps. This is +76bps higher than the current trading spread level of +134bps. This illustration highlights just how weak (wide) things would need to get for investors to end up with a net negative return experience over the next 12-mos. We believe the chance of a further +76bp widening remains unlikely and this B/E cushion should provide some comfort to investors if continued volatility, and even weakness, were to occur in the IG credit market. From a risk-adjusted return standpoint, if spreads were to widen +76bps and investors do not lose money on a 12-mos period, the questions we would ask is where are other risk assets in this environment? How low do you think the equity markets would be in this scenario? -10? or -15? or -20? ……





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The inception date of the Arrow EC Income Advantage Alternative Fund (formerly East Coast Investment Grade Income Fund) was April 26, 2012.

On June 26, 2020, the East Coast Investment Grade Income Fund (TSX: ECF.UN) was converted from a closed end fund into an open-end alternative mutual fund, renamed Arrow EC Income Advantage Alternative Fund and delisted from the TSX. Details of the conversion are outlined in the information circular which is available at www.sedar.com. Unitholders of Fund had their units redesignated as Series FD Units.

Commissions, trailing commissions, management and performance fees and expenses all may be associated with mutual fund and exchange-traded fund (ETF) investments. Please read the prospectus before investing. Unless otherwise indicated, the indicated rates of return are the historical annual compound total returns net of fees and expenses payable by the fund (except for figures of one year or less, which are simple total returns) including changes in security value and reinvestment of all distributions and do not take into account sales, redemption, distribution or optional charges or income taxes payable by any securityholder that would have reduced returns. Mutual funds and ETFs are not guaranteed, their values change frequently and past performance may not be repeated. You will usually pay brokerage fees to your dealer if you purchase or sell securities of an ETF on recognized Canadian exchanges. If the securities are purchased or sold on these Canadian exchanges, investors may pay more than the current net asset value when buying securities of the ETF and may receive less than the current net asset value when selling them.

The rates of return are used only to illustrate the effects of the compound growth rate and are not intended to reflect future values or returns on investment in an investment fund.

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The comparison presented is intended to illustrate the historical performance of Arrow EC Income Advantage Alternative Fund (the “Fund”) as compared with the historical performance of a widely quoted market index or a weighted blend of widely quoted market indices or other investment funds. There are various important differences that may exist between the Fund and the stated indices or other investment funds that may affect the performance of each. The objectives and strategies of the Fund result in holdings that do not necessarily reflect the constituents of and their weights within the comparable indices. Indexes are unmanaged and their returns do not include any sales charges or fees. It is not possible to invest directly in market indices. Certain statements contained in this communication are based in whole or in part on information provided by third parties and Arrow Capital Management has taken reasonable steps to ensure their accuracy. Market conditions may change which may impact the information contained in this document. Published May 2022.