



Futu Investing White Paper

Market Trends & Trading Behavior of Retail Investors
H1 2022

Futu Holdings is the parent company of moomoo.



By reviewing the trading behavior of investors using Futu's financial platforms, this white paper aims to reveal the retail investors' trading behavior and investment strategies in response to the heightened market volatility as a result of rising inflation pressures, constrained monetary policies, lingering concerns of coronavirus variants, and geopolitical tensions.

Preface

Futu Holdings Limited ("Futu") (Nasdaq: FUTU) is an advanced technology company transforming the investing experience by offering fully digitized brokerage and wealth management platforms——moomoo and Futubull.

Futu and its subsidiaries provide financial services, including trading and clearing services for the United States, Hong Kong SAR, China Connect, and Singapore stocks, margin financing, wealth management, market data, and interactive social features to individual investors.

Futu's subsidiaries hold 51 licenses and qualifications from regulators in Hong Kong SAR⁽¹⁾, the United States⁽²⁾, Australia⁽³⁾ and Singapore⁽⁴⁾. Its subsidiary, Moomoo Financial Singapore Pte. Ltd, is the first digital brokerage with full Singapore Exchange memberships.

According to Futu's 2022 first quarter financial report, the total client assets surpassed HK\$386 billion (circa \$49.3 billion), and the total stock trading value for first quarter achieved HK\$1.3 trillion (circa \$169.3 billion). The significant trading volume makes Futu a credible source for examining market sentiment and retail investment trends.

Futu and its subsidiaries advocate responsible investing by providing greater access to analytic tools, market information and diverse asset classes as part of its corporate social responsibilities. This white paper intends to shed light on the retail investors' investing trends, and helps enhance the market's understanding of retail investors' behavior.

(1) Type 1 License for dealing in securities, Type 2 License for dealing in futures contracts, Type 3 License for Leveraged Foreign Exchange Trading, Type 4 License for advising on securities, Type 5 License for advising on futures contracts, Type 7 License for providing automated trading services, and Type 9 License for asset management.

(2) Member of Financial Industry Regulatory Authority, Inc. (FINRA), the Securities Investor Protection Corporation (SIPC), as well as Depository Trust Company (DTC), National Securities Clearing Corporation (NSCC), and the Options Clearing Corporation (OCC).

(3) Australian Financial Services (AFS) license issued by the Australian Securities and Investments Commission (ASIC).

(4) All SGX memberships, MAS Capital Markets Services (CMS) license and Exempt Financial Adviser (EFA) status.

Global Markets Overview



1. US stock market overview

As of June 15, 2022, all three major US stock indexes plunged drastically compared to the levels at the beginning of the year:

- Dow Jones Industrial Average down 16.7% to 30,669.
- Nasdaq Composite Index (COMP) down 29.0% to 11,099.2.
- Standard & Poor's 500 Index falling 20.9% to 3,790.

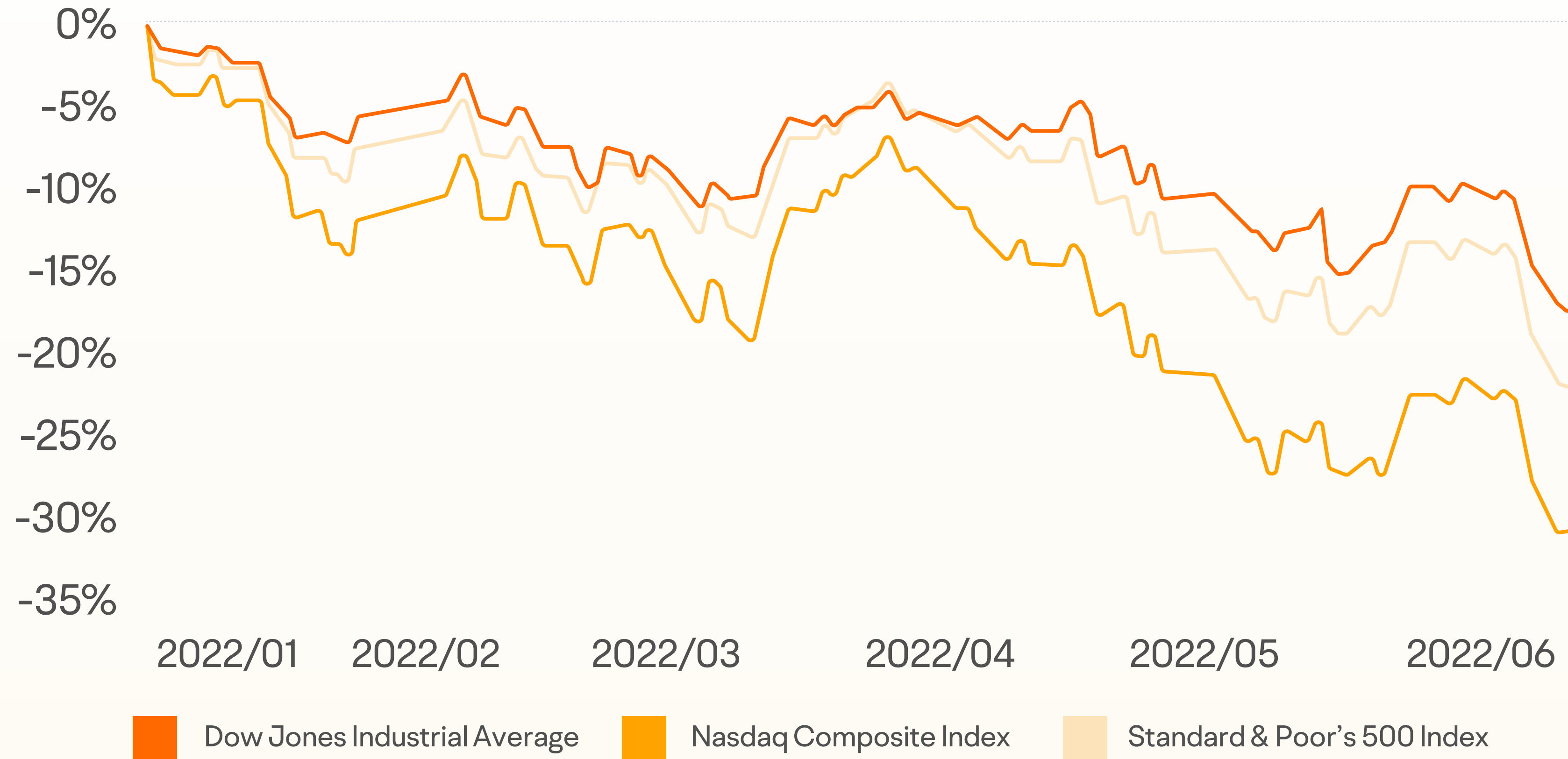
During the first half of 2022, the Federal Reserve accelerated monetary policy tightening amidst a backdrop of rising inflation. The relatively hawkish stance deepened the market expectations of further interest hikes and triggered concerns of an economic downturn which exerted substantial downward pressure on equity markets.

In May, the US consumer price index rose 8.6% from a year ago, posting its largest increase in 40 years. The rapid rise in prices may further solidify the likelihood that the Fed will take more aggressive actions to cool price pressures.

In anticipation of further interest rate hikes, US Treasury yields surged during the first half of the year, jeopardising asset investments and further impacting the equity market.

During the last earnings season in June, behemoths like Amazon, Apple and Walmart all posted weak results, bringing more negative sentiments to the market.

Fig. 1: Major Equity Indexes Performance in H1 2022



(Source: Bloomberg, Futu)

Looking at sector performance, the energy and telecommunication sectors beat the market with 40% and 0.6% increase respectively, marking the only two gainers among all industries since January 4, 2022 (Appendix 1). The rest of the market declined by various amounts.

Turning to individual stocks, by June 15, 2022, energy stocks were the biggest gainers in the US stock market (Appendix 2). Conversely, the top 10 decliners were generally from the consumer discretionary and information technology sectors.

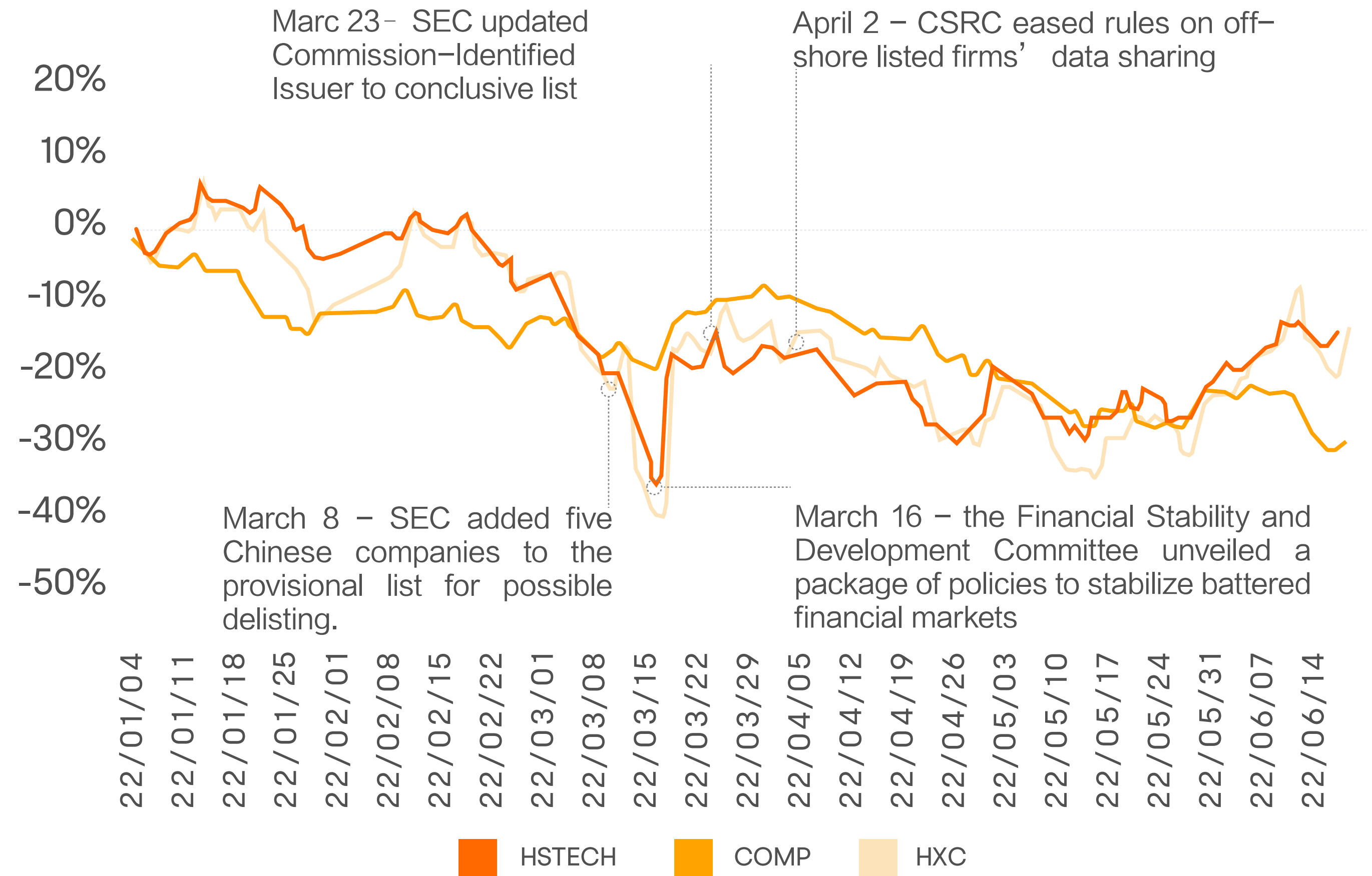
Technology stocks remained most active during the first half of 2022 in terms of trading value, with Tesla (\$2.8 trillion), Apple (\$1.8 trillion) and Nvidia (\$1.4 trillion) ranked as the top three (Appendix 3).

China Concept Stocks (CCS) Overview

Between January 4, 2022 and June 15, 2022-

- NASDAQ Golden Dragon China Index (HXC) fell 12.2% to 7,468.64;
- Hang Seng TECH Index (HSTECH) fell 15.7% to 4,703.72.

Fig. 2: HXC, HSTECH and COMP Performance in H1 2022



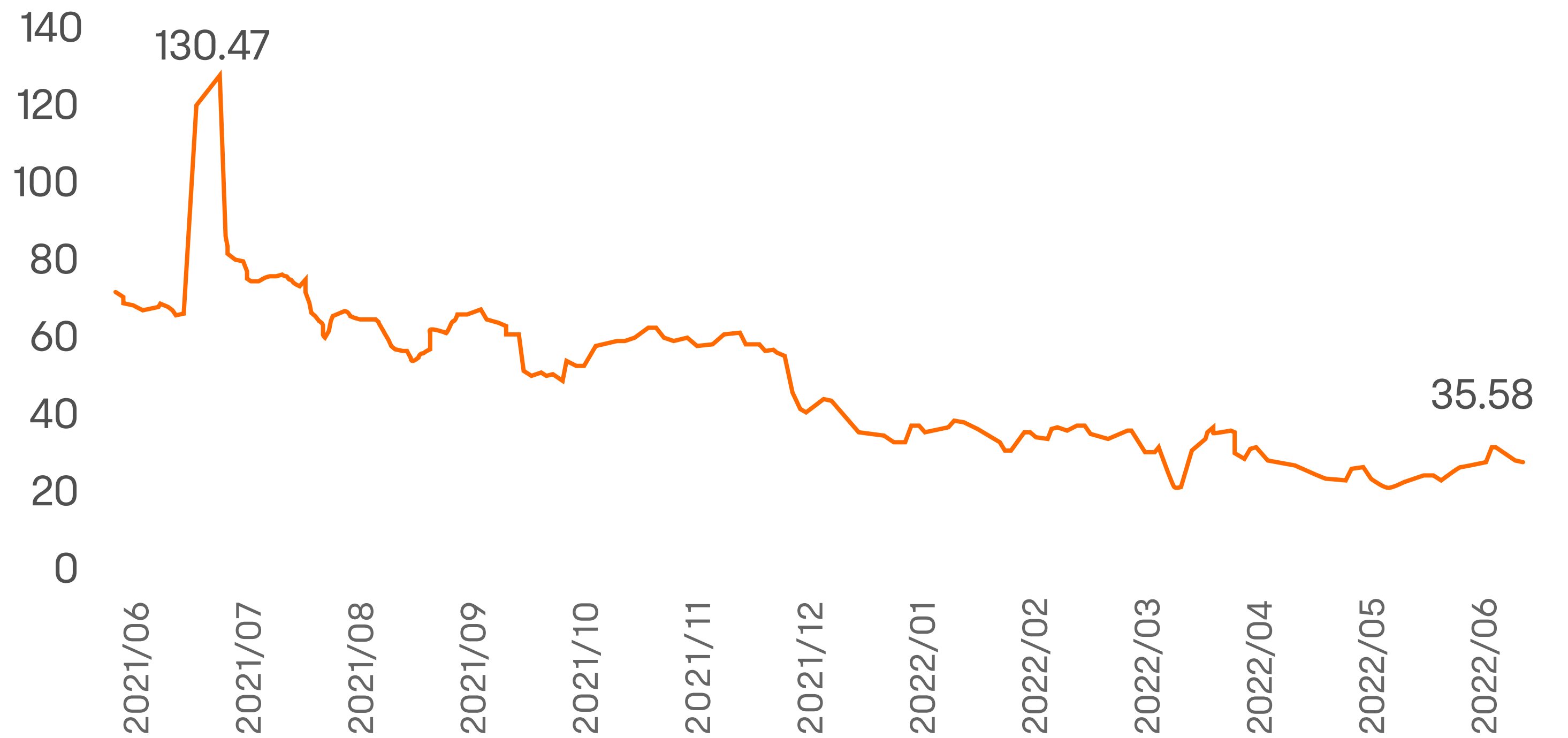
(Source: Bloomberg, Futu)

Since 2021, China Concept Stocks (CCS) saw values trend lower in due to intensified domestic and global policy constrains. This trend continued into early 2022 as the China-US audit dispute raised delisting concerns.

As of June 15, 2022, the valuation of the HXC has collapsed to 35.58 from 130.47 seen in June 2021, eroding value by 72.7%.

With the CCS valuation bubble popping to some extent, the now more reasonably priced sector could rise in the coming months, especially as the projected audit cooperation between China and US gets clearer (Appendix 4).

Fig. 3: HXC Valuation (P/E Ratio)

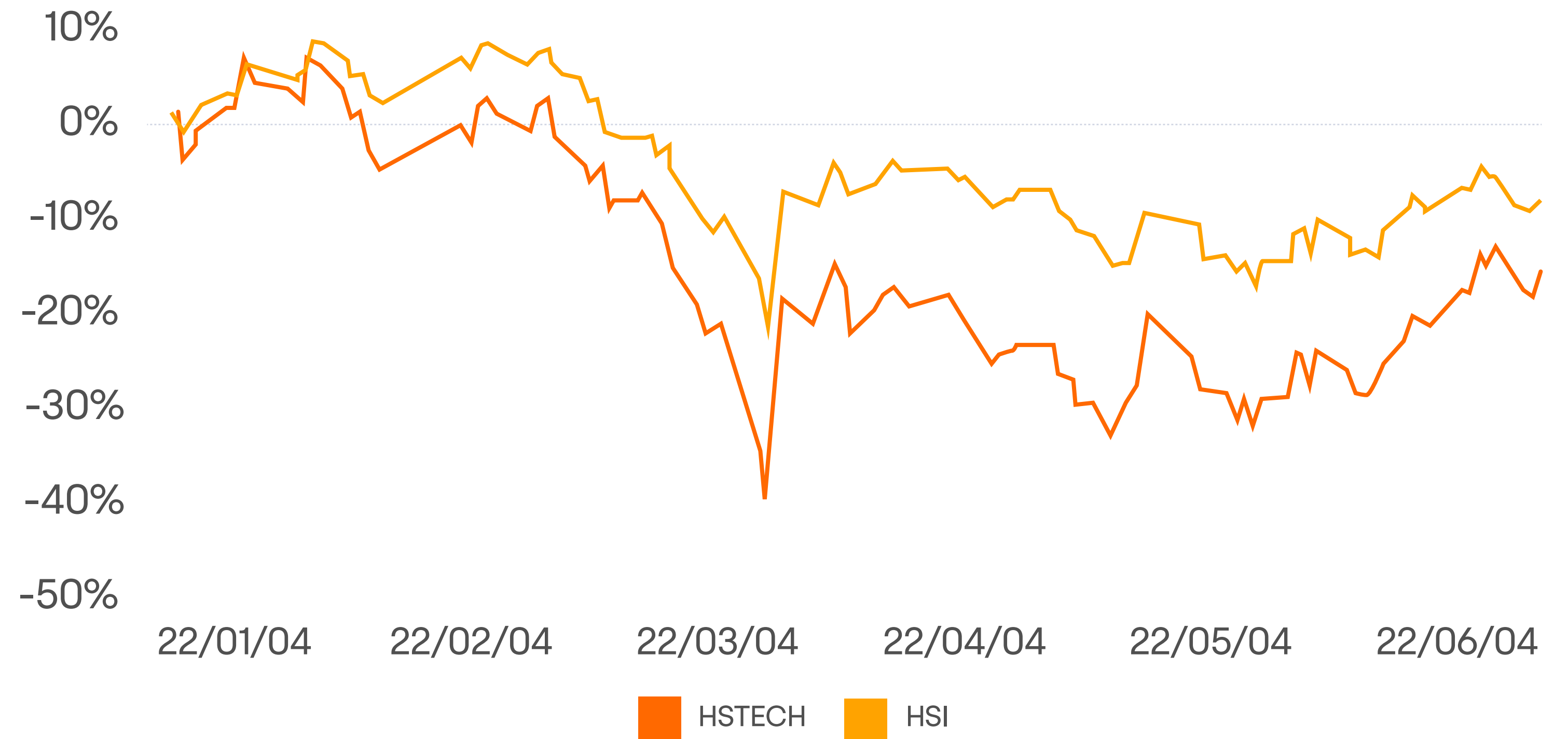


(Source: Bloomberg, Futu)

2. Hong Kong stock market overview

As of June 15, 2022, Hang Seng Index (HSI) fell 8.5% to 21,308.2 since the beginning of this year.

Fig. 4: HSI and HSTECH Performance in H1 2022



(Source: Bloomberg, Futu)

In January, HSI and HSTECH rebounded, and HSI reached its highest level at almost 25,000. However, both indexes plunged in early February due to strong headwinds from China regulatory restrictions, the pandemic outbreak and market uncertainty.

On March 16, the Financial Stability and Development Committee, China's market regulator under the supervision of the State Council, unveiled a package of policies designed to stabilize battered financial markets, signalling an ease of regulatory crackdown of technology and property industries.

At the end of April, the eleventh meeting of the Central Committee for Financial and Economic Affairs and the meeting held by the Politburo of the Chinese Communist Party released additional positive signals to the market, leading to a rally in the Hong Kong stock market.

The energy sector led the Hong Kong market with a 34.9% increase, followed by telecom services sector with a 10.3% increase. Healthcare, utilities, and consumer discretionary were the most sold-off sectors (Appendix 5).

The turnover in HK stock market was concentrated in IT and platform companies in the first half of 2022. Tencent dominated with a total traded value of \$1.1 trillion, followed by Meituan (\$0.69 trillion) and Alibaba (\$0.58 trillion) (Appendix 6).

Retail investing behavior

Financial markets were extremely volatile in the first half of 2022 due to the ongoing pandemic, geopolitics, inflation concerns, and the US Fed's interest rate hike.

In this section, we will look into whether or not retail investors changed or adjusted their investment behaviors and strategies amid this volatile market and if so, how they changed.

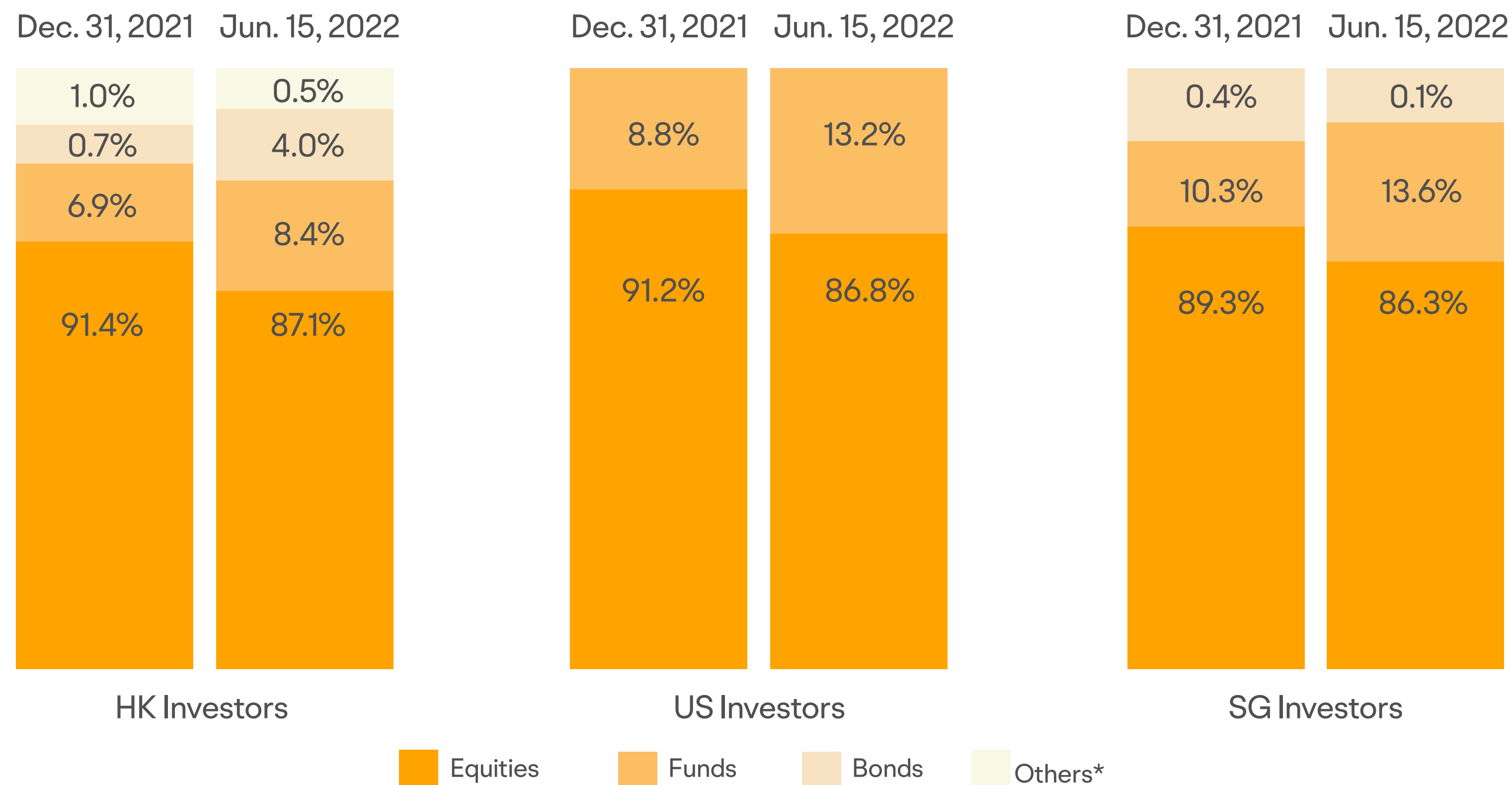


1. Investment products

1.1 By Region

We compared the portfolio values as at December 31, 2021 and June 15, 2022, with data collected from individual Futubull and moomoo users across three different regions, including Hong Kong SAR (“HK”), US and Singapore (“SG”).

Fig. 5: Composition of Investments by Region



(Source: Futu)

* Incl. warrants and options (the same as below)

The data shows listed equities remained the most prominent asset for all regions, followed by fund products (ETFs and REITs). Based on the data extracted on June 15, 2022, equities accounted for 87.1% of the total portfolio value in HK, 86.8% in US, and 86.3% in SG.

Compared to data as of December 31, 2021, all regions recorded a decline in stock weighting, dropping 4.3% in HK, 4.4% in US and 3% in SG.

US investors opted to diversify their portfolios with listed fund products, with the proportion of fund value climbing to 13.2% in June 2022 from 8.8% in December 2021.

Singapore investors also diversified with fund products as a proportion of fund portfolio increasing 3.3% to 13.6% in June

HK investors also allocated more funds into their portfolio, with its weighting rising from 6.9% to 8.4% over the past year.

Furthermore, HK investors also moved money to bond products in their portfolios, increasing to 4% on June 15, 2022, from 0.7% on December 31, 2021.

1.2 By Gender

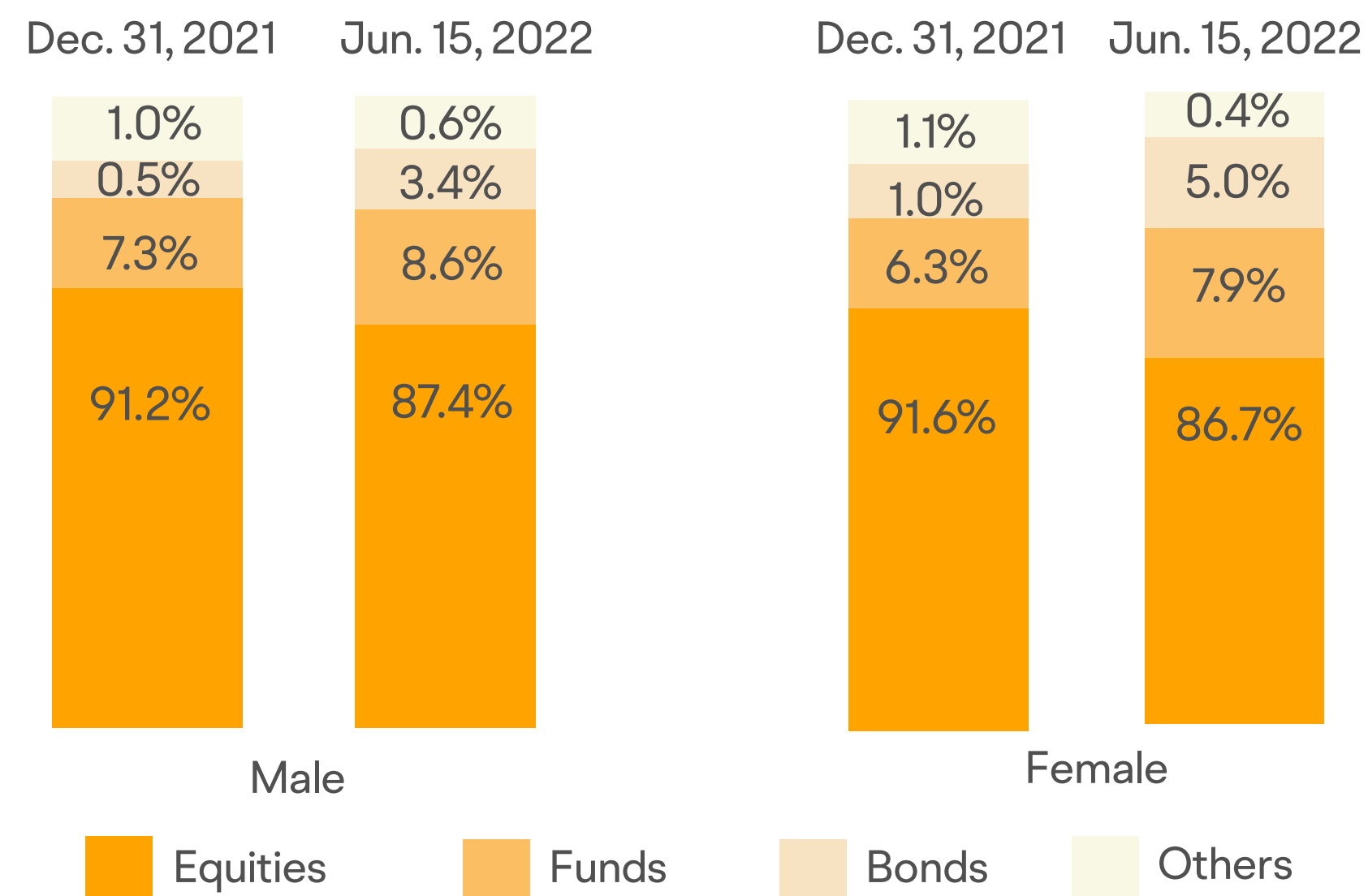
With data extracted from HK and SG investors, we reviewed differences between male and female investors and their investments.

On June 15, 2022, the average portfolio balance of HK male clients was 42.6% higher than the average of HK female clients' accounts. Additionally, the average portfolio value of SG male clients on that date was 51.5% higher than that of SG female clients' accounts.

Male and female investors showed similar investing patterns, with investments comprising mainly stocks (85%-92%), followed by funds.

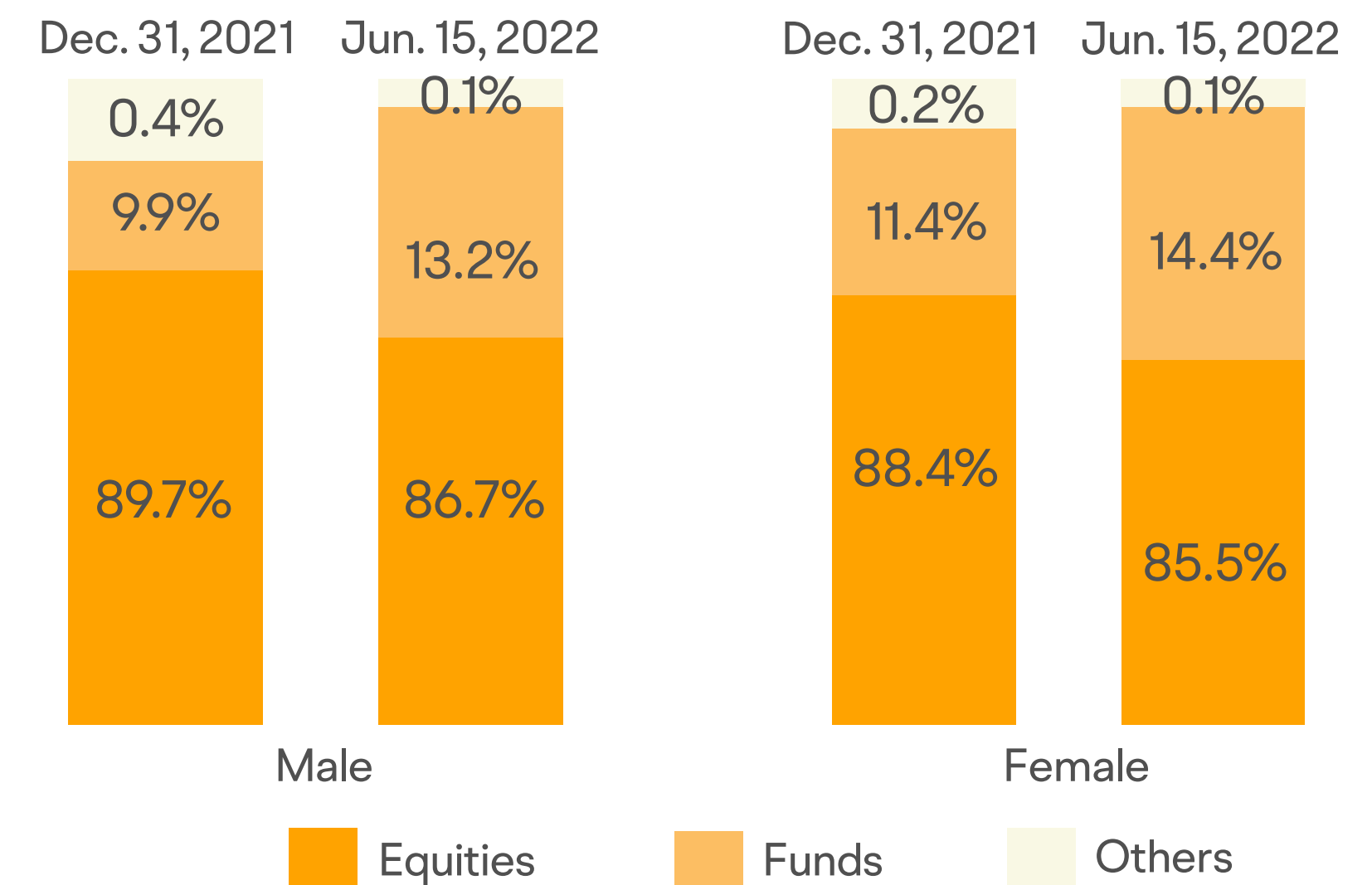
Notably, HK female investors tended to allocate more bonds into their portfolios. As at June 15, 2022, 5% of HK female clients' investments were composed of bonds, which is 1.6 ppts higher than HK male clients.

Fig. 6: Composition of HK Investors' Investments by Gender



(Source: Futu)

Fig. 7: Composition of SG Investors' Investments by Gender



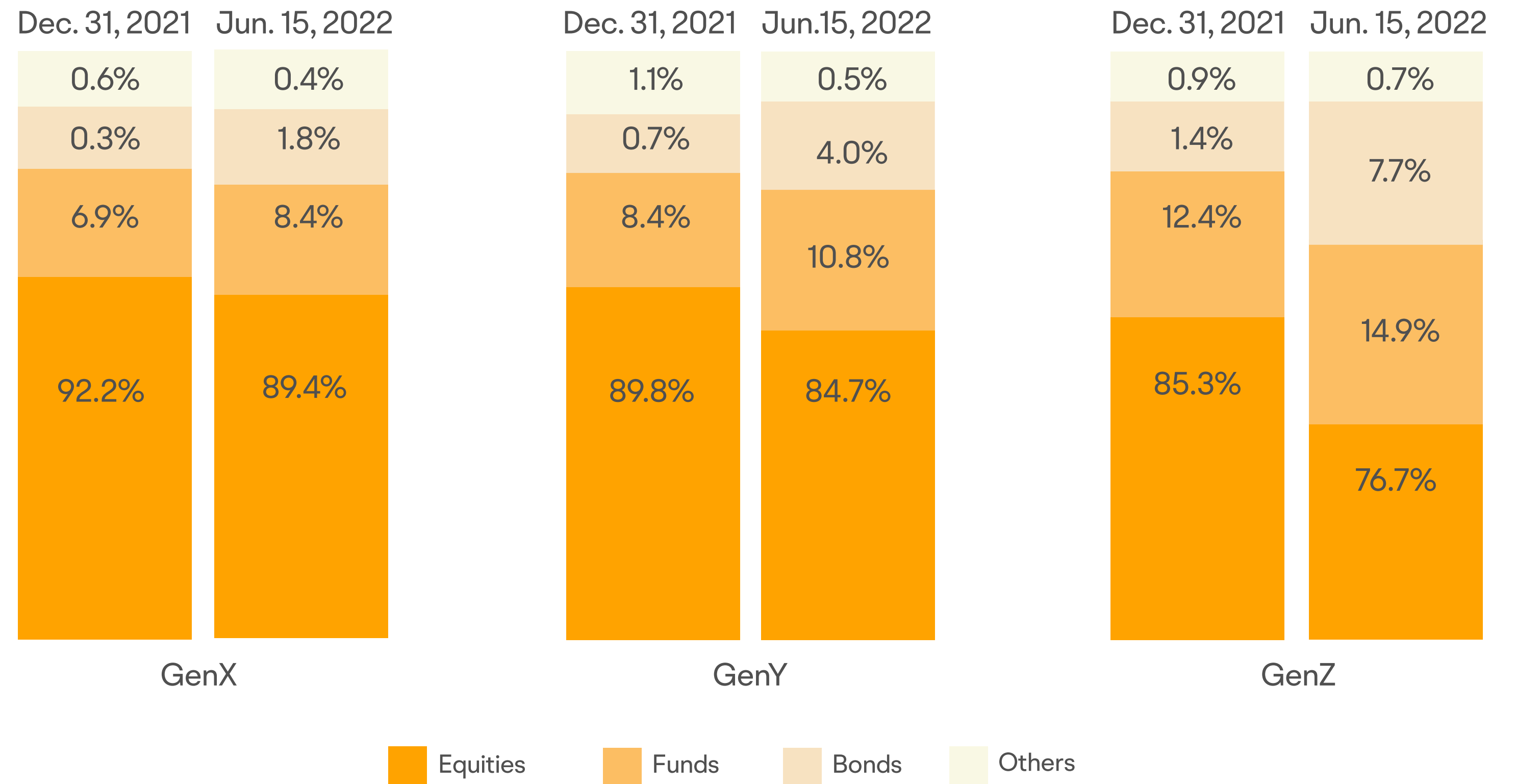
(Source: Futu)

1.3 By Generation

We then divided the investors into three groups by their age, including -

- Generation X - born in/ or before 1980;
- Generation Y - born between 1981 and 1996;
- Generation Z - born in/ or after 1997.

Fig. 8: Composition of Investments by Generation



(Source: Futu)

As of June 15, 2022, the data revealed that as much as 89.4% of Gen X investors' investments were equities, while the level with Gen Y and Gen Z were only 84.7% and 76.7%, respectively.

In aggregate, Gen Z investors allocated 14.9% and 7.7% of their positions to funds and bonds respectively, which is the highest level among all three generations. Gen X investors allocated only 8.4% and 1.8% of their positions to funds and bonds, respectively, which is the lowest of all three generations.

Overall, the collected data shows different risk appetites among the three generations. As the oldest generation, Gen X were the risk-takers with the highest stock position among all three generations. Between December 31, 2021 and June 15, 2022, their investing patterns only changed slightly, with a 2.8% decrease in stock investment position to 89.4%.

While Gen Z group were the risk-averse investors, their equity investments significantly declined (-8.6%), from 85.3% on December 31, 2021, to 76.7% on June 15, 2022.

2. Trading frequency

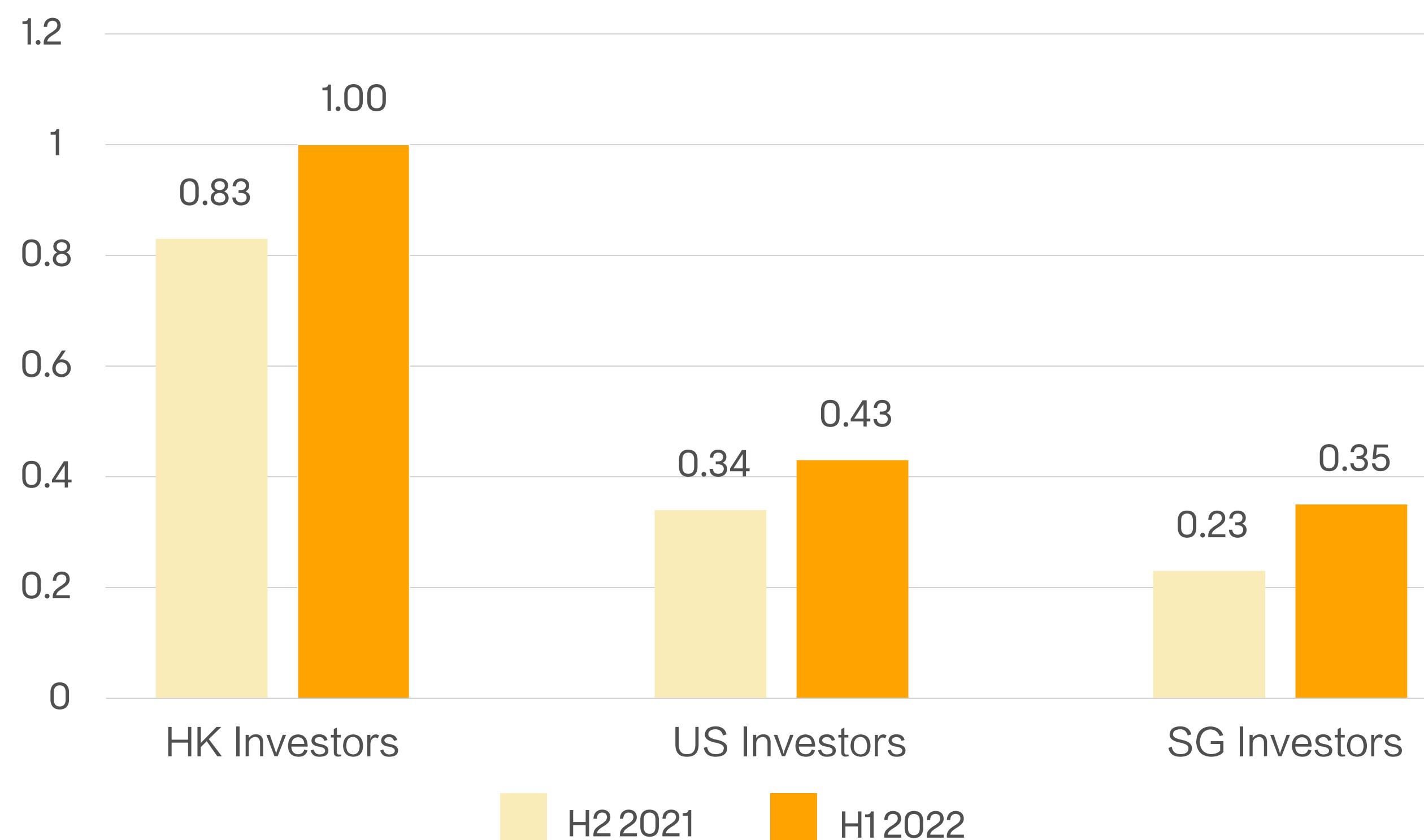
2.1 By Region

We calculated average trading frequency per trading day with the data extracted from the second half of 2021 (July 1, 2021 to December 31, 2021, or H2 2021) and first half of 2022 (January 1, 2022 to June 15, 2022, or H1 2022), across investors from HK, US and SG.

In terms of trading frequency during H1 2022, HK investors were active investors, trading an average of 1.00 time per day.

US investors' average daily trading frequency jumped to 0.43 times in H1 2022, representing an increase of 26.5% as compared to 0.34 times in H2 2021.

Fig. 9: Average Daily Trades by Region



(Source: Futu)

2.2 By Gender

We looked into male and female investors and the average daily trading frequency with data extracted from Futu’s Hong Kong and Singapore investors.

In H1 2022, both male and female HK investors became more active, executing around 20% more trades versus H2 2021. However, in Singapore, male investors were 50% more active in H1 2022, and female investors were 41.2% more active in terms of daily average trading frequency.

Notably, Futu’s database also showed that HK and SG female investors executed more options during H1 2022. The daily amount of stock options executed by HK and SG female investors increased 11.0% and 21.2% respectively, compared to H2 2021.

Fig. 10: HK Investors Average Daily Trades by Gender

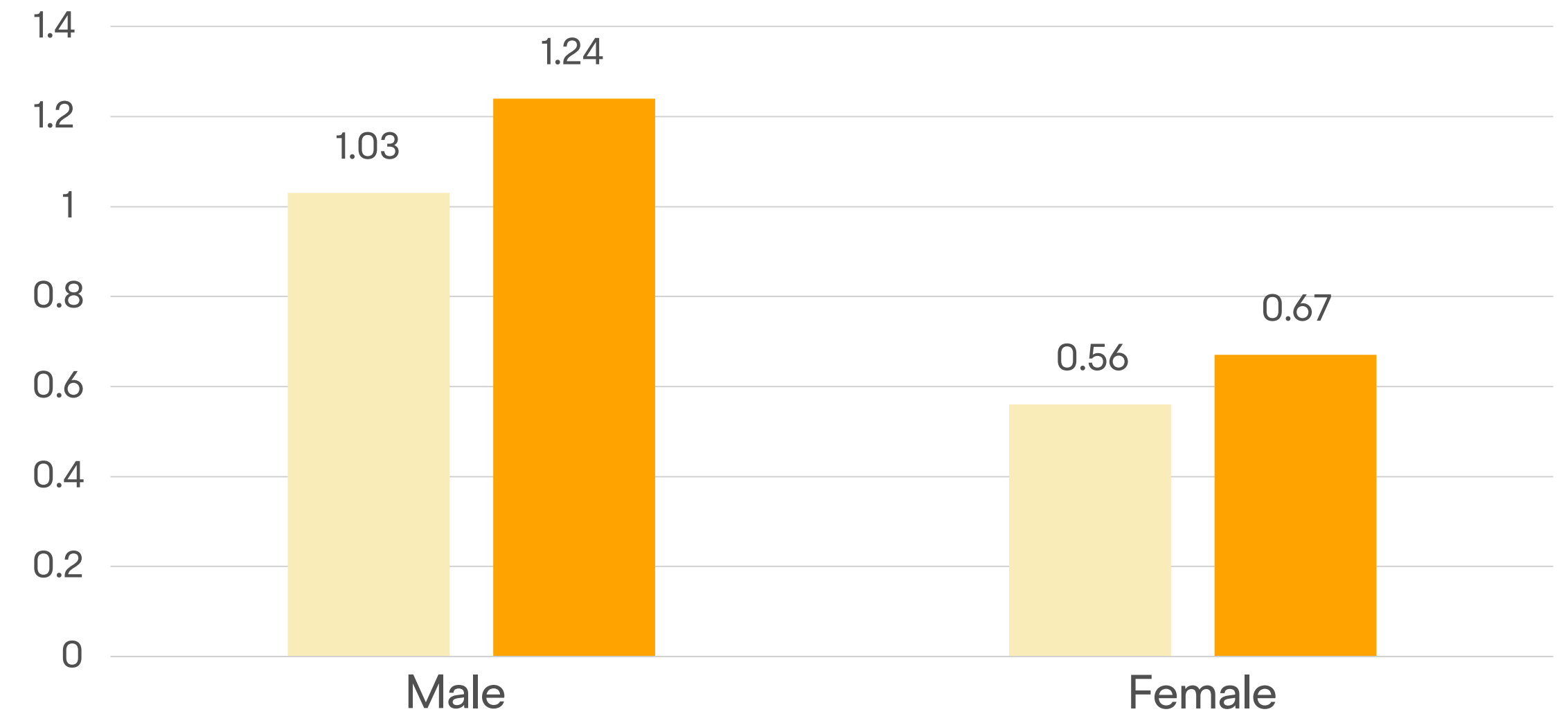
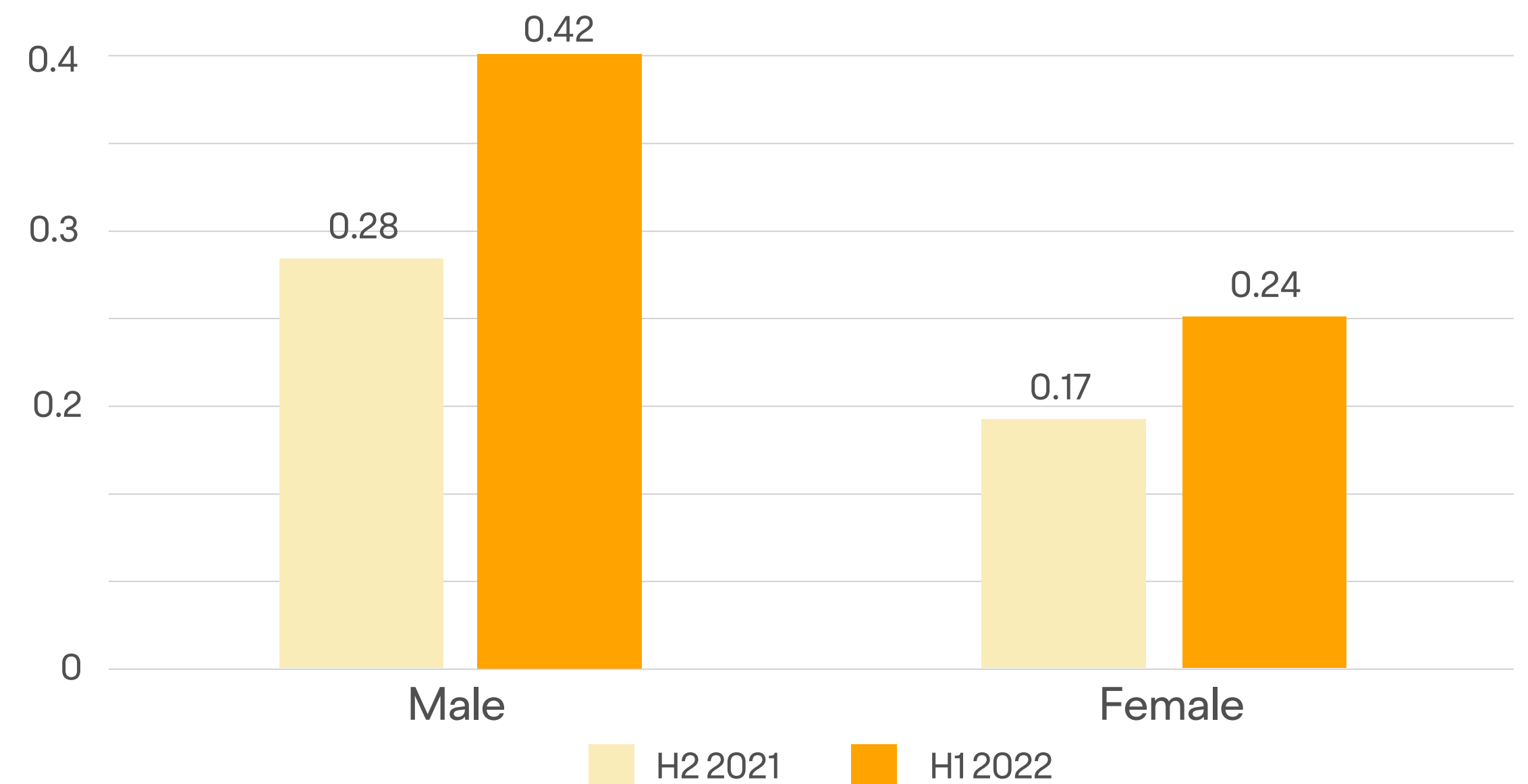


Fig. 11: SG Investors Average Daily Trades by Gender



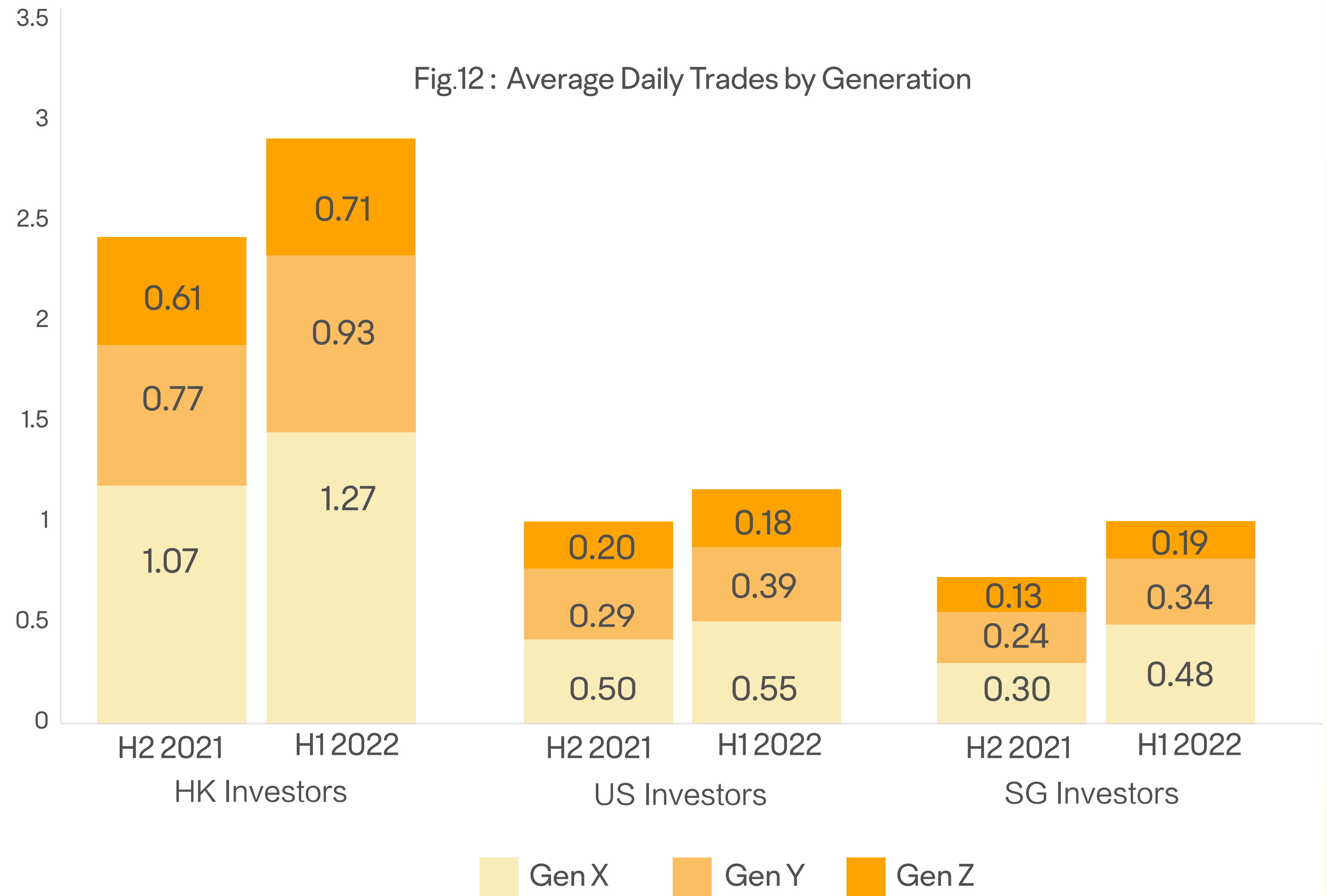
(Source: Futu)

2.3 By Generation

According to our data, Gen X were the most active investors and Gen Z were the least active investors across all three regions.

In HK, every Gen X investor executed an average of 1.27 trades every trading day, followed by Gen Y with 0.93 trades, and lastly Gen Z with 0.71 trades.

In the US, each Gen X investor traded 0.55 times daily, compared to 0.18 trades by each Gen Z investor. In SG, Gen X traded an average of 0.48 times each day, compared to 0.19 trades by Gen Z.



(Source: Futu)

3. Stock trading trends

3.1 Top 5 Most Traded Sectors on Futu Platforms

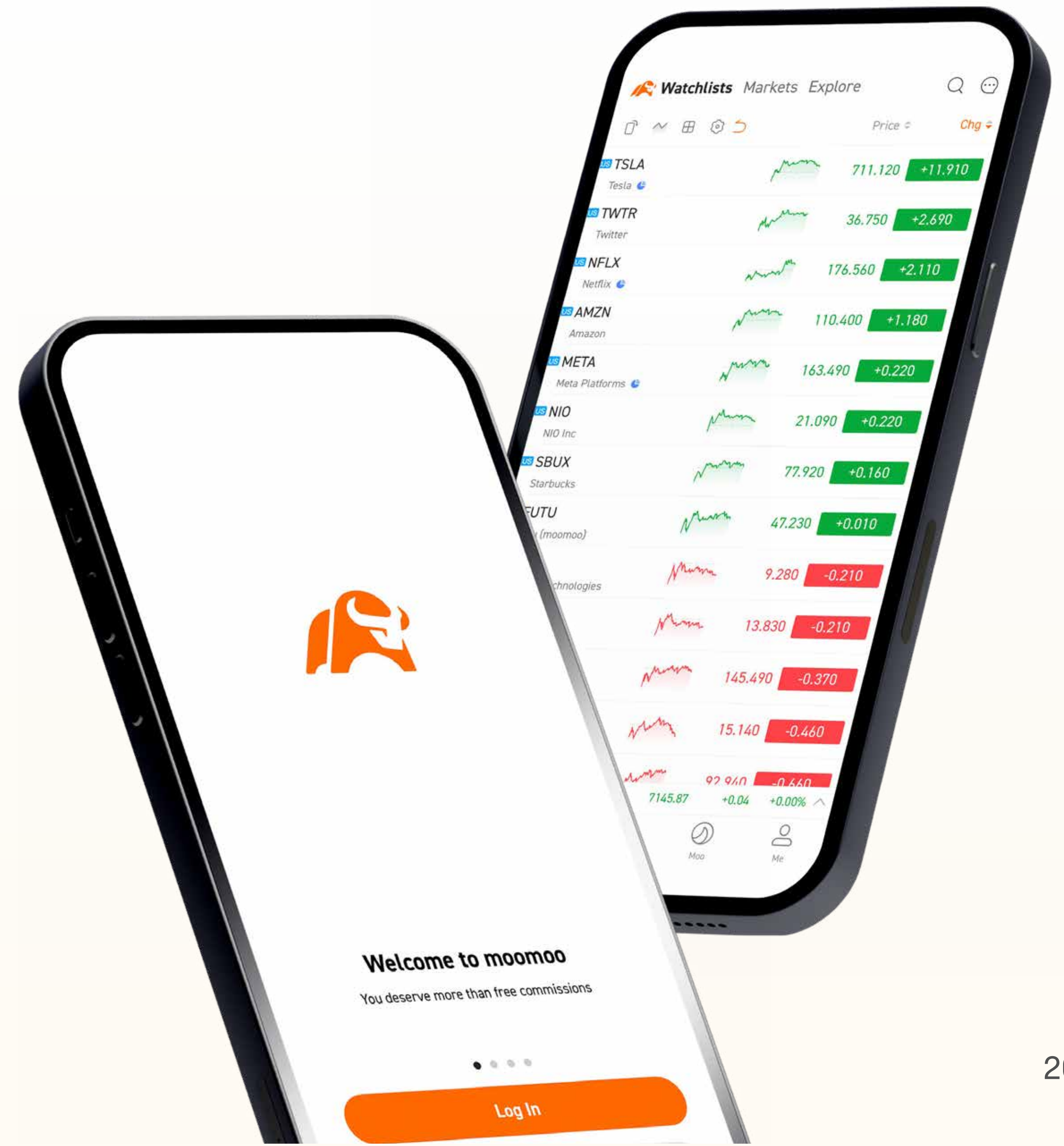
Looking at different industries, in terms of their trading value in H1 2022, consumer discretionary, information technology and financials remained the most active sectors.

Compared to H2 2021, turnover of consumer discretionary sector surged by more than 30% in H1 2022, while other sectors saw various degrees of decline.

Fig 13: Top 5 Industries with Largest Trading Value in H1 2022

Rank	Sector
1	Consumer Discretionary
2	Information Technology
3	Financials
4	Health Care
5	Industrials

(Source: Futu)



3.2 Top 5 Most Traded Stocks on Futu Platforms

Looking at stocks by trading value in H1 2022, the top five most traded stocks by US and SG investors were all listed in the US. Two HK-listed stocks were ranked among the top five by HK investors, with the other three being the US stocks.

Tesla ranked top one in all three regions. US investors also actively traded Advanced Micro Devices and Meta Platforms.

HK investors were more interested in China tech giants like Tencent Holdings, Meituan and Futu Holdings.

SG investors were active in trading shares of SEA Limited and Futu Holdings.

Fig.14: Top 5 Most Traded Stocks for HK Investors in H1 2022

Ticker	Name	Listed Market	H12022	H2 2021
TSLA	Tesla	US	1	1
700	Tencent	HK	2 ↑	3
NVDA	Nvidia	US	3 ↑	6
3690	Meituan-W	HK	4 ↑	7
FUTU	Futu	US	5	2

(Source: Futu)

Fig.15: Most Traded Stocks for US Investors in H1 2022

Ticker	Name	Listed Market	H12022	H2 2021
TSLA	Tesla	US	1	1
NVDA	Nvidia	US	2 ↑	5
AMD	Advanced Micro Devices	US	3 ↑	9
META	Meta Platforms	US	4 ↑	10
BABA	Alibaba	US	5 ↑	11

(Source: Futu)

Fig.16: Top 5 Most Traded Stocks for SG Investors in H1 2022

Ticker	Name	Listed Market	H12022	H2 2021
TSLA	Tesla	US	1	1
NVDA	Nvidia	US	2 ↑	5
SE	SEA	US	3 ↑	7
FUTU	Futu	US	4	2
AAPL	Apple	US	5 ↑	6

(Source: Futu)

3.3 Top 5 Emerging Traded Stocks

In terms of daily turnover growth, Tesla and Nvidia again were among the top three for investors across all three markets. In addition, Advanced Micro Devices made the top 5 for US investors, Meituan was among the top 5 for HK investors and Pinduoduo was among the top 5 for SG investors.

Fig.17: Top 5 Most Traded Stocks for HK/US/SG Investors in H1 2022

HK				US			SG		
Rank	Listed	Ticker	Name	Listed	Ticker	Name	Listed	Ticker	Name
1	US	TSLA	Tesla	US	TSLA	Tesla	US	TSLA	Tesla
2	US	BABA	Alibaba	US	NVDA	Nvidia	US	NVDA	Nvidia
3	US	NVDA	Nvidia	US	AMD	Advanced Micro Devices	US	PDD	Pinduoduo
4	HK	3690	Meituan-W	US	MULN	Mullen Automotive	US	NIO	Nio
5	HK	9988	Alibaba-SW	US	BABA	Alibaba	US	AMD	Advanced Micro Devices

consumer discretionary
 information technology

(Source: Futu)

3.4 Top 5 Most Popular Stocks on Futu Platforms

Ranking stocks by the number of followers, Twitter was in the top five across all three regions. This was driven by Elon Musk’s previous announcement about his potential acquisition of Twitter.

Fig.18: Top 5 Stocks with Largest No. of Followers - in HK

Rank	Ticker	Name	No. of Relevant Posts
1	TWTR	Twitter	42,366
2	0020.HK	SenseTime-W	34,989
3	9988.HK	Alibaba-SW	31,394
4	NVDA	Nvidia	31,113
5	3690	Meituan-W	29,081

(Source: Futu)

Fig.19: Top 5 Stocks with Largest No. of Followers - in US

Rank	Ticker	Name	No. of Relevant Posts
1	NVDA	Nvidia	2,627
2	MULN	Mullen Automotive	2,003
3	AMC	AMC Entertainment	1,965
4	AMD	Advanced Micro Devices	1,724
5	TWTR	Twitter	1,709

(Source: Futu)

Fig.20: Top 5 Stocks with Largest No. of Followers - in SG

Rank	Ticker	Name	No. of Relevant Posts
1	NVDA	Nvidia	7,701
2	SE	Sea	5,377
3	TWTR	Twitter	5,323
4	GRAB	Grab Holdings	4,816
5	TSLA	Tesla	4,812

(Source: Futu)

We also reviewed the popularity of stocks in Futu’s online investing community, ranking them by the number of posts where they were mentioned. Tesla dominated the rankings across all three regions.

Fig.21: Top 5 Most Discussed Stocks in H1 2022- in HK

Rank	Ticker	Name	No. of Relevant Posts
1	TSLA	Tesla	155,007
2	0700.HK	Tencent	71,165
3	FUTU	Futu	65,079
4	3690.HK	Meituan-W	51,879
5	9988.HK	Ailibaba-SW	50,234

(Source: Futu)

Fig.22: Top 5 Most Discussed Stocks in H1 2022 - in US

Rank	Ticker	Name	No. of Relevant Posts
1	AMC	AMC Entertainment	8,808
2	TSLA	Tesla	7,861
3	AAPL	Apple	2,863
4	MULN	Mullen Automotive	2,717
5	AMZN	Amazon	1,727

(Source: Futu)

Fig.23: Top 5 Most Discussed Stocks in H1 2022 - in SG

Rank	Ticker	Name	No. of Relevant Posts
1	TSLA	Tesla	7,256
2	AMC	AMC Entertainment	4,137
3	FUTU	Futu	3,814
4	GRAB	Grab Holdings	2,455
5	NIO	Nio	2,290

(Source: Futu)

4. Trends in Mutual Fund Investing

We then analyzed investing patterns and trends of mutual funds on Futu, based on H1 2022 (January 1, 2022 to June 15, 2022) data on wealth management clients in HK and SG.

4.1 Mutual Fund Subscription Distribution

Gen Y investors showed the strongest interest towards fund products, with 65.5% buying or selling funds at least once during H1 2022. Gen X investors followed with 26.6%, but only 7.9% of Gen Z investors bought or sold funds in H1 2022.

In breaking the data up by gender, 63.6% of male investors purchased or sold funds during H1 2022, compared to 36.4% for female investors.

Fig.24: Funds Subscription by Generation

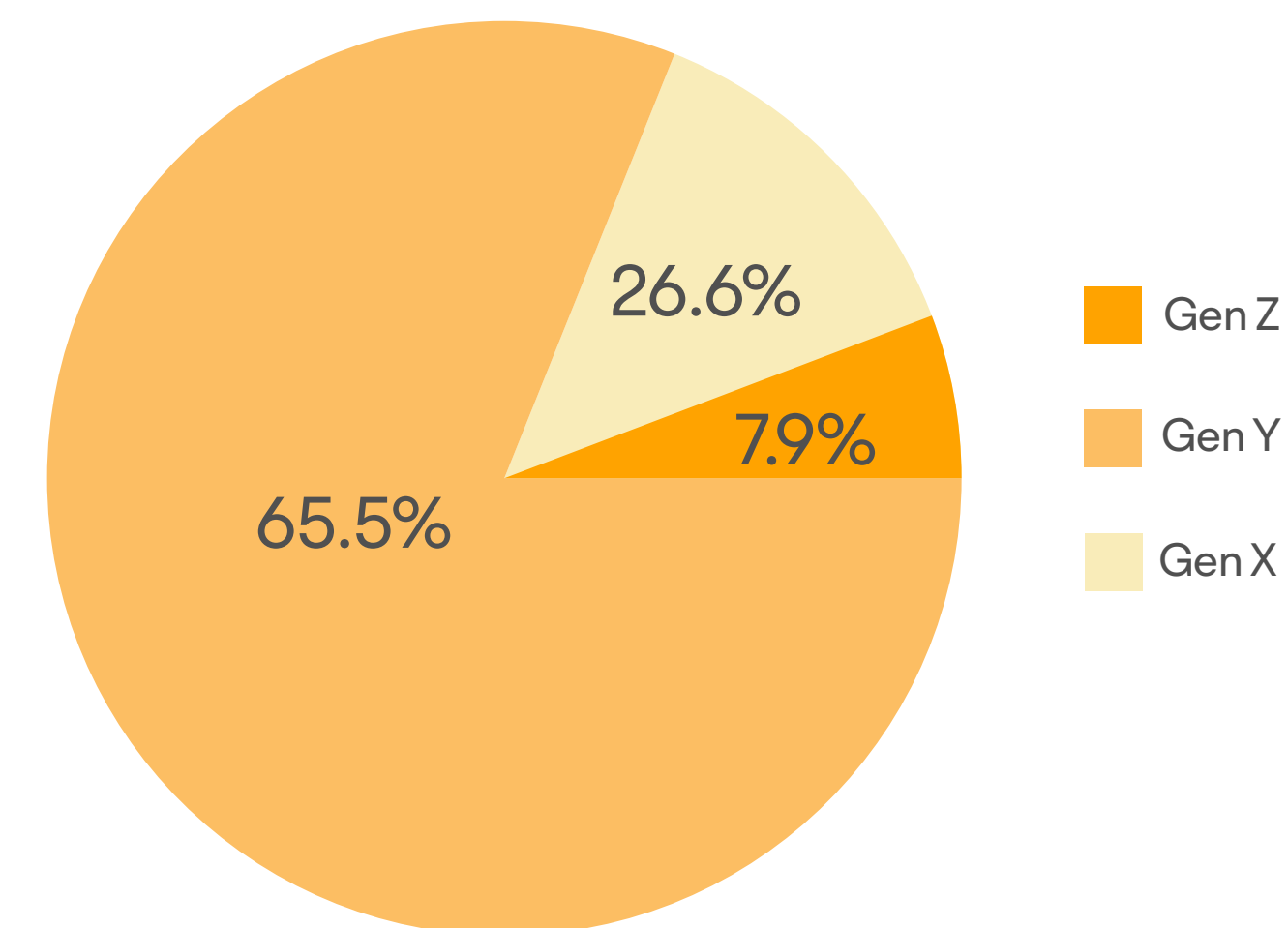
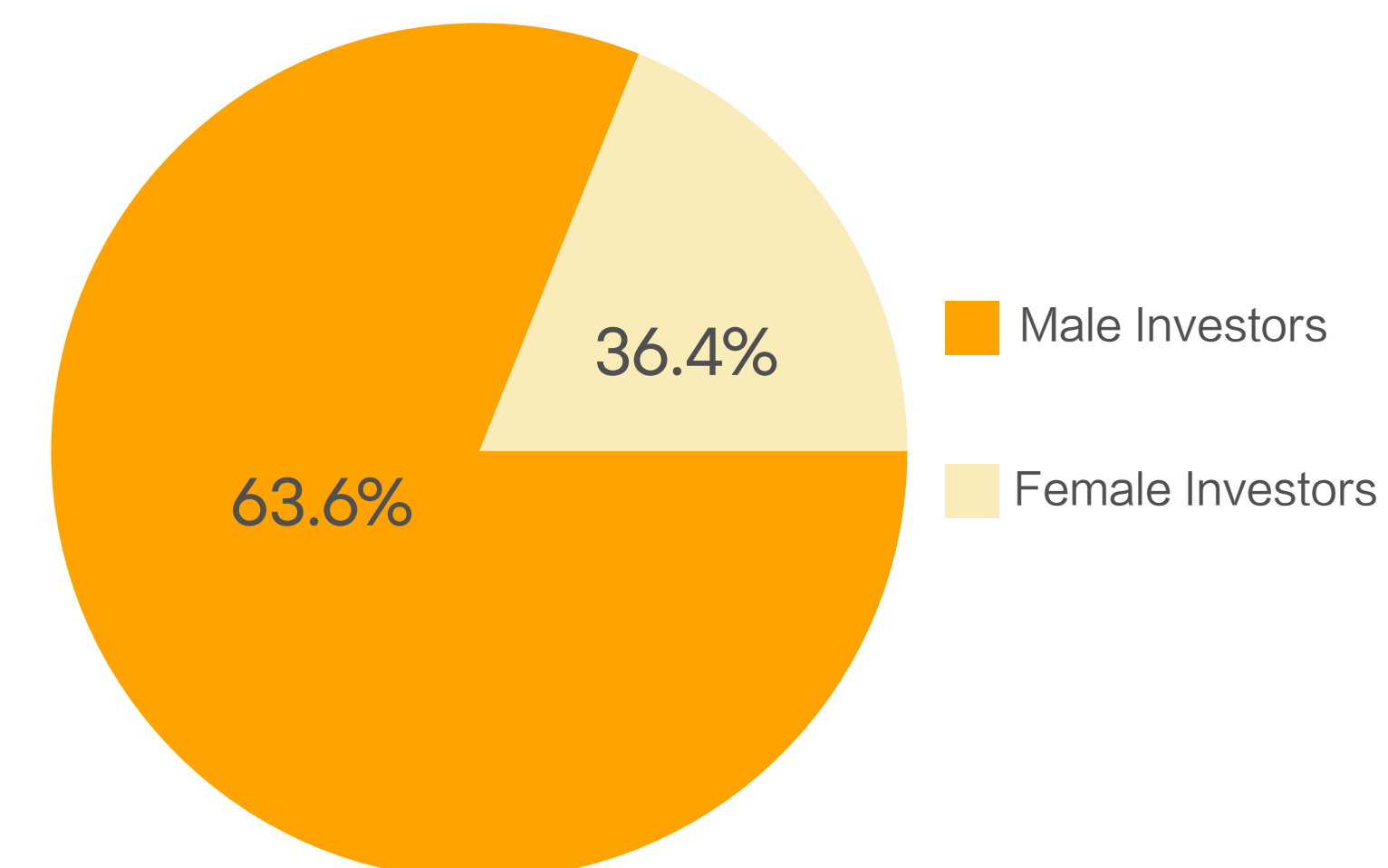


Fig.25: Funds Subscription by Gender



(Source: Futu)

4.2 Mutual Fund Holders Distribution

In reviewing existing fund holders as of June 15, 2022, 66.3% are Gen Y investors, followed by 27% who are Gen X investors and 6.7% who are Gen Z investors.

By gender, male investors accounted for 58.9% of the fund holders and female investors accounted for 41.1% according to the data from June 15, 2022.

Fig.26: Fund Holders Distribution by Generation

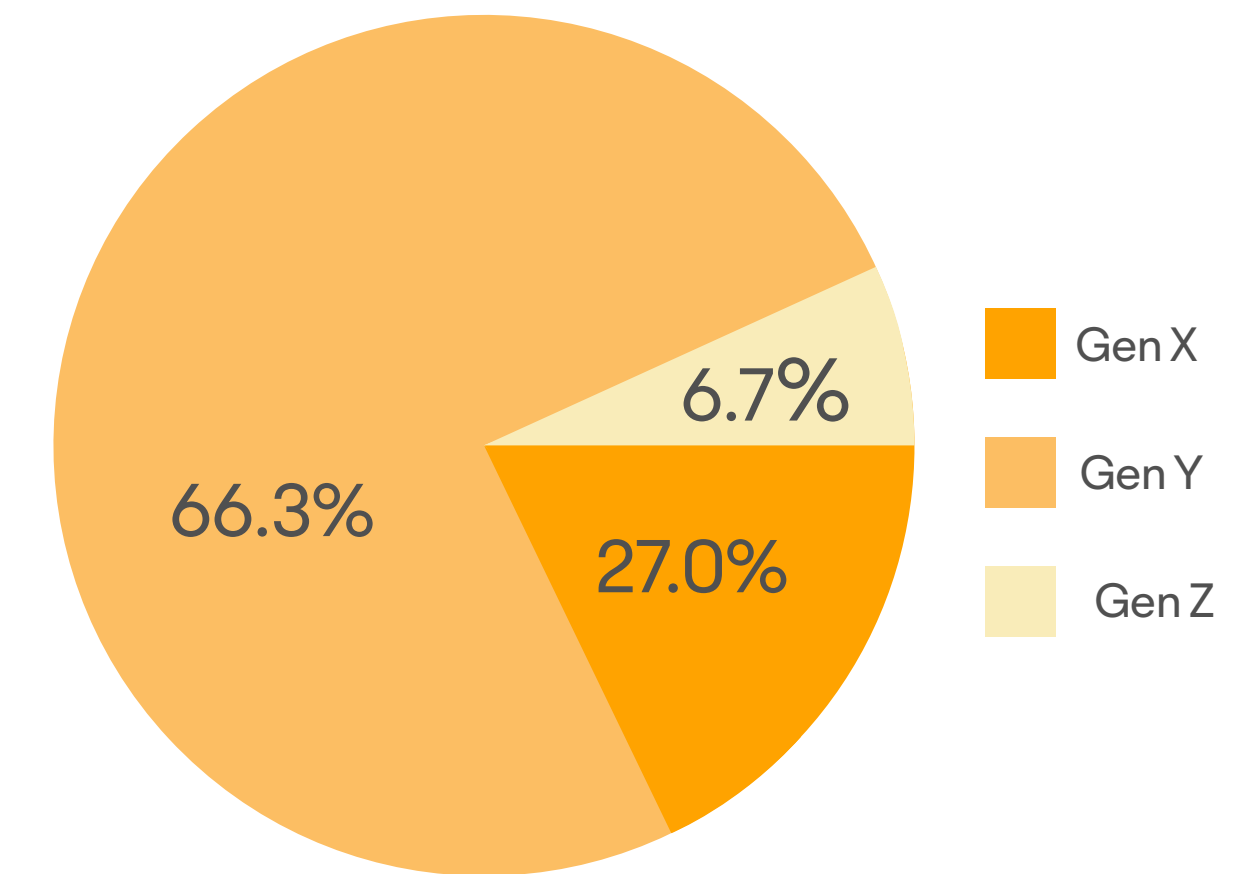
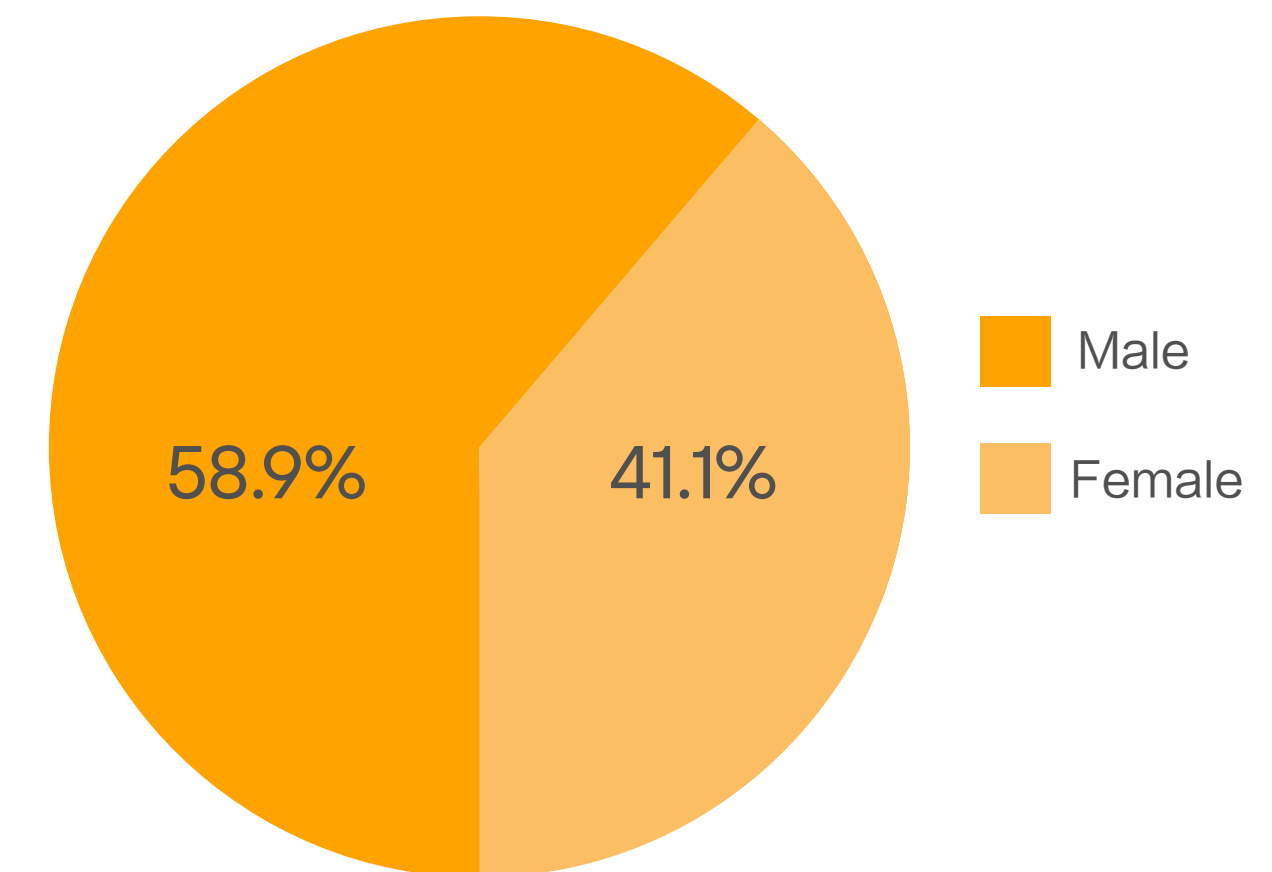


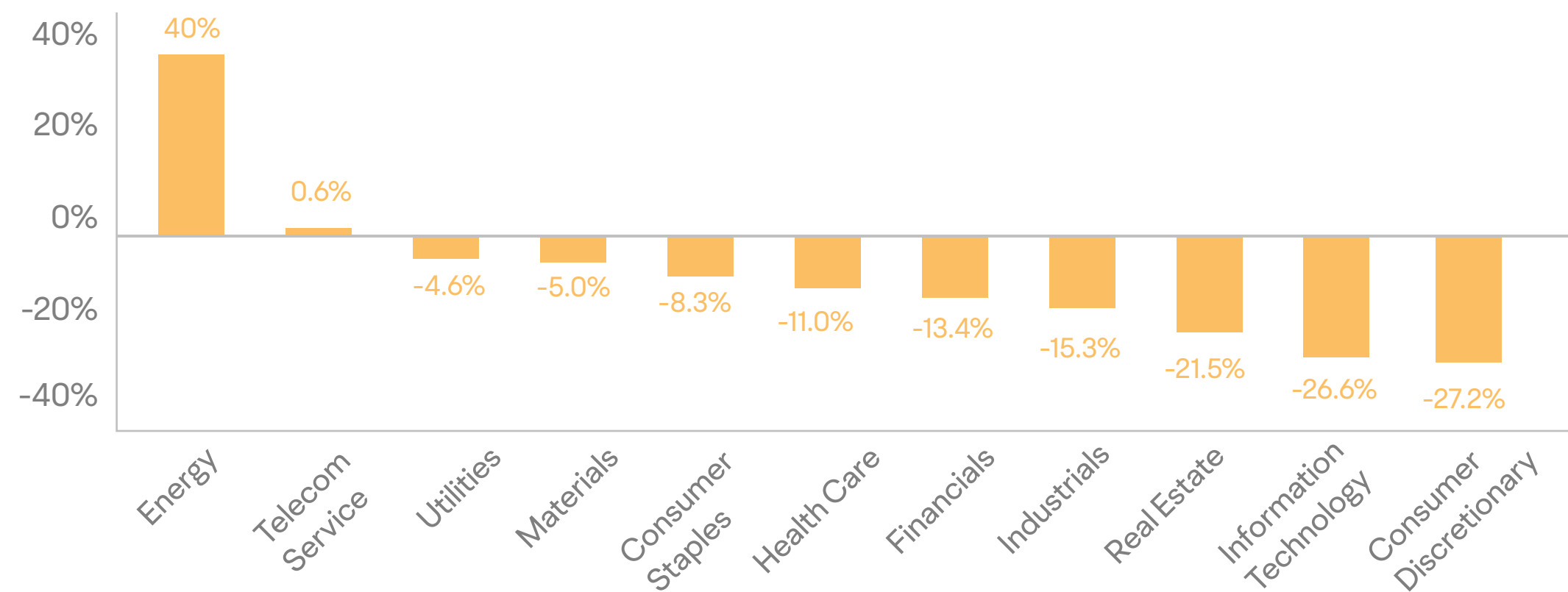
Fig.27: Fund Holders Distribution by Gender



(Source: Futu)

Appendix 1-6

Appendix 1: Top 10 Best Performing Sectors in H1 2022 - US Listed



(Source: Bloomberg Futu)

Appendix 2: Top 10 Best Performing Stocks in H1 2022 - US Listed

Ticker	Name	Performance (% , 2022 to June 15, 2022)
BPT.N	BP Prudhoe Bay Royalty	586.99%
HUSA.A	Houston American Energy Corp	305.59%
VTNR.O	Vertex Energy	219.43%
MTR.N	Mesa Royalty Trust	213.96%
NVCT.O	Nuvectis Pharma	212.62%
RCMT.O	RCM Technologies	212.08%
NINE.N	Nine Energy Service Inc.	211.00%
KAVL.O	Kaival Brands Innovations	208.60%
PBF.N	PBF Energy	189.82%
ENSV.A	Enservco	188.39%

(Source: Bloomberg, Futu)

Appendix 3: Top 10 Most Traded Stocks in H1 2022 - US Listed

	Name	Trading Value (\$ 100 mio, 2022 to June 15, 2022)
TSLA.O	Tesla	28097.90
AAPL.O	Apple	17546.30
NVDA.O	Nvidia	14096.94
AMZN.O	Amazon	13308.84
AMD.O	Advanced Micro Devices	13019.42
MSFT.O	Microsoft	11779.70
META.O	Meta Platforms	8720.82
GOOGL.O	ALPHABET-A	5645.94
GOOG.O	ALPHABET-C	4572.85
NFLX.O	Netflix	3688.57

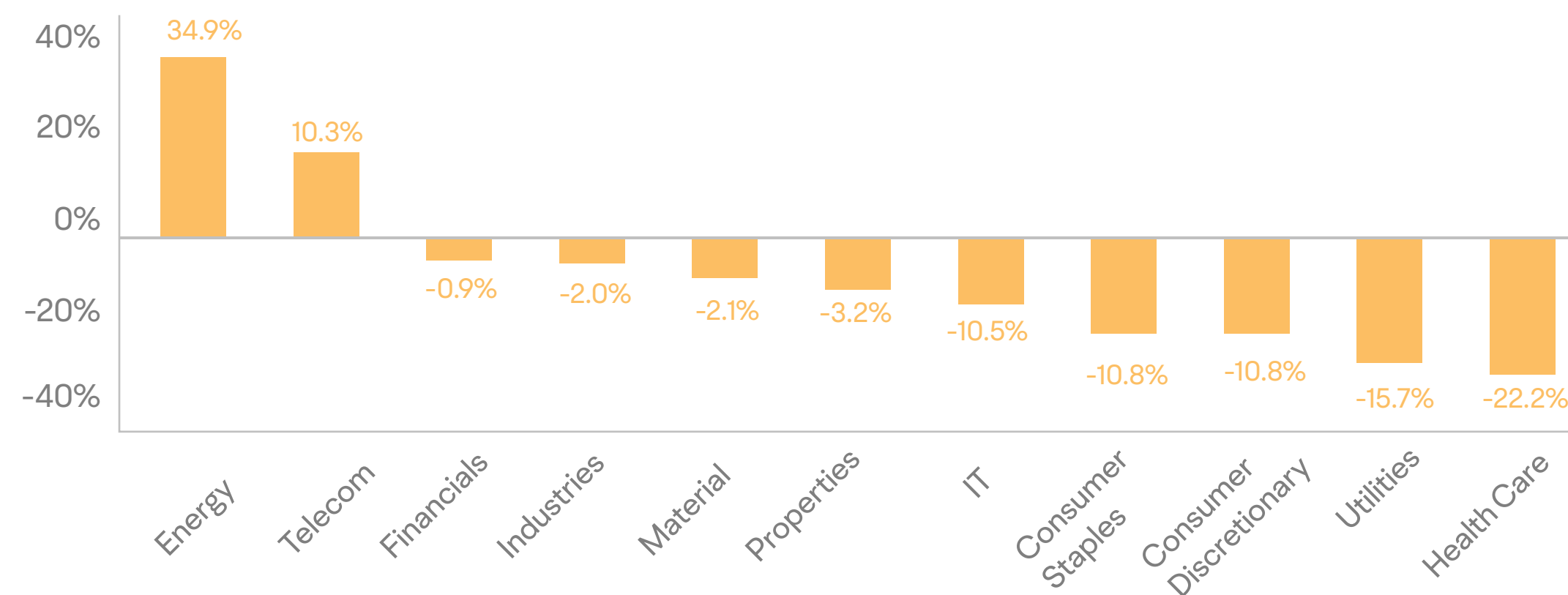
(Source: Bloomberg, Futu)

Appendix 4: Top 10 Best Performing CCS Stocks in H1 2022

Ticker	Name	Performance (%, 2022 to June 15, 2022)
VIPS.N	Vipshop	28.69%
PTR.N	CNPC	21.17%
LU.N	Lufax Holding Ltd	16.38%
NIO.SG	Nio	10.40%
SNP.N	Sinopec	5.70%
PDD.O	Pinduoduo	3.24%
FUTU.O	Futu Holdings	3.19%
NTES.O	NetEase	1.78%
LI.O	Li Auto	1.21%
CYPC.L	China Yangtze Power (GDR)	0.29%

(Source: Bloomberg, Futu)

Appendix 5: Top 10 Best Performing Sectors in H1 2022 - HK Listed



(Source: Bloomberg, Futu)

Appendix 6: Top 10 Most Traded Stocks in H1 2022 - HK Listed

Ticker	Name	Performance (%, 2022 to June 15, 2022)
0700.HK	Tencent	11337.26
3690.HK	Meituan-W	6872.92
9988.HK	Alibaba-SW	5804.73
9618.HK	JD.com-SW	3173.00
1024.HK	Kuaishou-W	2628.58
1299.HK	AIA Group	2307.82
0388.HK	Hong Kong Exchanges	2144.30
1211.HK	BYD	2054.44
2269.HK	WuXi Biologics	2028.02
2318.HK	Ping An Insurance	1832.99

(Source: Bloomberg, Futu)

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