Artificial Intelligence Opening Up New Investment Horizons
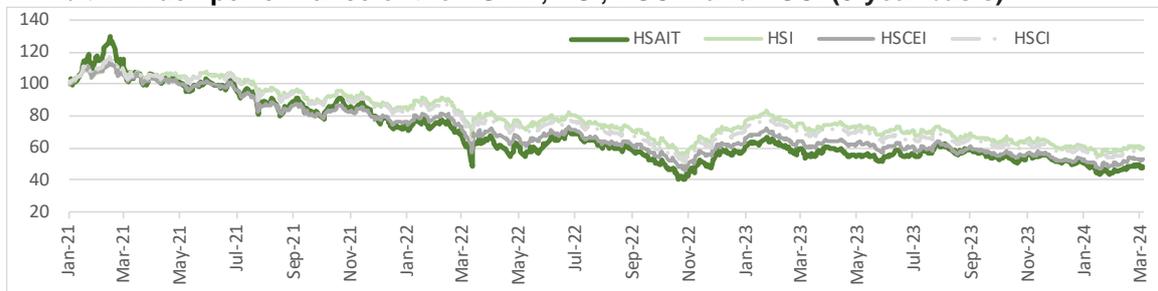
HSIL indexes as solution to track the performance of AI thematic companies

The frenzy surrounding ChatGPT (a generative artificial intelligence application) has shifted market focus to the potential applications of artificial intelligence (AI) in the future. According to Bloomberg Intelligence forecast, the industry has projected the AI market to grow at a rate of over 40% CAGR between 2022 and 2032. The recent buzz around company producing chips for AI systems, reflects how much the market's intense focus on AI and its implications for the future.

For investors looking to track the performance of the AI companies, the Hang Seng Artificial Intelligence Thematic Index ('HSAIT') tracks the performance of companies in the value chain of AI technology and that are listed in Hong Kong. Investors seeking an index with a broader theme in the technology space can consider the Hang Seng Internet and Information Technology Index ('HSIII') and the Hang Seng TECH Index ('HSTECH').

When comparing the HSAIT against the Hang Seng Composite Index ('HSCI') as the benchmark, we note that the HSAIT was -3%, +4% and -8% against the benchmark on a YTD, 1-year and 3-year basis, respectively. Given that the investment theme related to AI has only gained traction in the past one year or so, it is not surprising that the HSAIT has underperformed the HSCI on a 3-year basis.

Exhibit 1: Index performance of the HSAIT, HSI, HSCEI and HSCI (3-year basis)

Source: Hang Seng Indexes Company.
Date: 8 March 2024

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Executive Summary

Market attention upon AI has continued into 2024

The popularity of generative AI applications such as ChatGPT has shifted market attention to the potential usage of AI in the future. With the media widely reporting the various capabilities of ChatGPT and subsequent launches of similar AI applications by other tech companies (eg, Bing AI by Microsoft, Gemini by Google, ERNIE by Baidu), the frenzy from investment community and end users surrounding AI has continued into 2024.

Focus upon artificial intelligence is demonstrated via market frenzy around AI hardware company

As the market gets more optimistic towards the growth potential of AI, the consensus earnings estimates for AI hardware company in terms of gross profit, gross profit margin and free cash flow (FCF) generated by the operating business are being revised up repeatedly by the market.

Hang Seng Artificial Intelligence Theme Index ('HSAIT') tracking AI companies

In September 2023, Hang Seng Indexes Company launched the Hang Seng Artificial Intelligence Theme Index. Such index tracks the performance of Hong Kong-listed companies which are engaged in the value chain of AI technology. The number of constituent members has been fixed at 40 and the index members are being reviewed once every six months. A cap of 10% weighting distribution is being imposed upon each constituent member.

Hang Seng Internet and Information Technology Index ('HSIII') tracks "software and services" technology companies

Back in August 2015, the Hang Seng Internet and Information Technology Index was launched to track the performance of companies listed in Hong Kong that are related to internet and information technology businesses. We note that several constituent members are gaming companies, therefore performance of the HSIII has been impacted by the regulatory control over number of gaming hours incurred by young users implemented by the government in recent years.

Hang Seng TECH Index ('HSTECH') tracks performance of major technology companies

In July 2020, the Hang Seng TECH Index was launched to track the largest technology companies (number of constituent members fixed at 30) in Hong Kong. Investment themes of the HSTECH constituent members include cloud, digital, e-commerce, fintech, Internet and autonomous. The HSTECH is meant to be the most comprehensive and representative index, capturing all the major technology companies as its constituents.

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Opportunities ahead for AUM of ETFs tracking the HSTECH to move further up

We take a look at the ratio of total assets under management (AUM) of HSI-related ETFs to the HSI's freefloat market cap. The ratio ranged from 1.1% to 1.4% between 2019 and 2023. When we look at HSTECH, such ratio only ranged from 0.2% to 1.4% between 2019 and 2022. For 2023, as more and more ETFs began to track the HSTECH, we note that the ratio has moved up to 2.5%. Longer term, we believe there is room for the HSTECH to further move up on this ratio. Therefore, there is still upside potential for the size of HSTECH-related ETFs to grow further.

Hang Seng Artificial Intelligence Theme Index

When comparing the Hang Seng Artificial Intelligence Theme Index against the Hang Seng Composite Index, we note that the Hang Seng Artificial Intelligence Theme Index was -3%, +4% and -8%, respectively, against the benchmark on a YTD, 1-year and 3-year basis. Given the investment theme related to AI has only gained traction in the past one year or so, it is not surprising that the HSAIT has underperformed the Hang Seng Composite Index on a 3-year basis.

Exhibit 2: Index performance of the HSAIT, HSI, HSCEI and HSCI (3-year basis)
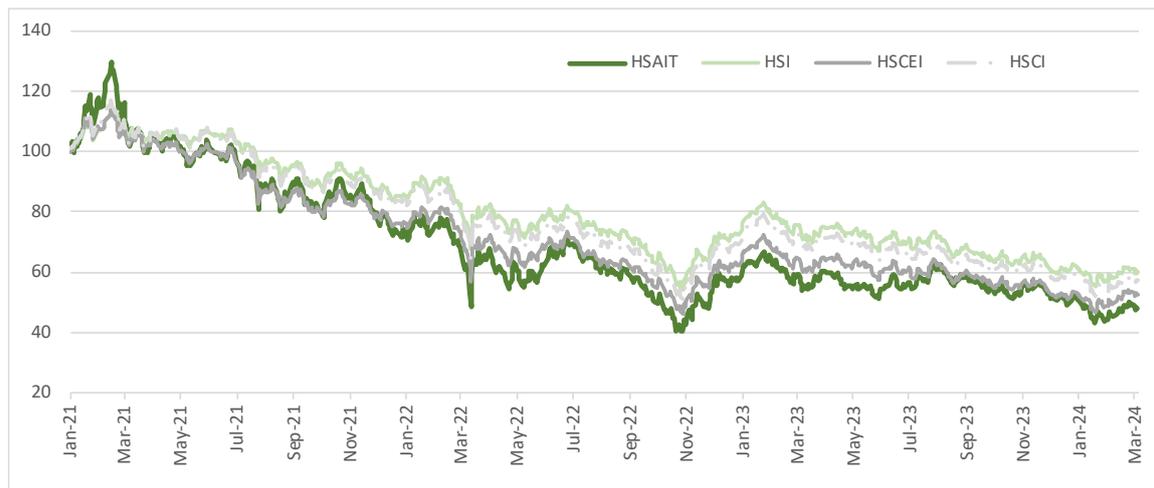
Source: Hang Seng Indexes Company.
Date: 8 March 2024

Market Attention on Artificial Intelligence Continues

Back in late November of 2022, the company (OpenAI) released a demo version of ChatGPT (Chat Generative Pre-Trained Transformer) to the public. With the media widely reporting the various capabilities of ChatGPT and subsequent launches of similar AI applications by other tech companies (eg, Bing AI by Microsoft, Gemini by Google, ERNIE by Baidu), the frenzy from investment community and end users surrounding AI has continued into 2024.

Exhibit 3: Impact of ChatGPT upon various industries

		Impacts upon industry
(I)	**Customer service**	Leveraging ChatGPT to automate responses to common inquiries
(II)	**Education**	Used to create intelligent tutoring systems capable of providing personalized assistance to students
		Professors can utilize ChatGPT to create a database of examination questions
(III)	**Content creation**	Used to generate creative ideas, draft articles
(IV)	**Businesses**	Automate routine tasks such as drafting emails or writing code
(V)	**Healthcare**	Used for clinical decision support, medical recordkeeping, analyzing and interpreting medical literature, and disease surveillance
(VI)	**Entertainment**	Used to generate video game storylines and movie scripts

Source: Forbes, Hang Seng Indexes Company.
Date: 8 March 2024

Apart from chatbot, other popular applications of artificial intelligence which have been rolled out include: (1) Siri (iOS-based) and Google Assistant (Android-based) which serve as digital assistants on smart devices; (2) autonomous driving vehicles (on limited scale); (3) use of AI to make decisions in real time and increase productivity (eg, fulfillment warehouse); (4) use of AI to detect minor diseases inside the human body; (5) use of AI to detect amount of water and moisture, amount of deficient nutrients in the soil, (6) use of AI in the hiring process to detect any kind of malpractice behavior, (7) use of AI to make a human-like simulation in gaming.

One way to show the frenzy surrounding AI is to look at the earnings trajectory of AI hardware company and their share price performance. As the market gets more optimistic towards the growth potential of AI, the consensus earnings estimates for AI hardware company in terms of gross profit, gross profit margin and free cash flow (FCF) generated by the operating business are being revised up repeatedly by the market.

According to Bloomberg Intelligence, the global AI market size was valued at US$40bn in 2022 and projected to grow at a CAGR of 42% between 2022 and 2032 (10-year period). Given the business applications of AI are only at the beginning stage, the full potential of the market is yet to be full tapped. As the global AI market continues to get bigger in size, the companies which generate revenue from providing AI products and services should benefit correspondingly.

Exhibit 4: Size of generative AI market opportunity

(US$ mn)	2022	2027E	2032E	CAGR
Hardware	**37,972**	**223,615**	**641,738**	**33%**
Devices (Inference)	4,128	82,965	168,233	45%
Computer Vision AI Products	1,032	22,124	60,564	50%
Conversational AI Products	3,096	60,841	107,669	43%
Infrastructure (Training)	33,844	140,650	473,505	30%
AI Server	22,563	49,641	133,817	19%
AI Storage	9,025	33,094	92,642	26%
Generative AI Infrastructure as a Service	2,256	57,915	247,046	60%
Software	**1,492**	**58,825**	**279,899**	**69%**
Specialized Generative AI Assistants	447	20,864	89,035	70%
Coding, DevOps and Generative AI Workflows	213	12,617	50,430	73%
Generative AI Workload Infrastructure Software	439	13,468	71,645	66%
Generative AI Drug Discovery Software	14	4,042	28,343	114%
Generative AI Based Cybersecurity Spending	9	3,165	13,946	108%
Generative AI Education Spending	370	4,669	26,500	53%
Generative AI Based Gaming Spending	**190**	**20,668**	**69,414**	**80%**
Generative AI Driven Ad Spending	**57**	**64,358**	**192,492**	**125%**
Generative AI Focused IT Services	**83**	**21,690**	**85,871**	**100%**
Generative AI Based Business Services	**38**	**10,188**	**34,138**	**97%**
Total	**39,832**	**399,344**	**1,303,552**	**42%**

Source: Bloomberg Intelligence, IDC, eMarketer, Statista.
Date: 8 March 2024

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For many Fortune 500 companies, they have announced the adoption of AI into their business operations. In the following, we provide a sample list of how AI being used in their daily business operations or service offerings.

Amazon: Amazon uses AI software to determine the most efficient packaging options for shipping products to the customers. On one hand, this can reduce the volume of materials used in the packaging process. On the other hand, this can lower the shipping costs paid by customers as weight of the package is reduced.

Apple: The company's CEO recently indicated Apple will announce its business plans on how to put generative AI to use later this year. Meanwhile, Siri (a digital assistant) for iOS users has been powered all along with AI technology.

Meta: By using AI technology, Meta offers translation service which could capture the content within a conversation. The seamless translation makes the recipient of the message feels the message is originally delivered in the recipient's home language.

Microsoft: At Microsoft, the company merges AI and data to offer open-source tools which help farmers to adopt sustainable agriculture practices. Separately, Microsoft uses AI to help mapping out places which are exposed to natural disaster risks so that residents could be warned ahead.

Tesla: Tesla released its full self-driving software to some of the company's customers. The full self-driving software is AI-powered to enhance the driving experience. Separately, Tesla is using AI to power the general-purpose robotic humanoid (named Optimus by Tesla).

Exhibit 5: Popular applications of AI
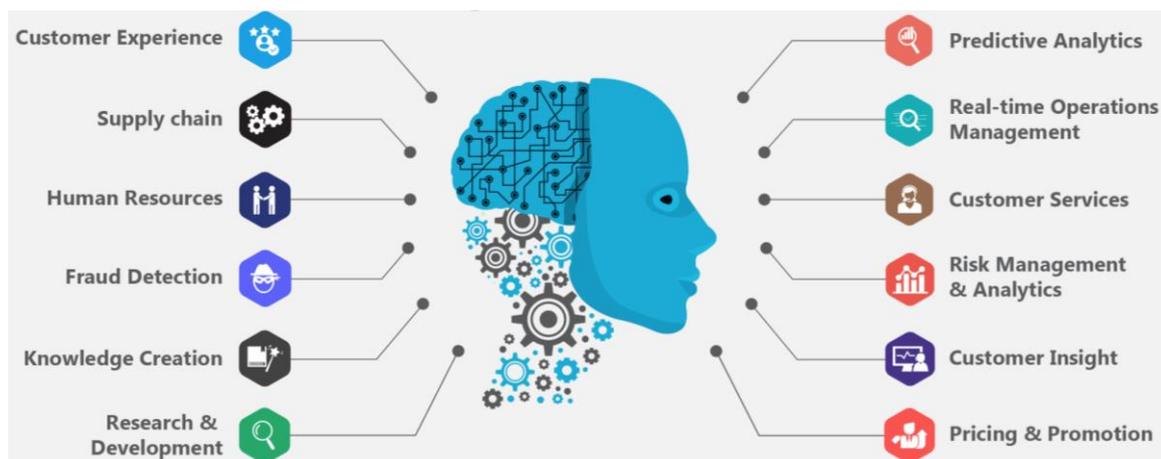
Source: WinWire.
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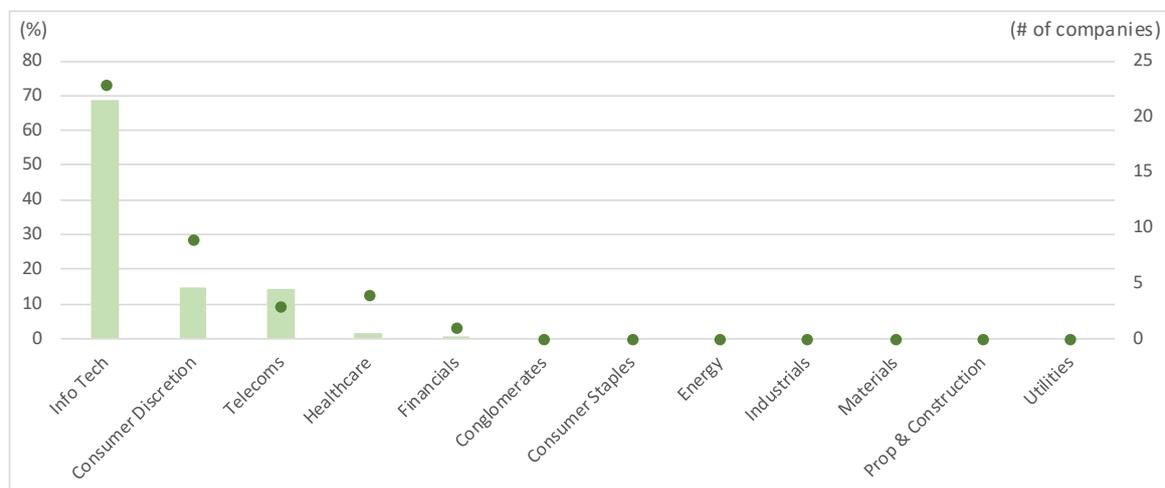# Hang Seng Artificial Intelligence Theme Index ('HSAIT')

In September 2023, Hang Seng Indexes Company launched the Hang Seng Artificial Intelligence Theme Index ('HSAIT'). The index is to track the performance of Hong Kong-listed companies which are engaged in the value chain of AI technology. Any listed company within the Hang Seng Composite Index ('HSCI') is eligible for consideration as a potential constituent member of HSAIT. To be considered for inclusion into the HSAIT, the listed company must belong to one of the following industries in the Hang Seng Industry Classification System ("HSICS"):

- Consumer Discretionary (Industry Code 23);
- Healthcare (Industry Code 28);
- Telecommunications (Industry Code: 35);
- Financials (Industry Code: 50);
- Information Technology (Industry Code: 70)

For a listed company to be eligible for constituent selection, the company's business should have one of the following themes: (1) core computing power and resources; (2) artificial intelligence technologies; (3) artificial intelligence application. The first category includes companies which are involved in development or production of specific processing chips, high performance computing, cloud computing, high speed networks. The second category includes companies which are involved in machine learning, big data, natural language processing, digitalization, generative artificial intelligence. The last category includes companies which are involved in smart living, smart city, smart healthcare and smart finance.

The number of constituent members has been fixed at 40 and the index members are being reviewed once every six months. A cap of 10% weighting distribution is being imposed upon each constituent member.

Exhibit 6: Distribution of companies within the HSAIT (Index weightings represented by bar chart on LHS)

Source: Hang Seng Indexes Company.
Date: 8 March 2024

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Exhibit 7: Top 10 companies (weighting distribution) within the HSAIT

	Code	Company	Industry	Weighting (%)
1	3690.HK	MEITUAN - W	Information Technology	10.75%
2	0941.HK	CHINA MOBILE	Telecommunications	10.47%
3	0700.HK	TENCENT	Information Technology	9.83%
4	9988.HK	BABA - SW	Information Technology	9.78%
5	1810.HK	XIAOMI - W	Information Technology	9.63%
6	2015.HK	LI AUTO - W	Consumer Discretionary	8.38%
7	9618.HK	JD - SW	Information Technology	6.80%
8	1024.HK	KUAISHOU - W	Information Technology	5.96%
9	9999.HK	NTES - S	Information Technology	4.83%
10	0981.HK	SMIC	Information Technology	2.92%
			Subtotal	**79.34%**

Source: Hang Seng Indexes Company.

Date: 8 March 2024

Exhibit 8: Index performance of the HSAIT against HSI, HSCEI and HSCI (3-year basis)
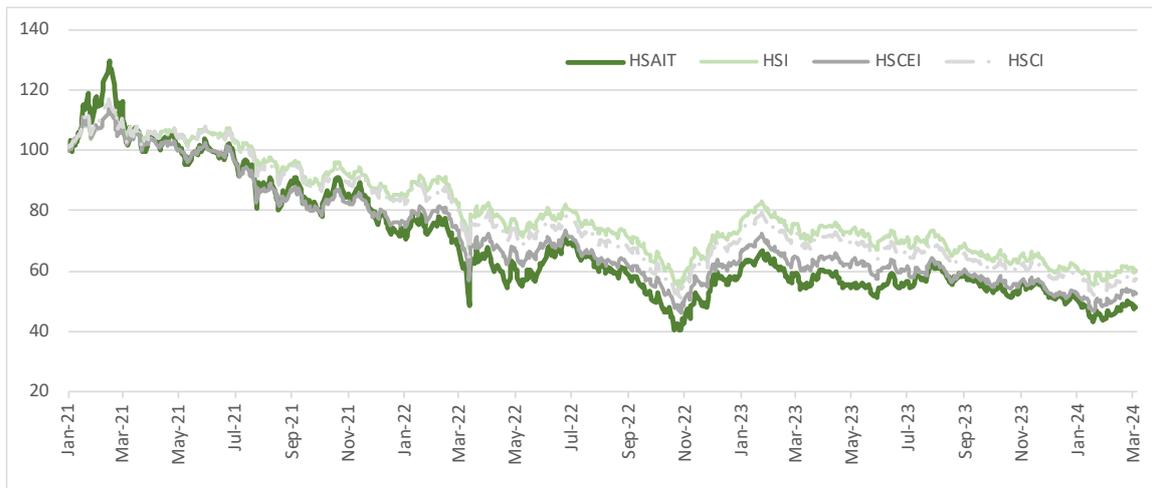
Source: Hang Seng Indexes Company.

Date: 8 March 2024

Hang Seng Internet & Information Technology Index ('HSIII')

Before the launch of the Hang Seng Artificial Intelligence Theme Index in 2023, Hang Seng Indexes Company has the Hang Seng Internet & Information Technology Index ('HSIII'). Such index tracks the performance of companies listed in Hong Kong that are related to Internet and information technology businesses. The constituent companies are selected from companies classified under "s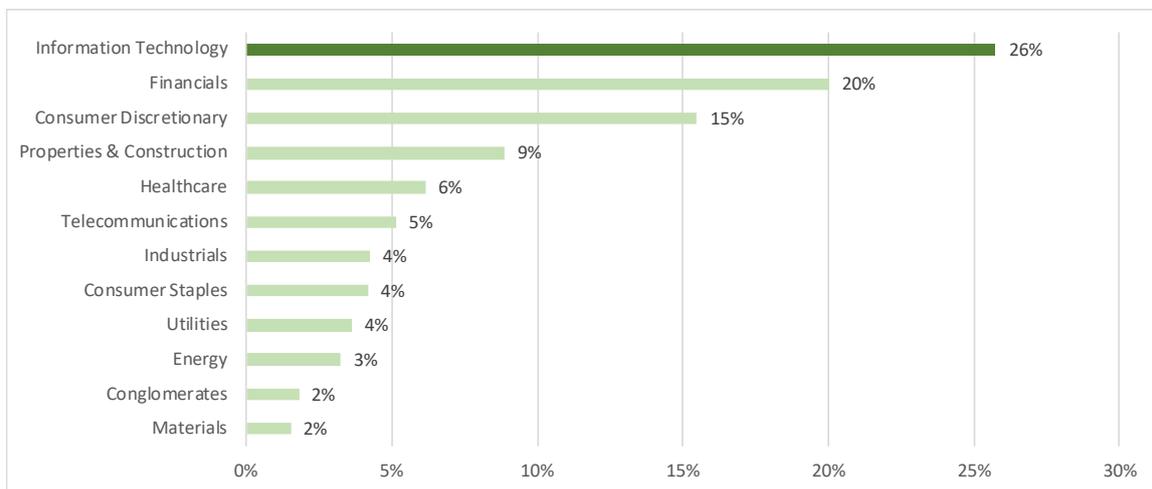oftware & services" category in the Hang Seng Industry Classification System. The index was launched in August 2015. The number of constituent companies is fixed at 30. The list of index members is reviewed once every six months. A cap of 12% weighting distribution is being imposed upon each constituent member.

Within the HSIII, we note that roughly 95% weighting distribution of the index (20 companies) are also constituent members of the HSAIT.

The significance of Information Technology industry can be seen when we look at the distribution of market capitalization by industry of all the companies listed on the Hong Kong Exchanges and Clearing Limited (HKEX) (Exhibit 9). Similarly, when we look at the distribution of trading volume (in HK$ mn) of all the companies listed on the HKEX, we note that Information Technology industry is ranked as the number one industry as well.

Exhibit 9: Breakdown of mkt cap (HK$ mn) by industry in HKEX mainboard-listed universe for 2023

Industry	%
Information Technology	26%
Financials	20%
Consumer Discretionary	15%
Properties & Construction	9%
Healthcare	6%
Telecommunications	5%
Industrials	4%
Consumer Staples	4%
Utilities	4%
Energy	3%
Conglomerates	2%
Materials	2%

Source: Hang Seng Indexes Company, HKEX
Date: 8 March 2024

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Exhibit 10: Breakdown of turnover (HK$ mn) by industry in HKEX mainboard-listed universe for 2023
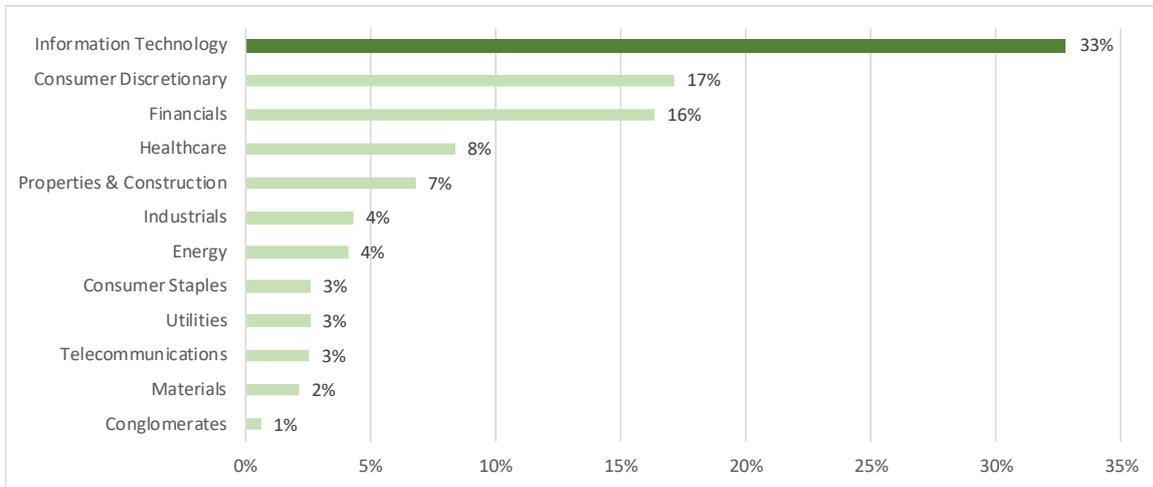
Source: Hang Seng Indexes Company, HKEX

Date: 8 March 2024

Based on Exhibit 11, we note that 6 out of the top 10 companies (weighting distribution) within the HSIII are companies with "weighted voting right structures" (marked by "W" in company's ticker symbol). By having the "weighted voting right structures," the founders and management can maintain control over the strategic direction of a company. Under "one share, one vote" structure, a person's voting power is proportional to his shareholding of the company.

Exhibit 11: Top 10 companies (weighting distribution) within the HSIII

	Code	Company	Industry	Weighting (%)
1	3690.HK	MEITUAN - W	Information Technology	12.77%
2	1024.HK	KUAISHOU - W	Information Technology	12.57%
3	9618.HK	JD - SW	Information Technology	12.16%
4	9999.HK	NTES - S	Information Technology	12.15%
5	0700.HK	TENCENT	Information Technology	11.68%
6	9988.HK	BABA - SW	Information Technology	11.62%
7	9888.HK	BIDU - SW	Information Technology	7.86%
8	0268.HK	KINGDEE INT'L	Information Technology	2.96%
9	9626.HK	BILIBILI - W	Information Technology	2.64%
10	3888.HK	KINGSOFT	Information Technology	2.33%
			Subtotal	**88.75%**

Source: Hang Seng Indexes Company.

Date: 8 March 2024

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Hang Seng TECH Index ('HSTECH')

In the event that investors not looking to focus specifically on equity investment with AI theme in technology space, then they can consider a broad-based index, the Hang Seng TECH Index.

In order to track the largest technology companies listed in Hong Kong, Hang Seng Indexes Company launched the HSTECH in July 2020. Investment themes of the HSTECH constituent members include cloud, digital, e-commerce, fintech, Internet and autonomous.

The number of constituent members has been fixed at 30 and the index members are being reviewed once every three months. A cap of 8% weighting distribution is being imposed upon each constituent member.

Within the HSTECH, we note that roughly 84% weighting distribution of the index (20 companies) are also constituent members of the HSAIT.

Exhibit 12: Distribution of companies within the HSTECH (Index weightings represented by bar chart on LHS)
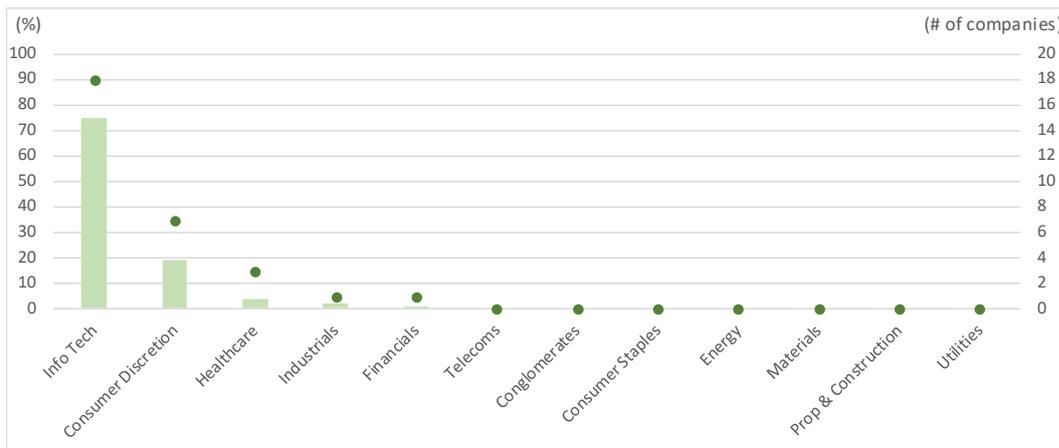
Source: Hang Seng Indexes Company.
Date: 8 March 2024

Exhibit 13: Top 10 companies (weighting distribution) within the HSTECH

	Code	Company	Industry	Weighting (%)
1	3690.HK	MEITUAN - W	Information Technology	8.58%
2	9618.HK	JD - SW	Information Technology	8.17%
3	1024.HK	KUAISHOU - W	Information Technology	8.14%
4	1810.HK	XIAOMI - W	Information Technology	8.03%
5	0700.HK	TENCENT	Information Technology	7.85%
6	9988.HK	BABA - SW	Information Technology	7.81%
7	2015.HK	LI AUTO - W	Consumer Discretionary	6.82%
8	9999.HK	NTES - S	Information Technology	6.61%
9	0992.HK	LENOVO GROUP	Information Technology	4.39%
10	0981.HK	SMIC	Information Technology	3.98%
			Subtotal	**70.37%**

Source: Hang Seng Indexes Company.
Date: 8 March 2024

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Comparison of Index Performance

When comparing the Hang Seng Artificial Intelligence Theme Index (HSAIT) against the Hang Seng Composite Index ('HSCI') as the benchmark index, we note that the HSAIT was -3%, +4% and -8%, respectively against the benchmark on a YTD, 1-year and 3-year basis. Given the investment theme related to AI has only gained traction in the past one year or so, it is not surprising that HSAIT has underperformed the HSCI on a 3-year basis.

When comparing the Hang Seng Internet & Information Technology Index (HSIII) against the HSCI as the benchmark index, we note that the HSIII was -4%, -8% and -19%, respectively against the benchmark on a YTD, 1-year and 3-year basis. Given the HSIII is centered upon software and services, we note that many of the constituent (ie, gaming companies) are impacted by the government's control on the gaming hours incurred by young users in 2019. Therefore, the HSIII has significantly underperformed the benchmark on a 3-year basis.

Meanwhile, due to the heavy regulatory pressure upon the Internet sector in mainland, when comparing the Hang Seng TECH Index against the HSCI as the benchmark index, we note that the Hang Seng TECH Index as -6%, +4% and -13%, respectively against the benchmark on a YTD, 1-year and 3-year basis.

Exhibit 14: Index performance comparison against various indexes

Index	Bloomberg ticker	YTD	1-year	3-year
Hang Seng Artificial Intelligence Theme Index	HSAIT	-7.5%	-14.5%	-52.7%
Hang Seng Internet & Information Technology Index	HSIII	-8.5%	-25.9%	-64.1%
Hang Seng TECH Index	HSTECH	-10.0%	-13.9%	-58.0%
Hang Seng Index	**HSI**	**-4.1%**	**-17.9%**	**-43.2%**
Hang Seng China Enterprises Index	**HSCEI**	**-1.9%**	**-14.9%**	**-48.4%**
Hang Seng Composite Index	**HSCI**	**-4.3%**	**-18.1%**	**-44.7%**

Source: Hang Seng Indexes Company.
Date: 8 March 2024

Correlation between the HSAIT, HSIII and HSTECH

In the following exhibit, we compute the correlation between the Hang Seng Artificial Intelligence Thematic Index ('HSAIT'), the Hang Seng Internet & Information Technology Index ('HSIII') and the Hang Seng TECH Index ('HSTECH'). Judging from the correlation ratio (as shown in the following exhibit), we see that the HSIII and the HSTECH have shown high correlation with the HSAIT. In other words, the constituent members of the HSIII and the HSTECH are exposed to similar investment theme of artificial intelligence.

Exhibit 15: Correlation among the HSAIT, HSIII and HSTECH

	HSAIT	HSIII	HSTECH
HSAIT	1.000	0.978	0.986
HSIII	0.978	1.000	0.983
HSTECH	0.986	0.983	1.000

Source: Hang Seng Indexes Company.
Date: 8 March 2024

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Comparison of AUMs Tracking HSIL's Major Indexes

We take a look at the ratio of total assets under management (AUM) of the HSI-related ETFs to HSI's freefloat market cap. The ratio ranged from 1.1% to 1.4% between 2019 and 2023. Meanwhile, for the HSCEI, the ratio ranged from 0.3% to 0.7% between 2019 and 2023.

When we look at the HSTECH, such ratio only ranged from 0.2% to 1.4% between 2019 and 2022. For 2023, as more and more ETFs began to track the HSTECH, we note that the ratio has moved up to 2.5%. Longer term, we believe there is room for the HSTECH to move up further. Therefore, there is still upside potential for the size of the HSTECH-related ETFs to grow further.

Exhibit 16: AUM (HK$ billion) of index-related ETFs versus % of ETF's AUM to HSI freefloat market cap

Source: Hang Seng Indexes Company.
Date: 8 March 2024

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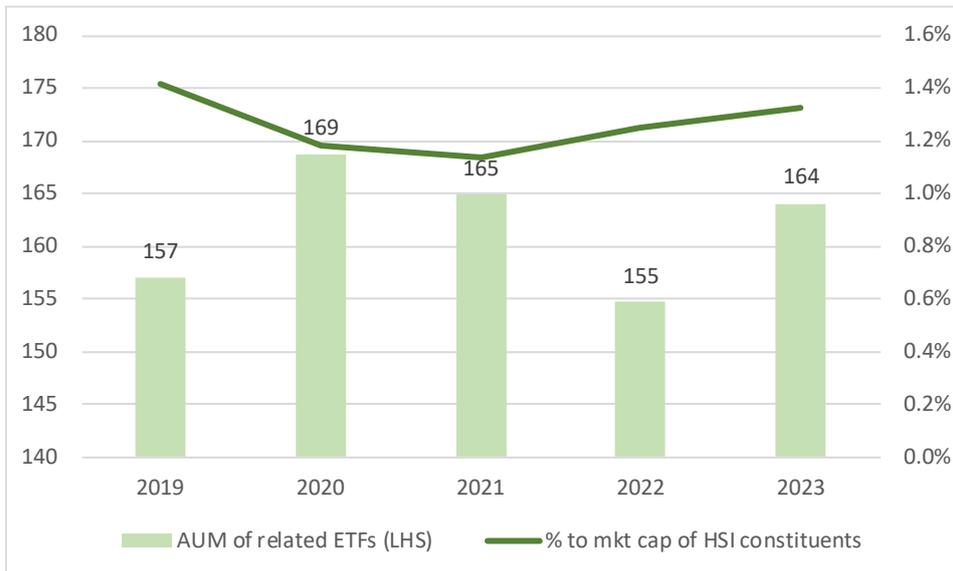
Exhibit 17: AUM (HK$ billion) of index-related ETFs versus % of ETF's AUM to HSCEI freefloat market cap

Source: Hang Seng Indexes Company.

Date: 8 March 2024

Exhibit 18: AUM (HK$ billion) of index-related ETFs versus % of ETF's AUM to HSTECH freefloat market cap

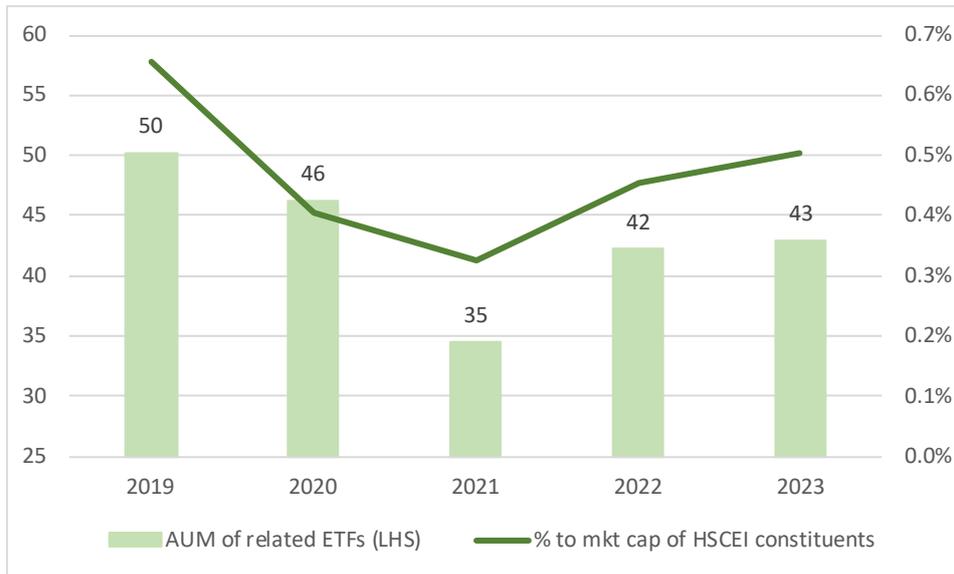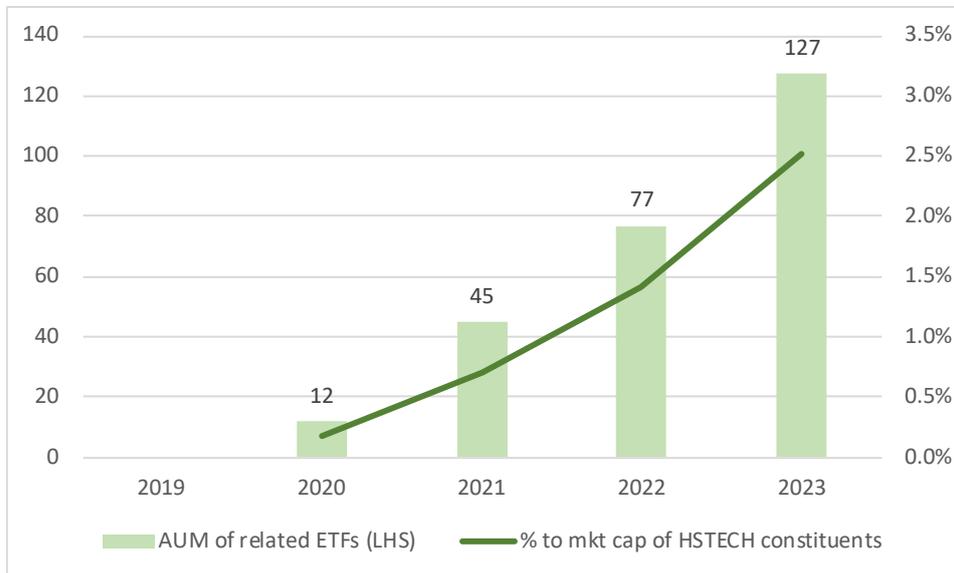Note: Hang Seng TECH Index was launched in July 2020.

Source: Hang Seng Indexes Company.

Date: 8 March 2024

Appendix 1 – HSAIT Constituent Details (Top 30 Stocks)

Exhibit 19: HSAIT – Top 30 constituents (based on 8 March 2024)

	Code	Company	Industry	3-mth ADT (HK$ m)	Weighting (%)	Acc. Weighting (%)
1	3690.HK	MEITUAN - W	Information Technology	3,175.4	10.75	10.75
2	0941.HK	CHINA MOBILE	Telecommunications	1,153.2	10.47	21.22
3	0700.HK	TENCENT	Information Technology	6,991.5	9.83	31.05
4	9988.HK	BABA - SW	Information Technology	3,515.6	9.78	40.82
5	1810.HK	XIAOMI - W	Information Technology	1,140.9	9.63	50.46
6	2015.HK	LI AUTO - W	Consumer Discretionary	1,281.1	8.38	58.83
7	9618.HK	JD - SW	Information Technology	1,037.1	6.80	65.63
8	1024.HK	KUAISHOU - W	Information Technology	796.8	5.96	71.59
9	9999.HK	NTES - S	Information Technology	1,228.7	4.83	76.43
10	0981.HK	SMIC	Information Technology	634.8	2.92	79.34
11	9888.HK	BIDU - SW	Information Technology	897.5	2.86	82.20
12	6690.HK	HAIER SMARTHOME	Consumer Discretionary	194.0	2.48	84.68
13	0728.HK	CHINA TELECOM	Telecommunications	281.6	2.36	87.04
14	9868.HK	XPENG - W	Consumer Discretionary	556.9	2.18	89.22
15	0762.HK	CHINA UNICOM	Telecommunications	197.1	1.45	90.67
16	0268.HK	KINGDEE INT'L	Information Technology	176.9	1.08	91.75
17	9626.HK	BILIBILI - W	Information Technology	260.2	0.96	92.70
18	0241.HK	ALI HEALTH	Healthcare	116.2	0.88	93.58
19	3888.HK	KINGSOFT	Information Technology	115.6	0.85	94.43
20	9863.HK	LEAPMOTOR	Consumer Discretionary	78.3	0.77	95.19
21	0020.HK	SENSETIME - W	Information Technology	191.5	0.72	95.92
22	0354.HK	CHINASOFT INT'L	Information Technology	121.7	0.55	96.47
23	6060.HK	ZA ONLINE	Financials	34.8	0.42	96.90
24	0136.HK	CHINA RUYI	Consumer Discretionary	43.5	0.41	97.30
25	0552.HK	CHINACOMSERVICE	Information Technology	20.2	0.36	97.66
26	1357.HK	MEITU	Information Technology	196.5	0.34	98.01
27	1833.HK	PA GOODDOCTOR	Healthcare	75.0	0.29	98.30
28	9866.HK	NIO - SW	Consumer Discretionary	94.2	0.26	98.55
29	1060.HK	ALI PICTURES	Consumer Discretionary	20.0	0.21	98.76
30	2013.HK	WEIMOB INC	Consumer Discretionary	48.5	0.20	98.96

Source: Hang Seng Indexes Company.

Date: 8 March 2024

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Appendix 2 – HSIII Constituent Details (Top 30 Stocks)

Exhibit 20: HSIII – List of constituent companies (based on 8 March 2024)

	Code	Company	Industry	3-mth ADT (HK$ m)	Weighting (%)	Acc. Weighting (%)
1	3690.HK	MEITUAN - W	Information Technology	3,175.4	12.77	12.77
2	1024.HK	KUAISHOU - W	Information Technology	796.8	12.57	25.35
3	9618.HK	JD - SW	Information Technology	1,037.1	12.16	37.51
4	9999.HK	NTES - S	Information Technology	1,228.7	12.15	49.66
5	0700.HK	TENCENT	Information Technology	6,991.5	11.68	61.34
6	9988.HK	BABA - SW	Information Technology	3,515.6	11.62	72.96
7	9888.HK	BIDU - SW	Information Technology	897.5	7.86	80.82
8	0268.HK	KINGDEE INT'L	Information Technology	176.9	2.96	83.78
9	9626.HK	BILIBILI - W	Information Technology	260.2	2.64	86.42
10	3888.HK	KINGSOFT	Information Technology	115.6	2.33	88.75
11	0020.HK	SENSETIME - W	Information Technology	191.5	2.00	90.74
12	0354.HK	CHINASOFT INT'L	Information Technology	121.7	1.52	92.27
13	1797.HK	EAST BUY	Information Technology	250.2	1.36	93.63
14	0696.HK	TRAVELSKY TECH	Information Technology	56.1	0.97	94.60
15	1357.HK	MEITU	Information Technology	196.5	0.95	95.54
16	9890.HK	ZX INC	Information Technology	53.2	0.71	96.25
17	2400.HK	XD INC	Information Technology	53.6	0.47	96.72
18	0777.HK	NETDRAGON	Information Technology	7.9	0.41	97.14
19	3738.HK	VOBILE GROUP	Information Technology	23.1	0.40	97.54
20	3896.HK	KINGSOFT CLOUD	Information Technology	22.4	0.33	97.87
21	9878.HK	HUITONGDA NET	Information Technology	9.2	0.33	98.20
22	0856.HK	VSTECS	Information Technology	16.7	0.30	98.50
23	9698.HK	GDS - SW	Information Technology	61.0	0.28	98.78
24	2121.HK	AINNOVATION	Information Technology	22.0	0.28	99.05
25	9923.HK	YEAHKA	Information Technology	5.0	0.25	99.30
26	0909.HK	MING YUAN CLOUD	Information Technology	11.2	0.23	99.53
27	9959.HK	LINKLOGIS - W	Information Technology	5.2	0.16	99.69
28	9636.HK	JF WEALTH	Information Technology	1.9	0.15	99.84
29	9880.HK	UBTECH ROBOTICS	Information Technology	36.9	0.12	99.96
30	9898.HK	WB - SW	Information Technology	3.5	0.04	100.00

Source: Hang Seng Indexes Company.

Date: 8 March 2024

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Appendix 3 – HSTECH Constituent Details (Top 30 Stocks)

Exhibit 21: HSTECH – List of constituent companies (based on 8 March 2024)

	Code	Company	Industry	3-mth ADT (HK$ m)	Weighting (%)	Acc. Weighting (%)
1	3690.HK	MEITUAN - W	Information Technology	3,175.4	8.58	8.58
2	9618.HK	JD - SW	Information Technology	1,037.1	8.17	16.75
3	1024.HK	KUAISHOU - W	Information Technology	796.8	8.14	24.89
4	1810.HK	XIAOMI - W	Information Technology	1,140.9	8.03	32.92
5	0700.HK	TENCENT	Information Technology	6,991.5	7.85	40.77
6	9988.HK	BABA - SW	Information Technology	3,515.6	7.81	48.57
7	2015.HK	LI AUTO - W	Consumer Discretionary	1,281.1	6.82	55.39
8	9999.HK	NTES - S	Information Technology	1,228.7	6.61	62.00
9	0992.HK	LENOVO GROUP	Information Technology	632.5	4.39	66.39
10	0981.HK	SMIC	Information Technology	634.8	3.98	70.37
11	9888.HK	BIDU - SW	Information Technology	897.5	3.90	74.27
12	6690.HK	HAIER SMARTHOME	Consumer Discretionary	194.0	3.39	77.66
13	9961.HK	TRIP.COM - S	Consumer Discretionary	541.5	3.35	81.01
14	9868.HK	XPENG - W	Consumer Discretionary	556.9	2.98	83.99
15	2382.HK	SUNNY OPTICAL	Industrials	404.8	2.04	86.03
16	6618.HK	JD HEALTH	Healthcare	152.2	1.83	87.86
17	0268.HK	KINGDEE INT'L	Information Technology	176.9	1.47	89.33
18	0780.HK	TONGCHENGTRAVEL	Consumer Discretionary	133.8	1.38	90.71
19	0285.HK	BYD ELECTRONIC	Information Technology	131.7	1.35	92.05
20	9626.HK	BILIBILI - W	Information Technology	260.2	1.31	93.36
21	0241.HK	ALI HEALTH	Healthcare	116.2	1.20	94.56
22	3888.HK	KINGSOFT	Information Technology	115.6	1.16	95.72
23	0020.HK	SENSETIME - W	Information Technology	191.5	0.99	96.71
24	1797.HK	EAST BUY	Information Technology	250.2	0.67	97.38
25	0772.HK	CHINA LIT	Consumer Discretionary	110.1	0.64	98.02
26	1347.HK	HUA HONG SEMI	Information Technology	155.6	0.64	98.66
27	6060.HK	ZA ONLINE	Financials	34.8	0.58	99.23
28	1833.HK	PA GOODDOCTOR	Healthcare	75.0	0.39	99.63
29	9866.HK	NIO - SW	Consumer Discretionary	94.2	0.35	99.98
30	9898.HK	WB - SW	Information Technology	3.5	0.02	100.00

Source: Hang Seng Indexes Company.

Date: 8 March 2024

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Appendix 4 – Comparison of HSAIT, HSIII and HSTECH

Exhibit 22: Comparison of constituent members (based on 8 March 2024)

			HSAIT	HSIII	HSTECH				HSAIT	HSIII	HSTECH
(1)	0020.HK	SENSETIME - W	x	x	x	(30)	2252.HK	MEDBOT - B	x		
(2)	0136.HK	CHINA RUYI	x			(31)	2382.HK	SUNNY OPTICAL			x
(3)	0241.HK	ALI HEALTH	x		x	(32)	2400.HK	XD INC		x	
(4)	0268.HK	KINGDEE INT'L	x	x	x	(33)	3650.HK	KEEP	x		
(5)	0285.HK	BYD ELECTRONIC			x	(34)	3690.HK	MEITUAN - W	x	x	x
(6)	0354.HK	CHINASOFT INT'L	x	x		(35)	3738.HK	VOBILE GROUP	x	x	
(7)	0552.HK	CHINACOMSERVICE	x			(36)	3888.HK	KINGSOFT	x	x	x
(8)	0696.HK	TRAVELSKY TECH		x		(37)	3896.HK	KINGSOFT CLOUD	x	x	
(9)	0700.HK	TENCENT	x	x	x	(38)	6060.HK	ZA ONLINE	x		x
(10)	0728.HK	CHINA TELECOM	x			(39)	6618.HK	JD HEALTH			x
(11)	0762.HK	CHINA UNICOM	x			(40)	6690.HK	HAIER SMARTHOME	x		x
(12)	0772.HK	CHINA LIT			x	(41)	6699.HK	ANGELALIGN	x		
(13)	0777.HK	NETDRAGON		x		(42)	9618.HK	JD - SW	x	x	x
(14)	0780.HK	TONGCHENGTRAVEL			x	(43)	9626.HK	BILIBILI - W	x	x	x
(15)	0856.HK	VSTECS	x	x		(44)	9636.HK	JF WEALTH		x	
(16)	0909.HK	MING YUAN CLOUD	x	x		(45)	9698.HK	GDS - SW	x	x	
(17)	0941.HK	CHINA MOBILE	x			(46)	9863.HK	LEAPMOTOR	x		
(18)	0981.HK	SMIC	x		x	(47)	9866.HK	NIO - SW	x		x
(19)	0992.HK	LENOVO GROUP			x	(48)	9868.HK	XPENG - W	x		x
(20)	1024.HK	KUAISHOU - W	x	x	x	(49)	9878.HK	HUITONGDA NET		x	
(21)	1060.HK	ALI PICTURES	x			(50)	9880.HK	UBTECH ROBOTICS		x	
(22)	1347.HK	HUA HONG SEMI			x	(51)	9888.HK	BIDU - SW	x	x	x
(23)	1357.HK	MEITU	x	x		(52)	9890.HK	ZX INC		x	
(24)	1797.HK	EAST BUY		x	x	(53)	9898.HK	WB - SW		x	x
(25)	1810.HK	XIAOMI - W	x		x	(54)	9923.HK	YEAHKA	x	x	
(26)	1833.HK	PA GOODDOCTOR	x		x	(55)	9959.HK	LINKLOGIS - W		x	
(27)	2013.HK	WEIMOB INC	x			(56)	9961.HK	TRIP.COM - S			x
(28)	2015.HK	LI AUTO - W	x		x	(57)	9988.HK	BABA - SW	x	x	x
(29)	2121.HK	AINNOVATION	x	x		(58)	9999.HK	NTES - S	x	x	x

Source: Hang Seng Indexes Company.

Date: 8 March 2024

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