Guinness Atkinson
China & Hong Kong Fund
Managers' Update – November 2022

Summary Review & Outlook

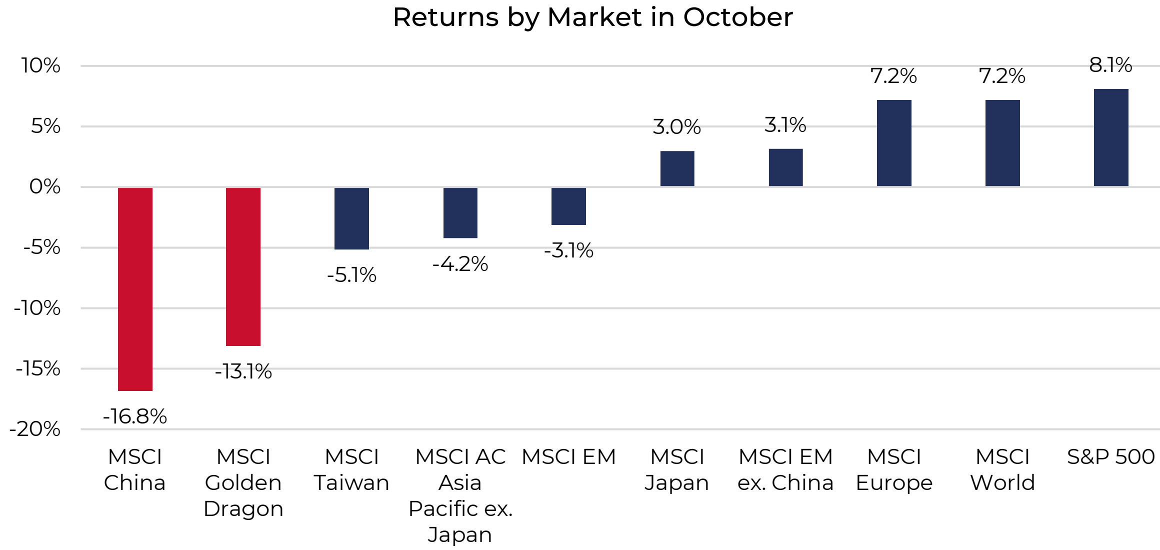
Summary View

- In October, the MSCI China Total Return Index ("MSCI China Index") fell 16.8% (in USD unless otherwise stated).
- The strongest stocks in the Fund were Venustech, Hangzhou First Applied Material and Shenzhen Inovance. The weakest stocks in the Fund were Baidu, China Merchants Bank and China Overseas Land & Investment.
- COVID-19 restrictions and lockdowns continue, as cities classed as high or mid risk increased to account for ~50% of GDP. However, markets are forward looking and have rallied sharply in November on the prospects of China relaxing its zero COVID policy.
- China is trading on a forward price earnings ratio of 11.2x, which is one standard deviation below its medium-term average. We think the risk reward ratio is very attractive for the country and investors should be seriously considering investing in China. Based on an analysis conducted by Goldman Sachs, on 36 other countries' historical performance, markets on average rallied a month before restrictions were eased in the initial COVID-19 outbreak.

Macro Commentary

- The US introduced tougher measures designed to restrict sales of advanced semiconductors to China. Licenses are required to sell chips used for supercomputers in China, if these chips use American technology. Licenses are also required to sell semiconductor fabrication equipment to higher end foundries in China. US persons are not allowed to help support the development or production of these high end chips in China without a license.
- The Fund does not own any mainland Chinese foundries, nor does it own any chip designers.
- The Caixin Manufacturing Purchasing Managers Index (PMI), which is more geared towards private businesses, increased by 1.1 points to 49.2 in October (a value below 50.0 indicates weakening activity). The National Bureau of Statistics (NBS) Manufacturing Purchasing Manager Index (PMI), which is more geared towards state owned firms, fell 0.9 points to 49.2.
- In October, consumer price inflation (CPI) was 2.1%, lower than September's 2.8% rate. Energy prices fell which offset a rise in pork prices. Producer price inflation turned negative for the first time in nearly two years, falling 1.3%. The subdued inflation readings reflect the impact of weakening global growth and COVID-19 related restrictions and lockdowns.

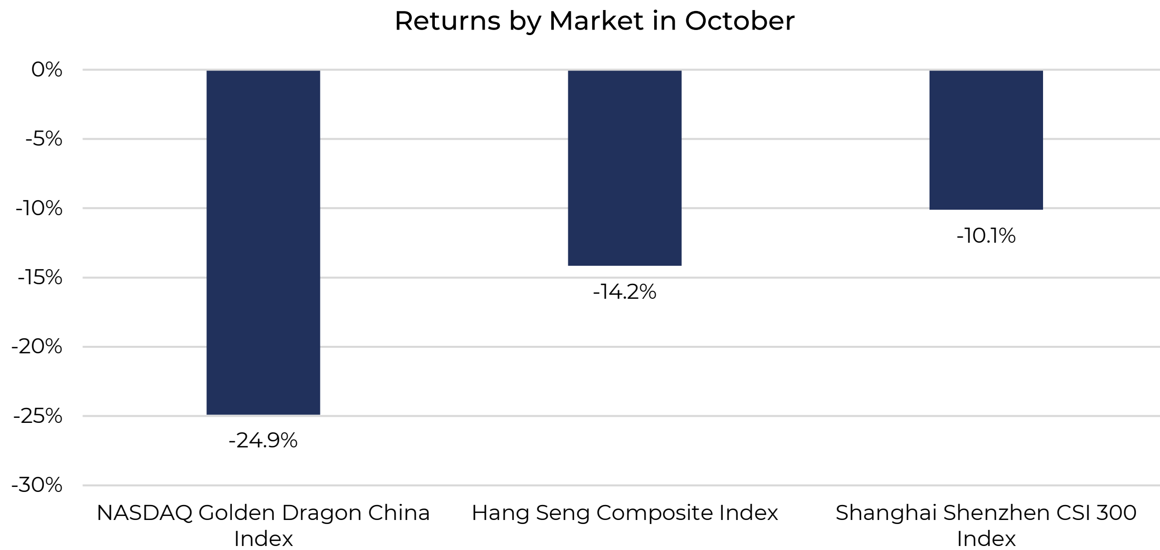
Market Commentary



(Data from 09/30/22 to 10/31/22, returns in USD, source: Bloomberg, Guinness Atkinson calculations)

In October, China was the weakest major market, falling 16.8% in USD compared to the MSCI World Index which rose 7.2%. Markets were worried about the impact of leadership changes to The Politburo and Standing Committee of the Politburo. Xi Jinping is now onto his third term as leader of the country while Premier Le Keqiang was not reappointed to the Standing Committee. The unofficial age limit of retirement (68 years old) was ignored as Zhang Youxia (Vice Chairman of Central Military Commission) and Wang Yi (Foreign Minister) retained their spots on the Standing Committee. Xi's new appointments to the Committee consisted of clear allies who he has worked with in the past.

Markets were concerned with the lack of "market friendly" faces on the Standing Committee, with questions raised over China's commitment to growth. Despite the sell-off, we do not see any significant change to China's growth model. Decision making has become more centralized, but this is acceptable if decisions are rational, and of course a problem if decisions are not rational. We have not seen any strong arguments explaining why the leadership changes will suddenly lead to irrational decisions being made. We think that in the medium term, the stability in leadership is likely to allow Xi to carry out his economic plan – to upgrade China's competence in fields including high end manufacturing, pharmaceuticals, semiconductors and so on. These will be examples of his pillar industries – not the current internet tech companies.



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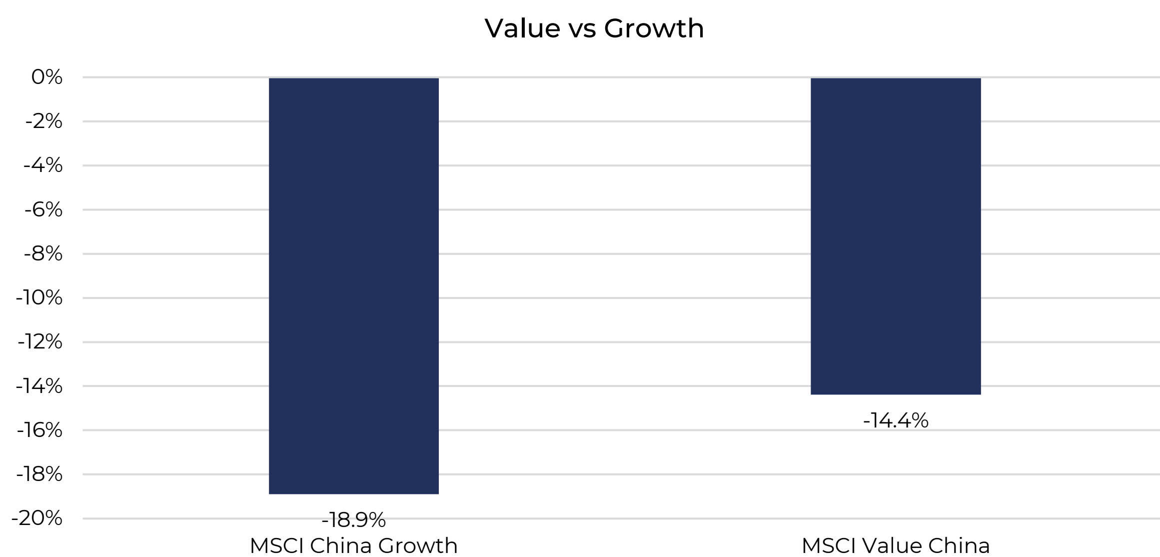
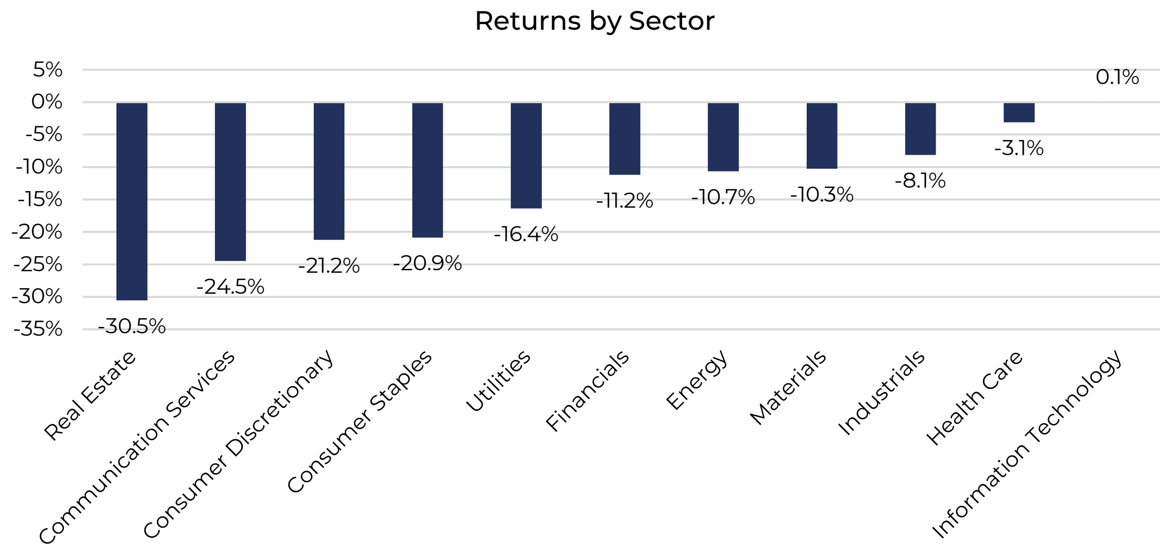
The sell-off was most concentrated in the Chinese American Depository Receipts (ADRs) listed in the US, which are generally liquid and easy for global investors to buy and sell. The Hang Seng Composite Index fell 14.2% while the CSI 300 Index (covering the A share market) fell 10.1%.



(Data from 09/30/22 to 10/31/22, returns in USD, source: Bloomberg, Guinness Atkinson calculations)

The growth index fell by 18.9% while value index fell by 14.4%. The growth index contains many of the tech stocks which were weakest in the sell-off, explaining why it lagged the value index.



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In October, the weakest sectors were Real Estate, Communication Services and Consumer Discretionary. Real Estate names were weak as the property market remains fragile. Contracted sales for the top 100 property developers fell by 31% year-on-year in October, marking no improvement compared to the 30% drop in September. The sudden resignation of the chair of Longfor (a major developer), was poorly received. We own one property developer in the Fund called China Overseas Land & Investment (COLI). It is a conservatively financed state owned enterprise (SOE). SOEs have fared much better relative to their private competitors this year, able to take on projects where the private sector has pulled back. That said, even though the SOE developers are doing better on a relative basis, they are still feeling the pressure. According to estimates by JP Morgan, contracted sales for the major SOE developers fell by 20% in the first 10 months of the year, still much better than the private sector where sales have fallen by 43%. COLI's sales have fallen by 23%, in line with other SOEs. Its October sales increased by 20% year on year, much better than the overall industry.

As the tech giants sold off, the Communication Services and Consumer Discretionary sectors were weak. Note the Communication Services sector includes well-known companies such as Tencent, Netease and Baidu. The Consumer Discretionary sector includes Alibaba, Meituan, JD.com, Pinduoduo, BYD and Nio.

Information Technology, Health Care and Industrials were outperformers. Health Care was driven by biotech and medical device companies. Some investors are expecting that innovative drugs might not be included in central procurement lists, meaning these drugs may not be subject to large price cuts. The State Council set aside $27bn of low-interest loans to upgrade medical equipment in public buildings, boosting the prospects of medical device companies. "New infrastructure" names outperformed, explaining some of the strength in Industrials.

Company Results

Our China A share holdings reported quarterly results at the end of October. For our holdings that have so far reported, the median revenue change has been +6% while the median earnings per share (EPS) change has been -5%. Below we summarize the most positive and negative results.

Wuxi Lead Intelligent reported a 70% increase in revenue and a 64% increase in EPS. It makes battery equipment and so benefits as automobile manufacturers shift towards electric vehicles. New orders in the quarter increased to CNY 6bn ($840m), a year on year increase of 94%. This is encouraging as its major customer (CATL) has yet to ramp up its tendering process, so Lead Intelligent is doing well in attracting other customers. The business is planning on issuing Global Depositary Receipts (GDRs) in the London or Swiss stock exchange, to support its successful push into Europe.

Hangzhou First Applied Material is the world's largest manufacturer of solar film, which is used to protect solar panels. Its third quarter revenue and EPS increased 41% and 9% respectively - an impairment led to earnings growth lagging revenue growth. The company is seeing demand accelerate as the supply of polysilicon, which is a key component of solar panels, increases. This greater supply of polysilicon is likely to lead to its price falling, making solar modules cheaper and so even more attractive relative to oil and gas. In the next few years, as solar module manufacturers upgrade their products, the demand for solar film is likely to shift away from EVA (Ethylene Vinyl Acetate) film and towards POE (PolyOlefin Encapsulant) film. Here, arguably First Applied is even more competitive and so we expect the company to do well.

Shenzhen Inovance Technology (Inovance) reported 15% revenue growth and 18% EPS growth. Inovance is a manufacturer of industrial automation tools and robotics. The company is still guiding for 2022 revenue growth of 25-50% and net profit growth of 10-30%. So far, in the fourth quarter there are signs of a pickup in industrial automation orders. The EV business (controllers and powertrains) is unlikely to make a profit this year as R&D expenses remain high and growth has been slightly slower than expected. We are not concerned with this development as Inovance has a long history of successfully and profitably expanding its product range.

Nari Technology reported a 10% increase in revenue and a 14% increase in EPS. It manufactures dispatching hardware and software for the grid. As China expands its renewable energy capacity, this new capacity must be connected to the grid which bodes well for Nari's prospects. In the first nine months of the year, China's investment in the grid has increased by 9% and Nari expect similar growth in 2023.

Hong Kong Exchanges and Clearing's (HKEX) third quarter revenue fell by 23% and its EPS fell by 30%. Demand for Chinese equities remains weak and so volumes were poor. At the same time costs continue to grow, driven by higher wages and some legal expenses linked to the London Metal Exchange, which HKEX owns. We expect that when global investors become more bullish on China, for HKEX to recover.

Ping An Insurance's third quarter revenue and EPS fell 14% and 35% respectively. Negative equity markets led to investment losses in the Property & Casualty, and Asset Management segments. New business value was weaker than expected due to the slow macro economy and continuing COVID-19 restrictions. However, there was operating profit growth for the life insurance and banking segments.

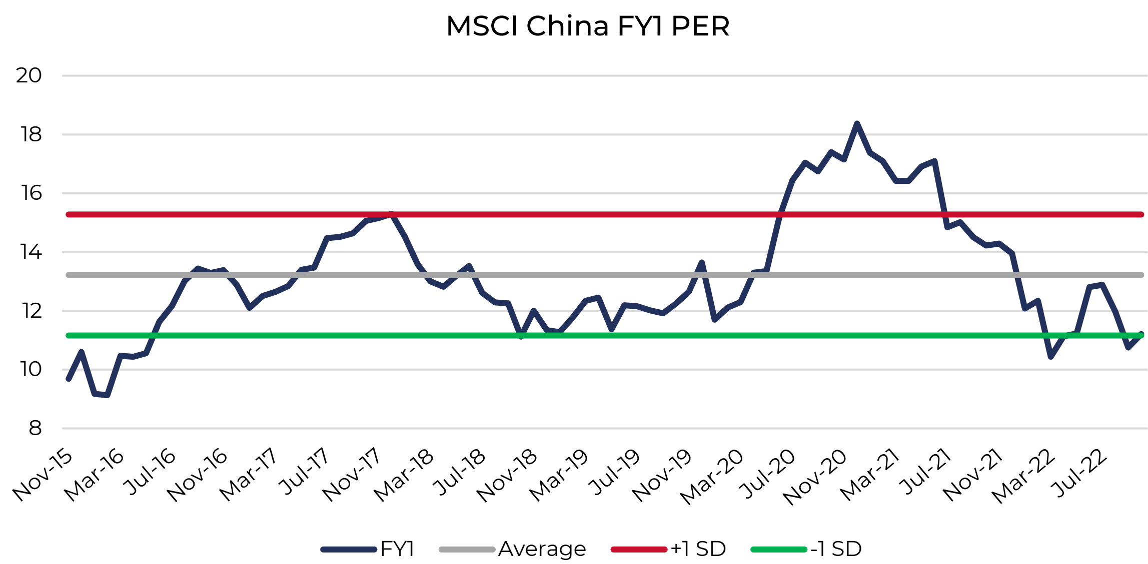
Zhejiang Supor (cookware and kitchen appliances) reported a 11% contraction in revenue, but EPS was flat. Orders from parent company, Groupe SEB, were weak as overseas demand contracts. Domestic sales grew 3% year-on-year. Gross and operating margins increased as more higher margin products were sold. Management is expecting a small decline in revenue this year with a 5% increase in profits. As there are no significant capital expenditure plans, Supor announced a special dividend to utilize some of the excess cash on its balance sheet, a sign of good capital allocation. Looking to 2023, management argue that if energy costs are high in Europe, Groupe SEB may shift more of its manufacturing away from Europe and towards Supor, which would boost its export orders.

Outlook

In early November, Chinese markets have rallied strongly on the prospects of China loosening its zero COVID policy. Some of this optimism has been driven by rumors whereas some of it has been driven by actual developments. On social media, rumors spread that the a "reopening committee" had been formed by the government, which led to a rally in Chinese markets. In terms of more concrete developments, the People's Daily, a government run newspaper, for the first time played down the long-term impact of COVID-19 on health, and said most symptoms are temporary and mild. After the German Chancellor's visit to the country, China allowed foreigners to take BioNTech's mRNA vaccine. The former head of the Chinese Center for Disease Control and Prevention (CCDC) said in his personal view, China would open its border with Hong Kong in early 2023, and would then further open up later in the year. Even though the National Health Commission soon after said China was sticking with its zero COVID policy, markets still held up due to the belief that China is moving closer to relaxing some COVID-19 rules. Later, for international travelers and close contacts of people testing positive for COVID-19, China reduced the number of days needed for quarantine by two days. Second-degree close contacts will also no longer be traced.

We await the results of the CCDC's trial of 14 domestic vaccines, aiming to test the efficacy of these vaccines as booster shots to older, inactivated vaccines. Results are expected this quarter and if they are positive, the relevant vaccines could receive Emergency Use Authorisation (EUA). In this scenario, we think China could be in a position to vaccinate a large portion of its population and open up in summer 2023. In the event that the trial finds no effective domestic mRNA vaccines, there is also the possibility that China approves foreign mRNA vaccines i.e. the BioNTech/Pfizer and Moderna vaccines. As foreigners in China are now allowed to take BioNTech's mRNA vaccine, this this does add some credence to this theory.

We remind investors that markets are likely to rally well before China officially announces an easing of its zero COVID policy, as the first week in November has shown. Based on other countries' historical performance, markets on average rallied a month before restrictions were eased in the initial COVID-19 outbreak. Given China's low valuation, we argue the risk reward ratio for the country remains attractive.



(Data from 11/30/15 to 10/31/22, SD refers to standard deviation. Source: Bloomberg, Guinness Atkinson calculations)

Edmund Harriss (portfolio manager)

Sharukh Malik (portfolio manager)

Performance

In October, sources of outperformance included:

Underweight in the tech giants: Tencent, Alibaba and Meituan (not held in the Fund). The Fund is run on an equally weighted basis and so each position has a neutral weight of about 3.2%. As of 10/31/22, Tencent, Alibaba and Meituan accounted for 11.0%, 8.0% and 4.7% of the MSCI China Index. As these names were underperformers, the Fund captured significantly less of the downside through the underweight position.

Overweight in Industrials which has outperformed, and good stock selection. The Industrials sector fell 8.1% in October compared to MSCI China which fell 15.6%. Our Industrials holdings as a whole did better than the sector due to our exposure to "New Infrastructure" names. It was pleasing to see that Hangzhou First Applied Material (solar film) which we added at the end of September, was the second strongest stock in the Fund, increasing 17.3%. Shenzhen Inovance (exposure to automation and robotics), was the third strongest stock in the Fund, increasing 13.0%. Wuxi Lead Intelligent (equipment for EV battery plants) increased 3.1%.

As of 10/31/2022	YTD	1 Year	3 Year	5 Year	10 Year
China & Hong Kong Fund (ICHKX)	-40.45%	-40.86%	-10.84%	-6.87%	0.46%
Hang Seng Composite Index TR	-37.90%	-42.36%	-13.03%	-8.42%	0.21%
MSCI China Net Total Return Index	-42.79%	-47.90%	-13.83%	-9.67%	-0.06%

As of 09/30/2022	YTD	1 Year	3 Year	5 Year	10 Year
China & Hong Kong Fund (ICHKX)	-33.12%	-31.35%	-5.44%	-3.87%	2.01%
Hang Seng Composite Index TR	-27.67%	-31.27%	-7.37%	-5.02%	2.20%
MSCI China Net Total Return Index	-31.23%	-35.39%	-7.17%	-5.55%	2.36%

All returns over 1 year annualized. *Source: Bloomberg, Guinness Atkinson Asset Management.*

Expense Ratio: 1.50%

Performance data quoted represents past performance; past performance does not guarantee future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. Performance data shown is current to the most recent month and quarter end. To obtain performance as of the most recent month end, please visit www.gafunds.com or call 1-800-915-6565. Performance data does not reflect the 2% redemption fee for shares held less than 30 days and, if deducted the fee would reduce the performance noted.

The Fund's investment objectives, risks, charges and expenses must be considered carefully before investing. The statutory and summary prospectus contains this and other important information about the investment company, and it may be obtained by calling 800-915-6566 or visiting gafunds.com. Read it carefully before investing.

Investments in foreign securities involve greater volatility, political, economic and currency risks and differences in accounting methods. These risks are greater for emerging markets countries. The China and/or Hong Kong stock markets in which the Fund invests may experience periods of volatility and instability. These fluctuations may cause a security to be worth less than it was at the time of purchase. Market risk applies to individual securities, a particular sector or the entire economy. China and/or Hong Kong stocks may fall out of favor with investors, the value of Chinese currencies may decline relative to the U.S. dollar and/or China or Hong Kong stock markets may decline generally. The Fund invests in invest in small-cap or mid-cap, which involve additional risks such as limited liquidity and greater volatility, than investments in larger companies.

One cannot invest directly in an Index.

Standard deviation is the statistical measure of market volatility, measuring how widely prices are dispersed from the average price. If prices trade in a narrow trading range, the standard deviation will return a low value that indicates low volatility.

The Shanghai Shenzhen CSI 300 Index is a market capitalization-weighted stock market index designed to replicate the performance of the top 300 A-share stocks traded in the Shanghai and Shenzhen stock exchanges.

Hang Seng Composite Total Return Index is a market capitalization weighted index that monitors the performance of stocks listed in Hong Kong.

In China, the National Bureau of Statistics (NBS) Manufacturing Purchasing Manager Index measures the performance of the manufacturing sector and is derived from a survey of more large-scale, state-owned companies. The Manufacturing Purchasing Managers Index is based on five individual indexes with the following weights: New Orders (30%), Output (25%), Employment (20%), Suppliers' Delivery Times (15%) and Stock of Items Purchased (10%), with the Delivery Times index inverted so that it moves in a comparable direction.

The Caixin PMI measures the performance of the manufacturing sector and is derived from a survey of more private companies.

MSCI AC Asia Pacific ex Japan Index is free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of countries in the Asia Pacific region.

MSCI Europe Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of European markets.

MSCI EM Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of Emerging markets in Asia, Europe, Middle East, Africa and Latin America.

MSCI EM ex China is the same as the MSCI Emerging Markets Index but excludes China.

MSCI China Index captures large and mid cap representation across China A shares, H shares, B shares, Red chips, P chips and foreign listings (e.g. ADRs). With 703 constituents, the index covers about 85% of this China equity universe.

The MSCI China A Index captures large and mid-cap representation across China securities listed on the Shanghai and Shenzhen exchanges. The index covers only those securities that are accessible through "Stock Connect".

MSCI Hong Kong Index is a capital weighted stock index designed to measure the performance of the large and mid cap segments of the Hong Kong market. It has 48 constituents and covers approximately 85% of the free float-adjusted market capitalization of Hong Kong equity stocks.

MSCI Golden Dragon is a composite of the MSCI China, Hong Kong and Taiwan Indices which are free float-adjusted market capitalization weighted indices that is designed to measure the equity market performance of the respective markets.

MSCI Japan Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of the Japanese market.

MSCI World Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed markets.

MSCI China Growth Index captures large and mid cap securities exhibiting overall growth style characteristics across the Chinese equity markets.

MSCI China Value Index captures large and mid cap Chinese securities exhibiting overall value style characteristics. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price, and dividend yield.

S&P 500 Index is a market-capitalization-weighted index of leading publicly traded companies in the U.S.

American depositary receipt (ADR) refers to a negotiable certificate issued by a U.S. depositary bank representing a specified number of shares—usually one share—of a foreign company's stock. The ADR trades on U.S. stock markets as any domestic shares would.

Price/Earnings ratio (P/E) is an equity valuation multiple. It is defined as market price per share divided by annual earnings per share

Opinions expressed are subject to change, are not a guarantee and should not be considered investment advice. Past performance is not indicative of future results.

Top Fund Holdings as of 10/31/2022:

1.	Venustech Group Inc	5.09%
2.	Shenzhen Inovance Technology Co Ltd	4.95%
3.	NARI Technology Co Ltd	4.67%

4.	CSPC Pharmaceutical Group Ltd	4.48%
5.	Hangzhou First Applied Materials	4.45%
6.	AIA Group Ltd	4.11%
7.	China Medical System Holdings Ltd	3.81%
8.	Wuxi Lead Intelligent Equipment Co Ltd	3.76%
9.	NetEase Inc	3.70%
10.	JD.com Inc	3.61%

Fund holdings and sector allocations are subject to change and are not recommendations to buy or sell any security.

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