Guinness Atkinson

China & Hong Kong Fund

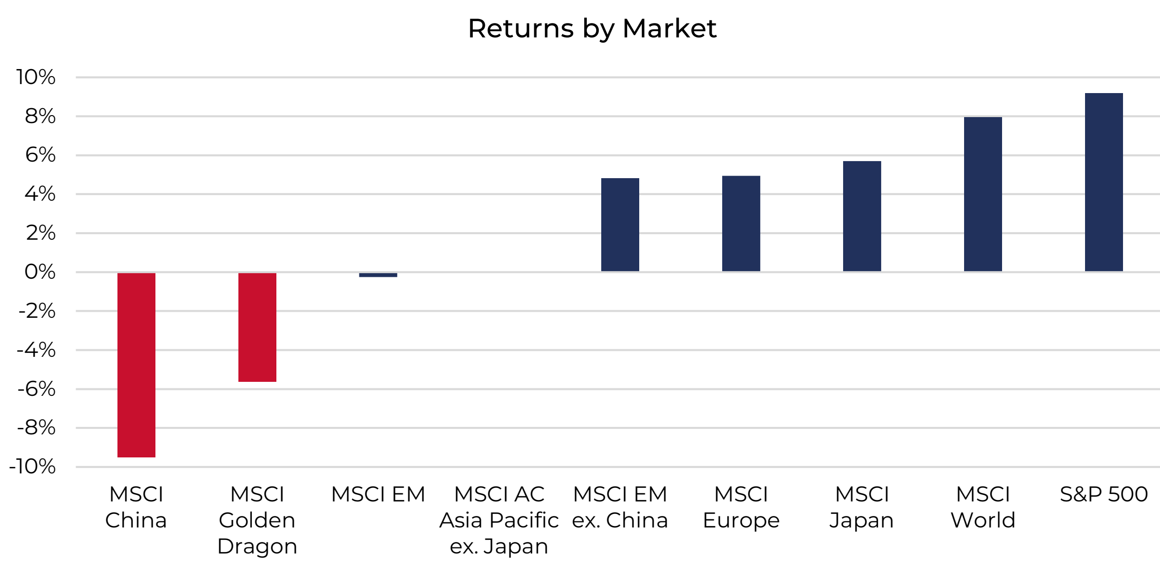
Managers' Update – August 2022

Summary Review & Outlook

Summary View

- In July, the MSCI China Total Return Index ("MSCI China Index") fell 9.5% (in USD unless otherwise stated).
- Consumer price inflation (CPI) rose to 2.7% in July compared to 2.5% in June, primarily driven by rising food prices (specifically pork and fresh vegetables). Core CPI, which excludes food and energy, was 0.8% in July compared to 1.0% in June.
- Producer price inflation (PPI) was 4.2% in July, lower than the 6.1% reading for June, as commodity prices weakened on a sequential basis.
- Stronger stocks in the portfolio were CSPC Pharmaceutical, Xinyi Solar and Nari Technology. Weaker stocks were Suofeiya and Alibaba.
- No changes were made to the portfolio in July.
- As of 07/31/22, MSCI China traded on a price/earnings ratio of 11.7x on estimated 2022 earnings, putting it at valuations last seen during the trade war. The portfolio trades on a price/earnings ratio of 14.8x on estimated 2022 earnings, which puts it at a 26% premium to the market. We think this premium is worth paying for given the Fund's higher cash return on capital (11.7% vs 9.3% for MSCI China) and the Fund's low debt (net debt/equity -48% vs 30% for MSCI China).

Market Commentary



(Data from 06/30/22 to 07/31/22, returns in USD, source: Bloomberg, Guinness Atkinson Asset Management calculations)

Chinese markets fell by 9.5% in July (in USD). The weakness was predominantly caused by protests in nearly 100 cities in China as homebuyers refused to make their mortgage payments. This was because construction work has stopped on houses which they had bought off plan. The risk was that these protests would broaden, and so Chinese markets sold off. This fear was not realized; the protests were mostly limited to cities in Henan, Hubei, and Hunan provinces. The affected banks, who were not receiving their mortgage payments, said overdue loans represented less than 0.01% of their total mortgage book. Assuming the protests remain limited, the issue is manageable given the small scale. The problem is not that homebuyers cannot pay their mortgages - in this case they are unwilling to do so because of incomplete projects.

Why were these construction projects not going ahead? Certain developers' finances are stretched, and they do not have the cash to work on projects e.g., Evergrande. There were multiple factors which ultimately led to this situation:

1. "Three red lines" policy - since 2020, the government has tried to reduce the amount of leverage in the property market by introducing debt caps on those failing to meet three financial thresholds – the so called "three red lines policy". This was one of the catalysts for Evergrande entering default as it was not able to borrow more to fund its growth.
2. Caps on the presale model (which permits the sale of properties off plan, prior to construction) - in 2021 the rules were tightened which restricted what property developers could do with the pre-sale funds. Developers must put these funds into escrow accounts, and these funds can only be used for the specific project they were paid for. Though these rules did previously exist, they were not rigorously enforced so developers would use the presale proceeds raised for one project to fund a completely different project. Again, this is something developers like Evergrande used regularly and so enforcement of the rules has further dampened activity.
3. Zero-COVID policy – this is certainly impacting economic growth, leading to subdued demand not just in the property market but in the whole economy. Weakening global growth, along with the aforementioned issues, are all occurring simultaneously, making a difficult job even harder to resolve.

The government is now mulling over its options. China Construction Bank (CCB), a large state-owned bank which is not held in the portfolio, may be asked to contribute Chinese Yuan (CNY) 40 bn ($5.9bn) towards a bailout fund to support distressed developers. This would be in addition to the People's Bank of China (PBOC) contributing another CNY 40 bn to set up an initial CNY 80 bn fund. Reports indicate the fund could grow to at least CNY 300 bn ($44bn).

The problem from the government's point of view is that any sort of bailout fund could encourage other developers to take on too much risk if they expect eventually the government will step in. This is often called moral hazard and is something the government is keen to prevent; but the short-term problem of a moribund property market seems to be greater than the medium-term cost of moral hazard.

In the Fund, we own one property developer, China Overseas Land & Investment (COLI). It is probably the most conservatively financed major developer in China and its financial position is well within the three red lines. COLI is majority owned by a state-owned enterprise and has been acquiring more projects over the past 12 months as its private competitors have struggled. We are alert to any suggestions that the company may be called upon to assist distressed developers, but there have been no signs of this occurring so far. COLI was the best performing stock in the portfolio in the first half of the year, rising 37.8% compared to the MSCI China Index which fell 11.3%. In July, COLI fell 12.8% while the MSCI China Index fell 9.5%. Other well-known property names fell more steeply in July, reflecting their greater risk – Longfor Group fell 26.4%, Country Garden Holdings fell 37.7% and China Vanke fell 19.1%.

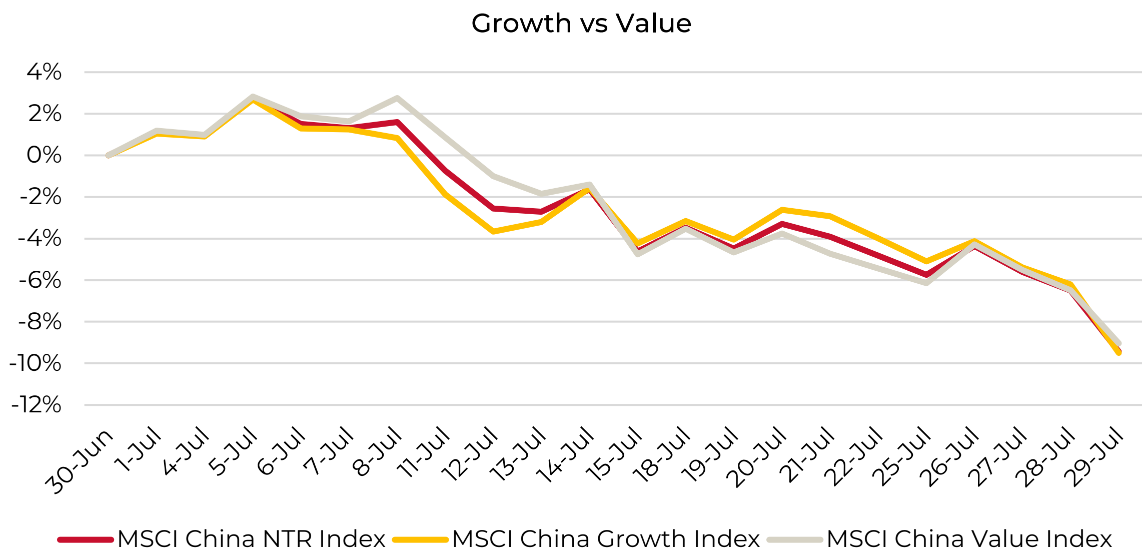
We own one bank – China Merchants Bank (CMB). Its overdue mortgages linked to the protests were worth only CNY 12m i.e., ~$2m. To put this into context, as of 07/12/22 the total value of CMB's assets was $1.49 trillion.

We also hold names which have indirect exposure to the property market. Sany Heavy makes construction equipment such as excavators. Suofeiya makes kitchen cabinets and so its prospects are linked to property sales. To a lesser extent China Lesso is also impacted. It makes plastic pipes used in all types of construction, but we think more than half of the business comes from infrastructure projects rather than property.

Taiwan

Towards the end of the month, markets were also worried over the consequences of Nancy Pelosi's trip to Taiwan. The Chinese leadership viewed the visit by Pelosi, the Speaker of the House of Representatives and one of the most senior politicians in the US, as a strong provocation. After many days of suspense, Pelosi landed in Taiwan in the evening of August 2nd and departed the following day. She met Taiwan's President Tsai Ing-wen as well as Deputy Speaker of Parliament Tsai Chi-Chang. China responded by carrying out a series of military drills around Taiwan. The drills were closer to Taiwan than ever before, extending into its territorial waters. China also announced a ban of certain imports from Taiwan, including some agricultural products. However according to DBS, agricultural exports to China only accounted for 0.6% of Taiwan's exports in 2021, so the ban was not significant.

In July, value stocks and growth stocks in China essentially fell in line.



(Data from 06/30/22 to 07/31/22, returns in USD, source: Bloomberg, Guinness Atkinson Asset Management calculations)

The strongest sectors were Energy, Industrials, and Healthcare. The weakest were Real Estate, Consumer Discretionary, and Communication Services. Due to the mortgage protests, it is no surprise Real Estate was so weak.

(Data from 06/30/22 to 07/31/22, returns in USD, source: Bloomberg, Guinness Atkinson Asset Management calculations)

Company Updates

There was no specific news regarding CSPC Pharmaceutical, but it was the best performing stock in the Fund in July. Management expects some growth in the business in the second quarter even though lockdowns led to fewer patients in hospitals. In August, CSPC is likely to publish the results of its phase I trial of its mRNA COVID-19 vaccine. Assuming the results are satisfactory the company is expecting to complete a Phase II trial in September, involving patients in southeast Asia.

Xinyi Solar was also strong, rising 10%. It reported first half results where revenue grew 20% but net income fell 38%. Solar glass volumes grew 45% but the gross margin fell 24.5 percentage points to 26.7%. This was driven by 13-16% lower average selling prices (ASPs) compared to the preceding period in 2021, which had relatively high ASPs. Additionally higher raw material and energy prices (soda ash and gas) were another factor. In the short-term it is likely gas prices will remain high so further margin pressure is likely. But given much of the world's focus on transitioning towards renewable energy, we see room for more demand through higher volumes. Xinyi Solar increased capacity by 40% in the first half of the year, through adding new production lines and through older plants coming back online after completing maintenance. The company is targeting more capacity additions including a new facility in Malaysia which diversifies its sources of production. We think this diversification is a sensible move in case geopolitical disputes escalate.

Suofeiya was the weakest stock in the portfolio, falling 35%. It makes kitchen cabinets and so its prospects are linked to the property market. Given the property protests at the beginning of July, the stock was weak. At the same time, the deputy general manager/CEO unexpectedly resigned which further added to the weakness. We continue to hold the stock because we think the business can use its strong brand to generate a high return on capital. Currently we think the market price implies the returns of the business dip to the cost of capital, which we think is unlikely. The business went public in 2011, and through considerable changes over that period it has sustained earnings well above the cost of capital. The preceding 10 years have contained multiple downturns that the business has navigated well, and we expect Suofeiya's strong balance sheet should give it time to manage the current slowdown.

Fuling Zhacai's sales grew 15% in the second quarter while net income grew 75% (Zhacai is a type of pickled mustard plant stem and very popular). Due to lockdowns, volume growth was rapid in April since more people were in their homes. As lockdowns were lifted, there was a slowdown for the rest of the quarter. For the quarter as a whole, Zhacai volumes were down 10% but ASPs were up 14%, driven by the price increases implemented in November 2021. Gross margins increased 5.3 percentage points on a quarterly basis as mustard roots prices, a key cost, continued to fall.

Alibaba applied to convert its secondary listing in Hong Kong (HK) into a primary listing, which means the company will have dual primary listing in both the US and HK. The company expects the process to be completed this year which should allow the stock to be eligible for Southbound trading (Southbound trading refers to mainland Chinese investors buying HK-listed stocks through the Stock Connect). The flows from these Southbound flows can be substantial; for example, mainland investors own ~10% and ~15% of the free float shares for Tencent and Meituan, respectively.

Outlook

Appetite for Chinese stocks remains weak for global investors, which is the reason why we think China remains an interesting investment proposition. Current valuations reflect current sentiment, and the debate is whether they reflect future outcomes. If China's economy is stronger in the medium term (3-5 years) than it is today, then there is potential for a valuation re-rating, boosting shareholder returns. We think at some point China is likely to move away from its zero-COVID policy which should lead to stronger economic growth, since lockdowns and movement restrictions would no longer occur. In this scenario, China is cheap as today's valuations do not reflect likely future outcomes and so we argue investors should be looking at the country for this very reason.

As of 07/31/22, MSCI China traded on a price/earnings ratio of 11.7x on estimated 2022 earnings, putting it at valuations last seen during the trade war. The portfolio trades on 14.8x on estimated 2022 earnings, which puts it at a 26% premium to the market. We think this premium is worth paying for given the characteristics the Fund has. The Fund's cash return on capital was 11.7% in 2021 compared to only 9.3% for the MSCI China Index. That is a function of the Fund's process, where we only look at companies with a return on capital above the cost of capital. Our companies in aggregate are much better at allocating capital than the overall market. The Fund's premium Return on Equity (ROE) is, we believe, to be a function of better margins and operational efficiencies and not a function of financial leverage. The aggregate net debt/equity ratio for the portfolio is -48% (i.e., net cash with cash levels higher than debt), compared to 30% debt for the MSCI China Index. We think being invested in companies with strong balance sheets is an attractive characteristic given the challenges the Chinese economy is facing.

Edmund Harriss (portfolio manager)

Sharukh Malik (portfolio manager)

GUINNESS ATKINSON FUNDS

Performance

As of 07/31/2022	YTD	1 Year	3 Year	5 Year	10 Year
China & Hong Kong Fund (ICHKX)	-19.15%	-22.27%	0.23%	0.63%	4.35%
Hang Seng Composite Index TR	-15.19%	-22.90%	-3.98%	-1.32%	4.45%
MSCI China Net Total Return Index	-19.69%	-28.35%	-3.65%	-1.57%	4.29%

As of 06/30/2022	YTD	1 Year	3 Year	5 Year	10 Year
China & Hong Kong Fund (ICHKX)	-11.07%	-20.53%	2.57%	3.47%	4.93%
Hang Seng Composite Index TR	-7.67%	-25.24%	-1.87%	1.63%	5.45%
MSCI China Net Total Return Index	-11.26%	-31.79%	-0.57%	2.14%	5.49%

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.

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 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.

Cash return on capital invested (CROCI) is a formula for valuation that compares a company's cash return to its equity. Developed by the Deutsche Bank's global valuation group, CROCI gives analysts a cash flow-based metric for evaluating a company's earnings.

Return on equity (ROE) is a measure of financial performance calculated by dividing net income by shareholders' equity. Because shareholders' equity is equal to a company's assets minus its debt, ROE is considered the return on net assets.

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.

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 7/31//2022:

1.	NetEase Inc	4.49%
2.	NARI Technology Co Ltd	4.43%
3.	China Overseas Land & Investments Ltd	4.21%
4.	JD.com Inc	4.18%
5.	China Medical System Holdings Ltd	4.03%
6.	AIA Group Ltd	3.95%
7.	Shenzhen Inovance Technology Co Ltd.	3.89%
8.	Xinyi Solar Holdings Ltd	3.85%
9.	Baidu Inc	3.69%
10.	Wuxi Lead Intelligent Equipment Co Ltd	3.54%

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

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