



# THEMATICS

## Digital Economy – The Case for AI

Edition 01

24 December 2024

# CONTENTS



## 1. KEY TRENDS

Artificial Intelligence Overview & Trends	03
--	----

## 2. SGX LISTED STOCKS

AI Related stocks	09
-------------------	----

## 3. FUND FEATURE

Top funds that offer Exposure to AI	10
--	----

# 1 DEVELOPMENTS IN ARTIFICIAL INTELLIGENCE

**How has AI transformed economies over the last few years, and what are the growth forecasts for AI-related industries?**

Artificial Intelligence (AI) has firmly established itself as a transformative force, reshaping industries and economies worldwide. A 2017 report by PwC titled “Sizing the Prize” estimated that AI could contribute up to \$15.7 trillion to the global economy by 2030. This staggering projection underscores the enormous potential of AI-driven innovation to boost productivity and create value across sectors.

What was once a niche technological pursuit has now become a central pillar of economic progress, revolutionizing industries like healthcare, finance, logistics, and beyond. Much of this transformation can be traced back to Google’s introduction of the Transformer architecture in 2017. This pivotal innovation allowed machines to better understand context in data sequences, leading to significant advancements in natural language processing (NLP). Building on this foundation, OpenAI’s development of large language models (LLMs), such as the GPT series, pushed AI capabilities even further.

When ChatGPT was launched in late 2022, it marked a turning point for AI adoption. This application demonstrated the versatility of generative AI, showing how it could handle creative tasks, programming, customer support, and decision-making with remarkable ease. Businesses across the globe began leveraging AI to automate complex workflows, analyze massive datasets, and gain actionable insights—unlocking efficiencies and driving innovation.

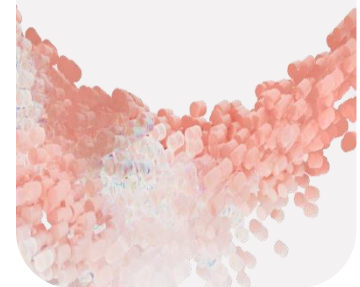
Healthcare is one example of where AI is making a profound impact. From accelerating drug discovery to improving diagnostics, AI has become an indispensable tool for researchers and practitioners. Similarly, in finance, AI is transforming risk assessment, fraud detection, and investment management. Even traditionally labor-intensive sectors like logistics are seeing AI revolutionize supply chain optimization and delivery systems.

Countries are also recognizing AI’s potential to shape the future of their economies. Singapore, for instance, has become a leader in this space with its Smart Nation program, which focuses on building world-class research capabilities, robust digital infrastructure, and ethical AI practices. This approach has positioned the country as a regional hub for AI innovation, providing a blueprint for how nations can embrace this technology to drive sustainable economic growth.

However, alongside its immense potential, AI also brings challenges. Concerns around data privacy, ethical use, and the future of work in an increasingly automated world require careful navigation. How businesses and governments address these issues will determine the role AI plays in shaping the global economy in the years ahead.

AI is no longer just a technological advancement—it is a transformative power reshaping industries, economies, and the way we live. As we move into the next phase of its evolution, the focus must remain on harnessing its benefits responsibly and inclusively.

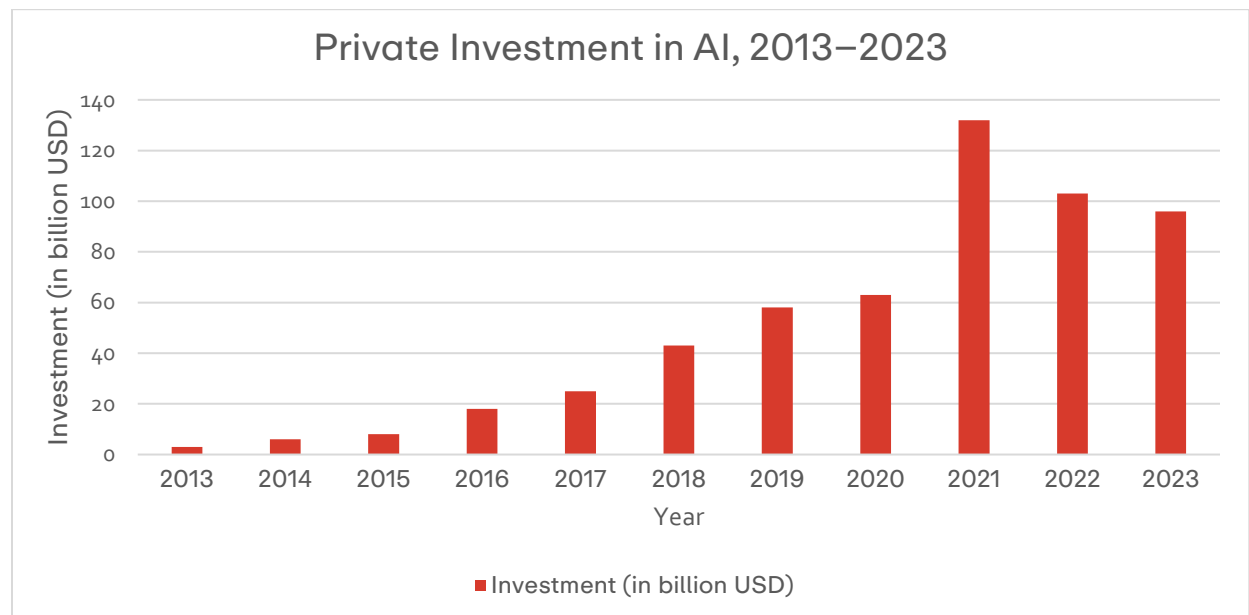
**AI is revolutionizing industries, boosting global economies, and driving innovation while raising challenges in ethics, privacy, and workforce adaptation.**



## How can one invest in this theme: technology, healthcare, and manufacturing?

Investing in the AI revolution presents unprecedented opportunities across industries such as technology, healthcare, and manufacturing, each offering a unique pathway for growth. In the technology sector, companies specializing in AI software, hardware, and cloud infrastructure are leading the charge, making them prime targets for investment. Giants like NVIDIA, Microsoft, and Google, renowned for their advancements in machine learning algorithms, natural language processing, and AI-driven applications, offer attractive long-term growth potential. Startups are also at the forefront of AI innovation. AI startups managed to raise around **\$42.5 billion** through 2,500 funding rounds—a remarkable feat given the tough investment climate. Generative AI has been a major highlight, with funding skyrocketing from **\$5.1 billion in 2022** to roughly **\$21.4 billion by September 2023**. For diversified exposure, retail investors can consider AI ETFs, which aggregate a range of companies involved in AI development and deployment.

Chart 1: Private Investment in AI, 2013-23



Source: Stanford University, AI Index Report 2024

Healthcare is another promising sector where AI is revolutionizing patient care and drug discovery. Investments in companies developing AI-powered diagnostic tools, wearable health tech, telemedicine platforms, and predictive healthcare analytics are poised to yield significant returns. For example, AI solutions that streamline clinical trials or anticipate disease outbreaks are becoming essential for healthcare providers and pharmaceutical firms. Biotech companies harnessing AI to accelerate drug development further amplify the sector's investment potential, offering transformative solutions to global health challenges.

The manufacturing sector is equally ripe for AI-driven innovation, as smart factories integrating AI with IoT are reshaping traditional production lines. Predictive analytics, robotics, and autonomous logistics are becoming industry standards, presenting opportunities in companies like Siemens and ABB, known for their industrial AI solutions. Moreover, the electric vehicle (EV) sector is harnessing AI to optimize production and develop autonomous driving technologies, making it an exciting area for investors with a long-term perspective.

To maximize returns, investors should evaluate the scalability of AI technologies, the size of the addressable market, and the regulatory environment. Diversifying investments across sectors mitigates risks, while staying informed on AI breakthroughs and competitive trends enables strategic decision-making. Ethical considerations are increasingly important as AI adoption grows. Companies with robust governance, transparent data practices, and a commitment to addressing societal challenges, such as climate change and equitable healthcare, are likely to succeed in a regulation-driven landscape. For those seeking both financial and social impact, investing in AI solutions aimed at improving lives while addressing global challenges offers a compelling avenue for sustainable growth.

Chart2: AI adoption by industry and function, 2023

Industry/Function	Human Resources	Manufacturing	Marketing and Sales	Product Development	Risk	Service Operations	Strategy & Finance	Supply Chain
All Industries	9%	6%	25%	26%	12%	24%	8%	9%
Business, Legal, and Professional Services	9%	5%	28%	24%	10%	19%	13%	6%
Consumer Goods/Retail	7%	9%	31%	15%	6%	22%	2%	14%
Financial Services	9%	1%	22%	20%	28%	31%	14%	4%
Healthcare/Pharma/Medical Products	5%	7%	8%	26%	7%	15%	6%	11%
Tech, Media, and Telecom	14%	6%	36%	44%	7%	36%	6%	9%

Source: McKinsey & Company Survey, 2023 | Chart: 2024 AI Index report

## Case Study on Singapore and SGX-Listed Companies

### How Important is AI to the Singapore Economy

Artificial Intelligence (AI) has become a cornerstone of Singapore's strategy to enhance its economy and establish itself as a global technology hub. With initiatives such as AI Singapore and the Smart Nation program, the country is leveraging AI to drive innovation, productivity, and economic competitiveness. The government has allocated over SGD 500 million for AI development, focusing on areas like research and development (R&D), education, and industry adoption. AI contributes to key sectors like healthcare, finance, and transport, ensuring Singapore remains at the forefront of technological advancements.

Singapore's strategic location and robust infrastructure make it an ideal hub for AI-driven businesses. The city-state's proactive approach to regulatory sandboxes and its comprehensive Intellectual Property (IP) protection framework have fostered a conducive environment for AI startups and multinational corporations. This has positioned Singapore as a leader in the regional AI ecosystem, generating high-value jobs and attracting significant foreign investment.

### Key Trends and Drivers in the AI Sector in Singapore

The AI sector in Singapore is shaped by several trends and drivers:

- Government Incentives and Policies:** Tax incentives and grants, such as those offered under the Research, Innovation, and Enterprise (RIE) 2025 plan, encourage companies to invest in AI innovation. Initiatives like AI Ethics and Governance projects also position Singapore as a global leader in responsible AI deployment.
- Public-Private Partnerships:** Collaborative efforts between the government and private sector have accelerated AI adoption. Examples include partnerships between AI Singapore and local universities, as well as corporations like DBS and ComfortDelGro.
- Focus on Talent Development:** Programs like the AI Apprenticeship Programme (AIAP) aim to build a pipeline of skilled professionals, ensuring a sustainable workforce for AI-related industries.
- Demand for Industry-Specific AI Solutions:** Industries such as healthcare, finance, and logistics are driving demand for tailored AI applications, creating opportunities for innovation and growth.

## Potential Investment Themes

### Technology Infrastructure

Singapore's AI ecosystem relies heavily on robust technology infrastructure. Companies like ST Engineering and Venture Corporation, both listed on the Singapore Exchange (SGX), play a pivotal role. ST Engineering has integrated AI into its defense, aerospace, and smart city solutions, while Venture Corporation focuses on advanced manufacturing and AI-enabled devices. These firms present significant opportunities for investors seeking exposure to the AI hardware and software sectors.

### Healthcare

AI has revolutionized healthcare in Singapore, enabling predictive diagnostics, personalized medicine, and efficient hospital operations. Companies such as Raffles Medical Group and AI-driven startups like Kronikare have adopted AI technologies for diagnostics and patient care. Telemedicine platforms have also seen rapid adoption, creating investment opportunities in both SGX-listed firms and emerging healthcare startups.

### Transport and Smart Cities

AI is central to Singapore's vision of becoming a Smart Nation. Companies like ComfortDelGro and SMRT are integrating AI into transport management systems to optimize operations and enhance commuter experiences. Autonomous vehicles and predictive maintenance are key growth areas, supported by government-backed trials and policies. Investors can explore these companies as potential beneficiaries of AI adoption.

### Retail and Consumer Services

AI-driven personalization and predictive analytics are transforming retail and consumer services. SGX-listed retail REITs, such as CapitaLand Integrated Commercial Trust, are leveraging AI to optimize tenant mix and enhance customer experiences. Additionally, e-commerce platforms like Shopee, though not SGX-listed, demonstrate how AI is reshaping consumer behavior and logistics in Singapore's retail sector.

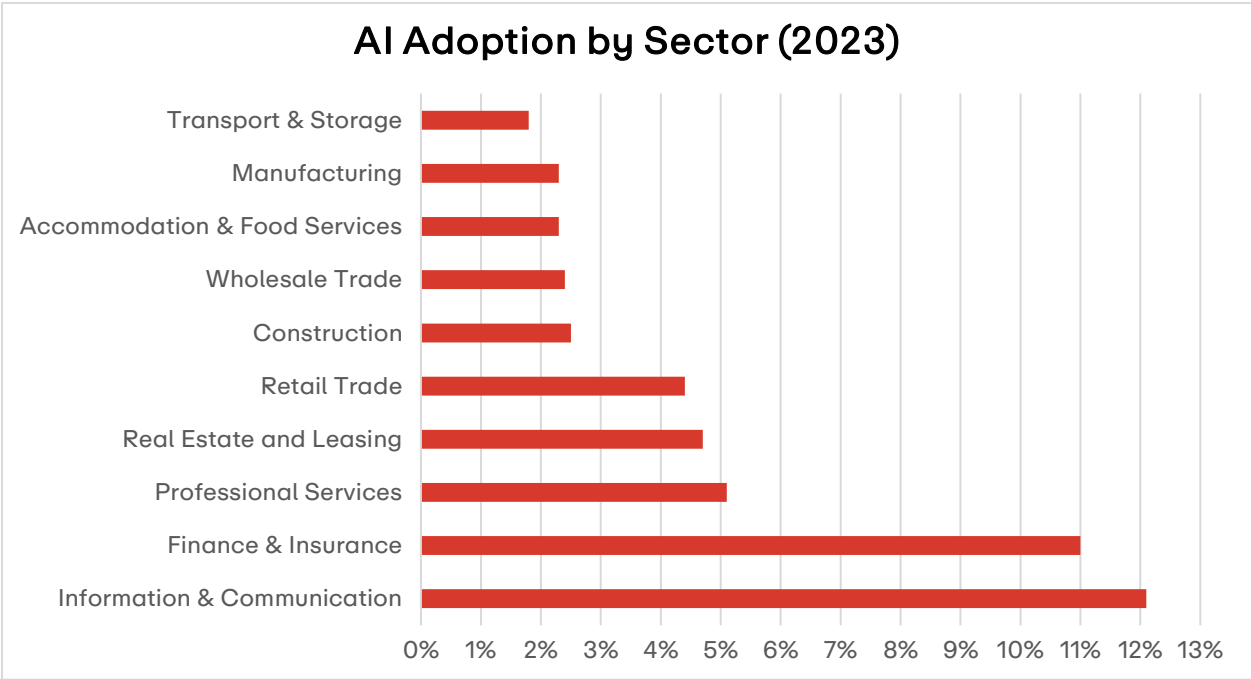
### Finance and Banking

Singapore's financial sector is a global leader in adopting AI for fraud detection, risk management, and customer service. SGX-listed banks like DBS, OCBC, and UOB are leveraging AI to automate processes and provide personalized financial products. DBS, for instance, uses AI for virtual banking assistance and real-time fraud monitoring, making these banks attractive investment targets.

### Maritime and Logistics Sector

AI is transforming the maritime and logistics industries, critical components of Singapore's economy. PSA International, a leading global port operator, has implemented AI solutions to optimize port operations and improve supply chain efficiency. Similarly, companies involved in logistics, such as SGX-listed SATS, are adopting AI to enhance cargo handling and streamline processes. These advancements underscore the potential of AI to drive efficiency and profitability in this sector.

Chart 3: Singaporean Enterprises that Adopted AI by Sector (2023)



Source: Infocomm media development authority Singapore

Conclusion

AI’s transformative impact on Singapore’s economy presents diverse investment opportunities across multiple sectors. From technology infrastructure to healthcare, transport, retail, finance, and logistics, SGX-listed companies and startups are at the forefront of AI innovation. The proactive support from the government and a well-established ecosystem make Singapore a compelling destination for AI-focused investments, ensuring sustained growth and competitive advantage in the global AI landscape.

## Stocks listed on Singapore Stock Exchange that offer exposure to the AI Theme

### SGX: S63 SINGAPORE TECHNOLOGIES ENGINEERING LTD

ST Engineering (SGX: S63) leverages AI and predictive technologies to lead in smart solutions. On October 14, 2024, it secured a S\$60M contract to build a smart city platform for Lusail City, Qatar, enhancing operations for 450,000 people. Its aerospace sector launched the Component Health Management system, initially deployed with Japan Airlines and Zipair Tokyo for Boeing 787s, using advanced analytics to detect anomalies and predict component lifespan, reducing costs by up to 60%. Trading at SGD 4.55 on December 23, 2024, it remains an AI-driven market leader.

### SGX: S68 SINGAPORE EXCHANGE LIMITED

Singapore Exchange Limited (SGX: S68) integrates AI and machine learning to enhance regulatory oversight and operations. Its AI-driven surveillance systems, via SGX RegCo, bolster market integrity by detecting trading anomalies. SGX FX won "Best AI-Based Solution" at the 2024 Waters Technology Asia Awards, showcasing its innovation. Trading at SGD 9.50 on December 23, 2024, SGX exemplifies technological leadership, improving efficiency and service offerings in the financial sector.

### SGX: C52 COMFORTDELGRO CORPORATION LTD

ComfortDelGro Corporation Ltd (SGX: C52) is leveraging AI and autonomous technologies to enhance global transportation services. In July 2024, it partnered with Pony.ai to launch large-scale robotaxi operations in China, with plans to expand globally. In April 2024, it acquired A2B Australia, growing its taxi fleet to 21,000 vehicles. For H1 2024, revenue rose 13.7% to S\$2.12B, and net profit grew 21.4% to S\$95.3M. Trading at SGD 1.42 on December 23, 2024, ComfortDelGro is driving innovation in mobility solutions.

### SGX: BN4 KEPPEL CORPORATION

Keppel Corporation (SGX: BN4) is strengthening its presence in AI and digital infrastructure through strategic initiatives. In December 2024, it partnered with AWS to enhance global data centers, subsea cables, and renewable energy projects using Amazon Bedrock. Keppel is also developing the Bifrost Cable System, the largest high-speed Pacific cable, and acquired an AI-ready data center in Tokyo. Trading at SGD 6.74 on December 23, 2024, Keppel is driving growth in the digital economy.

### SGX: AJBU KEPPEL DC REIT

Keppel DC REIT, Asia's first pure-play data center REIT, is capitalizing on the rapid growth of AI-driven demand for computational infrastructure. In November 2024, it acquired two hyperscale AI-ready data centers in Singapore for S\$1.07 billion, enhancing its portfolio for future AI workloads. Trading at S\$2.24 in January 2025, with a market cap of S\$4.97 billion, P/E ratio of 25.89, and 3.52% dividend yield, it offers stable returns and growth in the AI-driven digital economy.

### SGX: Z74 SINGTEL

Singtel is advancing AI development in Singapore and Southeast Asia through initiatives like RE:AI, an AI Cloud Service for enterprises, and a collaboration with NVIDIA to boost regional AI adoption under the National AI Strategy 2.0. It also launched Nxera, a sustainable, AI-ready data center brand. Trading at SGD 3.10 on December 20, 2024, with a 30.8% annual return, Singtel demonstrates strong growth and innovation in AI and telecommunications.

*The stocks listed on this page are for reference only. This should not be construed as a recommendation to buy. GROW with Singlife does not offer stocks on its platform. Please refer to the Disclaimer at the end of this document.*



## Funds that offer exposure to the AI Theme

### NATIXIS THEMATICS AI AND ROBOTICS

An unconstrained and concentrated portfolio, the fund has a high active share and invests across global markets in companies of all sizes – which have longer potential runways of growth. Unlike other portfolios, the fund only invests in companies offering products and services, rather than the adopters. This gives it a purer play on the theme of AI & Robotics.

The field of Artificial Intelligence has been an exciting place to be for investors over the past few years, however one has to keep in mind the exponential nature of developments in the field. In a very dynamic and rapidly evolving investment opportunity set, investors have the challenge and the opportunity of identifying the long-term winners early on but, more importantly, avoiding “over-hyped” areas of the market that could be materially detrimental to performance (a distinction not offered via passive exposure for instance) hence the fund privileges a highly selective and active approach to investing in AI & Robotic related companies at Natixis Thematics AM. It is likely that the winning strategies of tomorrow will be those that maintain consistent and long-term exposure to the most attractive opportunities in the universe, while adopting a strict valuation discipline to help smooth the inevitable ups and downs along the way. The fund manager, therefore, believes that the true value lies in the enablers of artificial intelligence rather than the adopters, for these are the companies that are poised to benefit from the continued exponential advancements in the field that we’ve witnessed. And, in addition to using the last decade of robotics and automation as a lens to look at what the future might hold for AI, combining these two areas can present a novel opportunity-set for investors that not only balances two fields at different stages of their development and adoption (as well as with different cyclicity and valuations) but two fields with a myriad of mutual and self-reinforcing benefits hence providing portfolio diversification with the ability to navigate a variety of market cycles and environment

### BGF WORLD TECHNOLOGY FUND

The Fund is an all-cap strategy that employs a bottom-up, fundamental process to seek opportunities across the global technology universe, with a focus on maximizing total return. Managed by 2 PMs with a combined 53 years of investment experience, equipping the fund with the expertise to capitalize on the best emerging opportunities in the rapidly evolving tech space. The Fund has ~70-80% exposure to the AI theme across compute & infrastructure, models, data, software, services, internet and hardware. The Fund boasts a track record of over 29 years, delivering top quartile returns vs its peer group on a 1,5 and 10 year basis. The Fund has been recognized with a 4 star Morningstar rating and a Bronze Medal Morningstar Rating.

### BGF NEXT GENERATION TECHNOLOGY FUND

The Fund is a small and mid-cap focused strategy that provides exposure to innovative, earlier stage companies and emerging disruptors within the global technology universe. Managed by 2 PMs with a combined 53 years of investment experience, equipping the fund with the expertise to capitalize on the best emerging opportunities in the rapidly evolving tech space. The Fund has ~60-70% exposure to the AI theme across compute & infrastructure, models, data, software, services, internet and hardware. With over USD 24 billion in assets across public and private tech companies, the team leverages insights on emerging and disruptive technology trends from non-public companies to avoid any blind spots.

## ALLIANZ GLOBAL ARTIFICIAL INTELLIGENCE

Going beyond the typical technology index, Allianz Global Artificial Intelligence invests in stocks across all sectors for innovative companies leveraging Artificial Intelligence (AI) through a fundamental, bottom-up investment process. With a consistent and disciplined stock selection process and prudent risk control, the Fund aims to construct a well-diversified portfolio that invests in the global equity market of companies that stand to benefit the most from:

- Deployment of AI infrastructure and secondary enabling technologies critical to the growth of AI
- Development of AI software and applications to make smarter insights and decisions
- Adoption of AI in key vertical business processes to drive AI-enabled industries

## JP MORGAN FUNDS – US TECHNOLOGY

The JPM US Technology Fund is a fundamental, bottom-up, flexible approach to our high conviction ideas in technology-driven sectors. The fund seeks to invest in companies aligned with mega trends in technology regardless of sector or capitalization, and aim to identify Technology Leaders – companies that develop or harness new technologies to reimagine products, establish new markets, or attain leadership in existing ones.

- AI hardware (for example, Nvidia in the US, ASML in Europe and TSMC in Taiwan), which are the companies that drive the design and manufacture of the semiconductors that are key to generating computing power;
- AI hyperscalers (for example, Amazon's Web Services business or Google Cloud), which are the companies that provide physical AI infrastructure such as cloud services and data centers, create custom silicon chips, and build large language models that can be used by other companies;
- AI developers, which can range from small app builders to existing enterprise software companies (for example, Adobe or Microsoft) that leverage hyperscaler technologies to provide solutions for end users;
- AI integrators, which are the larger organisations that have sufficient technology functionality to build their own AI solutions, as well as the IT services companies that support them.

## Your Friendly Business Development Representatives



Adrian Ng  
[Email Adrian](#)



Lim Kai Xin  
[Email Kai Xin](#)

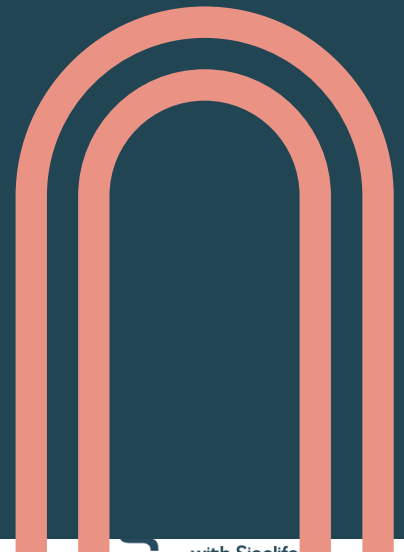


Isabella Zinn  
[Email Isabella](#)



Ching Ee Hel  
[Email Ching  
Ee](#)

# CONTACT



with Singlife

## DISCLAIMERS & CONFIDENTIALITY NOTICE

### IMPORTANT DISCLAIMERS

This document is prepared by Navigator Investment Services Limited (UEN No.: 200103470W) ("Navigator") and is distributed for information only. It is not and does not constitute an offer, recommendation, or solicitation to enter into any transaction, to buy or sell any investment product, or to adopt any investment strategy in relation to any investment product.

This document does not take into account the specific investment objectives, investment strategies, financial situation and needs of any particular person (including the intended recipient). You should not rely on any contents of this document as financial advice or recommendation to invest.

Past performance is not indicative of future performance and no representation or warranty is made regarding future performance.

All information and opinions expressed in this document were obtained from sources believed to be reliable and in good faith, but no representation or warranty, express or implied, is made as to its accuracy or completeness or any verification on such information and opinions has been performed. All information and opinions herein are current as at the date of this document, and subject to change without notice.

To the extent permitted by law, Navigator specifically disclaims all warranties (express or implied) regarding the accuracy, completeness, or usefulness of this document and the information within and Navigator assumes no liability with respect to the consequences of relying on this document and the information within for any purpose. Navigator accepts no liability for any loss or damage arising directly or indirectly (including special, incidental or consequential loss or damage) from the use of this document. All investments are subject to risks including market fluctuation, risk, and possible loss of principal. Some investments may not be offered to citizens of certain countries such as United States. This document has not been reviewed by the Monetary Authority of Singapore (MAS). In line with MAS Fair Dealing Outcomes, we at Navigator are committed to Treating Customers Fairly

### CONFIDENTIALITY NOTICE

This document is confidential and may contain information that is privileged. The sending of this document to any person other than the intended recipient is not a waiver of the privilege or confidentiality that attaches to it. If you are not the intended recipient, please destroy all copies of this document and do not copy, distribute or disclose this document or its contents and notify the sender immediately.