



# China: Should it be its own asset class?

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## Introduction

Foreign access to Chinese equity markets has grown by leaps and bounds over the past decade. Much of the recent narrative has centered on the domestically-listed A Shares, whose inclusion factor in several widely-followed and traded indexes increased significantly during 2019.

But A Shares, whose valuations are heavily influenced by Chinese retail investors, are only one of the nine major Chinese share classes that portfolio managers use to balance their exposure to China.

With China accounting for a growing share of emerging markets allocations, there has been an exponential growth in demand from investors and the financial industry for dependable sources of data upon which to base their decisions. EPFR's China Share Class Allocations (CSCA) and CSCA Flows datasets meet this need.

With these datasets, it is possible to analyze a market whose multiple share classes are complimentary but frequently not correlated, whose primary driver on the domestic front are retail investors, and whose issuers have different concepts of shareholder rights than is the case in Developed European and US markets. The data can also fuel quantitative models and strategies.



## Opening windows on China for more than two decades

### GEM and Asia ex-Japan Regional Fund Country Allocations (1996)

This dataset provides investors with a window into diversified fund manager sentiment towards China, both through changes in China’s average weighting and its weighting relative to other markets.

### China Country Fund Flows (2000)

As-reported tracking of flows into and out of dedicated China Equity Funds, providing a blunt proxy for investor sentiment and appetite for exposure to China.

### Equity and Bond Fund flows for China (2000 and 2004)

These hybrid datasets provide a snapshot of the money that EPFR-tracked Equity and Bond Funds are committing to or redeeming from Chinese markets. The data is correlated to traditional balance of payment trends, but precedes the BoP data by several weeks.

### China Equity Fund Sector Allocations (2006)

Captures the allocations between sectors in the average China Equity Fund portfolio on a monthly basis.

### China Stock Level Flows (2010)

Provides daily, weekly and monthly insights into the flows that individual Chinese stocks are attracting or losing.

### China Share Class Allocations (2020)

Tracks the relative allocation of EPFR-tracked fund managers between the nine major Chinese Share Classes (see table below).

### CSCA Flows (2020)

Uses the allocations data to estimate flows into and out of the major China Share Classes.

Category	Country of Incorporation	Country of Listing	Trading Currency
A Share	PRC	China	CNY
B Share	PRC	China	USD (Shanghai) HKD (Shenzhen)
H Share	PRC	HK SAR	HKD
Red Chip	Non-PRC	HK SAR	HKD
P Chip	Non-PRC	HK SAR	HKD
S Chip	Non-PRC	Singapore	SGD
N Share	Non-PRC	USA	USD
T Chip	PRC	Taiwan	TWD
ADR	PRC	USA	USD

## Old facts

### China Country Fund Flow dataset

- 7 fund groups
- History dating back to 02/29/1996
- Daily, weekly and monthly frequency
- 6,789 (5,369/1,420) Mutual Funds and ETFs
- \$5.52 trillion total fund assets
- 1 and 16-day release lag

### China Country Positioning dataset

- 6 fund groups
- History dating back to 12/31/1995
- Monthly frequency
- 1,191 (826/365) Mutual Funds and ETFs
- \$18.18 billion total fund assets
- 23-day release lag

### Number and AuM of funds reporting to EPFR that track selected benchmarks

Selected Benchmark	Total # of Funds	AuM Mil USD
MSCI ACWI	607	\$590,599.72
MSCI ACWI ex USA	146	\$408,716.98
MSCI Emerging Markets	612	\$524,115.45
MSCI Emerging Markets Small Cap	31	\$4,126.00
MSCI AC Asia ex Japan	128	\$74,822.45
MSCI AC Asia Pacific ex Japan	73	\$40,870.57
MSCI Asia ex Japan	9	\$1,721.38
MSCI EM Asia	17	\$10,163.48
MSCI Golden Dragon	32	\$10,842.98
MSCI Zhong Hua	4	\$1,733.31
MSCI China	62	\$32,256.04
MSCI China A Share	25	\$6,350.05
MSCI China 10/40	20	\$9,351.75
MSCI China A Onshore	10	\$6,056.01
MSCI China A Inclusion	6	\$176.83
CSI 100	5	\$110.36
CSI 300	44	\$25,245.29
CSI 500	17	\$8,139.47
SSE 50	9	\$6,042.48
FTSE China 50	8	\$3,736.13
FTSE China A50	12	\$4,191.64
Hang Seng	7	\$16,227.62
Hang Seng China Enterprise	17	\$4,744.56



## New facts

### China Share Class Positioning/Flow dataset

- 7 fund groups
- History dating back to 01/31/2014
- Monthly frequency
- 873 (465/408) Mutual Funds and ETFs
- \$1.77 trillion total fund assets
- 35-day release lag

### China Stock dataset

- 2924 distinct ISINs
- History dating back to 01/31/2010
- Daily and monthly frequency
- 9 filters (aggregate, active, passive, ETFs, Mutual Funds)
- 13 predictive factors derived from holdings
- 1 and 26-day release lag

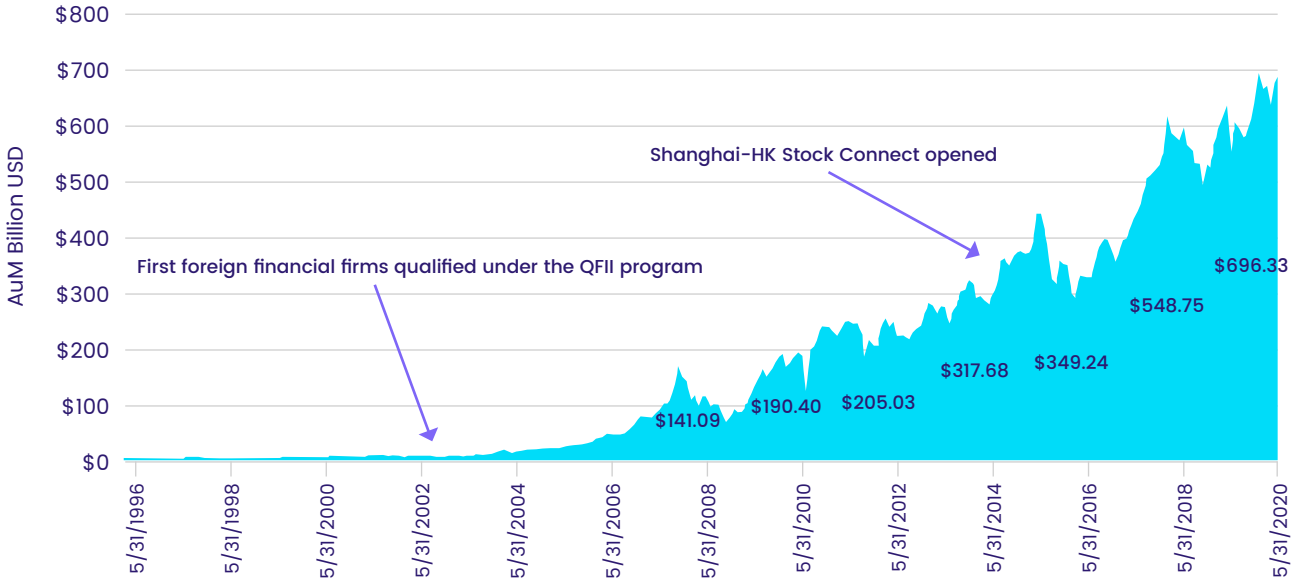
As of May 2020, all China Share Classes account for roughly 4.77% of the MSCI ACWI index.

USA ranked first with a 56.87% share of the total index; Japan ranked second with 7.20%, and China ranked third ahead of the UK with 4%.

China's share of the average EPFR-tracked Global Emerging Markets (GEM) Equity Funds has risen from 6.7% in 1Q07 to 32.18% in Q3 2020. Over the same period, China's average GEM Bond Fund weighting has climbed from 0.33% to 4.47%.

## Still room to grow

### Total AuM allocated to China Equity

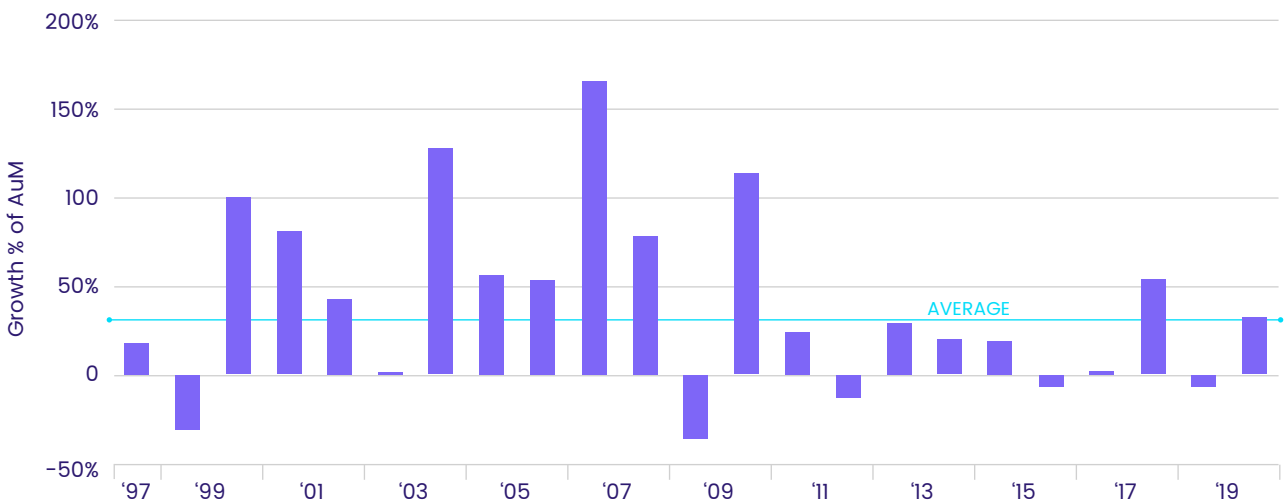


### Annual Growth

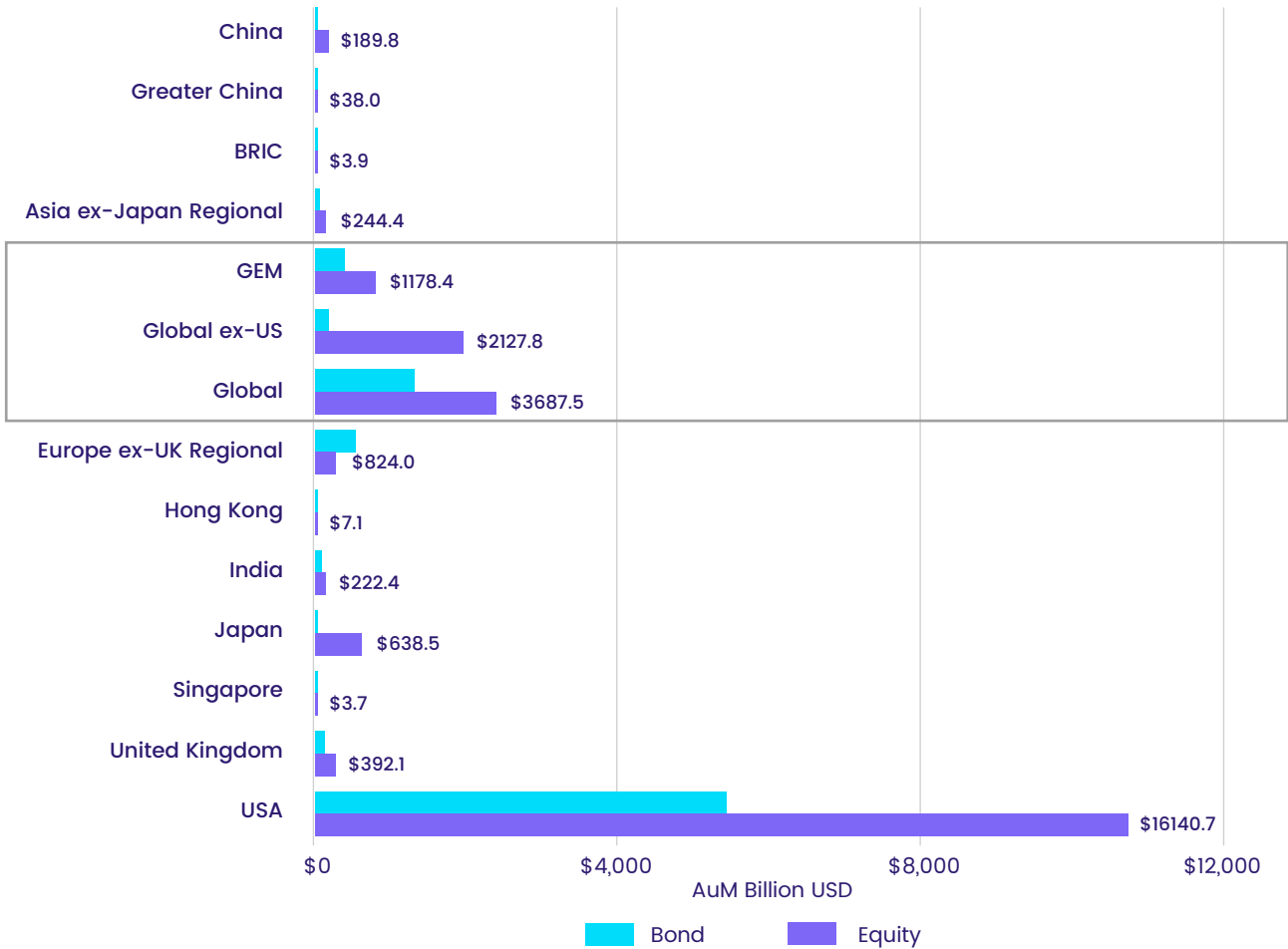
Before MSCI's inclusion of A Shares in 2017, the average annual growth of EPFR-tracked fund AuM invested into China companies was an astonishing 42.9%.

With China being one of the first major economies to relax pandemic containment measures, and the domestic market slated to open even more to foreign investors, we expect the growth in Chinese holdings to continue – and even accelerate.

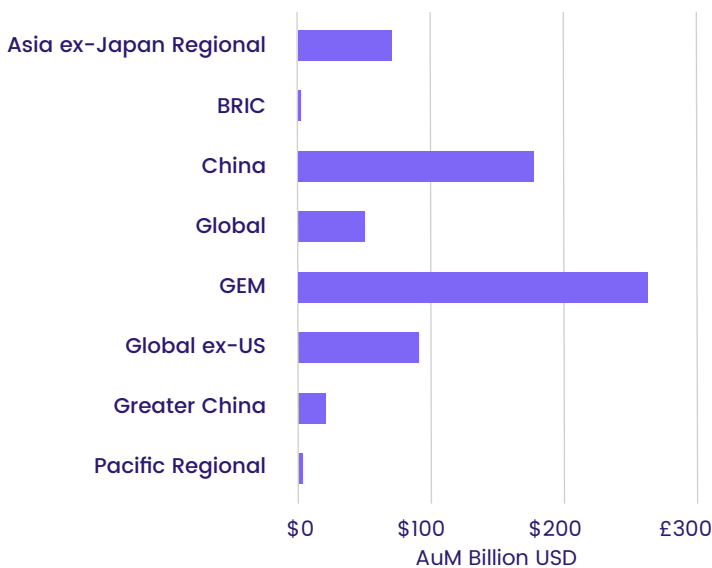
China's share of the average GEM Equity and Bond Fund has reached the point where a GEM ex-China fund group seems likely.



## Fund assets comparison



## Allocated AuM by geographic focus



There are three types of funds that can invest in China: China-dedicated funds, regional funds, and funds with global mandates.

Funds with global mandates are already the bigger fish in the pond – GEM, Global ex-US and Global Fund assets sum up to \$5.1 trillion in equity, and \$1.9 trillion in bonds.

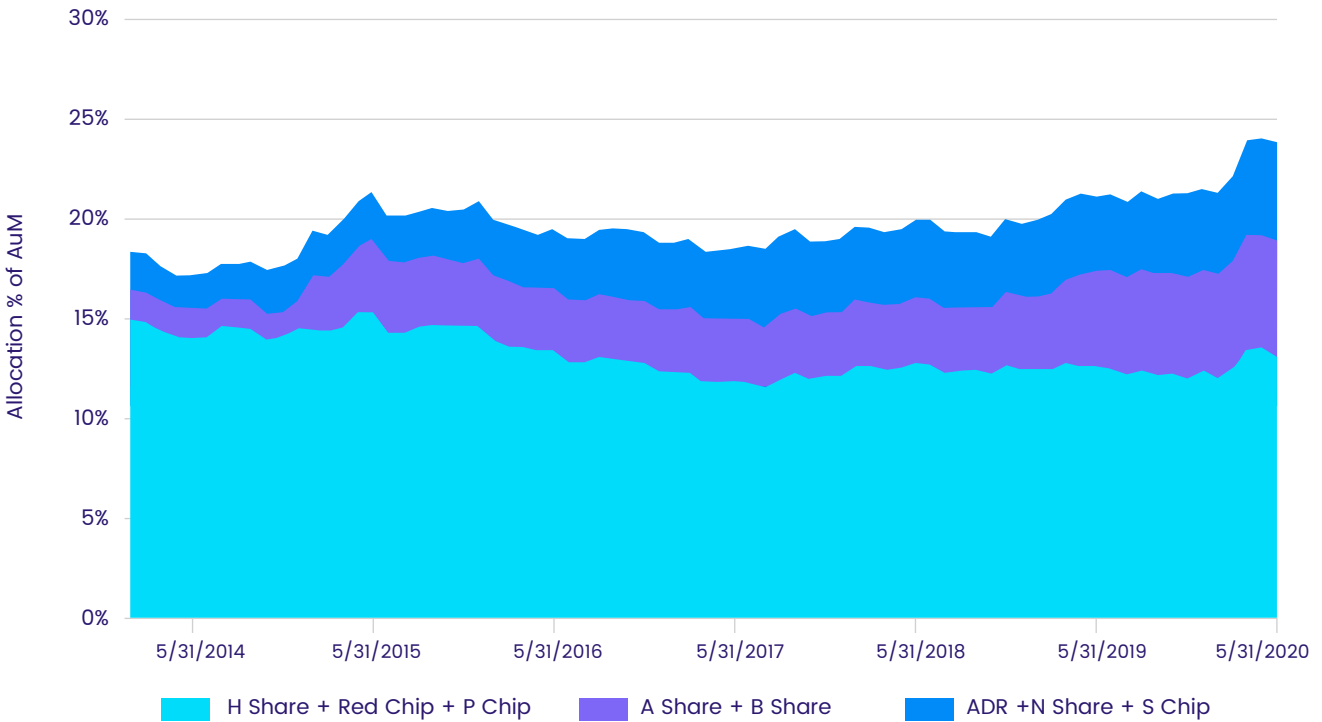
A tiny modest in the allocation to China by any of these groups will lead to a significant increase of the value of Chinese assets in their portfolios. For instance, 0.1% of the total Global Equity Fund AuM equals \$47 billion.



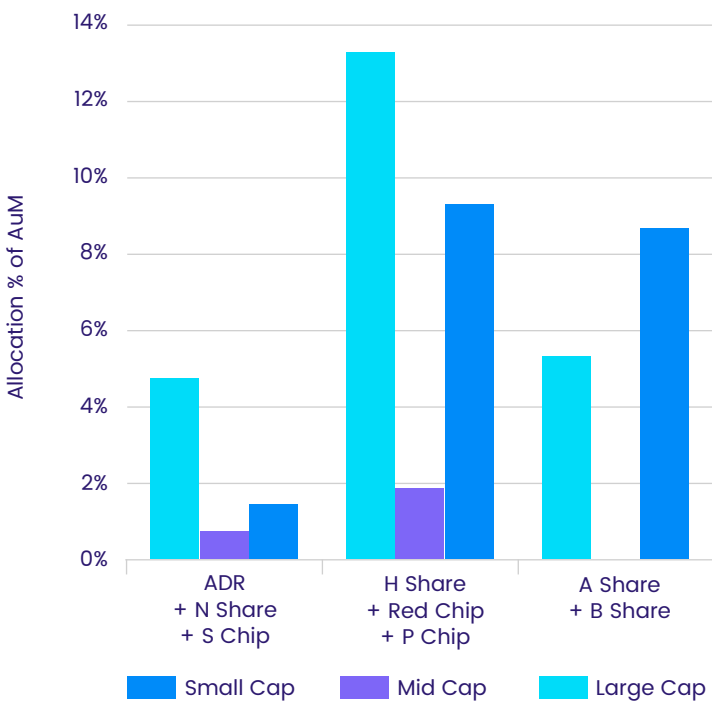


## Complementary markets

### China Share Class Allocation



### Share Class Allocation by market cap funds



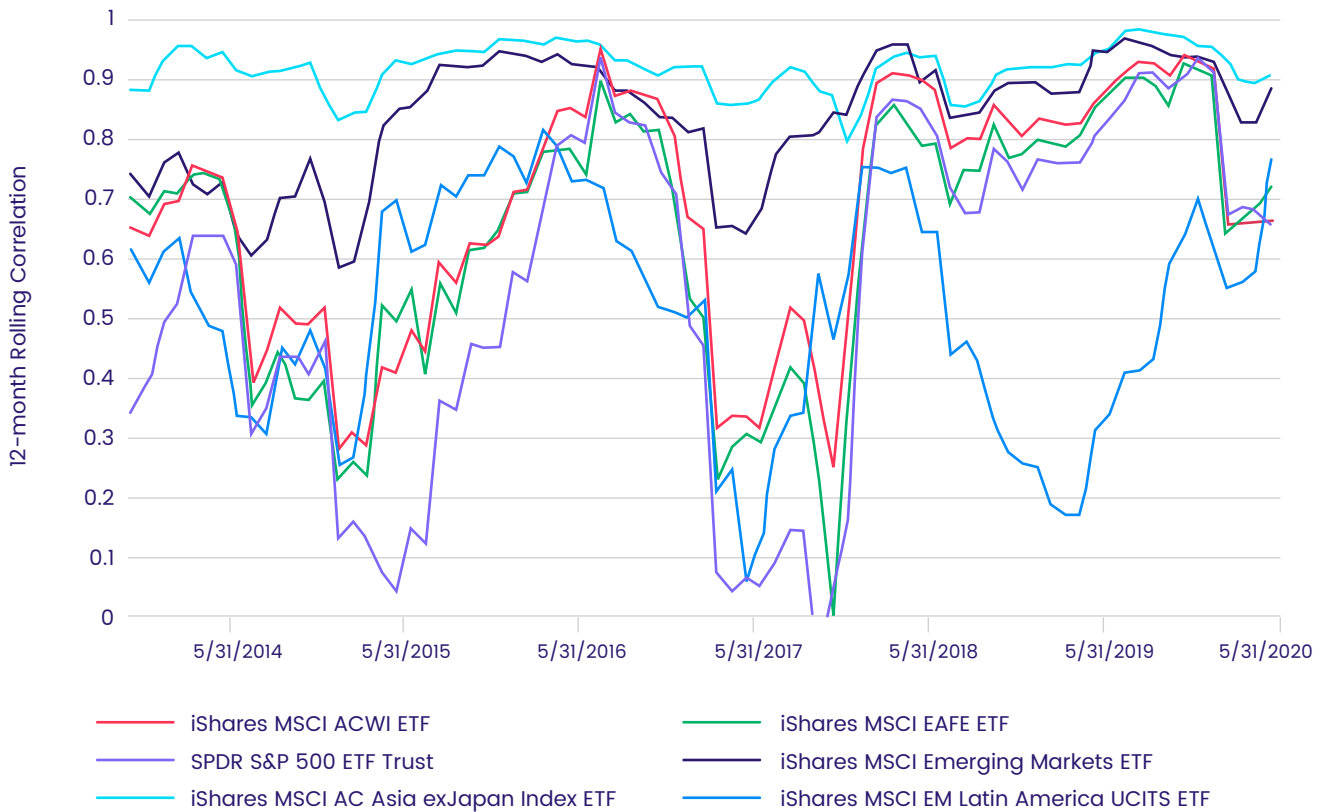
China's onshore and offshore markets complement – but are not always correlated with – each other.

Dual or triple-listing companies offer unique trading/hedging/financing opportunities (see following page). Large Cap companies are more likely to list in offshore markets.

For onshore equity markets, it is Small Cap plays (market capitalization of under \$2 billion) that dominate.

## Low correlation, diversification and opportunity

### MSCI China 12-month rolling correlation



### Share Class Allocation correlation with major benchmarks

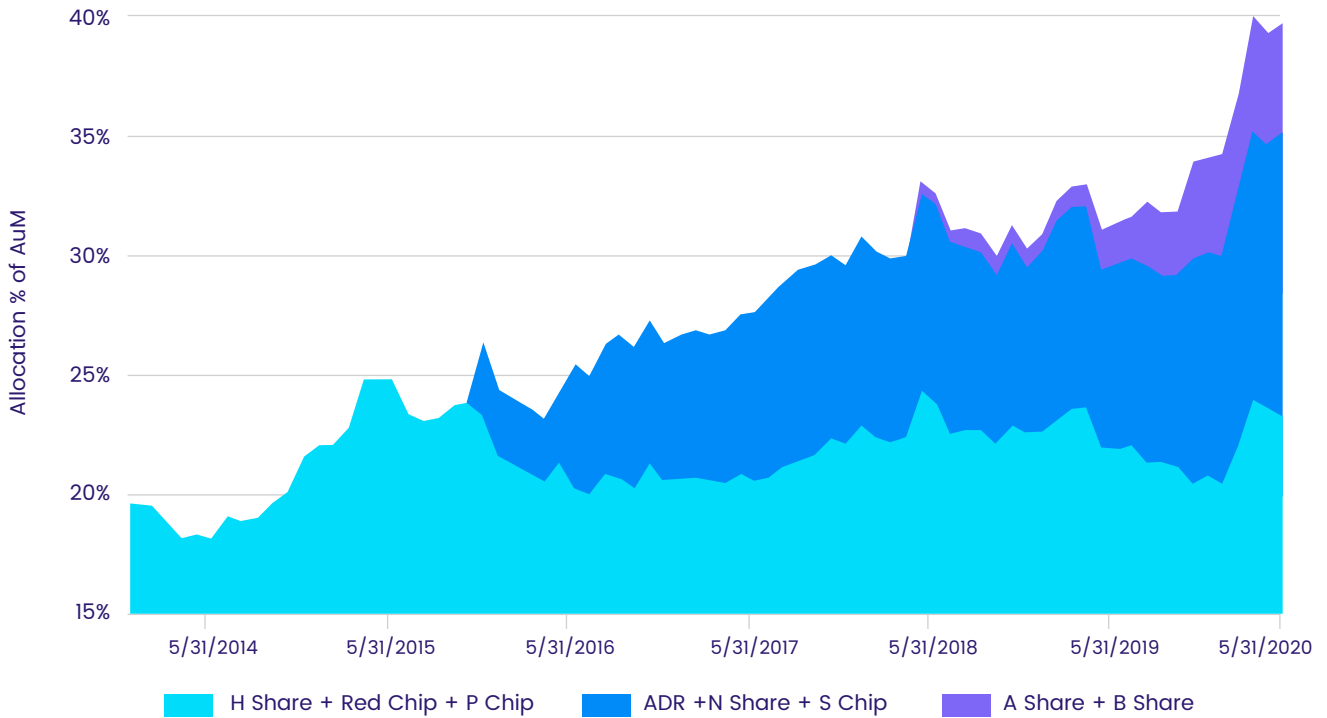
	Correlation	MSCI ACWI	MSCI GEM	MSCI China	FTSE China 50	FTSE China A-H 50	Hang Seng China Enterprises	CSI 300	FTSE China A50	MSCI China A Incl.
A + B	Aggregate	-5.36%	-7.93%	-6.78%	-12.54%	-14.63%	-20.22%	-16.63%	-17.55%	2.57%
	Active	-2.81%	-8.06%	-7.35%	-11.85%	-12.71%	-12.04%	-11.14%	-9.67%	-0.30%
	Passive	-6.48%	-7.40%	-5.05%	-11.30%	-15.68%	-23.04%	-17.24%	-19.08%	5.19%
H + Red Chip + P	Aggregate	-10.08%	-15.88%	-9.20%	-5.20%	0.19%	-3.72%	9.72%	8.06%	-0.98%
	Active	-9.76%	-22.87%	-14.68%	-14.26%	-2.61%	-13.99%	-3.06%	-1.42%	-2.21%
	Passive	-6.58%	-8.36%	-3.66%	0.68%	2.36%	4.09%	13.88%	12.45%	3.94%
ADR + N + S	Aggregate	5.68%	3.97%	5.91%	0.30%	-1.22%	-1.16%	-7.03%	-5.14%	8.47%
	Active	6.50%	4.32%	5.39%	0.16%	3.82%	-1.04%	-7.48%	-5.25%	11.57%
	Passive	4.70%	3.53%	7.08%	1.25%	-5.32%	0.29%	-4.31%	-2.72%	4.81%

While it's not perfectly uncorrelated, we observe some interesting seasonality between MSCI China-tracking ETF and other major benchmark tracking ETF performances. MSCI AC Asia ex-Japan is an exception to the seasonality trend, with the correlation hovering around 0.9.

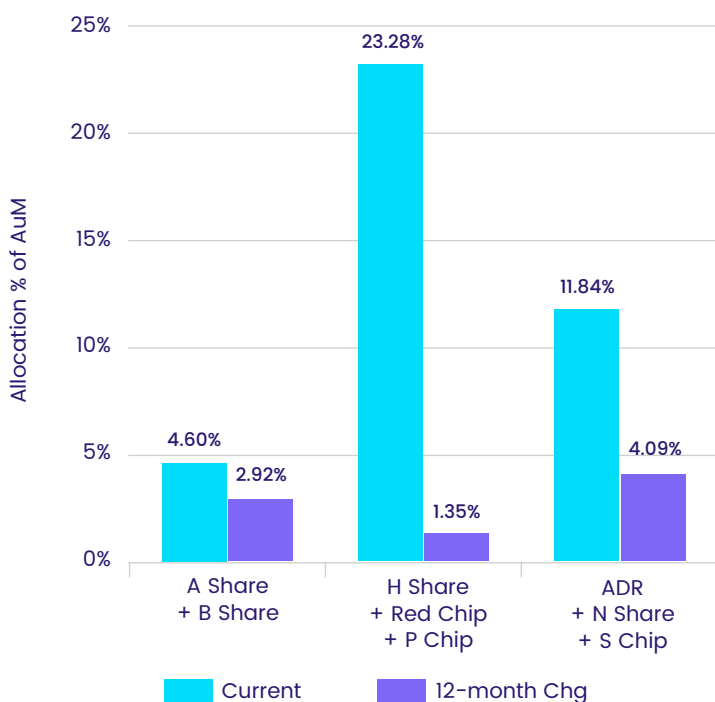


## Benchmark A Share inclusion

### Benchmark share class allocation



### Market cap funds share class allocation

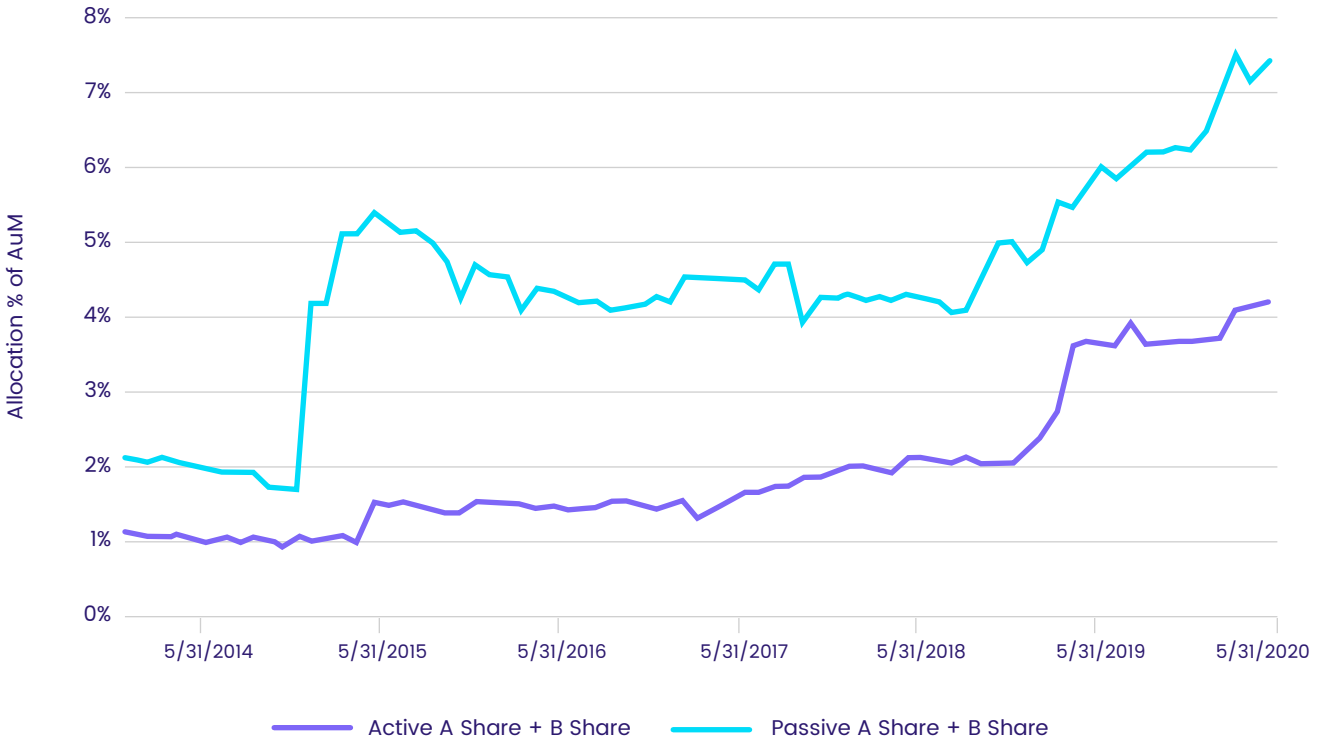


In the past 12 months, iShares MSCI Emerging Markets ETF has increased its allocation to China by 2.92% for domestically-listed shares, 1.35% for Hong Kong-listed shares, and 4.09% to foreign-listed shares respectively.

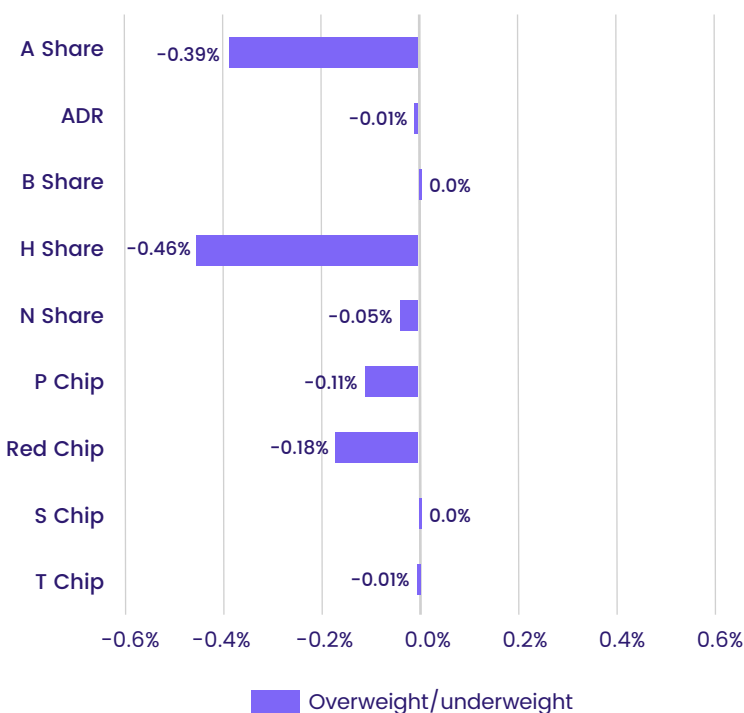
China's gain with a given benchmark is another country's or countries' loss. Brazil has seen its average GEM Equity Fund allocation shrink to a third of its level a decade ago.

The inclusion process is playing out during a period of global economic stress and deteriorating Sino-US relations, which complicates the job for managers of tracking the index.

### Active versus passive funds allocation to mainland-listed share classes



### Active ACWI funds overweight/underweight

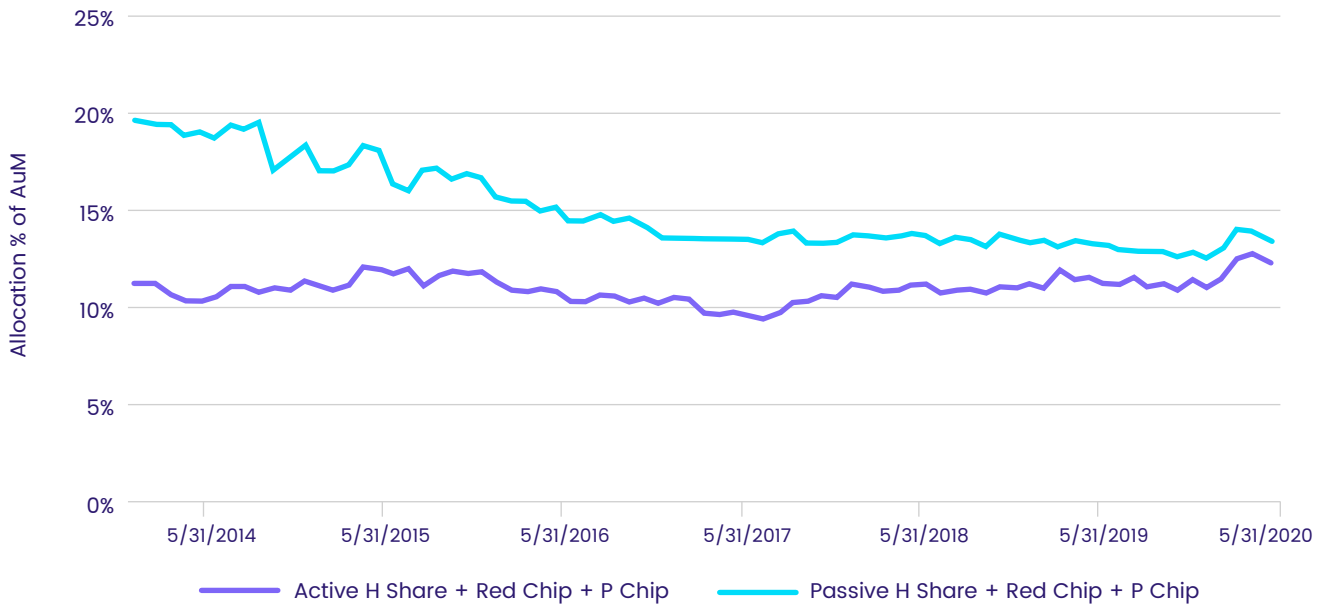


Even with the pressure from rebalanced indexes, active managers remain several steps behind when it comes to increasing their exposure to domestically-listed China Share Classes.

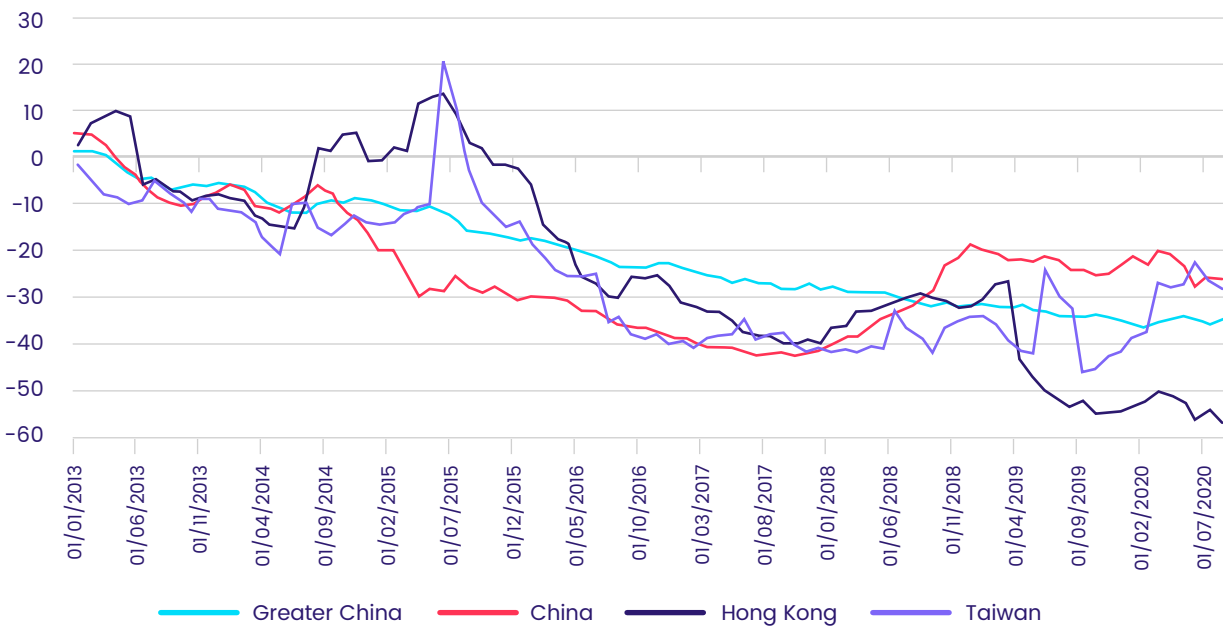
Active managers hesitated for several weeks after official data suggested that the COVID-19 pandemic had released its grip on China.

## H Shares: A convergence play?

### Active versus passive funds allocation to Hong Kong-listed share classes



### Cumulative flows, in percentage of AuM terms, for China, Greater China, Hong Kong, and Taiwan Equity Funds, 2013–2020



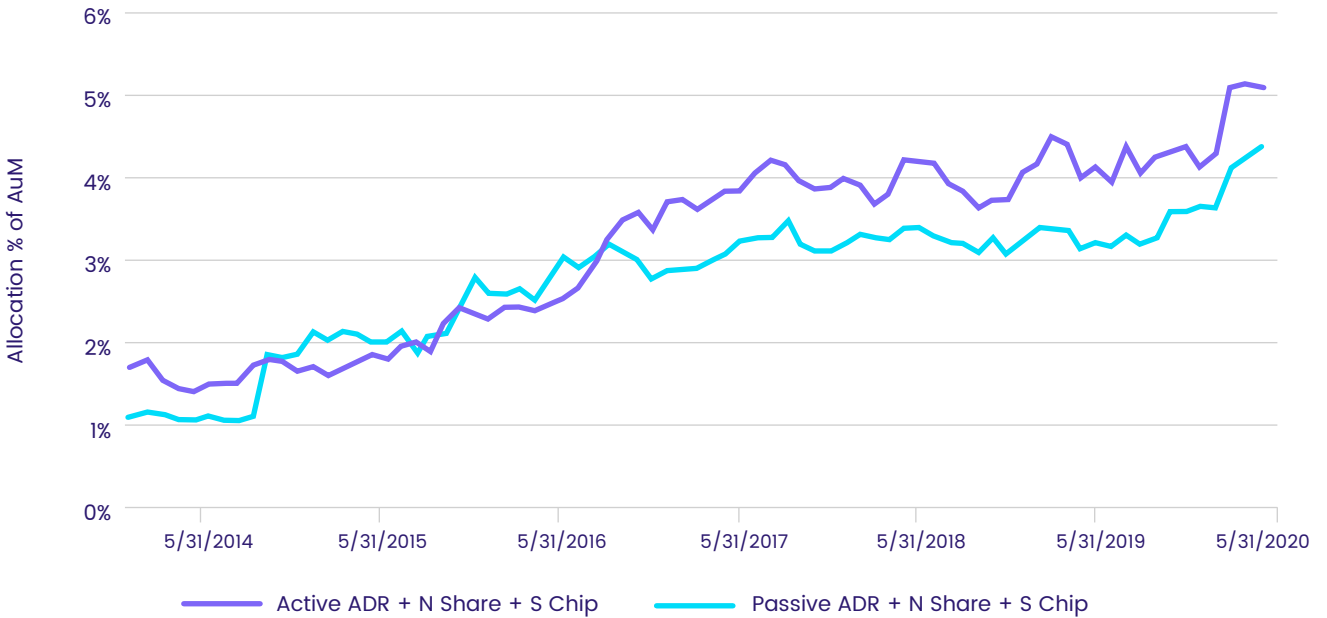
Active and passive manager allocations to Hong Kong-listed stocks are converging – mainly due to index-driven adjustments by passive funds. However, the adjustments that both groups have made during the current pandemic have been largely in step.

Investor flows to dedicated Hong Kong Equity Funds show a significantly stronger reaction to the unrest in Hong Kong that led up to the imposition of a new national security law by the Chinese government.



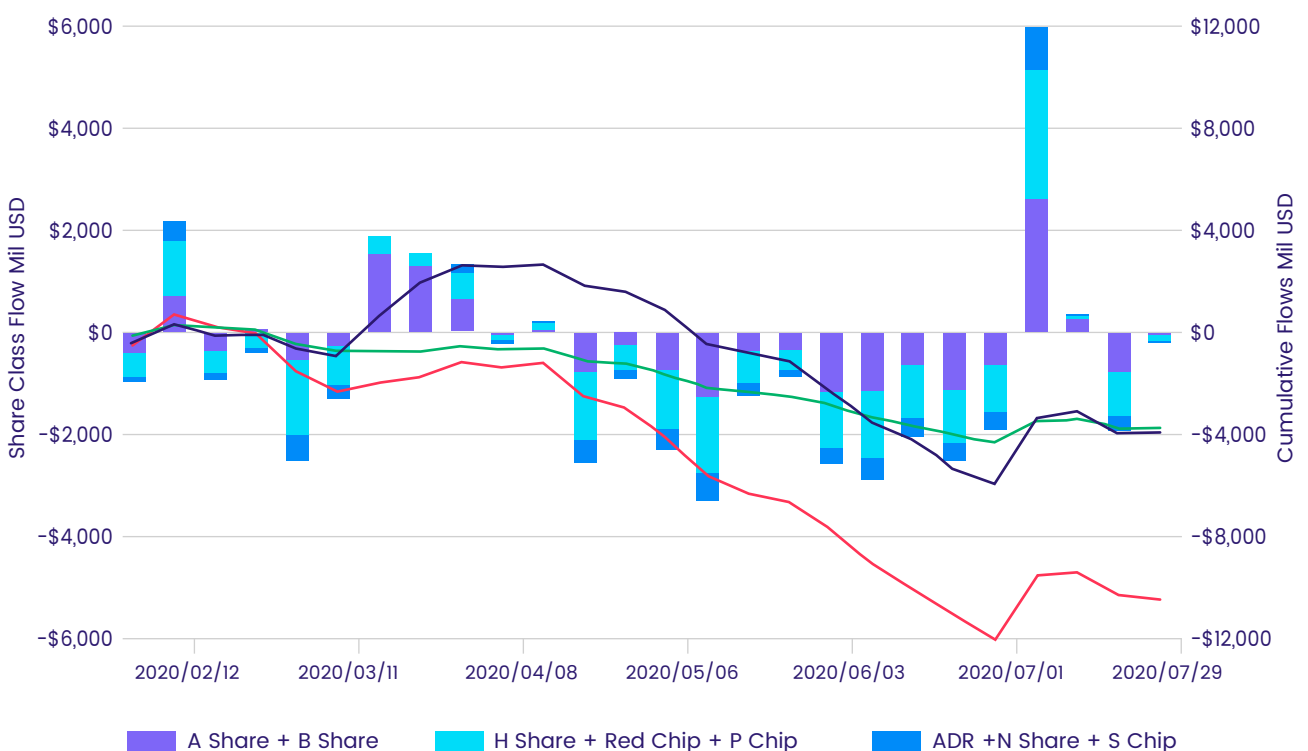
## Offshore still the right shore for active managers

### Active versus passive funds allocation to foreign-listed share classes



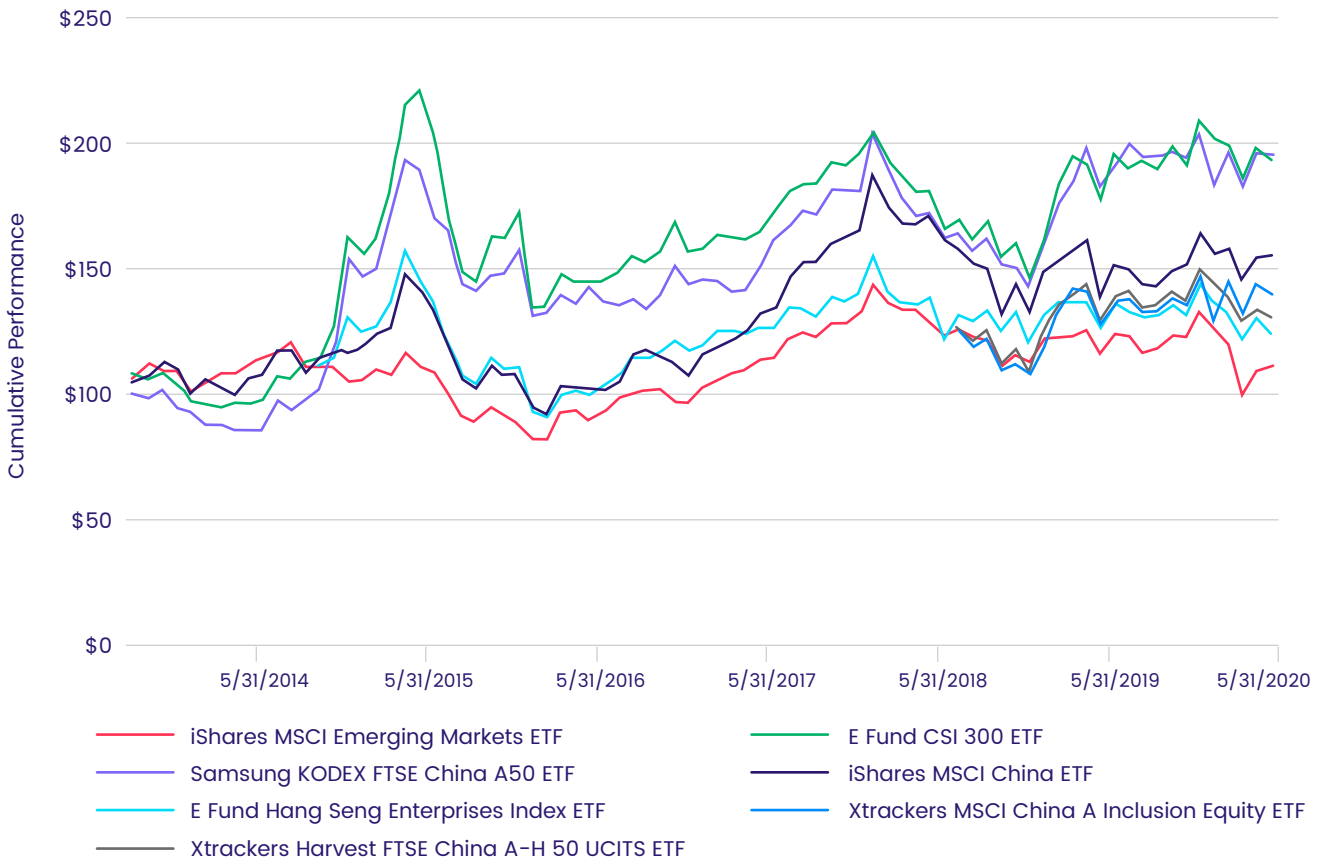
- The average allocation to these shares among active funds still exceeds the benchmark.
- The possibility of the US restricting the listing of Chinese shares in its equity markets gave managers reasons to be cautious going into the third quarter.

### China Share Class flow

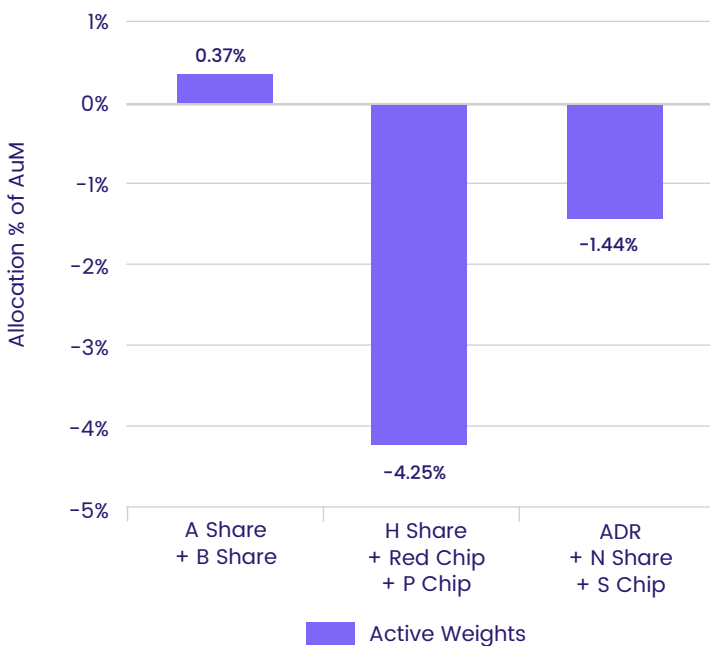


## Underexplored outperformers

### Benchmark performance



### Active GEM Funds overweight/underweight

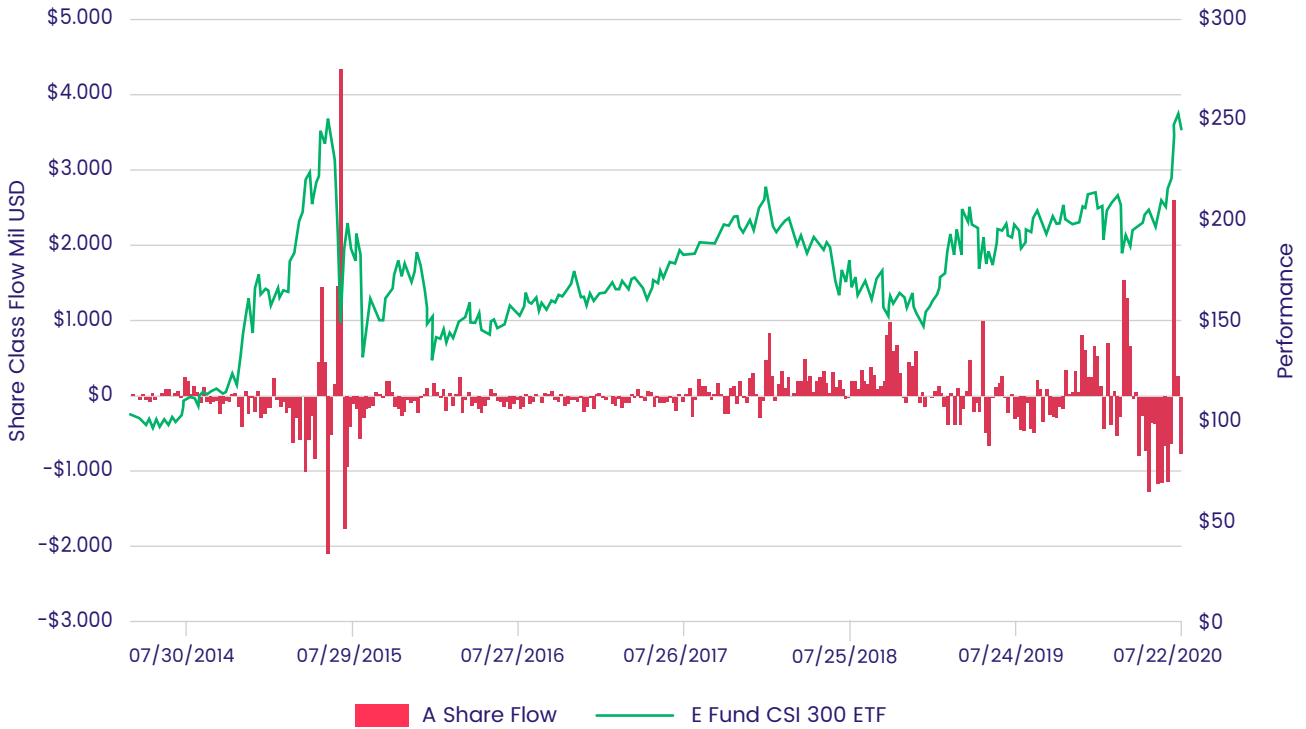


Compared to Global Emerging Markets ETFs, active managers were barely overweight Chinese domestically-listed stocks and underweight Hong Kong-listed and foreign-listed (see chart on left).

Even with the neutral/underweight from active managers, ETFs tracking CSI 300, FTSE China A50, FTSE China A-H 50, MSCI China, MSCI China A Inclusion, and Hang Seng Enterprises were still able to outperform MSCI Emerging Markets ETF during the corresponding period where the data is available.

## Going North or South

### China Share Class flows (Northbound)



- Northbound flows are more informative about future stock price action, whereas flow as a portion of overall turnover (Flow/TO) is the most useful measure to gauge the impact of Northbound flows.

### Hong Kong Stock Connect

#### Shanghai Connect

Buy + Sell Turnover Today ■ Sell ■ Buy

Northbound  
RMB44,494M 22,133M 22,361M

Southbound  
HK\$12,100M 5,646M 6,454M

Daily Quota Balance

Northbound  
RMB50,873M 97%

SSE Composite Index  
3,329.74 -43.84 -1.30%

Updated: 26 Aug 2020 15:59 HKT

#### Shenzhen Connect

Buy + Sell Turnover Today ■ Sell ■ Buy

Northbound  
RMB61,575M 31,490M 30,085M

Southbound  
HK\$11,455M 5,482M 5,973M

Daily Quota Balance

Northbound  
RMB52,423M 100%

SZSE Component Index  
13,428.40 -241.01 -1.76%

Updated: 26 Aug 2020 15:59 HKT

Source: HKEX  
[https://www.hkex.com.hk/Mutual-Market/Stock-Connect?sc\\_lang=en](https://www.hkex.com.hk/Mutual-Market/Stock-Connect?sc_lang=en)



## Quant strategy backtest

### China datasets offering granularity

China Country Flow/  
Positioning dataset



Macro level

China Share Class  
Positioning dataset



Macro level

China Stock  
dataset



Stock level

Year	Benchmark	Share Class			FloAlpha			PE		
	Equal Weight	1st Quintile	5th Quintile	Spread	1st Quintile	5th Quintile	Spread	1st Quintile	5th Quintile	Spread
'15	18.9%	-3.0%	-6.3%	3.3%	0.6%	-5.7%	6.3%	1.1%	-2.0%	3.1%
'16	-14.9%	4.0%	-8.2%	12.2%	-3.4%	3.7%	-7.1%	10.0%	-4.5%	14.5%
'17	12.9%	-3.0%	-3.0%	0.1%	18.4%	-8.9%	27.4%	12.1%	-12.5%	24.6%
'18	-29.3%	24.8%	-6.6%	31.4%	1.8%	-4.7%	6.5%	7.1%	0.3%	6.8%
'19	32.0%	19.6%	12.8%	6.8%	10.3%	1.2%	9.1%	-9.1%	10.3%	-19.4%
'20	-5.6%	9.7%	-0.8%	10.5%	3.9%	-3.5%	7.4%	-5.7%	8.8%	-14.5%
Total	0.6%	60.2%	-12.9%	73.1%	34.4%	-17.1%	51.4%	14.4%	-1.4%	15.8%
Annual	0.1%	9.2%	-2.6%	10.8%	5.7%	-3.4%	8.1%	2.6%	-0.3%	2.8%
STDEV	7.2%	6.9%	2.9%		1.7%	1.5%		2.5%	2.3%	

- The granularity of EPFR's data enables quantitative modeling from the stock level up to the macro level.
- Country-level datasets can be utilized in a long/short country-rotation model.
- The Share Class Positioning dataset, when utilized as an Active versus Passive factor in a proof-of-concept model, helped that model outperform an equally-weighted benchmark by an annualized 10.8%.
- On the stock level, FloAlpha (see Appendix I for details) – a factor built upon several of EPFR's in-house variables – outperforms the benchmark by 8%.
- Furthermore, flow/positioning sentiment factors work well with other conventional factors, such as volume, and perform relatively better than P/E, P/B, etc.



## Appendix: FloAlpha Factor Methodology

Data points	
Fund-level data points	Stock-level data points
$\varphi$ = dollar flow into fund	$\omega^*$ = % weight held by a fund in a stock
$\alpha$ = dollar starting assets of a fund	$\Delta\omega^*$ = change in weight from prior month
$A$ = dollar ending assets of a fund	$\bar{\omega}$ = mean weight (similar mandate funds)

Factor formulæ	
Flows persist into the future	Favor stocks held with conviction, by a small minority
$FloMo = \Sigma\varphi \times \omega / \Sigma\alpha \times \omega$	$AllocSkew = \Sigma A \times sgn(\bar{\omega} - \omega) / \Sigma A$
Managers receiving flows are increasing allocations to the right stocks	Manager receiving flows overweight the right stocks
$FloTrend = \Sigma\varphi \times \Delta\omega / \Sigma \varphi \times \Delta\omega $	$ActWtTrend = \Sigma\varphi \times (\omega - \bar{\omega}) / \Sigma \varphi \times (\omega - \bar{\omega}) $
$FloDiff = \Sigma\varphi \times sgn(\Delta\omega) / \Sigma \varphi $	$ActWtDiff = \Sigma\varphi \times sgn(\omega - \bar{\omega}) / \Sigma \varphi $
$FloDiff2 = \Sigma\Delta\omega \times sgn(\varphi) / \Sigma \Delta\omega $	$ActWtDiff2 = \Sigma(\omega - \bar{\omega}) \times sgn(\varphi) / \Sigma \omega - \bar{\omega} $
The tendency for managers to raise allocations persists into the future	Ownership dispersion is a positive sign
$AllocMo = \Sigma\Delta\omega \times (A + \alpha) / \Sigma(\omega - \Delta\omega/2) \times (A + \alpha)$	$Herfindahl^1 = 1 - \Sigma A^2 \times \omega^2 / (\Sigma A \times \omega)^2$
$AllocTrend = \Sigma\Delta\omega \times (A + \alpha) / \Sigma \Delta\omega \times (A + \alpha) $	$FundCt^2 = \Sigma sgn(\omega)$
$AllocDiff = \Sigma(A + \alpha) \times sgn(\Delta\omega) / \Sigma(A + \alpha)$	

1 Barabanov, S. S. (2002) 'The relationship between institutional ownership, concentration of ownership, bid-ask spread, and returns on NASDAQ stocks' Washington State University ProQuest Dissertations Publishing.

2 Chen, J., Hong, H., and Stein, J. C. (2002) 'Breadth of ownership and stock returns.' *Journal of financial Economics*, 66(2-3), pp. 171-205.



## **ABOUT EPFR**

EPFR is 'the intelligence behind intelligent decisions'. Our fund flows and asset allocation data track over 150,000 traditional and alternative fund shares classes with more than \$46 trillion in total assets, delivering a complete picture of institutional and retail investor flows and fund manager allocations driving global markets.

EPFR's market-moving data services include equity and fixed income fund flows on a daily, weekly and monthly basis and monthly fund allocations by country, sector and industry, providing financial institutions around the world with an unparalleled understanding of where money is moving.

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