MCM Q4 Update

Prepared by
Annant Bhargava
Abhinoor Singh

mercurycapitalm@gmail.com
https://www.mercurycm.org/

Mercury Capital Management

TABLE OF CONTENTS

About Mercury Capital Management

Mercury Capital Management (MCM) is a 501©(3) charitable organization, focusing on fundamental strategies driven by deep research, with a keen eye for complex technologies, small-cap companies, and niche industries. We encourage ourselves as an educational platform for students who are preparing and developing themselves for a career in finance, whilst upholding our organizational values: Respect, Integrity, and Accountability. We aim to educate and develop future investors, whilst contributing to the wider student community of St. Andrews through practical experience and industry networking events.

Semester Overview

This semester, we initially focused on training our newly recruited analysts from our education program, which would later be transferred into creating and pitching equities for our portfolio. Our education program included the following:

- *Finance and Banking Industry Overview: understanding differences of careers and roles.*
- *Key Financial Ratios and Statistics*
- *Sources of financial information (10K, 10Q, Proxy Statements etc.)*
- *Valuation Methods: Discounted Cash Flow + Comparable Valuation*

Quarter 4, 2023 Performance

In Q4, 2023, U.S. stocks surged, with the S&P 500 nearing record levels due to expectations of interest rate cuts. The boost in performance was due to interest rate-sensitive sectors, like information technology, real estate, and consumer discretionary, while the energy sector declined amid falling crude oil prices. The UK market also experienced growth, particularly in small and mid-cap stocks, fueled by expectations of a peak in interest rates and increased foreign acquisitions. In Asia, except for China's downturn over economic concerns, regions like Taiwan, South Korea, and India saw substantial growth, with tech stocks and chipmakers riding the wave of enthusiasm in artificial intelligence. Despite initial pressures, emerging markets ended strong, although they trailed behind their developed counterparts.

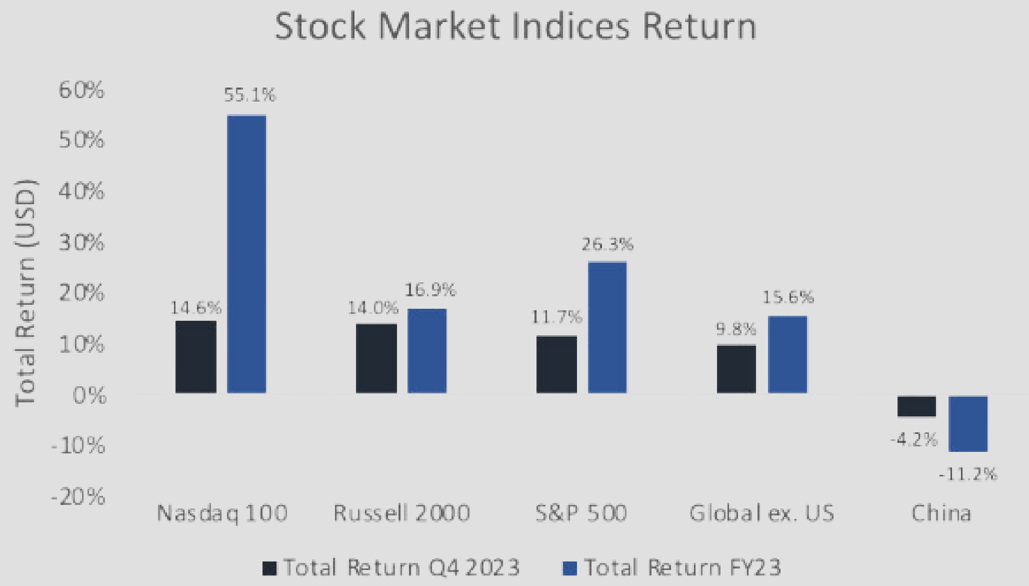


Chart Takeaway: *In Q4 2023, the stock market indices exhibited varied performance. The Nasdaq 100 led with an impressive 55.1% total return, demonstrating robust growth. The Russell 2000 and S&P 500 also showed strong quarterly returns of 14.0% and 16.9%, respectively. For the full fiscal year, the global markets excluding the U.S. had a notable return of 26.3%, while the U.S. indices had more modest growth, with the S&P 500 at 11.7% and Nasdaq 100 at 14.6%. However, China's indices declined both in the quarter (-4.2%) and over the fiscal year (-11.2%), reflecting the challenges faced in that market.*

Portfolio Q4 Performance

In Q4, Mercury Capital Management's portfolio, consisting of six stocks chosen by team heads and analysts, demonstrated a diverse performance. The stocks are as follows:

Soundhound
(NASDAQ: SOUN)

Scorpio Tankers
(NYSE: STNG)

InterDigital Corporation
(NASDAQ: IDCC)

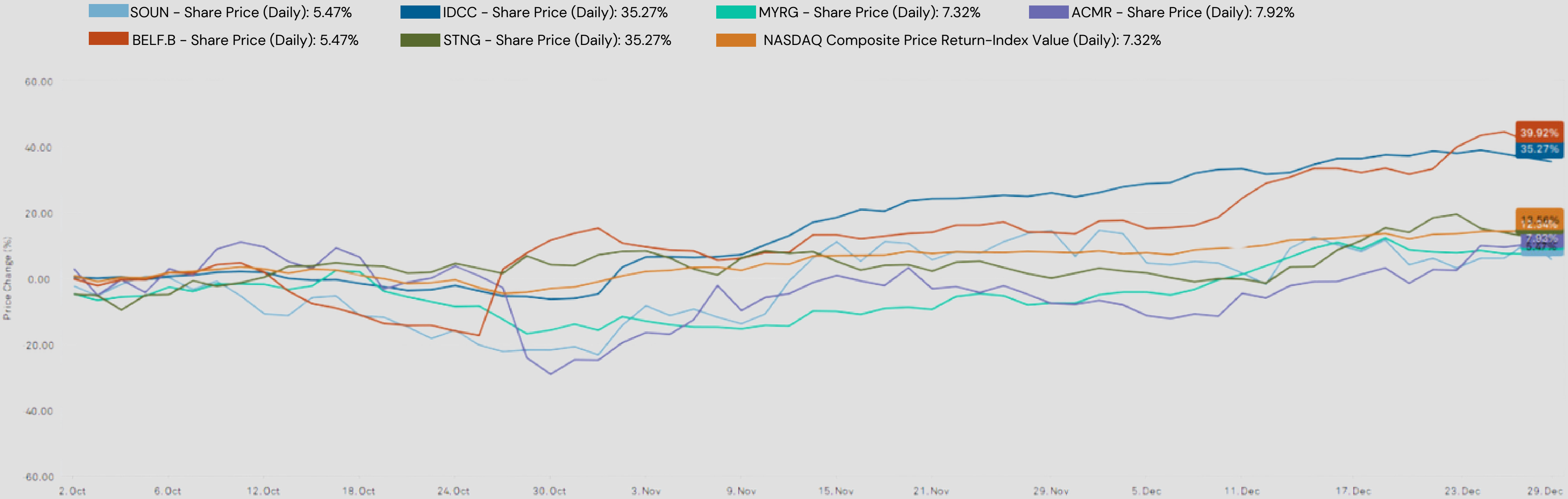
Bel Fuse Inc.
(NASDAQ: BELF.B)

MYR Group
(NASDAQ: MYRG)

ACM Research
(NASDAQ: ACMR)

Executive Summary

Outshining the NASDAQ composite's 13.56% gain in Q4, BELF.B posited an impressive 40.39% gain over the period. Similarly, IDCC outperformend the NASDAQ composite's index by 21.42%, marking an impressive 34.98% gain over Q4. Meanwhile, SOUN showed a solid performance with a 8.16% return. The least gain was observed in ACMR, with a modest 4.94% increase, while STNG delivered a notable 18.22% return, indicating a well-rounded and effectively diversified portfolio strategy.

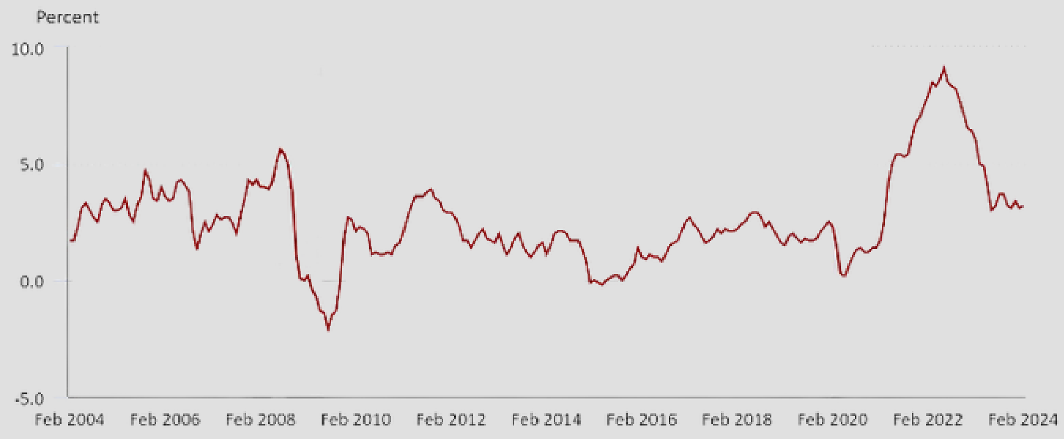


Interest Rates & Inflation

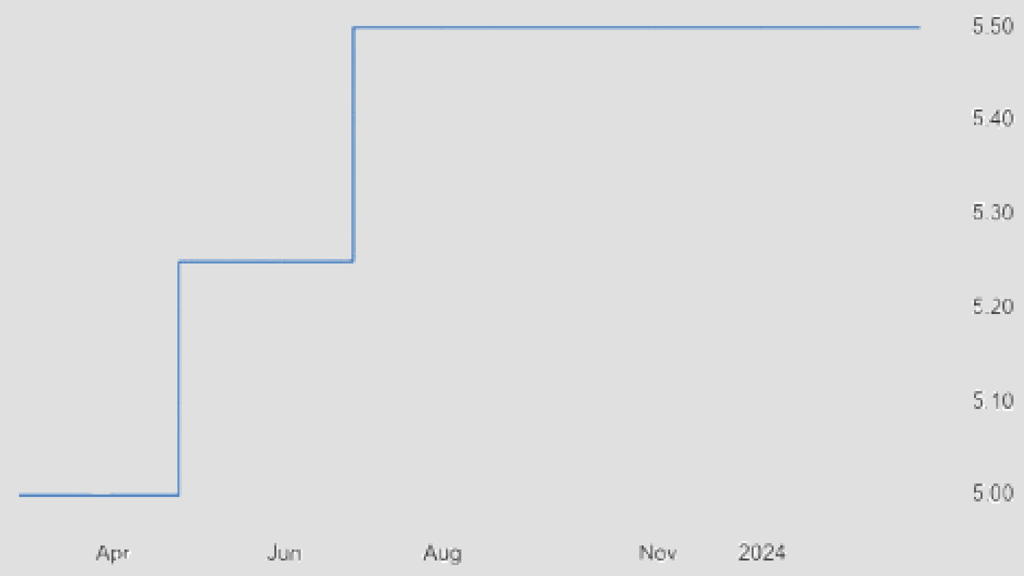
Harrison Gardner

In the United States, the Fed stood firm with a 5.25% to 5.50% benchmark federal funds rate throughout Q4, the highest since early 2001, despite pressures from improving market trends that defied previous forecasts. At the start of the quarter, weak sentiment prevailed due to market participants' anticipation of 'higher for longer' outlook on US interest-rates. By quarter end; however, investor sentiment improved significantly, fueled by a better macroeconomic outlook and optimism in hopes of a major Fed rate-hike period coming to an end, with the Fed possibly cutting rates in 2024. US Treasury yields have subsequently rallied, with the 10-year note ending the year at 3.88% having fallen from its 4.57% rate at the beginning of the quarter. Headline Consumer Price Index (CPI) moved higher for the first time in three months in December, rising 0.3 percentage points (ppts) to 3.4% year over year. This signals more room for disinflation in 2024 for the Fed to meet its 2% target inflation rate, despite a significant improvement from the 6.5% inflation rate of December 2022.

12-month percentage change, Consumer Price Index:



US Interest Rate - Percent



Growth of Artificial Intelligence

Ideja Bajra

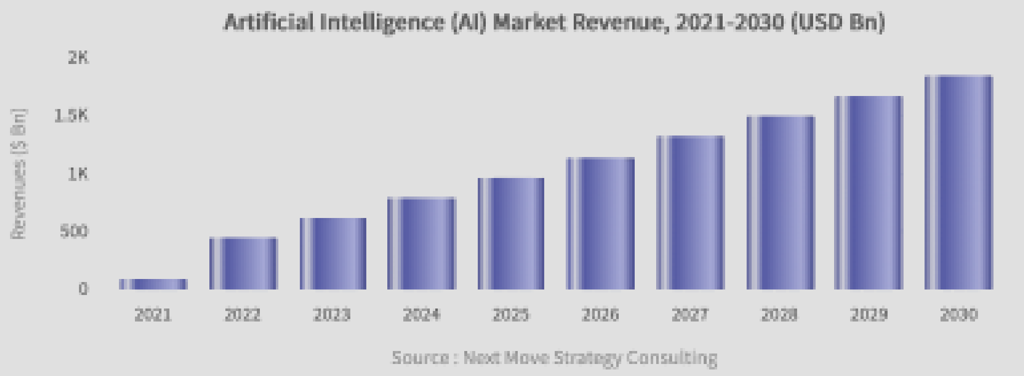
Market Expansion:

The market for artificial intelligence (AI) is expected to show strong growth in the coming decade. Its value of nearly 100 billion U.S. dollars is expected to grow twentyfold by 2030, up to nearly two trillion U.S. dollars. [1]
This growth is not uniform across the board but is particularly pronounced in several key areas:

- ***Autonomous Vehicles****: The autonomous vehicle sector is another prime beneficiary of AI's growth. Tesla, Waymo, and other companies in this space utilize advanced machine learning algorithms for real-time decision-making, sensor data interpretation, and navigation in complex environments. The progress in this sector not only highlights AI's capability in enhancing safety and efficiency but also its potential to redefine transportation.*

- ***Finance****: In the finance sector, AI has revolutionized fraud detection, algorithmic trading, and personalized banking services. AI systems can analyze millions of transactions to identify patterns indicative of fraudulent activity, greatly enhancing security. Furthermore, robo-advisors, leveraging AI to offer personalized investment advice, have democratized access to financial planning, with companies like Betterment and Wealthfront leading the charge.*

- ***Manufacturing****: AI's role in manufacturing has been transformative, enabling predictive maintenance, supply chain optimisation, and autonomous robots for assembly lines. General Electric's Predix platform, for example, uses AI to predict equipment failures before they happen, saving millions in maintenance costs and downtime.*



Future Outlook

The trajectory of AI's growth suggests a future replete with both opportunities and challenges:

- *Economic Impact: AI is projected to add $15.7 trillion to the global economy by 2030, with sectors such as healthcare, automotive, and finance witnessing the most significant transformations. [3]*

- *Technological Frontiers: The advent of quantum computing could exponentially increase AI's processing capabilities. By 2035, quantum-enhanced AI could potentially reduce drug discovery times from years to months, revolutionizing healthcare but also demanding rigorous ethical oversight in experimental methodologies.*

- *Global AI Governance: With AI's impact crossing national borders, international cooperation becomes crucial. A hypothetical global AI standards body, endorsed by 70% of the G20 nations, could be established by 2025 to harmonize regulations, ensuring AI's benefits are universally accessible while mitigating risks of misuse. [4]*

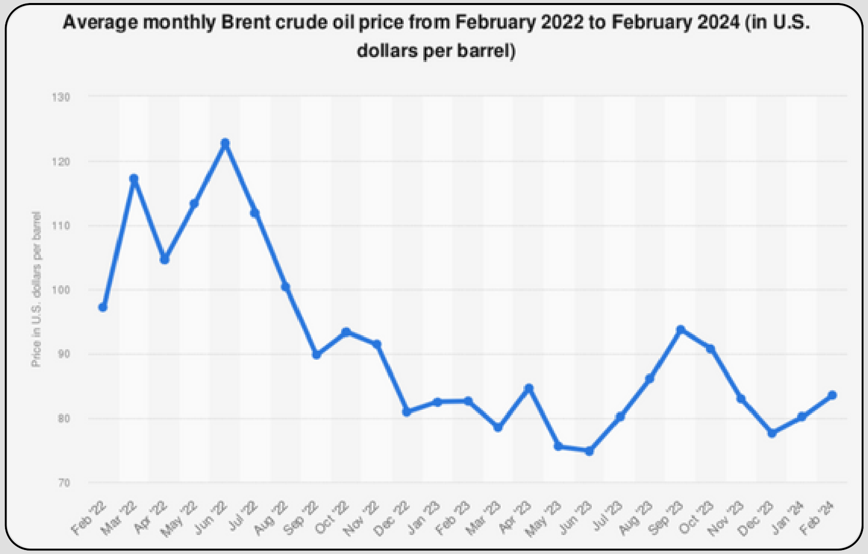
Israel-Gaza Conflict

Franco Kanaan

In the final quarter of 2023, the Israel-Gaza conflict posed significant threats to global markets beyond the Palestine-Isreal conflict, directly impacting the wider MENA region. Countries like Egypt, Jordan, and Lebanon are all facing the economic impacts of the shock in Gaza: an economic downturn led by uncertainty. Uncertainty has driven the lack of confidence amongst both consumers and investors which has been reflected in domestic economic detriment in the region, ultimately leading to more borrowing and the exacerbation of debt in already vulnerable nations.

Looking beyond the Middle East, the Gaza strip, has impacted global trade with its proximity to the Suez Canal - a critical route responsible for 12% of global trade. These delays have impacted the EU and UK, as inflationary pressure created by the increased risk premium, has negatively influenced both economic growth and consumer demand. Due to this, the WTO has reported that the conflict in the Middle East is likely to worsen already impacting trade growth.

The largest discussion surrounding the conflict has, however, been related to oil and gas. Despite popular speculation and fear, the outcomes within this industry have been mild: initial rise in oil prices, which further fell back to pre-condlict levels of ~$84 per barrel. The IEA notes that this is due to the conflict's lack of a direct impact on oil flows. Furthermore, in relation to natural gas, there appears to be more sustainable and reliable options away from the point of conflict which multinationals - Chevron, Eni and BP - have been able to utilise.



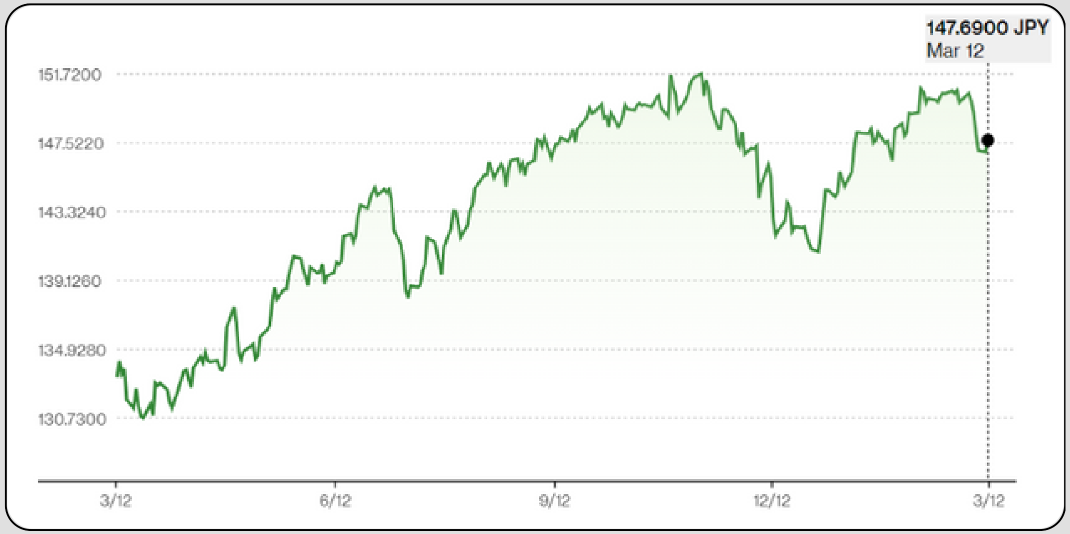
The key terms surrounding the nature of the conflict's impacts have been speculation and uncertainty. Whilst domestically and regionally, the conflict has caused irreversible social, economic and physical damage, globally, the conflict's knock-on effects have been relatiely minimal in the short term.This is due to the tendency to pursue economic self-interest by countries unaffected by the conflict.Nevertheless, the fear and uncertainty still dominate the globe when evaluating the future impacts of the conflict. Further involvement from Iran would enable greater American involvement, which could potentially remove 1-2 million barrels per day, ultimately witnessing a direct rise in oil prices. This would have serious repercussions, particularly within the Middle Eastern region, as the spike in oil prices would impact myriad different emerging markets within the region, dampening their economies ever further.

Currency & Exchange Rates

Harrison Gardner

The People's Bank of China (PBOC) pegs the Chinese yuan to a 2% range around a mid-point it fixes against the USD each day in order to keep its value low and exports cheap. Consequently, the value of ¥1 CNY on floating exchange rates has remained constant at $0.14 USD, £0.11 GBP and €0.13 EUR since Q2 2023 with little chance of fluctuation in the coming year.

Throughout 2023, the Japanese Yen has continued its downward trend into early Q4 until the beginning of a slight rally in November against its otherwise weak course. At the beginning of November, the Yen lay at a 21st century low exchange rate against the dollar at ¥151.52 JPY to $1 USD, a rate not seen since 1998, though has since strengthened to ¥140.85 JPY to the dollar – a 7.6% increase in the value of the Japanese Yen. Against other currencies, the yen sits at ¥178.57 JPY and ¥178.57 JPY to GBP and EUR respectively. Since early 2022, the yen has declined by an average of around 20% against major currencies – around 30% against the dollar. This trend of depreciation is partly attributable to the Bank of Japan's (BOJ) monetary easing policy of yield curve control adopted in 2016. Yield curve control sets short-term interest rates at -0.1% and aims for 0% 10-year long-term interest rates. Numerous economists have predicted the BOJ's negative interest rates to come to an end in 2024 following another poor year for the yen in 2023.



China

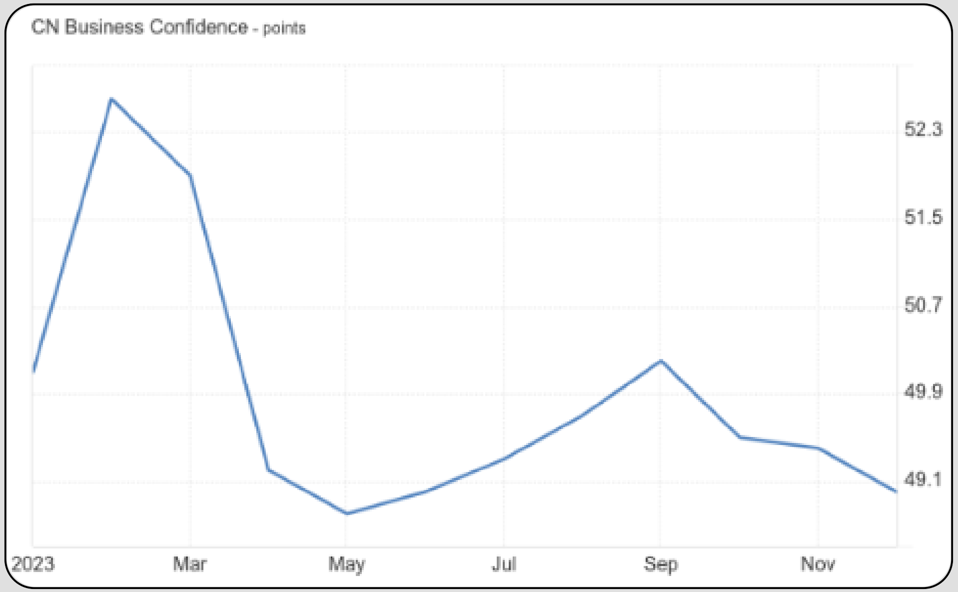
Junqi Wang

China faces increasing geopolitical tension with the US and EU, leading to stricter investment screening and market access challenges for foreign investors. This comes as China pursues self-relaince policies to icnrease the domestic supply chain.

A major trade tension between China and the west is Beijing's heavy subsidies on Chinese exports. The European Union has announced an anti-subsidy investigation when Chinese electric vehicles began to gain market shares in 2023. The war in Ukraine and the pandemic has convinced European leaders to diversify their sources of some key products in their supply chains, such as rare earths, which China dominates in productions and exports.

China's manufacturing activity in Q4 2023 continued to contract due to persistent deflationary pressures. This was evident in the decline of the official purchasing manager index from 50 to 49 in December. The contraction was compounded by the lowering of interest rates, which discouraged foreign investment and caused the Chinese currency to depreciate. This downturn, exacerbated by weak global demand for manufactured goods amid worldwide rate hikes to curb inflation, has not yet seen a return to pre-pandemic demand levels, affecting regional supply chains linked to China.The disappointing figures increase the likelihood of further fiscal stimulus from Beijing, which has already started to ease monetary conditions by slightly reducing lending rates and loosening some property market controls to prevent price overheating.

Leading US and Chinese companies have also been racing to build products powered by generative AI – models that can spew out humanlike texts and materials in seconds. The two countries have adopted different regulatory methods for domestic AI groups: China has provided detailed guidelines on AI development, emphasizing the need to control content; while the US focuses more on tackling threats, national security and consumer privacy with the assistance of AI. Although it's worth noticing that leading US AI companies including OpenAI had engaged in secret meetings with Chinese experts to discuss the emerging risks associated with the technology; followed by a rare collaboration on the safety of AI systems between the two powers in the coming months has been announced by the White House science chief.



Stock Performance & Review

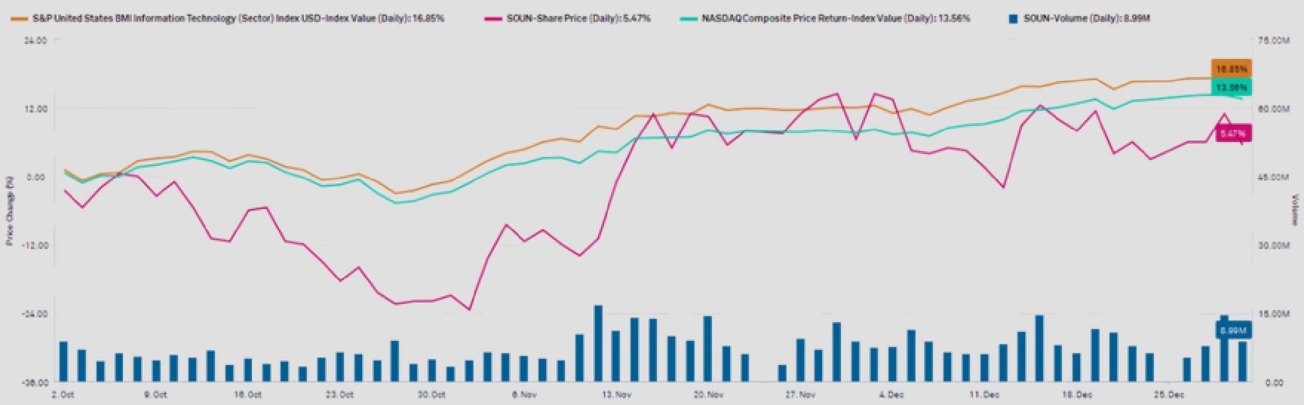
Joe Taylor

SoundHound AI, Inc. (NasdaqGM: SOUN): $1.96 starting, $2.12 ending. 8.16% Upside

SoundHound is a market-leading voice AI platform, offering customers a high-quality, complex conversation interpretation service.

Having been public since the end of April 2022 following a SPAC merger deal, SOUN's strong financial health and presence in high-growth markets led to its position within MCM's portfolio. SOUN expects 90% of cars to adopt the use of voice-controlled devices by 2028. With 37% of their revenue from automotive clients such as Mercedes, Hyundai, and Honda, SOUN will considerably benefit from the mass-adoption of such technology. The global voice recognition market is also expected to boom, reaching $167bn in 2030.

Closing FY2022 just under $12bn, market growth is projected over 300%, reaching $50bn in 2029. SOUN is expected to capitalise on these markets' growth prospects in coming years. Financially, SOUN remains a smart investment. Showcasing strong liquidity, with quick and current ratios of 4.94 and 5.11 respectively, SOUN sits above industry averages of 1.71 and 1.97. Their gross margin also sits at 73.45%, 27% higher than the industry average. Despite their strong financial metrics and growth opportunities, there are some risks with current lawsuits concerning data privacy and use of private intellectual property in training LLMs/AI neural nets.

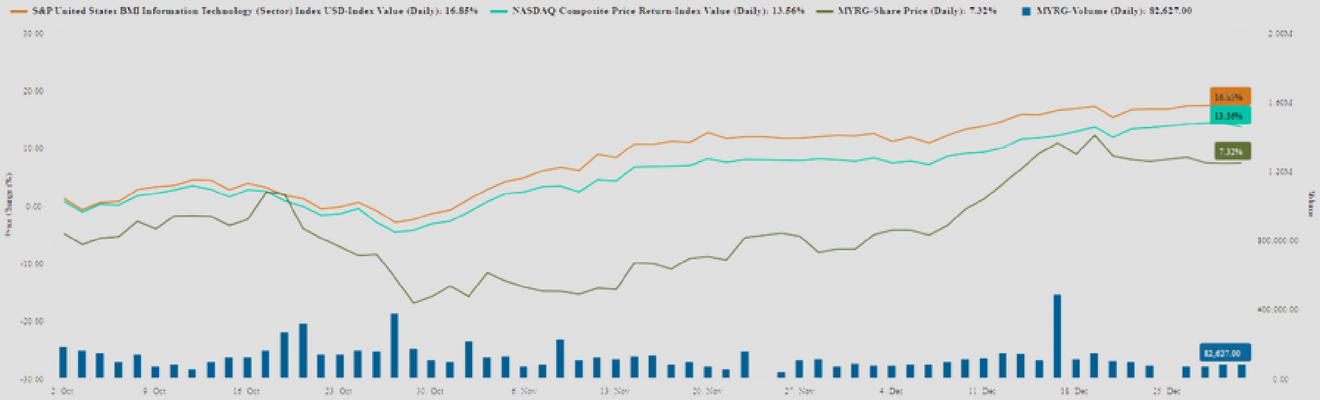


Having invested at $1.96, SOUN ended Q4 2023 at $2.12, leaving MCM with an 8.16% upside in the period since purchase. This price rise aligns with our analysts' relative and intrinsic valuations of the firm. MCM position SOUN at a relative valuation of $2.37, and an intrinsic target price of $2.92 from DCF analysis. Given that SOUN is a small cap stock, we are privy to future volatility, but are pleased with its current performance. Having had only one (albeit impressive) quarter of growth thus far in MCM's portfolio, we believe there is considerable opportunity for growth for SOUN.

MYR Group Inc. (NasdaqGS: MYRG): MYRG $128.17 starting, $144.63 ending. 12.84% Upside

The MYR Group corporation, taken public in August 2008, provides electrical construction services in the United States and Canada. Their business operations are split into Transmission & Distribution and Commercial & Industrial.

With the company taking strides towards a greener planet, we identified MYRG as a sound holding for MCM's portfolio. Given MYRG's focus on sustainability, the expected 11.3% CAGR of the sustainable construction market over the next 10 years and the US's $369bn allocation for renewable energy infrastructure act as significant growth drivers for MYRG. Additionally, with their strong track record in EV charging stations, MYRG is positively positioned for growth. EV sales are expected to make up 29.5% of US car sales in 2030, up nearly 310% from a 7.21% market share in 2023. Falling in the 18th percentile of their industry, MYRG radiates a strong ESG performance, which could be pivotal in securing government subsidies/contracts.



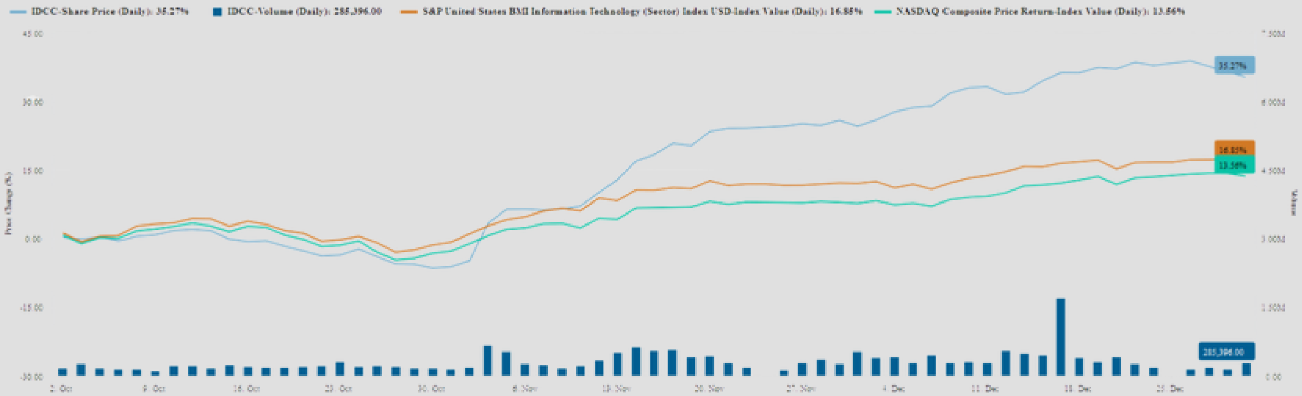
Our analysis deduced that MYRG is financially healthy. Standing above industry averages in both Net Profit Margin (2.8% compared to an average of 2.3%) and EBITDA margin (4% to 3.8%), MYRG runs a more profitable operation than their competitors. Most impressively, MYRG's Net Debt/EBITDA multiple of 0.1x shows that they are easily able to cover debt obligations, especially compared to competitors at an industry average of 7.3x. MYRGs inclusion in our portfolio is not without risk; the rife competition in the construction market could lead to pricing pressures reducing MYRGs profit margin. Additionally, a shortage of key clients or skilled labour force is likely to spell problems for MYRG.

Investing at $128.17, MYRG ended Q4 2023 at $144.63, delivering an upside of 12.84%. This increase has already surpassed our analyst's intrinsic valuation of $142.49 via a DCF analysis. A relative valuation of $178.40, however, shows us that MYRG still has further room for growth. Having only held MYRG in the MCM portfolio for one quarter, we are impressed thus far and look forward to seeing if it can reach our relative valuation.

InterDigital, Inc. (NasdaqGS: IDCC): $80.41 starting, $108.54 ending. 34.98% Upside

InterDigital is a technology research and development company that focuses on advanced wireless and video technologies globally.

IDCC benefits from natural high growth, with the technology sector's forecasted 10.95% CAGR, and specifically the software industry being predicted to reach $519.88bn in 2030 and boasting growth rate 3 percentage points higher than the US market average. IDCC's key focus lies in 5G/6G, recognised as a global top 10 patent holder as of October 2023. By 2027, it is forecasted that 5G subscriptions will reach 4.4bn globally and create an economic value of $7tn in 2030. AI adoption has also increased within the last year and, while it is not IDCC's primary revenue stream, they have a program committed to its R&D.



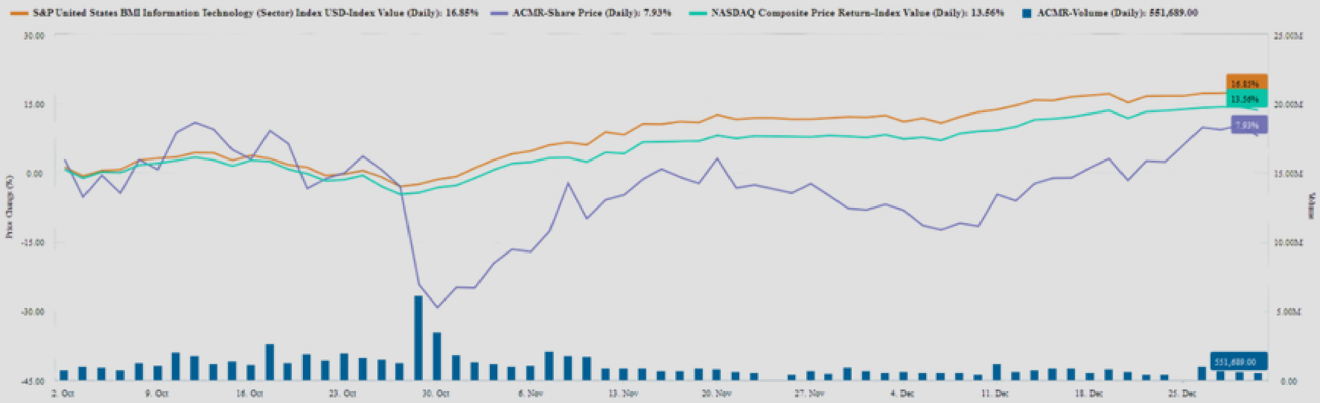
IDCC is a strong performer financially compared to their peers, emphasising its resilience and ability to navigate uncertainties. Our analysis demonstrates its stability. With a current ratio of 2.8x, compared to the industry average of 3.42x, IDCC is capable of covering their liabilities and with its Debt/EBITDA ratio of -1.4x and their strong liquidity profile. A gross profit margin of 85.8%, well above the 67.84% industry average, shows that IDCC is also efficient in their operations. Moreover, IDCC exhibited continued revenue growth, even during the COVID-19 pandemic. The 2023 market uncertainties, such as high inflation, do present some issues for IDCC, as a majority of its revenue is from patent license agreements negotiated before inflation rises. However, with inflation at 3.35% in the US as of December 2023, and further falls expected in 2024, we believe this is not of much concern.

Following its addition to MCM's portfolio at $80.41, IDCC has shown outstanding performance, delivering a 34.98% upside in Q4, ending at $108.54. Expectations for even higher upside are based on a relative valuation of $156.37. With further advancements in the 5G/6G market and the tech sector going from strength to strength, we are excited at the potential returns from IDCC as a long-term hold.

ACM Research, Inc. (NasdaqGM: ACMR): $18.62 starting, $19.54 ending. 4.94% Upside

ACM Research, Inc. is an American semiconductor equipment corporation. It specialises in the creation of single-wafer wet cleaning equipment, which is an integral part of the integrated circuits manufacturing process, constituting 70.2% of their revenue.

A substantial growth driver for ACMR is their industry. The semiconductor equipment market has a predicted CAGR of 12% over the next 10 years, with a total market size of around $2tn in 2033. ACMR is also expanding its presence in Asia, with plans for a new R&D centre in Lingang, China in January 2024, and a recently acquired land for a factory in South Korea. Nearly all Chinese semiconductor manufacturers already use ACM tools, particularly significant given China's growth of domestic mature node production amidst a US ban. In the upcoming years, ACMR aims to receive 50% of their revenue from mainland China, capitalising on its status as the largest revenue generator in the semiconductor market, amounting to $179.5bn at the end of 2023.



However, geopolitical disputes are likely to have unavoidable effects for ACMR. ACMR is highly dependent on imports from Taiwan, meaning any military conflict between mainland China and Taiwan significantly affects production. With 90% of ACMR staff in China, regulatory risks related to US-China trade sanctions could impact access to US technology.

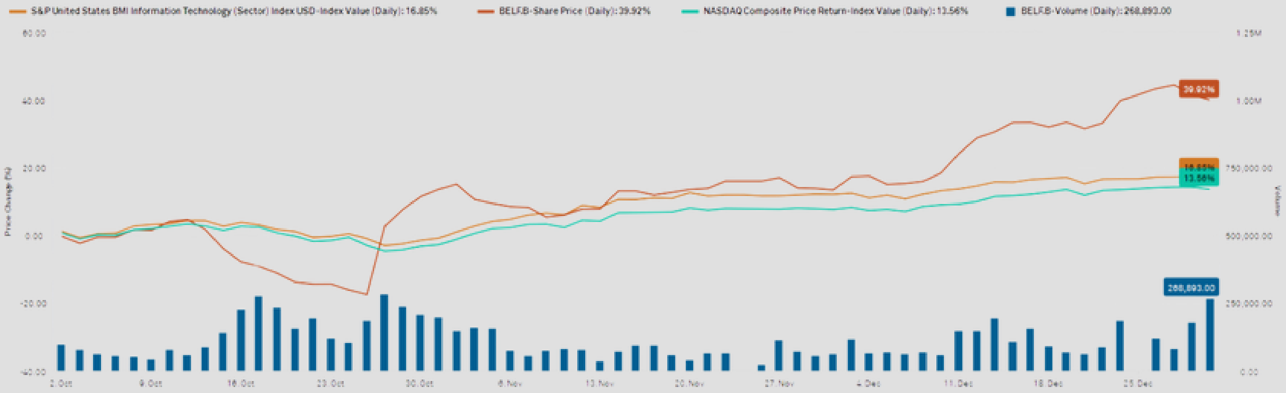
Financially, ACMR shows promise with a forecasted revenue growth of $808.2m over 3 years - an 100%+ increase since January 2023. Historically, ACMR has also demonstrated strong growth. Their 3-year 50.23% YoY growth far exceeds the industry average at 6.4%. It also shows positive liquidity signs, with a quick ratio of 1.26x against industry average 0.81x. Finally, its P/E ratio of 13.7x, despite an industry average of 22.5x, potentially signifies market undervaluation. However, ACMR's EBITDA margin of 19.52% recommends caution, as it is far below the industry average of 47.2%.

ACMR has delivered modest, but satisfactory, 4.94% upside for MCM's portfolio since investment at $18.62, reaching $19.54 by Q4. With a relative valuation of $24.17 and an intrinsic valuation of $34.47, ACMR shows potential of more significant returns in the long-term. However, the geopolitical tensions surrounding China remain a critical factor in ACMR's investment outlook.

Bel Fuse Inc. (NasdaqGS: BELF.B): $47.56 starting, $66.77 ending. 40.39% Upside

Headquartered in Jersey City, New Jersey, BELF.B operates in Power, Connectivity, and Magnetic Solutions, serving telecommunication, aerospace, transportation, and consumer electronics.

Due to the rising number of active electronic components, BELF.B's market is projected to grow significantly, from $319bn in 2022 and to $578bn by 2028, a CAGR of 10.42%. In the near term, our analysts expect Aerospace, Defence, Rail and Niche Industrial to be growth drivers for BELF.B. For example, when inspecting BELF.B's sales, with an 176% increase since 2021 in its aerospace products: FQIS, Omega and Dura-Con. For the longer-term, we expect EV, AI and Space to drive BELF.B's growth. Furthermore, predictions of EV sales constituting 29.5% of US car sales in 2030 and a 185% increase in eMobility sales since 2021 positions BELF.B positively. With their diverse product range and the inevitable advancements in technology, BELF.B is poised to deal with a significant uptick in future demand. This is not to say BELF.B is purely for the future, currently boasting an impressive blue-chip client list, such as Raytheon Technologies, Carrier, Dell EMC, and Cisco.



Financially, BELF.B has shown impressive growth since 2019. As of 30th September 2023, BELF.B's total sales are up to $669m from $493m, free cash flow is now at $83m rather than $15m, and EBITDA has increased 430% to $112m. BELF.B has also become more liquid, with cash reserves at $100m and a reduction in debt from $144m to $60m, with rumours that this liquidity is planned for R&D investments and M&A targets. However, there are some notable risks, including potential geopolitical tensions surrounding China. With BELF.B opening a new facility in Changping and 60% of their employees working in mainland China, this warrants caution. We also remain wary of the potential volatility that comes with their small-cap status ($660m).

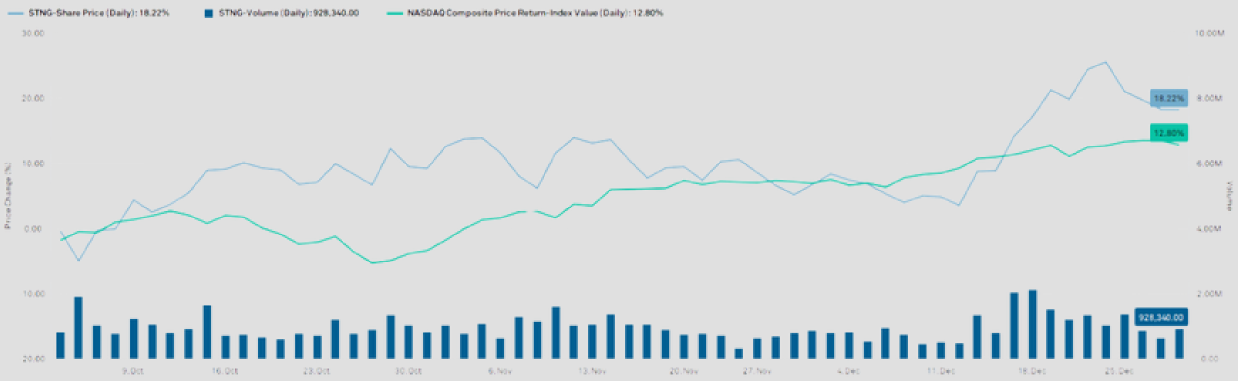
Invested at $47.56, BELF.B has provided MCM's portfolio with an upside of 40.39% since Q4 2023 at $66.77, exceeding our analysts intrinsic target price of $63.65 from DCF analysis, but still a below our relative valuation of $134.70. While pleased with BELF.B's performance, having delivered the highest upside by some way, we remain cautious given BELF.B's small-cap nature and the current situation in China.

Scorpio Tankers Inc. (NYSE: STNG): $51.43 starting, $60.80 ending. 18.22% Upside

Scorpio Tankers Inc. operates in the shipping industry. With a fleet of vessels which transport a variety of bulk liquids, they specialise in the international transportation of refined petroleum products. STNG went public in April 2010 after separating from Scorpio Ship Management.

STNG is notable for its relative environmental focus, compared to industry competitors, with significant low GHG emissions per unit of material and aiming for net-zero by 2050. This aligns with the Maritime Sector's goal to reduce annual GHG emissions by 50% compared to 2008.

In our analysis, we compared STNG to competitors in the Maritime sector using key financial metrics due to STNG's tax-exempt status, which complicates using a DCF analysis for intrinsic valuation. STNG showed potential undervaluation, with a P/E ratio of 4x compared to the competitor average of 4.5x, and EV/EBITDA and EV/Revenue multiples of 4.3x and 2.8x being below average. However, we are cautious with their "undervaluation" due to the small differences. STNG largely outperformed the competitor averages with their EPS of $10.34 compared to $7 and an EBITDA margin of 65% as opposed to 54%. They slightly outperformed in profit margin, with 40.77% versus the competitor average of 40%, and P/S ratio, 1.8x against an average of 1.75x. With STNG around or well above competitor average in most metrics, this makes a strong case for its inclusion in the MCM portfolio.



With current high demand and low supply in energy, STNG's specialisation in refined petroleum products is poised to benefit, marking a great time for holding the equity. However, it is not without risk. For example, current tensions in the Red Sea could lead to volatility. Additionally, as highlighted in STNG's annual report, their volatile stock price is a risk for "rapid and substantial decreases in the foreseeable future". The same report also referenced the potential of STNG's future taxation, majorly reducing their earnings.

With an inclusion in the MCM portfolio at $51.43, STNG has yielded an 18.22% upside, reaching $60.80 at the end of Q4. While impressive, STNG still has room to reach our relative valuation of $72.90 due to potential undervaluation and positive indications in their industry. However, caution is warranted regarding the accuracy of our valuations due to STNG's tax exemption. Also, the risks of future taxation and tensions in the Red Sea, indicate an incoming volatile period for STNG to come.

MCM

MERCURY
CAPITAL
MANAGEMENT