2023 PERFORMANCE REVIEW

Evolve Innovation Index Fund

EDGE provides investors with access to global companies that are involved in innovative or disruptive trends across a broad range of industries.

TSX **EDGE**

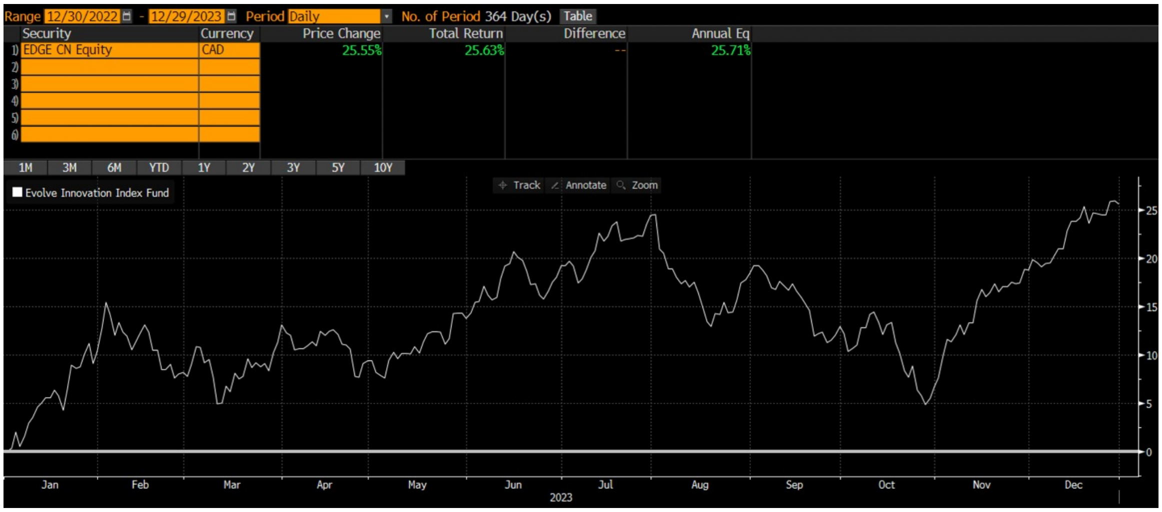
ETF TICKERS: EDGE (HEDGED); EDGE.U (USD)
MUTUAL FUND FUNDSERV CODE: EVF160 (CLASS F); EVF161 (CLASS A)

Investment Thesis: **Innovation is a long-term, key driver of global economic growth. Access 8 themes that are reshaping our world. Data and AI are at the center of technological innovation.**

8 Themes

1. **Cybersecurity:** Non-discretionary need to protect our data infrastructure
2. **Cloud Computing:** Store and access data through the internet
3. **5G:** Increasing wireless delivery speeds and efficiencies to connect the world
4. **Automobile Innovation:** The car is becoming digital: Autonomous, Connected & Electric
5. **Genomics:** Better drugs, developed in a fraction of the time at lower costs
6. **Robotics & Automation:** Rise of robots will boost productivity and economic growth
7. **Fintech:** Transforming how financial services are delivered and consumed
8. **eGaming:** Largest and fastest-growing entertainment sector

Performance



Source: Bloomberg, as at December 29, 2023.

The Evolve Innovation Index Fund (EDGE) had a strong year, returning 25.63% in 2023, but underperformed major technology indices due to lower exposure to the top performing big tech names. Although, when the rally began to broaden in November and December, EDGE.U outperformed both S5INFT and NDXT10.

TOTAL RETURN PERFORMANCE[1] (%)						
TSX TICKER	1 YEAR	2 YEAR	3 YEAR	4 YEAR	5 YEAR	SINCE INCEPTION*
EDGE	25.63	-8.53	-2.09	9.90	14.10	9.68

Source: Bloomberg, as at December 29, 2023. * Performance since inception of EDGE on April 30, 2018.

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Technology Sector Overview

2023 was a very strong year for the technology sector with major technology indices such as the S&P 500 Information Technology Index (S5INFT) and the Nasdaq-100 Technology Sector Adjusted Market Cap Index (NDXT10) up 57.84% and 85.37%, respectively. Innovations in Artificial Intelligence (AI) and the increasing popularity of Large Language Models (LLMs) such as OpenAI's ChatGPT, were a key driver in the sector's success due to expected increases in productivity. However, these gains were primarily concentrated within the 'Magnificent 7' (Apple, Microsoft, Alphabet, Amazon, Nvidia, Tesla and Meta) who collectively returned 75% in 2023. Although, towards the end of 2023, the tech rally began to broaden significantly driven by expectations of interest rate cuts in 2024.

Theme	Contribution to Return*
Cloud Computing	6.0%
Robotics & Automation	6.0%
Cyber Security	5.1%
Fintech	3.7%
5G	3.5%
E-Gaming	2.5%
Automobile Innovation	-0.4%
Genomics	-1.7%

*Approximate values only.

Six of EDGE's eight themes positively contributed to the fund's performance in 2023, a stark contrast to 2022 when all themes were detractors. Cloud Computing, Robotics and Automation, and Cybersecurity, all sectors heavily impacted by AI, were the primary contributors to the fund's performance for the year, while Automobile Innovation and Genomics were the only two detractors.

Cloud Computing

Cloud computing was the top contributing theme to EDGE's performance in 2023. The sector returned over 50% for the year resulting in a 6.0% contribution to the fund's total returns.

Through the year, the cloud computing industry demonstrated remarkable growth, with a market size estimated at $563.6 billion. Gartner forecasts a further increase in worldwide public cloud end-user spending to total $678.8 billion in 2024, signifying a growth of 20.4% from 2023. This growth is driven by evolving business needs and emerging technologies like Generative AI (GenAI), which are reshaping cloud models. Cloud service segments, including Infrastructure-as-a-Service (IaaS) and Platform-as-a-Service (PaaS), are expected to see the highest growth rates in 2024.[1]

The sector continues to be dominated by Amazon, Microsoft and Google each with a market share of 32%, 22%, and 11%, respectively. The next largest player, Alibaba, is significantly behind at around 4% market share.[2] These companies benefitted dramatically from the AI rally with each of them up over 50% this year.

In their most recent quarterly earnings, Microsoft Azure reported a significant 29% revenue increase in its Azure segment, with AI's growing contribution being a notable factor. Azure's focus on AI, in partnership with OpenAI, and enhanced GPU capacities, has been crucial for its growth.[3] On the other hand, AWS, experienced a slower growth rate of 12%. This slowdown is reflective of the broader trend of cost optimization among businesses. Despite this, AWS has improved its operating margin, indicating effective cost management strategies.[4] Google Cloud achieved a 22% growth rate but fell short of revenue expectations. However, it marked a significant shift to operating profit, emphasizing Alphabet's focus on integrating generative AI technology and implementing cost-cutting measures.[5]

Robotics and Automation

The Robotics and Automation sector had a very strong 2023, returning over 70% and contributing 6.0% to EDGE's total return. Robotics and Automation was another key beneficiary from AI. Semiconductor stocks led the way with Nvidia and AMD among the top 3 contributors to the fund, returning 230.76% and 127.41% respectively.

Nvidia, which makes the chips that power generative AI, became just the ninth company to ever achieve a market cap of $1 trillion dollars on the back of drastic increases in expected demand for these chips as AI innovation continues to accelerate.[6] Over the course of a decade, Nvidia established itself as a dominant force in the production of AI chips specialized for tasks like image recognition, facial recognition, speech recognition, and text generation for chatbots. This success was achieved by early recognition of the AI trend, chip customization, and the development of essential AI software tools. Led by CEO Jensen Huang, Nvidia further solidified its position by offering customers access to specialized hardware, computing services, and tools, effectively becoming a comprehensive solution provider for AI development. Today, Nvidia commands over 70% of the AI chip market and an even larger share in training generative AI models, according to research firm Omdia.[7] As a result, Nvidia significantly outperformed its competitors AMD and Intel through 2023.

However, both AMD and Intel are intensifying their efforts to compete with Nvidia in the AI accelerator chip market. AMD recently unveiled its MI300 lineup, aiming to outpace Nvidia by running AI software faster. AMD's CEO, Lisa Su, projected that the AI chip industry could surpass $400 billion in the next four years, highlighting the rapid growth expectations in this sector.[8] Meanwhile, Intel introduced Gaudi3, a forthcoming AI chip that will rival Nvidia's H100 and AMD's MI300X, as both companies seek to challenge Nvidia's dominance in supplying AI chips, especially for large-scale AI models like OpenAI's ChatGPT.[9]

Cybersecurity

Cybersecurity was another significant contributor to the performance of EDGE. The sector was up over 40% for the year, contributing 5.1% to the fund's total return. Cybersecurity companies were impacted by several notable factors through 2023 including geopolitical tensions, new reporting regulations and advancements in AI.

Geopolitical tensions, exemplified by Russia's cyberattacks on Ukraine, have played a significant role in shaping the cybersecurity landscape. While these attacks have caused disruptions and stolen data, they fell short of catastrophic destruction, prompting Ukraine to enhance its cyber defenses and share valuable lessons learned. The collaboration between Ukraine and the United States, along with involvement from American tech companies, has led to increased cyber cooperation and the adoption of best practices in critical infrastructure sectors. This geopolitical context has underscored the importance of cybersecurity and prompted nations to strengthen their defenses against cyber threats.[10]

The Securities and Exchange Commission (SEC) has introduced new regulations that require companies, including those in the cybersecurity industry, to disclose material cybersecurity incidents in a consistent and comparable manner. These rules mandate companies to report any material cybersecurity incidents on a new Form 8-K item, including details about the incident's nature, scope, timing, and its material impact or potential impact. This increased transparency and reporting framework will have significant implications for companies in the cybersecurity sector as companies prioritize investments in cybersecurity to decrease the risk of disclosing an incident.[11]

On the technological front, the industry has been vigilant about the potential misuse of AI technologies in cybercrime. While the adoption of AI has brought new capabilities to both defenders and attackers, the industry's proactive stance on integrating AI into security measures has been a crucial factor in maintaining a strong defense against AI-assisted threats. This integration of AI into cybersecurity is not only a shield against potential threats but also an avenue for growth, as companies that innovate in AI-security integration could see high returns.[12]

CrowdStrike and Palo Alto Networks have both showcased exemplary performances, solidifying their positions as top performers in the cybersecurity industry, each returning over 100% in 2023. CrowdStrike's remarkable growth, highlighted by significant advances in its Falcon Cloud Security and Falcon Identity Protection segments, complements its achievement of surpassing the $3 billion annual recurring revenue (ARR) milestone. This success is underpinned by robust demand for its AI native XDR platform and notable strides in cloud security and identity businesses. Similarly, Palo Alto Networks continues its impressive trajectory with sustained revenue growth, propelled by its platformization strategy and strong contributions from next-generation security capabilities. The company's consistent performance is further bolstered by notable achievements in its software and cloud-based businesses, emphasizing its leadership in the evolving cybersecurity landscape.

Fintech

Despite a general deceleration in the broader fintech industry, the theme was a substantial contributor to EDGE's overall performance, returning over 30% and contributing 3.7% to the fund's 2023 performance. AI integration was also a major theme in fintech in 2023, and companies who have successfully begun leveraging AI in their products saw impressive returns.

Shopify stood out as a remarkable success story, rebounding from a challenging 2022 to become the fund's second-largest contributor with a 122.49% return for the year. The company saw accelerated revenue growth, driven by substantial expansion in B2B and retail segments. Shopify's introduction of AI-powered features and enhancements to payment systems resulted in improved operational efficiency, contributing to solid growth in gross merchandise value, revenue, gross profit, and free cash flow margin.

Intuit also demonstrated significant gains, up 61.75% in 2023. The company exhibited robust financial performance throughout the year, marked by revenue growth and notable margin expansion. Intuit's strategic focus on its AI-driven expert platform, bolstered by significant investments in talent, data, and AI, continued to bear fruit. The company's efforts in digitizing B2B payments, integrating Mailchimp into its platform, and transforming consumer and business tax categories with offerings like TurboTax Live and Intuit Assist contributed to its strong financial results.

PayPal was the largest of only two detractors within EDGE's fintech holdings, dropping 16.14% over the year. The company faced challenges that contributed to its underperformance compared to other fintech companies. PayPal struggled with market share loss to Apple Pay, particularly in the mobile payment space, where younger demographics increasingly favor newer payment methods like Apple Pay and buy-now-pay-later options. Additionally, PayPal's Venmo, once a leading peer-to-peer payments platform, faced competition from Zelle and encountered difficulties in improving its monetization profile. Moreover, margin challenges emerged as lower-margin unbranded checkout products became a more significant portion of PayPal's business, potentially impacting its gross profit.[13]

5G

In 2023, the global 5G landscape witnessed significant expansion and progress in key markets. With 537 million new 5G connections added in Q3, the world reached a total of 1.6 billion 5G connections, indicating a substantial increase over the past year. Projections from Omdia suggest that this growth trend is likely to continue, with an estimated 1.8 billion 5G connections by the end of 2023 and a forecasted 7.9 billion by 2028, driven by advancements like 5G-Advanced networks and preparations for 6G. North America emerged as a prominent region in 5G deployment, demonstrating a strong commitment to advancing the technology, while Latin America and the Caribbean showcased encouraging progress in early-stage 5G adoption. Globally, the number of deployed 5G networks now rivals that of 4G LTE networks, with ongoing investments in 5G infrastructure worldwide. Overall, the 5G landscape presented a cautiously optimistic outlook, with continued innovation and cooperation expected to unlock its transformative impact on various industries.[14]

5G chipset manufacturers saw the highest returns in 2023 on the back of expanding 5G networks and developments in Artificial Intelligence increasing demand for chips. Marvell Technology, Qualcomm and Samsung Electronics were the top 3 performing 5G holdings in the fund, returning 59.22%, 31.37%

and 31.00% respectively. Comparatively, telecom stocks faced a challenging year in 2023, with many experiencing losses. Issues related to legacy telecom companies potentially facing liabilities due to lead materials in network cables contributed to these setbacks. Additionally, the significant debt burden associated with the costly rollout of 5G technology, heightened competition in the industry, and a fickle customer base willing to switch providers for better deals all contributed to lower profit margins and hindered the performance of telecom stocks during the year.[15]

E-Gaming

Although underperforming most other tech sectors, EDGE's E-Gaming sector still returned almost 20% in 2023. The market saw modest growth with the global games market generating $184.0 billion, up 0.6% year-on-year, and forecasted to grow to $205.7 billion by 2026. This growth is echoed in the performance of specific gaming segments, with console gaming growing by 1.9% to $53.2 billion and the PC segment by 3.9% to $40.4 billion. These segments are significant components of HERO's investment focus, which may benefit from such industry expansions. Furthermore, the continued player and payer growth, especially in emerging regions, supports a positive outlook for the gaming industry's future revenue streams and, by extension, the ETF's potential performance.[16]

A transformative event in 2023 was Microsoft's acquisition of Activision Blizzard, valued at $69 billion, which brings a vast library of popular franchises under one corporate umbrella. This acquisition, the largest in Microsoft's history, has major implications for the gaming ecosystem and is expected to significantly shift the balance of power within the industry in favor of Microsoft and Xbox.[17]

Additionally, the release of new consoles, such as Sony's PlayStation 5 Pro and Microsoft's Xbox Series Z, represents significant hardware advancements that are likely to drive consumer spending in the gaming sector. New-generation graphics cards and processors that hit the market also enhance the gaming experience for PC gamers.[18]

Automobile Innovation

The automobile innovation sector, navigated a turbulent 2023, characterized by a 7%decline over the year contributing -0.4% to EDGE's total performance. The industry grappled with downward pricing pressures, with major EV players like Tesla slashing vehicle prices, resulting in a substantial reduction in company revenues. This trend was a response to excess inventory and shifting consumer expectations, as evidenced by JD Power surveys indicating a high willingness to purchase EVs among U.S. car shoppers, yet a gap in finding options within their financial reach.[19, 20]

Despite these challenges, the sector displayed signs of robustness, with China's EV sales hitting record numbers even after an 11-year subsidy program ended. This growth suggests a sustained consumer interest and a potential untapped market that could support recovery.[21] Moreover, the widespread adoption of Tesla's North American Charging Standard (NACS) by several automakers, including legacy brands and newcomers, points to a collaborative shift towards standardized EV infrastructure, which could streamline operations and consumer experience in the long term.

Unfortunately, charging companies were some of the hardest hit in 2023 following EV makers adopting Tesla's NACS. Blink Charging, ChargePoint Holdings and Plug Power returned -77.72%, -76.12% and -64.62% respectively.

Chipmakers on the other hand were again among the top performers in the theme with both Nvidia and AMD contributing significantly to performance.[22]

Genomics

Genomics was the largest detractor from EDGE's performance. Returning almost -12%, the sector caused a 1.7% reduction in the fund's total performance.

The genomics industry encountered a series of significant challenges in 2023 that contributed to its underperformance. A key factor was the normalization of revenue following the pandemic, a period during which demand for COVID-related treatments and vaccines had surged. This led to a slight decline in revenues for public genomics companies, reflecting a broader shift away from the extraordinary market conditions experienced during the height of the pandemic. Additionally, the looming patent cliff presented a formidable challenge, with numerous established biologic products, integral to the revenue streams of many genomics firms, facing patent expirations. This was projected to affect nearly $200 billion in annual product sales by 2030, creating a potential vacuum in revenue generation for these companies.

The regulatory landscape further compounded the industry's difficulties. Increased scrutiny by entities like the Federal Trade Commission (FTC) raised concerns about potential stifling of innovation, particularly in the context of acquisitions by larger biopharmaceutical companies. The introduction of the US Inflation Reduction Act heralded a tougher pricing environment, impacting how genomics innovations could secure future reimbursement. Furthermore, a decline in FDA approvals for new molecular entities and biologics license applications, attributed in part to FDA staffing shortages, signaled additional hurdles. The financing environment also proved challenging, with significant decreases across various funding avenues, including venture capital, debt financing, and IPOs. This tough financial landscape was evident in the biotech IPO market's dramatic 93% decline from 2021. Amidst these trials, the sector exhibited a clear bifurcation: while some genomics companies thrived on clinical and regulatory successes and robust M&A activities, others struggled, lacking in strong data, financial performance, and healthy balance sheets.[23]

Long-Term Outlook

The modern economy is increasingly underpinned by a convergence of critical technologies: cybersecurity, cloud storage, and 5G. This triad forms a robust infrastructure essential for the burgeoning industries of the future. Cybersecurity has become a crucial, non-discretionary investment for businesses in an era where cybercrime risks escalate continuously. It acts as a safeguard, protecting the vast and valuable data that fuels modern enterprises. Cloud computing, meanwhile, is playing an increasingly vital role. As internet usage and the proliferation of IoT devices soar, cloud computing offers scalable, cost-effective solutions while supporting the surge in remote and hybrid work environments. The introduction of 5G technology is pivotal in this landscape, significantly enhancing data transmission speeds, efficiency, and connectivity, thus enabling organizations to operate more effectively in a data-driven world.

Emerging sectors such as genomics, robotics, fintech, E-gaming, and electric vehicles (EVs) are at the forefront of this transformative era, poised for significant growth. Genomics, with its rapid advancement exemplified by mRNA vaccine developments, offers promising investment opportunities, especially given its expected high annual growth rate. Robotics, catalyzed by the pandemic-induced automation trend, is expanding beyond traditional manufacturing, offering solutions to labor shortages and efficiency challenges across various sectors. Fintech, accelerated by the shift towards e-commerce and online transactions due to the pandemic, presents a fertile ground for innovation and investment. The E-gaming industry, already surpassing the film and music industries in size, is set to expand further, fueled by a maturing gamer demographic, increased M&A activities, and the growth of eSports. Electric vehicles represent a burgeoning market, driven by government policies, environmental consciousness, declining costs, and rising fuel prices, despite still being in the early stages of adoption. This landscape of disruptive technologies, as highlighted by McKinsey & Company, is expected to significantly contribute to equity market appreciation, with more than half of the $90 trillion projected increase over the next decade coming from these sectors.

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[1] The indicated rates of return are the historical annual compound total returns net of fees (except for figures of one year or less, which are simple total returns) including changes in per unit value and reinvestment of all dividends or 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. The rates of return shown in the table are not intended to reflect future values of the ETF or returns on investment in the ETF. ETFs are not guaranteed, their values change frequently, and past performance may not be repeated.

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