

MACRO UPDATE



Dean OrricoPresident & CEO



Robert LauzonManaging Director & CIO

Equity markets fell during the final month of 2022, closing out a volatile year for investors. The S&P 500, TSX Composite and MSCI World returned -5.8%, -4.9% and -4.2%, respectively. On a full-year basis, these indices generated total returns of -18.1%, -5.8% and -17.7%. 2022 proved historic for markets after the Federal Reserve's aggressive interest rate hikes to combat the highest inflation in decades sent both stocks and bonds lower in tandem; resulting in the first year where both the 10-year Treasury note and the S&P 500 index lost more than 10% on a total-return basis in a given calendar year.

Full-year returns were consistent with the ubiquitous trend of value outperforming growth in 2022. In the US, value topped growth by more

than 20% (-9.6% vs. -29.8%) while the Canadian market, which has a higher concentration in cyclical and value stocks relative to the S&P 500, outperformed the US by more than 12%. Energy (+65.4%) and utilities (+1.6%) were the only two sectors in the S&P 500 that were able to generate positive returns, while communication services (-39.9%), consumer discretionary (-37%) and information technology (-28.2%) experienced outsized impacts from rising rates and growing concerns of recession. The biggest driver of underperformance for the latter group was multiple compression. Despite rampant inflation and ongoing supply chain issues, S&P 500 earnings were relatively resilient throughout the year. Conversely, average forward price to earnings multiples for the S&P 500 declined by more than 20% which dragged stock prices lower, especially those for higher multiple stocks.

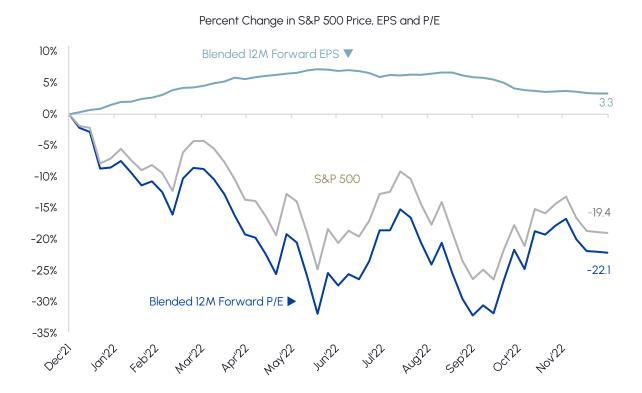
Russia's invasion of Ukraine, China's zero-COVID policy and hawkish monetary policy created macro headwinds which culminated in decadeshigh inflation. Fortunately, many of the headwinds

that plagued markets in 2022 are quickly becoming tailwinds for 2023. Inflation is trending lower in most countries as energy, freight and housing prices come down. China has made a notable pivot away from its zero-COVID stance; a development that should ease supply chain constraints and boost global demand. The Federal Reserve is likely nearing completion of its current rate hiking cycle which should lead to a normalization of the US dollar and less corresponding FX-related earnings headwinds.

It has become consensus opinion that stocks will remain under pressure during the first half of the year but could see a reprieve in the second half. Many notable market strategists continue to recommend defensive positioning as 2023 EPS estimates are still vulnerable to negative revisions.

We acknowledge that leading economic indicators are pointing to a recession this year and agree that beginning the year defensively positioned is appropriate; however, a market bottom could form sooner than many expect. December's abysmal price action may have pulled forward a potential market bottom by several months as markets are getting closer to fully pricing in a recession. Bear market lows often coincide with aggressive put option buying as investors seek downside protection, and the equity-only put: call ratio spiked a recordsetting 50% during the final week of the year.

MARKET WEAKNESS DRIVEN BY MULTIPLE COMPRESSION



Sources: Middlefield, Bloomberg. As at December 31st, 2022.

Ql'23 will be packed with companies providing full-year 2023 guidance which may cause a reset in earnings expectations. We expect opportunities to arise in areas we are currently underweight and intend to opportunistically add to our highest long-term conviction names on weakness.

2023 Macro Outlook

We hold a cautiously optimistic view for 2023 and expect stocks to be higher in a year. Our equity income strategies emphasize companies that can maintain or expand margins in the current environment to support dividend growth. We are focused on companies with strong balance sheets that can withstand an economic slowdown as well as opportunistically pursue M&A. We favour value over growth in the near-term, due to the potential for EPS misses and downgrades. If sentiment worsens in the weeks and months ahead, we intend to tactically deploy cash to capture upside potential in high-quality businesses trading at a discount.



HEALTHCARE

Middlefield Fund Tickers & Codes: MHCD / HWF / MID 625 / SIH.UN



Robert Moffat
Portfolio Manager

After trailing the S&P 500 for three consecutive years, healthcare generated impressive outperformance in 2022. The sector returned -2%, ranking fourth among all sectors and beating the Index by more than 16%.

Leadership was concentrated in defensive areas of the sector, including pharmaceuticals (+8.5%), large-cap biotech (+15.6%), managed care (+7.4%) and distributors (+39.7%). These areas tend to outperform during periods of economic uncertainty due to their steady demand and insulation from discretionary consumer spending. MedTech was a laggard as health care equipment (-18.9%) and life sciences tools & services (-22.9%) are more sensitive to supply chains, FX and labour constraints. Our healthcare funds were positioned defensively throughout the year which contributed to outperformance relative to the benchmark across all our healthcare strategies.

The outlook for healthcare in 2023 remains positive as it provides protection against a potential recession and negative EPS revisions. That said, we do not expect the same defensive

industries to outperform as significantly as they did last year. While we do not anticipate significant earnings revisions from these industries, we acknowledge the risk of a momentum reversal if markets adopt a more risk-on tone. Consistent with our macro outlook, we believe it is prudent to remain defensively positioned to start the year with a willingness to pivot to more growth-oriented industries once 2023 earnings estimates are reset lower. We are becoming increasingly bullish on the medium-term setup for MedTech and will look to add to our favorite dividend-paying names as opportunities arise. We may also increase exposure to select healthcare REITs and facilities that lagged in 2022 and are positioned for a rebound.

MASSIVE RETURNS DISPERSION AMONG HEALTH CARE SUB-INDUSTRIES



Sources: Middlefield, Bloomberg. As at December 31st, 2022.



REAL ESTATE

Middlefield Fund Tickers & Codes: MREL / MID 600 / RS / RA.UN / MSRE.UN



Dean Orrico

President & CFO

The real estate sector closed out a challenging year on a positive note, outperforming the broader market in December by 2.2% in Canada and 1% in the US. The December performance was particularly encouraging in a month where 10-year bond yields increased 36 bps in Canada and 27 bps in the US. Notwithstanding a strong finish to the year, the sector generated total returns of -21.5% and -26.2% for 2022, respectively.

The rapid and significant rise in interest rates, a widening of credit spreads and concerns about a recession took their toll on real estate sentiment and valuations in 2022. On a global basis, discounts to NAV are in excess of 20%, while Canadian REITs are trading at a discount of approximately 17%. This positions the sector attractively for 2023. Moreover, with inflation moderating alongside a softening economic growth outlook, the rise in long-term bond yields should be limited. Despite a slowing economy, we expect REIT earnings to remain largely intact this year due to the contractual nature of rental income and extensive mark-to-market rent opportunities.

It is also worth highlighting that there was a notable disconnect between the returns for publicly listed REITs and the private real estate market in 2022. While public REITs were down more than 20%, many private real estate funds revalued their portfolios higher by some 10% during the year. This same disconnect occurred in both 2008 and 2020 and, in both cases, public REITs rebounded nicely and outperformed in the following 12 to 24 months. More specifically, although higher interest rates are increasing the cost of both debt and equity, publicly listed REITs are reflecting increases in capitalization rates which are far greater than the levels experienced in prior recessionary periods. There were only four other years in the last 30 where publicly listed REIT returns were down by double digits and, in the year following a year of double digit declines, publicly listed REITs generated returns exceeding 30%.

Debt has become more expensive and companies are less likely to issue equity while trading at a discount to NAV. As a result, we are focused on



companies with strong balance sheets and promising organic growth prospects. This includes REITs with low net leverage and minimal exposure to floating-rate debt or near-term debt maturities. REITs that are currently generating below-market rents have the ability to renew leases at higher prices and grow their earnings without acquisitions or development. Due to ongoing supply/demand imbalances in Canada, industrial and multi-family REITs generally fit this description and are expected to grow their funds from operations by mid-to-high single digit percentages this year. These remain our preferred real estate asset classes entering 2023.

SUSTAINABLE INFRASTRUCTURE

Middlefield Fund Tickers & Codes: MINF / CLP.UN / MSRE.UN / MID 265 / MID 510 / ENS / ENS.PR.A



Robert LauzonManaging Director & CIO

In a year marked by macroeconomic uncertainty, utilities stood out, generating a positive return and beating the S&P by 19.7%. Historically, utilities have outperformed the S&P 500 by approximately 5.5% on average in the quarter prior to recessions, given the sector's earnings stability and its defensive characteristics. Throughout 2022, we remained invested in the utilities sector due to its modest volatility, high dividend yield and robust fundamentals, supported by record electricity prices and favorable regulatory policies.

Looking ahead, we are confident in the sector's ability to attract further capital spending and growth. The transition to clean energy and ongoing structural electrification trends are being supported by a positive regulatory environment and investment in low-carbon technologies. Investment will also be required in grid hardening and advanced metering infrastructure as regions prepare for extreme weather events that challenge the resilience of power grids such as

droughts, hurricanes, heat waves, and wildfires. In addition, we expect funds from the \$1.2 trillion Infrastructure Investment and Jobs Act to start flowing into the sector next year.

The declining Levelized Cost of Energy (LCOE) of renewable technologies is expected to result in lower-cost alternatives for consumers and margin expansion opportunities for renewable power producers. The Inflation Reduction Act's manufacturing and production credits are expected to further strengthen margin upside for these companies. In the electric utilities space, we prefer underappreciated names with strong cash flow generation, proven dividend growth and favorable risk-reward profiles. We believe that downward revisions to S&P 500 earnings estimates could further enhance the sector's value proposition.



TECHNOLOGY & COMMUNICATIONS

Middlefield Fund Tickers & Codes: MINN / WORK.UN / SIH.UN / MID 925



Shane ObataPortfolio Manager

The Nasdaq Composite fell 8.6% in December, ending 2022 at -33.1% and marking its worst year since the financial crisis. Coming into 2023, we are maintaining our focus on companies with reasonable valuations, high profitability (for example, high return on invested capital) and strong balance sheets, characteristics we believe will provide a "margin of safety" in what could be a challenging 2023 for the sector from a macro standpoint.

With inflation falling but still elevated, we expect central banks will maintain their hawkish stances and do what they can to ensure that financial conditions do not loosen significantly. Against that backdrop, we are largely avoiding unprofitable companies – especially ones that are far from inflecting – and focusing on several industries that we expect will prove their defensiveness in early 2023.

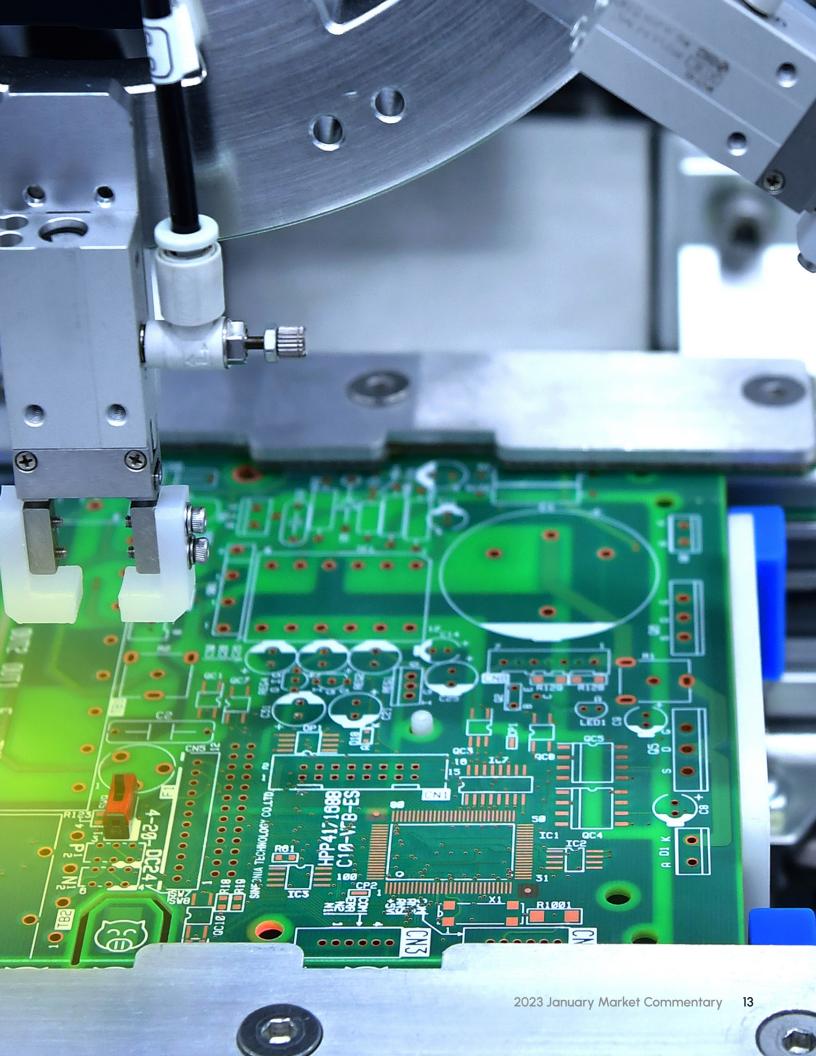
We continue to like US telecom at current prices.

T-Mobile remains our top pick though we also like

AT&T and Verizon due to their extremely low

valuations and high dividend yields, which should be supported by lower CapEx and thereby higher free cash flow in 2023. We are also finding selective value in FANG+ and semiconductor stocks. For example, Meta remains extremely cheap, with macro concerns about advertising and worries about the metaverse sufficiently priced into the stock. We would also note that while Meta's spending program remains massive, most of it is targeted to improve the company's Al capabilities. We view this as necessary to keep users engaged and improve targeting following the Apple privacy fallout.

AMD remains a high conviction idea within semis. Though we acknowledge the company may continue to suffer from PC-related headwinds in the short run, the core of the bull thesis is that AMD will likely continue gaining market share in the highly attractive server market at Intel's expense. The latter is spending a lot of money to improve its own design capabilities while also building out its foundry. Even so, there is no guarantee the company will catch up to its competitors.



RESOURCES

Middlefield Fund Tickers & Codes: AGR.UN / MID 161 / ENS / ENS.PR.A / MID 265



Dennis da Silva Senior Portfolio Manager

Gold finished the year at a 6-month closing high of \$1,824, up more than 3% in December. We are constructive on gold prices due to its safehaven qualities and the growing consensus for a recession this year. Gold returns have averaged 13% in the 12-month periods following the last six recessions. Gold equities have also started to show signs of relative strength to the underlying gold price and the broad market. We believe higher gold prices and improving cost structures for miners will result in expanding margins and capital flows into the sector.

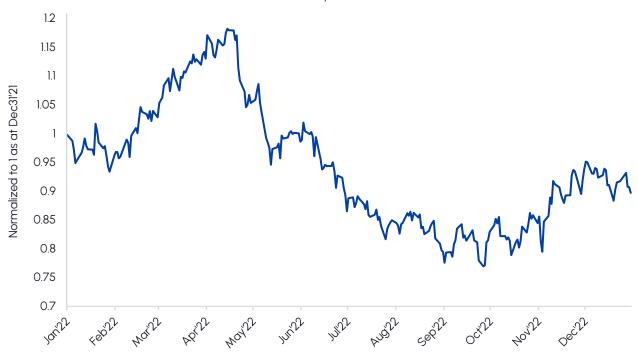
On December 9th, the Canadian government announced a new strategy to ramp up sustainable production and processing of critical minerals vital to power electric vehicles. The plan highlights the generational opportunity embedded in the energy transition and the central role Canada can play in the extraction and processing of required materials. We view Canada as having an advantage over other countries given its extensive history in mining and manufacturing, and experience in developing projects to a high standard of sustainability with environmental protections.

Oil prices reached their lowest point of the year in early December, almost breaking the US\$70/ bbl level before recovering to US\$80/bbl to finish the year. The EU embargo on Russian crude came into effect on December 5th and is expected to tighten markets, even if the incremental tightening happens more slowly than expected. OPEC+ will be crucial for supporting oil prices in the coming months and, while there is no meeting scheduled until June 2023, it would not be a stretch for the group to step in with additional supply cuts if oil prices were to fall further.

Potash producer Mosaic announced in early December a temporary curtailment in production at its Colonsay mine (12% of company capacity). We are not concerned by the announcement as it is not unusual for Canadian potash producers to shut down a mine over the winter to control inventories and for maintenance work. Colonsay has been the swing producing Saskatchewan mine for many years and this could be the initial step in a bottoming process for potash prices the market has been anticipating. Expectations remain that US and Brazilian potash inventory levels will be worked down in early 2023, setting the stage for improved global potash demand.

GOLD STOCKS SHOWING RELATIVE STRENGTH WITH ROOM TO RUN

GDX ETF / Spot Gold



Sources: Middlefield, Bloomberg. As at December 31st, 2022.

ESG

Environmental, Social and Governance

Middlefield Fund Tickers & Codes: MDIV / MINF / CLP.UN / SIH.UN / AGR.UN / MSRE.UN





Stephen Erlichman
Chair, ESG (Environmental, Social and Governance)

As the new year commences, it will be interesting to see what will take place in the ESG space in the next 12 months. This month's ESG commentary describes some of the many ESG developments that Middlefield will be following in 2023.

- The Canadian Securities Administrators (CSA), the U.S. Securities and Exchange Commission (SEC), the European Financial Reporting Advisory Group (EFRAG) and the International Sustainability Standards Board (ISSB) have all published draft rules for climate-related disclosures by companies and requested comments on those drafts. Thousands of comments were submitted to the SEC and hundreds of comments were submitted to each of the CSA, the EFRAG and the ISSB. In those comments from both companies and institutional investors, one major theme is a request that whatever climate-related disclosure rules ultimately are passed by the various organizations, the reporting requirements should as far as possible be consistent with each other, in order that companies are not faced with complying with (and asset managers are not faced with analyzing disclosure under) different and possible inconsistent rules. Accordingly, institutional investors and companies will be watching if and how consistency will be accomplished by the CSA, the SEC, the EFRAG and the ISSB in regard to climate-related disclosure requirements in 2023.
- 2. Asset managers and other institutional investors are starting to look at companies' biodiversity risks and strategies as part of investors' ESG integration process. Biodiversity risk was a key issue at the United Nations Biodiversity Conference (COP 15) held in Montreal in December 2022. COP15 ended with the adoption of a global biodiversity framework (GBF) aimed to address biodiversity loss, restore ecosystems and protect indigenous rights. The GBF includes measures to halt and reverse nature loss, including putting 30% of the world and 30% of degraded ecosystems under protection by 2030. Institutional investors and companies will be keeping watch on the progress of the GBF, as well as the status of a final nature-related risk and opportunity disclosure framework for companies that the Taskforce on Nature-related Financial Disclosures (TNFD) is expected to release by the end of 2023.
- 3. Legislation is pending or recently enacted in various jurisdictions around the world dealing with "modern slavery" issues, including requiring companies to conduct due diligence on humanrights violations such as human trafficking, child labor and forced labor in their supply chains. For example, in Canada federal Bill S-211 (called the Modern Slavery Act) is in third reading in the House of Commons and, if enacted, will require companies to file an annual report

- identifying, among other things, areas of risk for forced labor or child labor in their supply chains and measures taken to remediate such risks. Institutional investors will be watching the progress of such legislation and the resulting disclosures that will be made by companies in their securities portfolios.
- 4. Major institutional investors such as Blackrock, State Street and Vanguard have started to implement "pass through" voting which allows certain of their clients to vote portfolio securities directly rather than having Blackrock, State Street or Vanguard make the voting decision. This process is being called the "democratization of shareholder voting". It will be interesting to see which clients are offered this pass-through voting, which clients actually start to use their pass-through voting rights, whether the use of pass-through voting affects actual voting results at companies and, if yes, whether that fact in turn will change how companies engage with their shareholders in the future.
- 5. The issue of cybersecurity at companies has been a major topic for several years, given the increasing number of cybersecurity attacks and the costs involved in warding against cybersecurity attacks and in paying ransomware resulting from such attacks. In the U.S. in 2022 the SEC proposed new cybersecurity disclosure requirements for public companies requiring, among other things, enhanced disclosure regarding how boards of directors oversee cyber risk. It will be interesting to see what final cyber rules the SEC adopts, whether the CSA then

- follows suit for Canadian public companies, and whether new cyber disclosure rules result in changes at companies such as recruiting directors with expertise in cybersecurity risk management.
- 6. Companies may worry about possible litigation or regulatory action if their public disclosure of ESG information is found to be misleading. In order to provide accurate information, companies are starting to obtain "assurance" on their ESG disclosures and to include an assurance report with their ESG disclosures. Assurance can be internal (e.g., from a company's internal auditors) or can be external (e.g., from a company's outside auditor or from an engineering firm or another type of consultant knowledgeable about the company's business) and can cover greenhouse gas emissions (GHG) as well as various other types of ESG information. In 2021 the CSA asked for comments as to whether some form of assurance should be required for GHG emissions reporting for Canadian public companies, while Europe's Corporate Sustainability Reporting Directive published in 2022 will subject companies to independent certification requirements of their sustainability reporting. It will be interesting to see how assurance progresses in the future in Canada and around the world.
- 7. The topic of ESG ratings made the headlines again in 2022. When one rating agency gives a company a high ESG rating and another rating agency gives that same company a low ESG rating, questions have arisen as to the transparency of the ratings criteria, the

methodologies used to create the ratings, and whether conflicts of interest exist at ratings agencies. Accordingly, in 2023 institutional investors and companies will be watching to see if rating agencies will be regulated in some manner rather than being subject only to voluntary governance guidelines.

8. The "anti-ESG backlash" that has permeated certain aspects of U.S. politics does not seem to be abating. One consequence of the backlash is that some state governments have passed legislation that has resulted in certain asset managers, which have been the most visible in espousing ESG considerations as part of their investing process, losing hundreds of millions of dollars or more of managed assets from institutions in those states.

As a result, some institutional investors have started to become less visible on investing using ESG criteria, sometimes even shying away from referring to ESG in their voting guidelines and instead referring to the term "sustainability". It will be interesting to see what happens with the anti-ESG backlash in 2023, in the U.S. and elsewhere in the world

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EXCHANGE TRADED FUNDS (ETFS)

Fund	Ticker	Strategy
Middlefield Real Estate Dividend ETF	MREL	Real Estate
Middlefield Healthcare Dividend ETF	MHCD	Healthcare
Middlefield Health & Wellness ETF	HWF	Healthcare
Middlefield Sustainable Infrastructure Dividend ETF	MINF	Sustainable Infrastructure
Middlefield Sustainable Global Dividend ETF	MDIV	Sustainable Global
Middlefield Innovation Dividend ETF	MINN	Innovation
Middlefield U.S. Equity Dividend ETF	MUSA	U.S. Dividend

MUTUAL FUNDS (FE | F)

Fund	Codes	Strategy
Middlefield Global Real Estate Class	MID 600 601	Real Estate
Middlefield Global Healthcare Dividend Fund	MID 325 326	Healthcare
Middlefield Global Infrastructure Fund	MID 510 501	Global Infrastructure
Middlefield Income Plus Class	MID 800 801	Equity Balanced
Middlefield Global Dividend Growers	MID 181 182	Global Dividend
Middlefield U.S. Dividend Growers Class	MID 710 701	U.S. Dividend
Middlefield Global Agriculture Class	MID 161 162	Global Agriculture
INDEXPLUS Income Fund	MID 435 436	Canadian Dividend
Middlefield Canadian Dividend Growers	MID 148 149	Canadian Dividend
Middlefield Global Energy Transition Class	MID 265 266	Energy
Middlefield Innovation Dividend Class	MID 925 926	Innovation

TSX-LISTED CLOSED END FUNDS

Fund	Ticker	Strategy
MINT Income Fund	MID.UN	Equity Income
Sustainable Real Estate Dividend Fund	MSRE.UN	Sustainable Real Estate
International Clean Power Dividend Fund	CLP.UN	Sustainable Power
Middlefield Global Real Asset	RA.UN	Real Assets
Sustainable Agriculture & Wellness Dividend Fund	AGR.UN	Sustainable Agriculture
Sustainable Innovation & Health Dividend Fund	SIH.UN	Innovation & Healthcare
Workplace Technology Dividend Fund	WORK.UN	Enterprise Technology

TSX-LISTED SPLIT SHARE CORPS. (CLASS A | PREFERRED)

Fund	Ticker	Strategy
E-Split Corp.	ENS ENS.PR.A	Energy Infrastructure
Real Estate Split Corp.	RS RS.PR.A	Real Estate

LSE-LISTED INVESTMENT FUND

Fund	Ticker	Strategy
Middlefield Canadian Income Trust	MCT	Canadian Equity Income

Commissions, trailing commissions, management fees and expenses all may be associated with mutual fund investments. Please read the prospectus before investing. You will usually pay brokerage fees to your dealer if you purchase or sell units/shares of investment funds on the Toronto Stock Exchange or other alternative Canadian trading system (an "Exchange"). If the units/shares are purchased or sold on an Exchange, investors may pay more than the current net asset value when buying and may receive less than the current net asset value when selling them. There are ongoing fees and expenses associated with owning units or shares of an investment fund. An investment fund must prepare disclosure documents that contain key information about the fund. You can find more detailed information about the fund in these documents. Mutual funds and investment funds are not guaranteed, their values change frequently and past performance may not be repeated. Certain statements in this disclosure are forwardlooking. Forward-looking statements ("FLS") are statements that are predictive in nature, depend upon or refer to future events or conditions, or that include words such as "may", "will", "should", "could", "expect", "anticipate", "intend", "plan", "believe", or "estimate", or other similar expressions. Statements that look forward in time or include anything other than historical information are subject to risks and uncertainties, and actual results, actions or events could differ materially from those set forth in the FLS. FLS are not guarantees of future performance and are by their nature based on numerous assumptions. Although the FLS contained herein are based upon what Middlefield Funds and the portfolio manager believe to be reasonable assumptions, neither Middlefield Funds nor the portfolio manager can assure that actual results will be consistent with these FLS. The reader is cautioned to consider the FLS carefully and not to place undue reliance on FLS. Unless required by applicable law, it is not undertaken, and specifically disclaimed that there is any intention or obligation to update or revise FLS, whether as a result of new information, future events or otherwise.

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