EM WEEKLY FUND FLOWS MONITOR

Foreign selling in Korea continues this week; Hedge funds remain net sellers in EM Asia in September MTD, while China exposure sees a recovery

Foreign (FII) flows / positioning

- EM Asia ex-China markets saw FII outflows of US$7.4bn w/w, driven by Korea (-US$6.5bn). Non-Asia EMs saw selling of ~US$90mn w/w, led by moderate selling in UAE (-US$46mn).

HK/China Connect, Domestic retail flows

- Southbound saw inflows of US$1.5bn w/w (Ytd US$53bn). Korea (+US$1.7bn) saw retail buying this week, while Taiwan (-US$1.8bn) saw net retail selling. Ytd, Asian markets have seen US$61bn retail inflows.

Global Equity mutual fund flows

- Equity funds globally saw inflows of US$79.3bn w/w (vs. US$9.8bn inflow last week). In DM, US funds saw net buying of US$64bn. Europe (-US$0.6bn) saw selling, while Japan (+US$1.4bn) saw buying w/w. In EM, GEM funds saw US$0.9bn w/w outflows driven by outflows in active mandates (+US$66bn ytd).

Focus: HF and MF Positioning

- **Hedge Fund Positioning (Sep):** Among the major regions as of mid-September, DM Asia is the most net bought (driven by long buys), while EM Asia is the most net sold (driven by short sales). Hedge funds are now O/W Asia equities (DM + EM) by +13% vs. MSCI World ACWI (vs. high of +20% in June). Within Asia, Korea, Taiwan, and Japan are the most notionally net sold markets in September, while China and Hong Kong are the most net bought. Chinese equities saw a recovery in net exposure in September month-to-date.
- **Prelim MF Allocation:** Based on prelim. August EPFR data, Asian funds are most OW China, HK and SG, and most UW Taiwan and India. Asian funds raised exposure in China, while trimming exposure in Singapore and Taiwan (vs. benchmark). EM funds are most OW Brazil/Mexico, and most UW Taiwan. Over the past month, EM funds have raised exposure the most in India and China, and trimmed exposure in Taiwan. Sectorally, funds are most OW China Industrials, while most UW Taiwan Tech H/W & Semis and China Banks relative to benchmark weight.

Sunil Koul
+44(20)7051-4931 | sunil.koul@gs.com
Goldman Sachs International

Timothy Moe, CFA
+65-6889-1199 | timothy.moe@gs.com
Goldman Sachs (Singapore) Pte

Alvin So, CFA
+852-2978-1585 | alvin.so@gs.com
Goldman Sachs (Asia) L.L.C.

Tarun Lalwani, CFA
+1(212)934-5821 | tarun.lalwani@gs.com
Goldman Sachs India SPL

Terry Chan
+852-2978-6959 | terry.chan@gs.com
Goldman Sachs (Asia) L.L.C.

Si Fu, Ph.D.
+852-2978-0200 | si.fu@gs.com
Goldman Sachs (Asia) L.L.C.

Kinger Lau, CFA
+852-2978-1224 | kinger.lau@gs.com
Goldman Sachs (Asia) L.L.C.

John Kwon
+65-6654-6337 | jongmin.kwon@gs.com
Goldman Sachs (Singapore) Pte

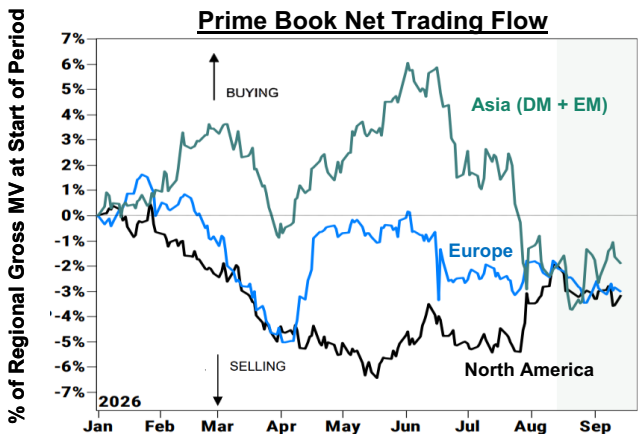
Amorita Goel, CFA
+65-6654-5445 | amorita.goel@gs.com
Goldman Sachs (Singapore) Pte

Mambuna Njie
+44(20)7051-7705 | mambuna.njie@gs.com
Goldman Sachs International

Investors should consider this report as only a single factor in making their investment decision. For Reg AC certification and other important disclosures, see the Disclosure Appendix, or go to www.gs.com/research/hedge.html.

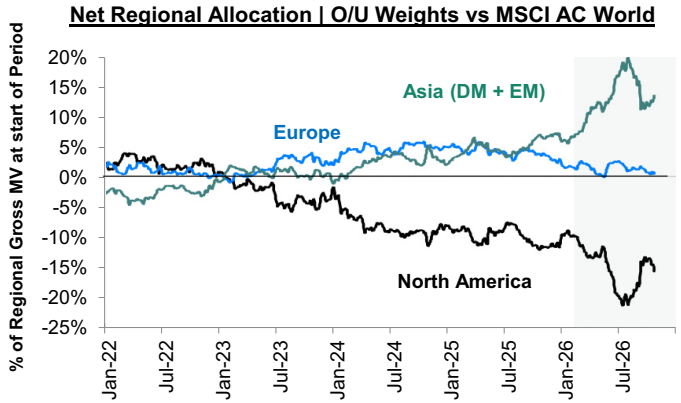
Focus: Hedge Fund Positioning (Mid-September)

Exhibit 1: Among the major regions, DM Asia is the most net bought, while EM Asia is the most net sold in September



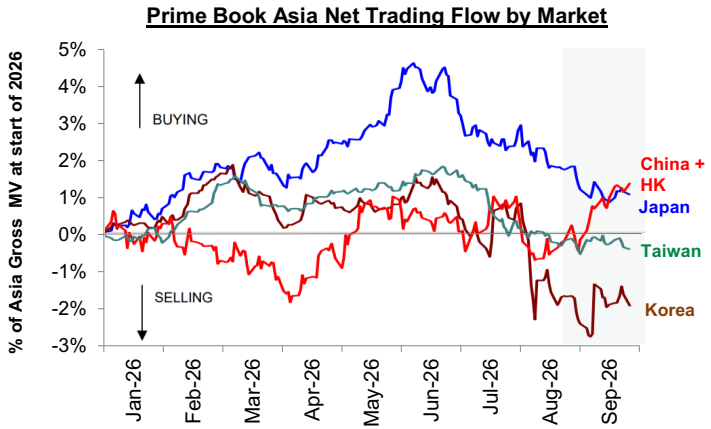
Source: Goldman Sachs FICC and Equities

Exhibit 2: Hedge funds are now O/W Asia equities (DM + EM) by +13% vs. MSCI World ACWI (vs. record high of +20% in June and +6.5% at start of the year)



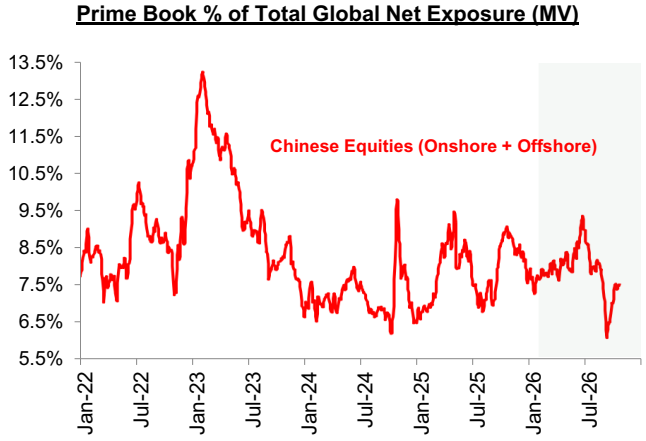
Source: Goldman Sachs FICC and Equities

Exhibit 3: Within Asia, Korea, Taiwan, and Japan are the most notionally net sold markets in September, while China & HK are the most net bought



Source: Goldman Sachs FICC and Equities

Exhibit 4: Chinese equities saw a recovery in net exposure in September



Source: Goldman Sachs FICC and Equities

Focus: Preliminary Mutual Fund Positioning (Aug 2026)

Exhibit 5: Based on preliminary EPFR data (~45% of total AUM reported), Asian funds are most OW China, HK and SG, and most UW Taiwan and India. In August, Asian funds raised exposure in China, while trimming exposure in Singapore and Taiwan (vs. benchmark)

AEJ funds (US$90 bn - Active Fund Only)					
Market	OW/UW allocation (in bp)	Market	1-mth chg	Market	3-mth chg
China	360	China	50	China	130
Hong Kong	155	India	30	India	105
Singapore	150	Thailand	5	Thailand	15
Indonesia	70	Philippines	5	Philippines	15
Thailand	55	Indonesia	1	Indonesia	10
Philippines	25	Malaysia	(5)	Malaysia	5
Malaysia	-40	Hong Kong	(5)	Hong Kong	2
Korea	-115	Korea	(25)	Korea	(40)
India	-210	Taiwan	(25)	Taiwan	(265)
Taiwan	-590	Singapore	(30)	Singapore	(15)

Note: The allocation of AEJ mandate only includes active funds, as of Aug '26

Source: EPFR, Goldman Sachs Global Investment Research

Exhibit 6: EM funds are most OW Brazil/Mexico, and most UW Taiwan. Over the past month, EM funds have raised exposure the most in India and China, and trimmed exposure in Taiwan

EM funds (US$215 bn - Active Fund Only)					
Market	OW/UW allocation (in bp)	Market	1-mth chg	Market	3-mth chg
Brazil	280	India	25	India	30
Mexico	85	China	25	China	55
Hungary	45	Thailand	10	Thailand	25
Greece	30	Hungary	5	Hungary	10
Thailand	25	Poland	5	Poland	10
South Africa	-50	Peru	(5)	Peru	(1)
Saudi Arabia	-140	Brazil	(10)	Brazil	15
India	-175	Korea	(10)	Korea	(15)
Korea	-210	South Africa	(15)	South Africa	(10)
Taiwan	-455	Taiwan	(20)	Taiwan	(130)

Note: The allocation of GEM mandates only include active funds, as of Aug '26

Source: EPFR, Goldman Sachs Global Investment Research

Exhibit 7: Sectorally, funds are most OW China Industrials, while most UW Taiwan Tech H/W & Semis and China Banks relative to benchmark weight

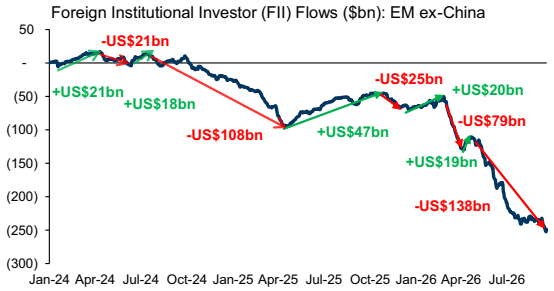
Mutual Fund Positioning - Top 5 Market Sector in Asia / EM				
Market Sector	OW/UW (vs. benchmark, bp)	Market Sector	1-mth chg	3-mth chg
China Industrial	180	Taiwan Tech H/w & Semis	15	-75
Hong Kong Insur./Other Fins	85	Korea Tech H/w & Semis	10	-75
Brazil Energy	45	China Consumer Retail	5	10
China Internet/Media/Ent.	40	Thailand Consumer Staples	5	5
Peru Banks	35	India Software & Services	5	10
Taiwan Insur./Other Fins	-65	Hong Kong Insur./Other Fins	-5	10
Taiwan Banks	-85	Peru Banks	-5	5
Korea Tech H/w & Semis	-90	Taiwan Consumer Retail	-10	-1
China Banks	-130	Taiwan Chem. & Other Mat.	-10	-15
Taiwan Tech H/w & Semis	-225	China Industrial	-15	-2

Note: Fund positioning is based on the top 350 AEJ/EM active funds (as of Aug' 26) and is subject to revision with new funds reporting

Source: FactSet, Goldman Sachs Global Investment Research

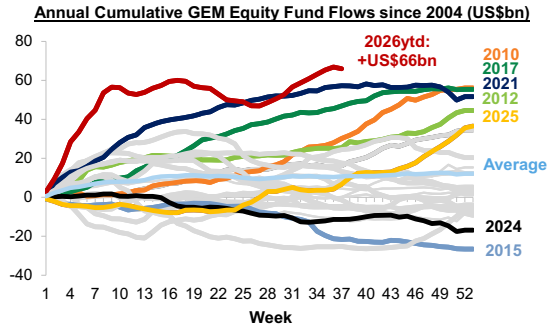
GEM Flows Recap

Exhibit 8: Foreign investors have net sold US$138bn in EM ex-China recently, after buying US$19bn since the April trough



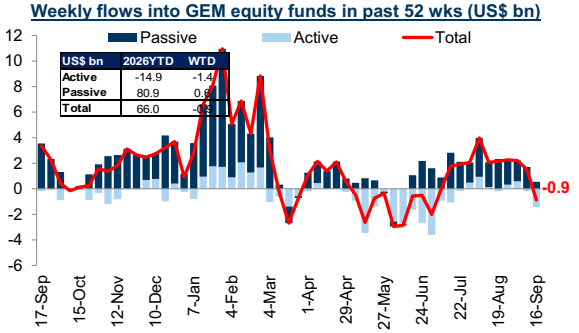
Source: Bloomberg, Goldman Sachs Global Investment Research

Exhibit 9: GEM funds marked the fastest annual pace of buying over the past two decades



Source: EPFR, Goldman Sachs Global Investment Research

Exhibit 10: GEM equity funds flows (active vs passive)



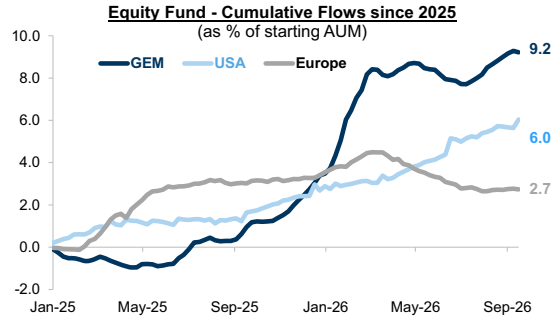
Source: EPFR

Exhibit 11: Adding market mandates, EM funds saw total inflows of US$20bn over the past 8 weeks, caused by GEM (+US$15bn), Taiwan (+US$7bn) and Korea (+US$3bn).

EM Equity Fund Flows over the past 8 weeks (US$bn)									
	29-Jul	5-Aug	12-Aug	19-Aug	26-Aug	2-Sep	9-Sep	16-Sep	8wk Sum
GEM	2.1	4.0	2.1	2.1	2.3	2.2	1.5	-0.9	15.4
Taiwan	4.9	2.4	-0.7	-0.4	0.2	-1.7	0.1	1.7	6.5
Korea	1.6	4.9	2.0	-0.8	-1.3	0.4	-1.1	-2.5	3.4
EMEA	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.1	0.7
ASEAN-4	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	-0.2
Latam	0.0	0.0	-0.5	-0.4	0.2	-0.4	0.1	0.3	-0.7
India	-0.7	-0.1	-0.1	-0.4	-0.3	-0.2	-0.1	-0.5	-2.3
China	16.0	-2.6	-14.5	-0.7	-0.4	-5.2	1.1	3.2	-3.2
EM Markets	24.0	8.6	-11.5	-0.4	0.8	-4.9	1.6	1.4	19.6

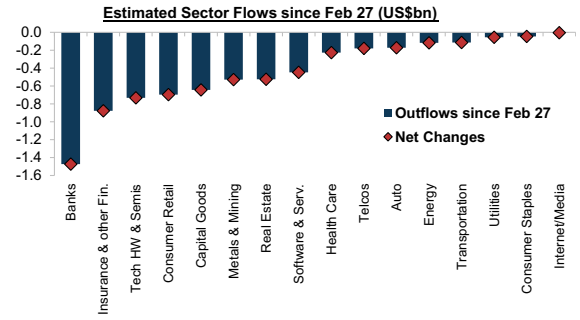
Source: EPFR, Goldman Sachs Global Investment Research

Exhibit 12: GEM and US funds have received strong inflows since 2025, while flows into Europe-focused funds have moderated recently



Source: EPFR

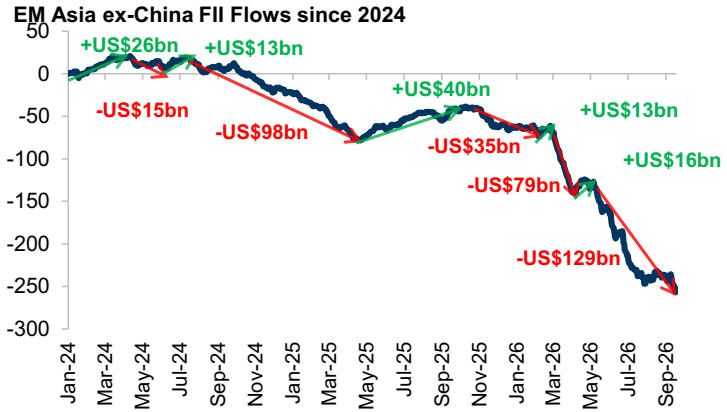
Exhibit 13: On sector flows data, Banks and Insurance & other Fin have seen the largest outflows among GEM/AEJ funds since Feb 27, followed by Tech HW & Semis



Source: EPFR, Goldman Sachs Global Investment Research

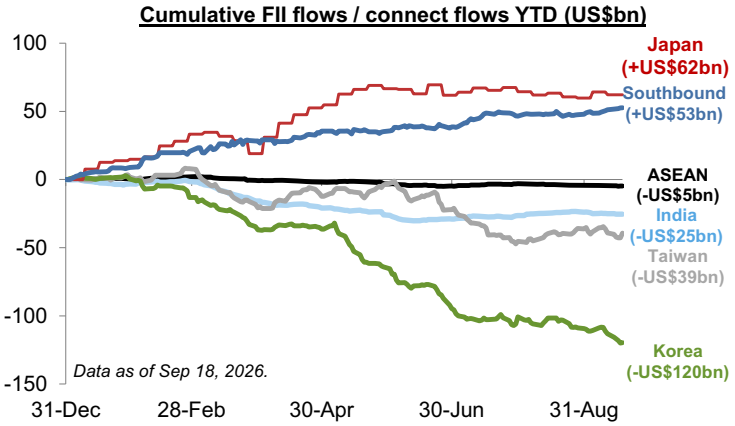
Regional Flows Recap

Exhibit 14: Foreign investors have net sold US$129bn in EM Asia ex-China recently, after buying US$16bn since the March trough



Source: Bloomberg, Goldman Sachs Global Investment Research

Exhibit 15: Within Asia, Japan saw the most buying (+US$62bn) since 2026, followed by Southbound (+US$53bn). Korea (-US$120bn) has led the FII selling



Source: Bloomberg, Goldman Sachs Global Investment Research

Exhibit 16: EM Asia ex-China markets saw FII outflows of US$7.4bn w/w, driven by Korea (-US$6.5bn)

FII Flows (US$bn)						
Markets	2026 YTD	1Q	2Q	Jul	Aug	WTD
Japan	62.2	18.9	30.4	2.6	(4.7)	-
India	(25.4)	(15.8)	5.4	2.5	2.4	(0.4)
Korea	(119.7)	(37.0)	(4.1)	(6.1)	(8.6)	(6.5)
Taiwan	(39.4)	(20.7)	12.3	(23.3)	9.1	(0.2)
Philippines	(0.5)	0.1	(0.4)	0.1	(0.2)	(0.0)
Indonesia	(4.2)	(1.9)	(1.4)	0.1	0.1	(0.1)
Thailand	1.6	0.6	(1.2)	1.5	(0.7)	(0.2)
Malaysia	(1.8)	0.3	(0.5)	0.1	(0.5)	0.0
EM Asia ex China	(189.4)	(74.3)	10.2	(25.2)	1.5	(7.4)
H-shares (SB)	52.6	28.3	37.5	8.0	1.3	1.5

Southbound Connect flows are Mainland investors buying HK-listed shares, i.e., more domestic than FII flows

Source: Bloomberg, FactSet, HKEX, Goldman Sachs Global Investment Research

Exhibit 17: EM Asia ex-China markets saw FII outflows of US$189bn in 2026

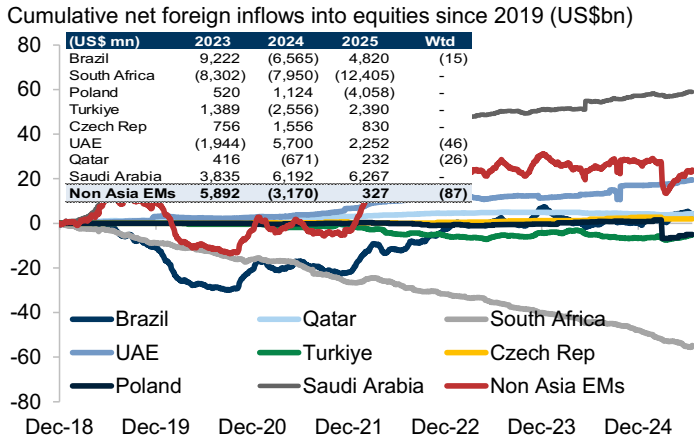
FII flows (US$ bn)						
Markets	2021	2022	2023	2024	2025	2026YTD
India	23.4	3.8	21.4	(0.8)	(18.8)	(25.4)
Korea	(20.1)	(22.8)	10.1	1.7	(3.9)	(119.7)
Taiwan	(16.0)	(15.3)	6.5	(19.7)	(7.6)	(39.4)
Philippines	(2.5)	(0.0)	(0.9)	(0.4)	(0.9)	(0.5)
Indonesia	(3.2)	2.7	(0.3)	1.4	(1.1)	(4.2)
Thailand	(8.3)	(1.6)	(5.5)	(4.4)	(3.2)	1.6
Malaysia	(5.8)	(0.8)	(0.5)	(0.9)	(5.2	
ASEAN	(19.8)	0.3	(7.3)	(4.3)	(10.3	
Japan	(31.4)	3.7	23.4	0.7	36.9	
EM Asia ex CN	(32.5)	(34.1)	30.8	(23.0)	(40.6	

Source: Bloomberg, FactSet, MSCI, Respective Local Stock Exchanges

人在草木间
更多资料请加V

Foreign Institutional Investors (FII) Flows

Exhibit 18: Non-Asia EMs saw selling of ~US$90mn w/w, led by UAE (-US$46mn)



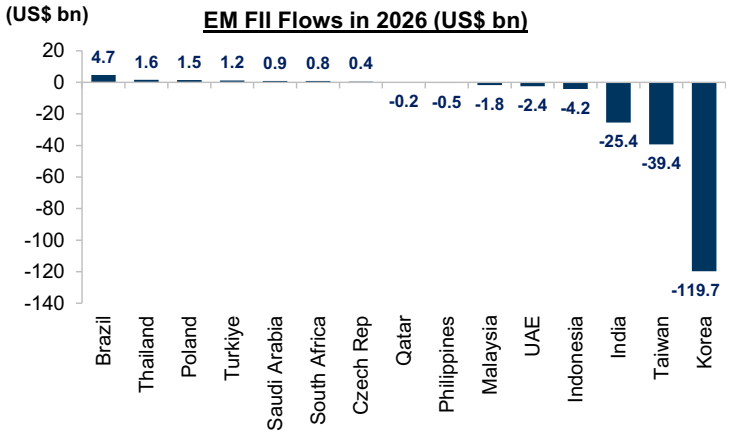
Source: Bloomberg, Respective Local Stock Exchanges

Exhibit 19: In 2026, we have seen FII inflows of US$6.9bn in Non-Asia EM markets, driven by Brazil (+US$4.7bn) and Poland (+US$1.5bn)

FII flows (US$ bn) - Non-Asia EMs						
Markets	**2021**	**2022**	**2023**	**2024**	**2025**	**2026YTD**
LatAM						
Brazil	(9.7)	(1.2)	9.2	(6.6)	4.8	4.7
EMEA						
South Africa	(7.4)	(10.3)	(8.3)	(7.9)	(12.4)	0.8
Poland	(0.4)	0.5	0.5	1.1	(4.1)	1.5
Turkiye	(0.2)	(1.4)	1.4	(2.6)	2.4	1.2
Czech Rep	0.2	0.0	0.8	1.6	0.8	0.4
UAE	(0.4)	4.0	(1.9)	5.7	2.3	(2.4)
Qatar	0.2	1.6	0.4	(0.7)	0.2	(0.2)
Saudi Arabia	5.3	6.5	3.8	6.2	6.3	0.9
Non Asia EMs	(12.5)	(0.4)	5.9	(3.2)	0.3	6.9

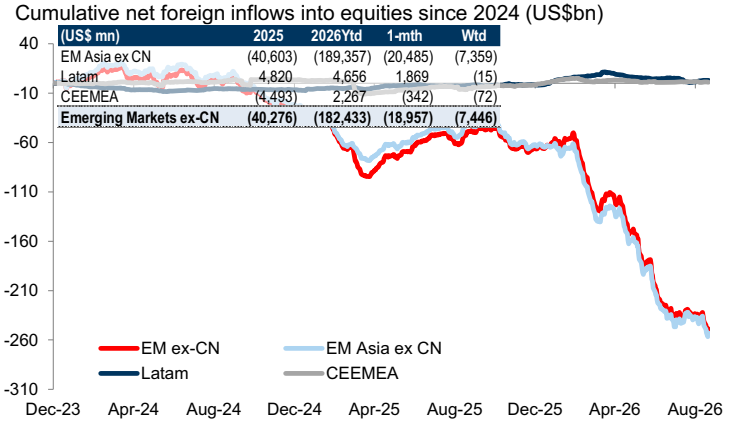
Source: Bloomberg, Respective Local Stock Exchanges

Exhibit 20: Among EM markets, Brazil (+US$4.7bn) has seen the most foreign buying in 2026, while Korea (-US$120bn) has seen the most selling



Source: Bloomberg, Respective Local Stock Exchanges

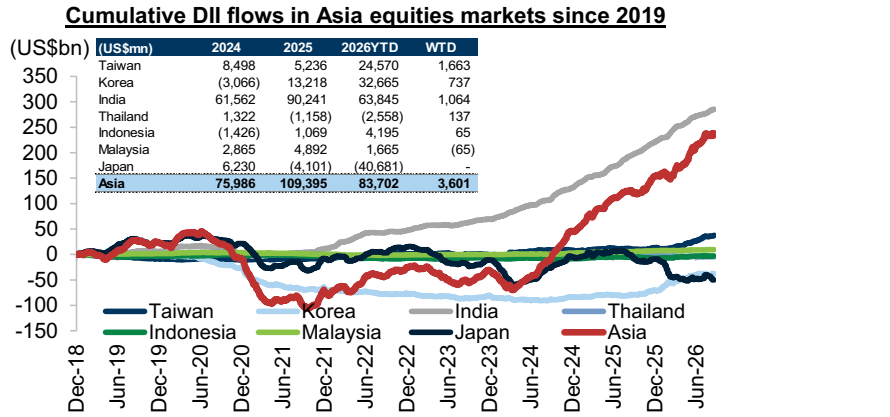
Exhibit 21: Over the past month, EM Asia ex China and CEEMEA saw outflows, while Latam saw inflows



Source: Bloomberg, Respective Local Stock Exchanges

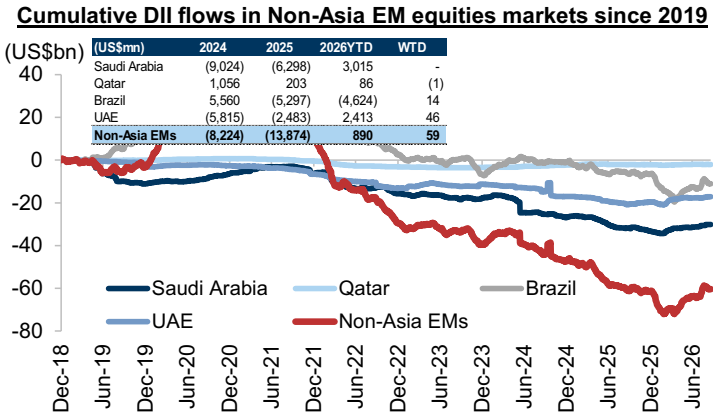
Domestic Institutional Investors (DII) Flows

Exhibit 22: Asia markets saw DII inflows of US$3.6bn this week, driven by Taiwan (+US$1.7bn), India (+US$1.1bn) and Korea (+US$0.7bn)



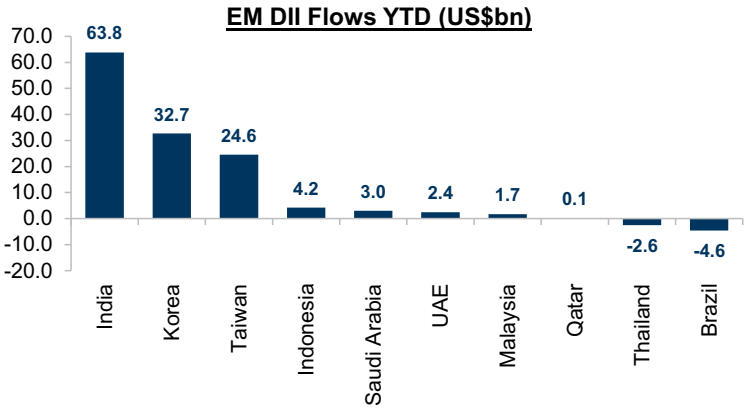
Source: Bloomberg, Respective Local Stock Exchanges

Exhibit 23: Non-Asia EM markets saw US$0.1bn DII inflows this week, driven by Brazil (+US$46mn)



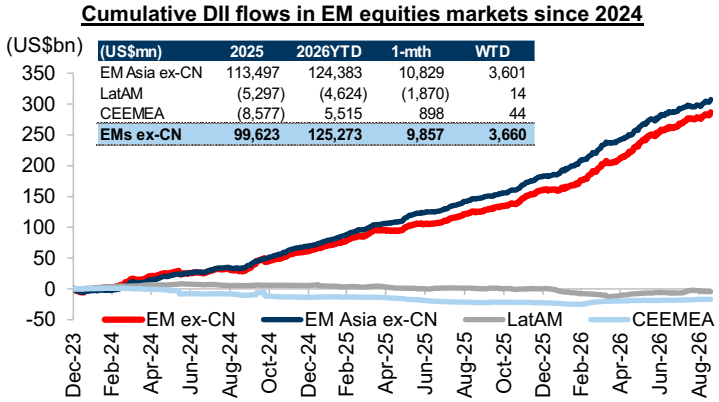
Source: Bloomberg, Respective Local Stock Exchanges

Exhibit 24: India (+US$64bn) has seen the most DII buying in 2026



Source: Bloomberg, Respective Local Stock Exchanges

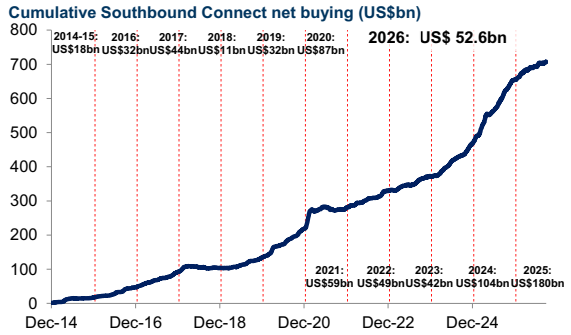
Exhibit 25: DII Flows into local equities market by geographic regions in 2026



Source: Bloomberg, Respective Local Stock Exchanges

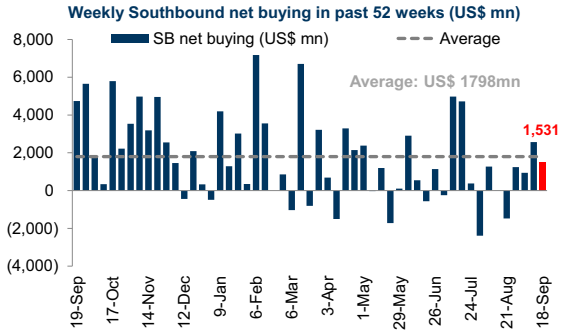
Stock Connect: Southbound Flows

Exhibit 26: Cumulative Southbound flows since inception in late 2014



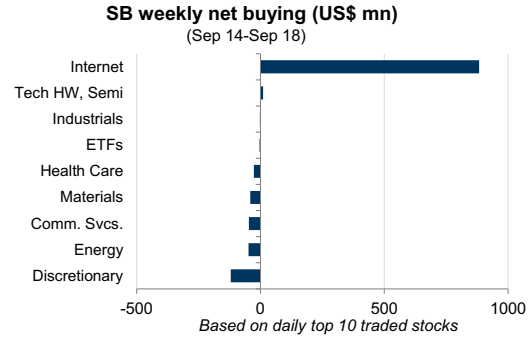
Source: HKEX, Wind

Exhibit 27: Weekly Southbound net buying in past 52 weeks



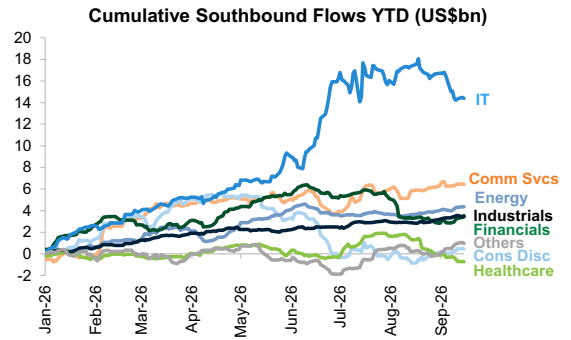
Source: HKEX, Wind

Exhibit 28: SB weekly net buying by sector



Source: HKEX, FactSet

Exhibit 29: Cumulative Southbound flows YTD



Source: Wind

Exhibit 30: Southbound top buying for the week

Southbound Top Buying (for the week)			
S.no	Ticker	Name	SB Net Buying (US$ mn)
1	2513.HK	Z.AI (Zhipu) (H)	876
2	1888.HK	Kingboard Laminates	74
3	0992.HK	Lenovo	23
4	6869.HK	Yangtze Optical Fibre & Cable (H)	17
5	9926.HK	Akeso	13
6	0100.HK	MiniMax	8
7	3308.HK	Golden Eagle Retail	7
8	1810.HK	Xiaomi	5
9	2269.HK	Wuxi Biologics	2
10	-	-	-

Note: Based on daily top 10 traded stocks.

Source: HKEX, FactSet

Exhibit 31: Southbound top selling for the week

Southbound Top Selling (for the week)			
S.no	Ticker	Name	SB Net Selling (US$ mn)
1	9988.HK	Alibaba Group	-120
2	1347.HK	Hua Hong Grace Semiconductor (H)	-63
3	0883.HK	CNOOC	-48
4	0700.HK	Tencent	-47
5	1548.HK	Genscript Biotech	-42
6	2099.HK	China Gold Int'l Resources	-41
7	0981.HK	SMIC	-35
8	6166.HK	CIG Shanghai (H)	-10
9	2800.HK	The Tracker Fund of Hong Kong	-4
10	2650.HK	Shanghai Zhida Technology (H)	-2

Note: Based on daily top 10 traded stocks.

Source: HKEX, FactSet

Exhibit 32: Largest Southbound holdings (Value and % of float)

Top Southbound Holdings (Value)

S.no	Ticker	Name	SB Holding Value (US$ mn)
1	0700.HK	Tencent	60,217
2	0939.HK	CCB (H)	44,561
3	1398.HK	ICBC (H)	34,195
4	0883.HK	CNOOC	33,258
5	0005.HK	HSBC Holdings	31,197
6	0941.HK	China Mobile	28,986
7	9988.HK	Alibaba Group	27,286
8	3988.HK	Bank of China	22,483
9	0981.HK	SMIC	18,973
10	1810.HK	Xiaomi	17,100

Top Southbound Holdings (as % float cap)

S.no	Ticker	Name	SB Holding Value (as % float cap)
1	0861.HK	Digital China	100%
2	1055.HK	China Southern Airlines (H)	91%
3	9636.HK	JF SmartInvest Holdings	91%
4	1877.HK	Shanghai Junshi Biosciences (H)	90%
5	1269.HK	China First Capital Group	88%
6	3900.HK	Greentown China	88%
7	3369.HK	Qinhuangdao Port	88%
8	1797.HK	East Buy	87%
9	2171.HK	CARsgen Therapeutics	84%
10	0297.HK	Sinofert	82%

Note: SB holding values are based on latest available CCASS shareholding information. Free float factors are based on MSCI foreign inclusion factor and Bloomberg free float percent data (as of Feb 2025).

Source: Bloomberg, HKEX, FactSet, MSCI

Exhibit 33: Top Southbound ownership changes (over the past week)

Top Increase in SB Ownership (over the past week)

S.no	Ticker	Name	SB Ownership Change (as % float)
1	9678.HK	Unisound AI Technology	5.4%
2	2883.HK	China Oilfield Services (H)	3.4%
3	1368.HK	Xtep Int'l	3.2%
4	3696.HK	InSilico Medicine Cayman TopCo	3.1%
5	9981.HK	Shenzhen Woer (H)	3.1%
6	2142.HK	HBM Holdings	3.0%
7	1164.HK	CGN Mining	3.0%
8	9887.HK	Nanjing Leads Biolabs (H)	2.8%
9	1033.HK	Sinopec Oilfield Service (H)	2.6%
10	0753.HK	Air China (H)	2.4%

Top Decrease in SB Ownership (over the past week)

S.no	Ticker	Name	SB Ownership Change (as % float)
1	2285.HK	Chervon Holdings	-4.2%
2	0639.HK	Shougang Fushan Resources	-3.2%
3	2587.HK	HealthyWay	-2.7%
4	0999.HK	Xiaocaiyuan Intl.	-2.7%
5	2562.HK	Synagistics	-2.6%
6	1083.HK	Towngas China	-2.4%
7	6693.HK	Chifeng Jilong Gold Mining	-2.4%
8	2333.HK	Great Wall Motor (H)	-2.3%
9	3986.HK	Giga Device Semiconductor (H)	-2.2%
10	2685.HK	Quantgroup Technology	-2.1%

Source: Bloomberg, HKEX, FactSet, MSCI

Exhibit 34: Top Southbound traded stocks this week (as % of stock turnover)

Top SB traded stocks (as % of stock turnover)									Top SB traded stocks (as % of stock turnover)								
			SB net buying (as % stock turnover)								SB net buying (as % stock turnover)						
S.no	Ticker	Name	9/14	9/15	9/16	9/17	9/18	S.no	Ticker	Name	9/14	9/15	9/16	9/17	9/18
1	9888.HK	Baidu	-	-	-	-	63%	11	6869.HK	Yangtze Optical Fibre & Cable (H)	12%	7%	-12%	-1%	17%
2	1548.HK	Genscript Biotech	-	-	-40%	-1%	-	12	2800.HK	The Tracker Fund of Hong Kong	-	6%	-7%	-	-16%
3	2099.HK	China Gold Int'l Resources	-	-29%	-	-	-	13	1888.HK	Kingboard Laminates	2%	-6%	15%	7%	0%
4	0883.HK	CNOOC	0%	11%	-7%	-25%	-	14	0100.HK	MiniMax	-7%	1%	14%	-10%	-2%
5	2513.HK	Z.AI (Zhipu) (H)	15%	12%	23%	24%	13%	15	9988.HK	Alibaba Group	-2%	-8%	-	-8%	-11%
6	1347.HK	Hua Hong Grace Semiconductor (H)	-	-22%	-1%	-	14%	16	0700.HK	Tencent	1%	-10%	6%	3%	0%
7	3690.HK	Meituan	-	-	-	-	-21%	17	9926.HK	Akeso	7%	-	-	-	-
8	0981.HK	SMIC	-21%	-4%	17%	-7%	11%	18	0992.HK	Lenovo	7%	-	-	-	-
9	1810.HK	Xiaomi	0%	1%	-	-	-19%	19	3986.HK	Giga Device Semiconductor (H)	-	-	-	-	-4%
10	6166.HK	CIG Shanghai (H)	5%	-	-16%	6%	19%	20	3308.HK	Golden Eagle Retail	-	-	3%	-1%	-

Note: Based on top 10 traded stocks.

Source: HKEX, FactSet

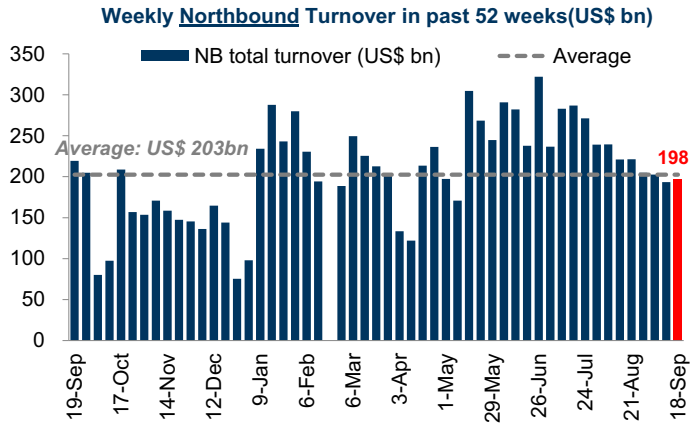
Exhibit 35: Occurrences in Top 10 stocks (Southbound favorites)

SB stocks that have occurred most frequently in Top 10 (past 1-year)				SB stocks that have occurred most frequently in Top 10 (past 1-month)				SB stocks that have occurred most frequently in Top 10 (past 1-week)			
S.no	Ticker	Name	% times in Top 10 past 1-yr	S.no	Ticker	Name	% times in Top 10 past 1-mo	S.no	Ticker	Name	% times in Top 10 past 1-wk
1	0700.HK	Tencent	98%	1	0981.HK	SMIC	100%	1	2513.HK	Z.AI (Zhipu) (H)	100%
2	9988.HK	Alibaba Group	97%	2	0700.HK	Tencent	100%	2	0981.HK	SMIC	100%
3	0981.HK	SMIC	97%	3	1888.HK	Kingboard Laminates	96%	3	1888.HK	Kingboard Laminates	100%
4	1810.HK	Xiaomi	84%	4	6869.HK	Yangtze Optical Fibre & Cable (H)	96%	4	0700.HK	Tencent	100%
5	1347.HK	Hua Hong Grace Semiconductor (H)	74%	5	9988.HK	Alibaba Group	96%	5	6869.HK	Yangtze Optical Fibre & Cable (H)	100%
6	6869.HK	Yangtze Optical Fibre & Cable (H)	70%	6	1810.HK	Xiaomi	63%	6	0100.HK	MiniMax	100%
7	0883.HK	CNOOC	62%	7	1347.HK	Hua Hong Grace Semiconductor (H)	63%	7	0883.HK	CNOOC	80%
8	3690.HK	Meituan	54%	8	2269.HK	Wuxi Biologics	38%	8	9988.HK	Alibaba Group	80%
9	2800.HK	The Tracker Fund of Hong Kong	46%	9	0883.HK	CNOOC	38%	9	6166.HK	CIG Shanghai (H)	80%
10	9992.HK	Pop Mart Int'l	42%	10	2800.HK	The Tracker Fund of Hong Kong	29%	10	1810.HK	Xiaomi	60%

Source: HKEX, FactSet

Stock Connect: Northbound Flows

Exhibit 36: Weekly Northbound total turnover in past 52 weeks



Source: HKEX, Wind

Exhibit 37: Northbound top turnover for the week

Northbound Total Turnover (for the week)			
S.no	Ticker	Name	NB Total Turnover (US$ mn)
1	300750.SZ	Contemporary Amperex Technology (A)	25,451
2	300308.SZ	Zhongji Innolight (A)	22,242
3	300502.SZ	Eoptolink Technology Inc (A)	13,437
4	002384.SZ	Suzhou Dongshan Precision (A)	7,556
5	300394.SZ	Suzhou TFC Optical Communication (A)	6,503
6	002371.SZ	NAURA Technology (A)	6,357
7	002281.SZ	Accelink Technologies (A)	4,758
8	000725.SZ	BOE Tech (A)	3,069
9	002463.SZ	WUS Printed Circuit (Kunshan) (A)	2,930
10	000636.SZ	Fenghua Advanced Tech (A)	2,775

Note: Based on daily top 10 traded stocks.

Source: HKEX, FactSet

Exhibit 38: Occurrences in Top 10 stocks

NB stocks that have occurred most frequently in Top 10 (past 1-year)			
S.no	Ticker	Name	% times in Top 10 past 1-yr
1	300502.SZ	Eoptolink Technology Inc (A)	98%
2	300750.SZ	Contemporary Amperex Technology (A)	98%
3	300308.SZ	Zhongji Innolight (A)	98%
4	688256.SS	Cambricon Technologies (A)	92%
5	603986.SS	GigaDevice Semi (Beijing) (A)	87%
6	601899.SS	Zijin Mining (A)	80%
7	601138.SS	Foxconn Industrial Internet (A)	73%
8	002475.SZ	Luxshare Precision (A)	73%
9	002371.SZ	NAURA Technology (A)	69%
10	300274.SZ	Sungrow Power Supply (A)	68%

NB stocks that have occurred most frequently in Top 10 (past 1-month)			
S.no	Ticker	Name	% times in Top 10 past 1-mo
1	688256.SS	Cambricon Technologies (A)	100%
2	603986.SS	GigaDevice Semi (Beijing) (A)	100%
3	300750.SZ	Contemporary Amperex Technology (A)	100%
4	300502.SZ	Eoptolink Technology Inc (A)	100%
5	600176.SS	China Jushi (A)	100%
6	600183.SS	Shengyi Technology (A)	100%
7	300308.SZ	Zhongji Innolight (A)	100%
8	002384.SZ	Suzhou Dongshan Precision (A)	96%
9	601899.SS	Zijin Mining (A)	88%
10	603259.SS	WuXi AppTec (A)	83%

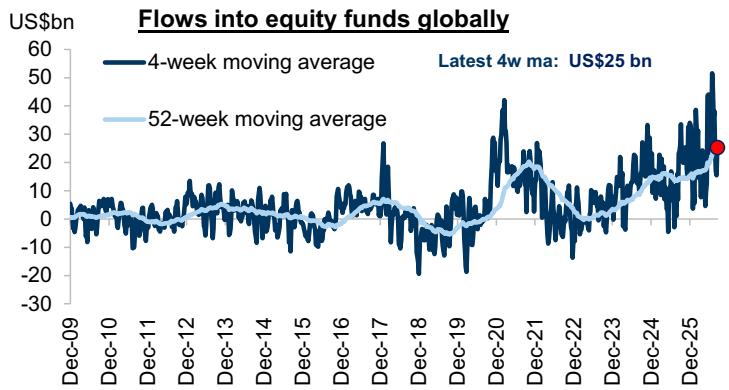
NB stocks that have occurred most frequently in Top 10 (past 1-week)			
S.no	Ticker	Name	% times in Top 10 past 1-wk
1	600176.SS	China Jushi (A)	100%
2	300750.SZ	Contemporary Amperex Technology (A)	100%
3	688256.SS	Cambricon Technologies (A)	100%
4	300394.SZ	Suzhou TFC Optical Communication (A)	100%
5	002384.SZ	Suzhou Dongshan Precision (A)	100%
6	600183.SS	Shengyi Technology (A)	100%
7	603259.SS	WuXi AppTec (A)	100%
8	603986.SS	GigaDevice Semi (Beijing) (A)	100%
9	300308.SZ	Zhongji Innolight (A)	100%
10	300502.SZ	Eoptolink Technology Inc (A)	100%

Source: HKEX, FactSet

Note: Northbound total buying and selling (in aggregate and at stock level) are no longer disclosed by HKEX.

Global, EM, Regional and Country Fund Flows

Exhibit 39: Equity funds globally saw inflows of US$79.3bn w/w (vs. US$9.8bn inflow last week)

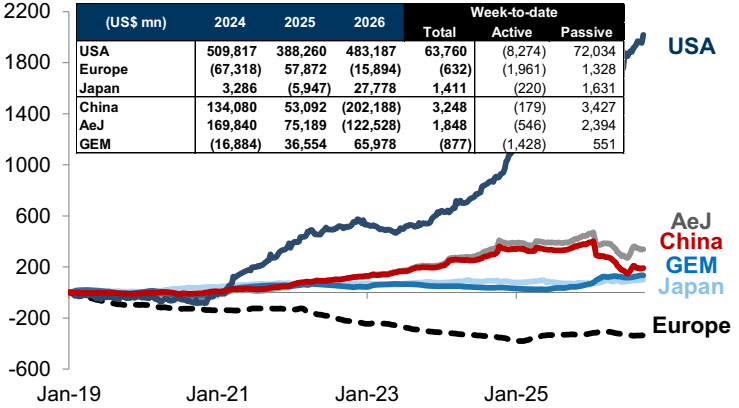


Source: EPFR, Goldman Sachs Global Investment Research

Exhibit 40: In DM, US funds saw net buying of US$64bn. Europe saw selling (-US$0.6bn) while Japan (+US$1.4bn) saw buying w/w.

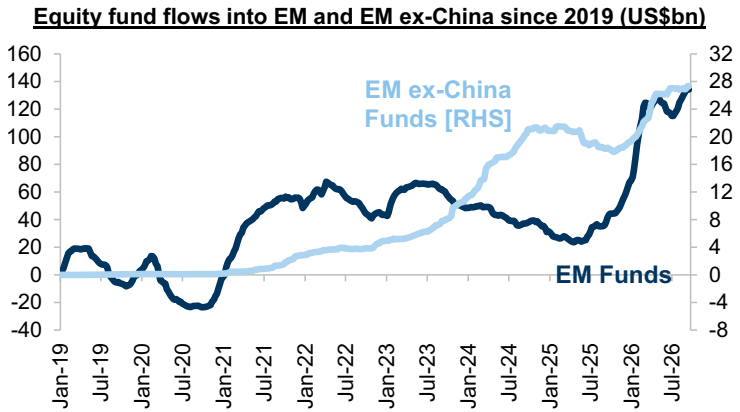
Cumulative active & passive equity fund flows since 2019 (US$bn)

(US$ mn)	2024	2025	2026	Week-to-date Total	Active	Passive
USA	509,817	388,260	483,187	63,760	(8,274)	72,034
Europe	(67,318)	57,872	(15,894)	(632)	(1,961)	1,328
Japan	3,286	(5,947)	27,778	1,411	(220)	1,631
China	134,080	53,092	(202,188)	3,248	(179)	3,427
AeJ	169,840	75,189	(122,528)	1,848	(546)	2,394
GEM	(16,884)	36,554	65,978	(877)	(1,428)	551



Source: EPFR

Exhibit 41: EM ex-China funds have seen US$27bn inflows since 2019

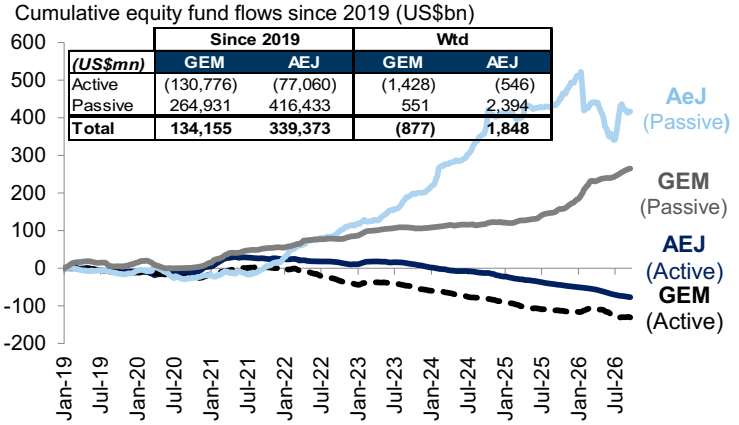


Source: EPFR, Goldman Sachs Global Investment Research

Exhibit 42: AEJ (+US$1.8bn) saw inflows, while GEM (-US$0.9bn) saw outflows w/w.

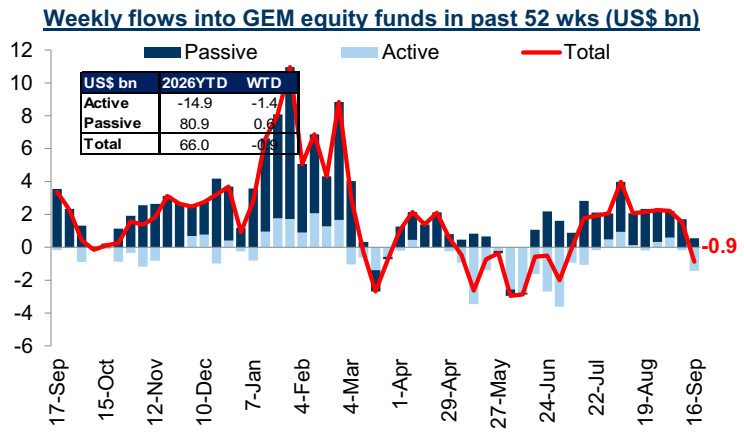
Cumulative equity fund flows since 2019 (US$bn)

	Since 2019		Wtd	
(US$mn)	GEM	AEJ	GEM	AEJ
Active	(130,776)	(77,060)	(1,428)	(546)
Passive	264,931	416,433	551	2,394
Total	134,155	339,373	(877)	1,848



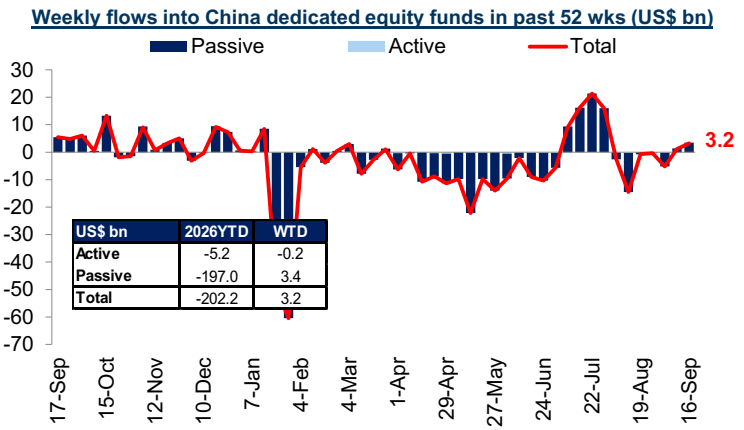
Source: EPFR

Exhibit 43: GEM equity funds flows (active vs passive)



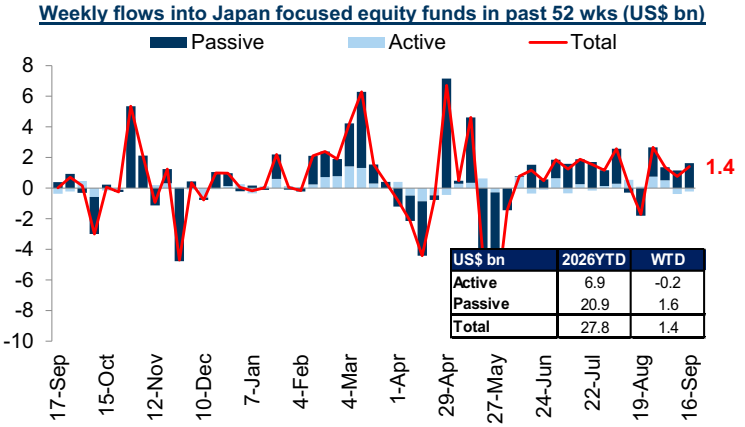
Source: EPFR

Exhibit 44: China equity funds flows (active vs passive)



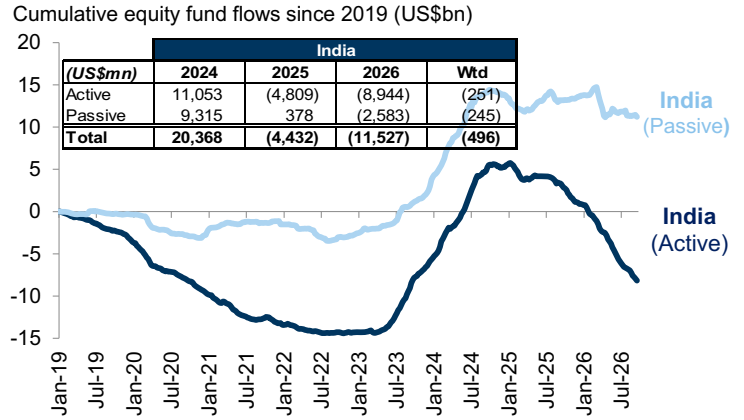
Source: EPFR

Exhibit 45: Japan equity funds flows (active vs passive)



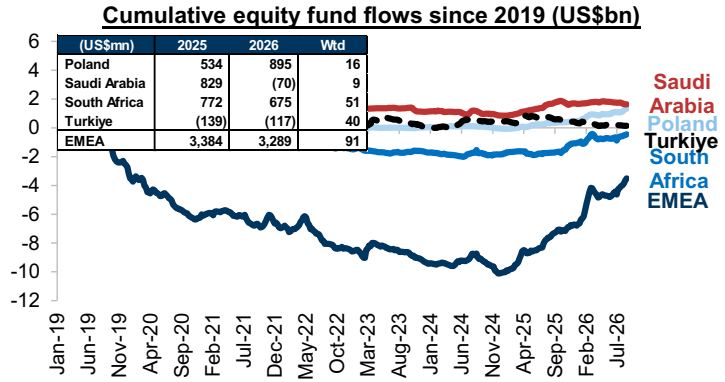
Source: EPFR

Exhibit 46: India equity funds flows (active vs passive)



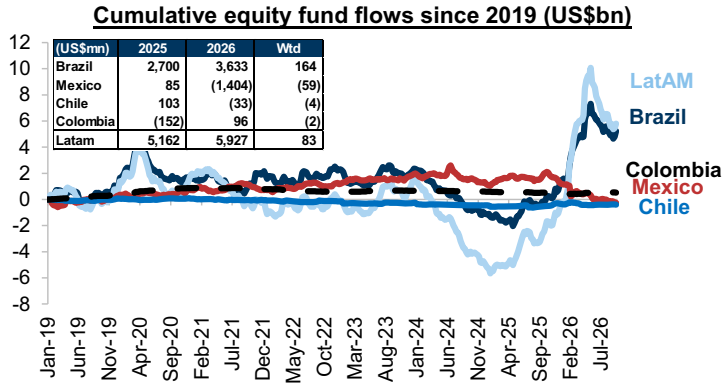
Source: EPFR

Exhibit 47: EMEA (+US$0.1bn) saw inflows this week



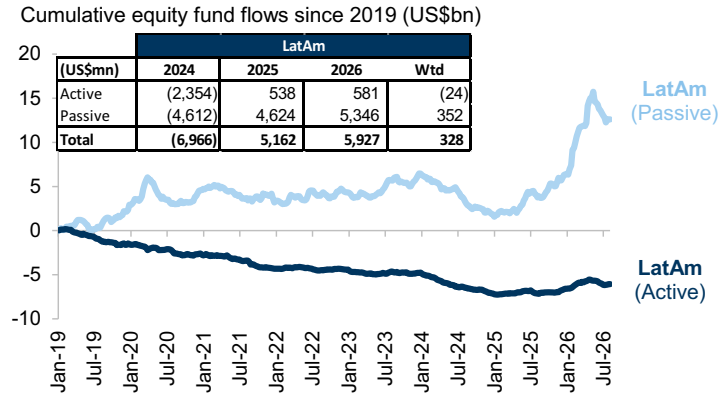
Source: EPFR

Exhibit 48: LatAm (+US$0.1bn) saw inflows this week



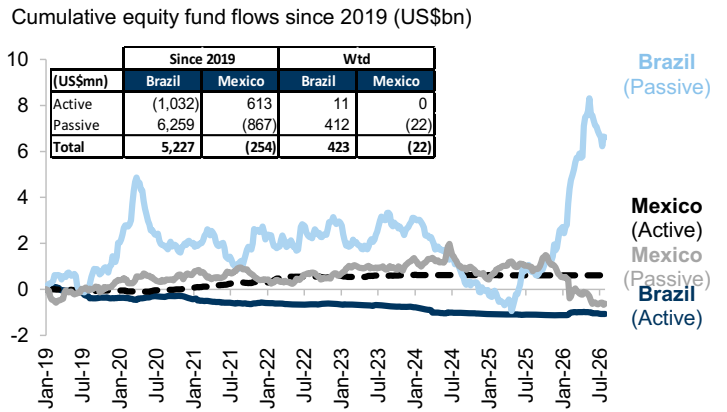
Source: EPFR

Exhibit 49: LatAm equity fund flows (active vs passive)



Source: EPFR

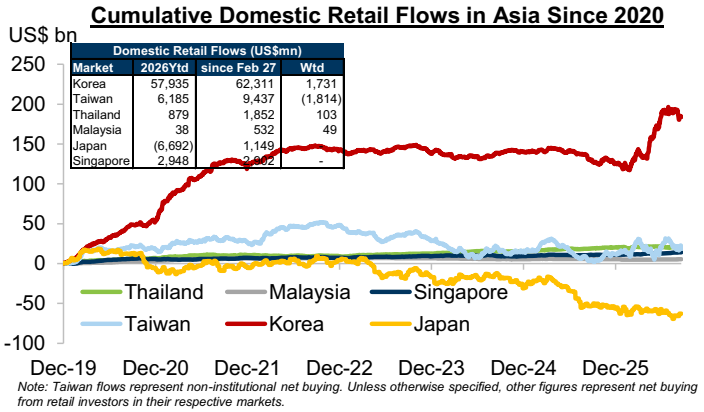
Exhibit 50: Brazil & Mexico equity funds flows (active vs passive)



Source: EPFR

Retail Investor Flows

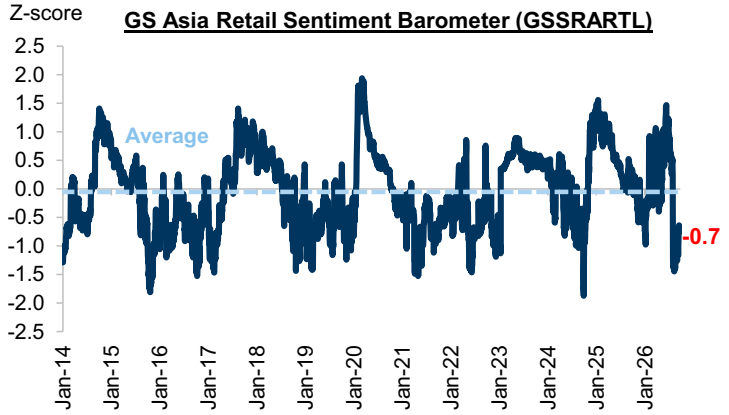
Exhibit 51: Korea (+US$1.7bn) saw retail buying this week, while Taiwan (-US$1.8bn) saw retail selling. Ytd, Asian markets have seen US$61bn retail inflows



Note: Taiwan flows represent non-institutional net buying. Unless otherwise specified, other figures represent net buying from retail investors in their respective markets.

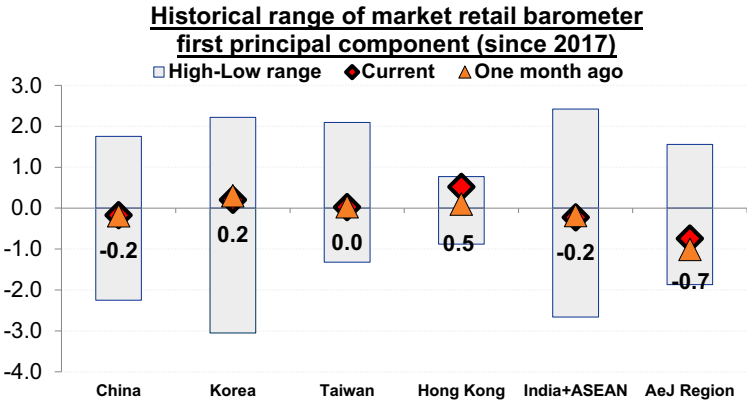
Source: Bloomberg, AMFI, TEJ, FactSet, MSCI

Exhibit 52: Our regional retail sentiment barometer (GSSRARTL)



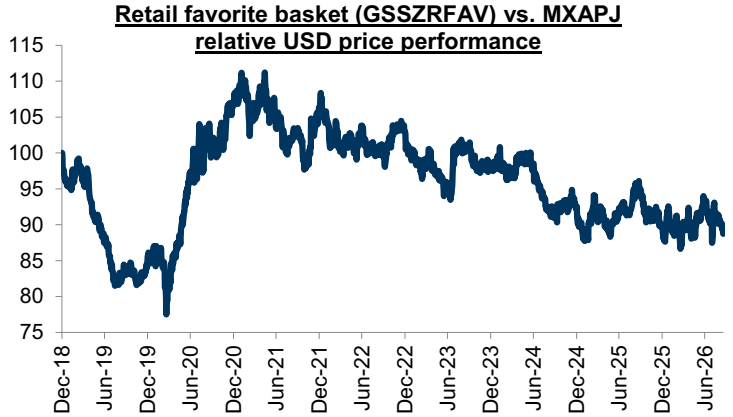
Source: Goldman Sachs Global Investment Research

Exhibit 53: Our retail sentiment barometers across markets



Source: Goldman Sachs Global Investment Research

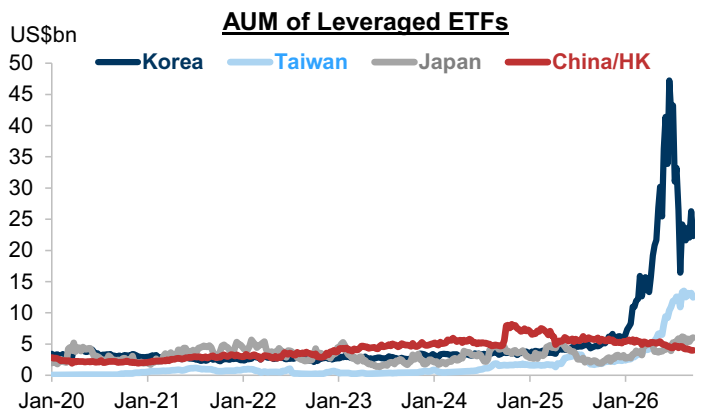
Exhibit 54: Relative performance of retail favorite basket (GSSZRFAV) vs MXAPJ since 2019



Source: FactSet, MSCI, Goldman Sachs Global Investment Research

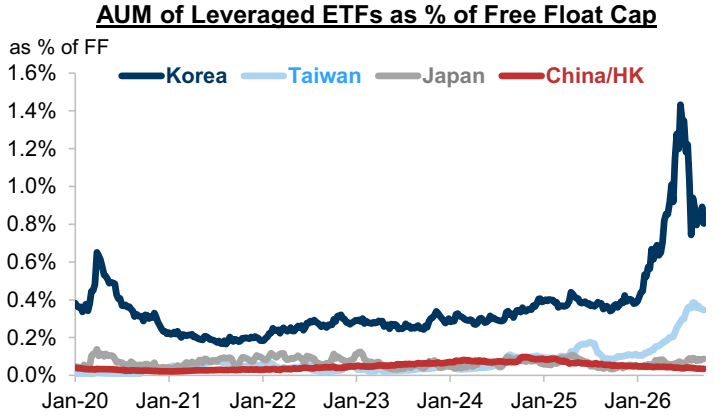
Retail leverage in North Asia

Exhibit 55: Leveraged ETF AUM in Korea dropped to US$22bn, while Taiwan stayed flat at ~US$13bn...



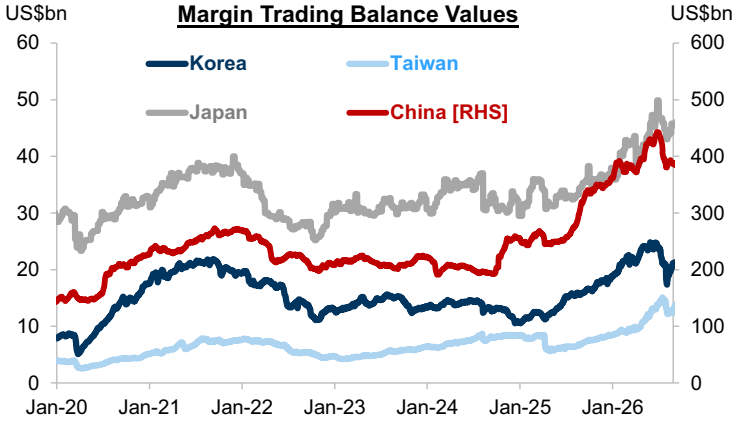
Source: EPFR, Goldman Sachs Global Investment Research

Exhibit 56: ...which represent ~0.8% of free-float market cap in Korea and ~0.4% in Taiwan; daily rebalancing flows may amplify intraday volatility, particularly in Korea



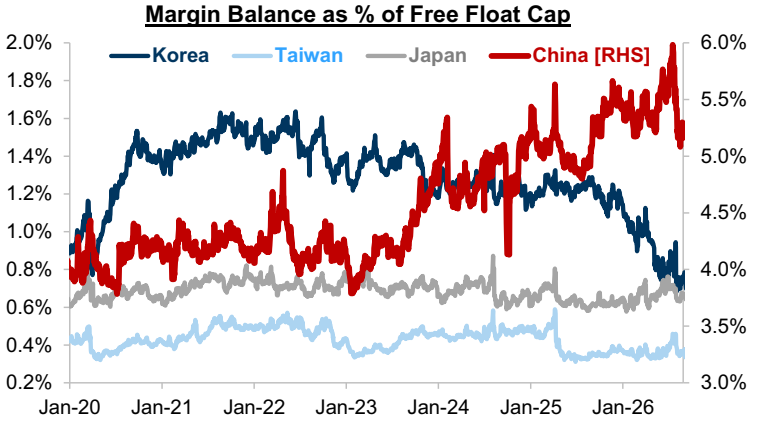
Source: EPFR, Goldman Sachs Global Investment Research

Exhibit 57: Margin balances have reached record highs in absolute terms across North Asia amid strong equity market performance



Source: TEJ, TWSE, JPX, Wind, Bloomberg, Korea Financial Investment Association, Goldman Sachs Global Investment Research

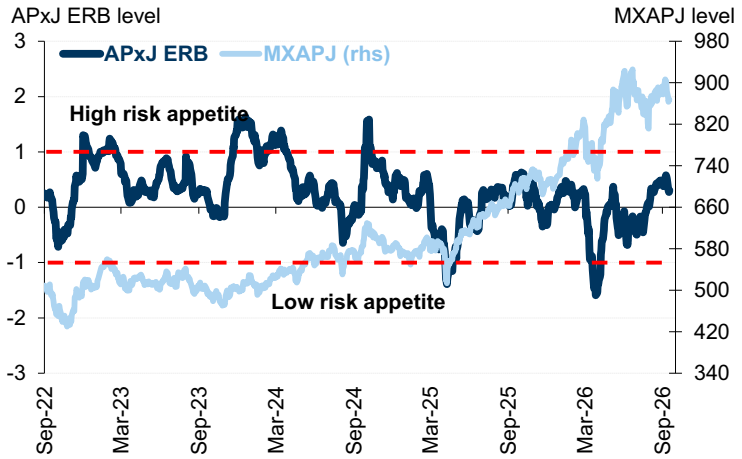
Exhibit 58: As a share of free-float market cap, margin balances are relatively modest, with structural regulatory and margin limits constraining further leverage expansion



Source: TEJ, TWSE, JPX, Wind, Bloomberg, Korea Financial Investment Association, Goldman Sachs Global Investment Research

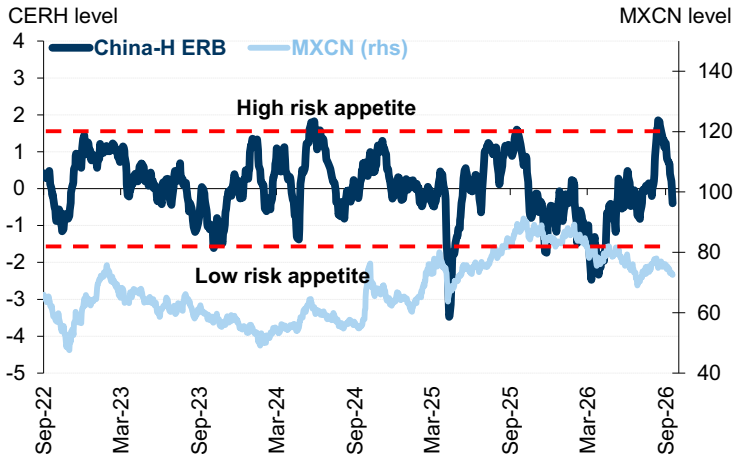
Regional Equity Risk Barometers (ERBs)

Exhibit 59: GS Asia Pacific ex-Japan Equity Risk Barometer



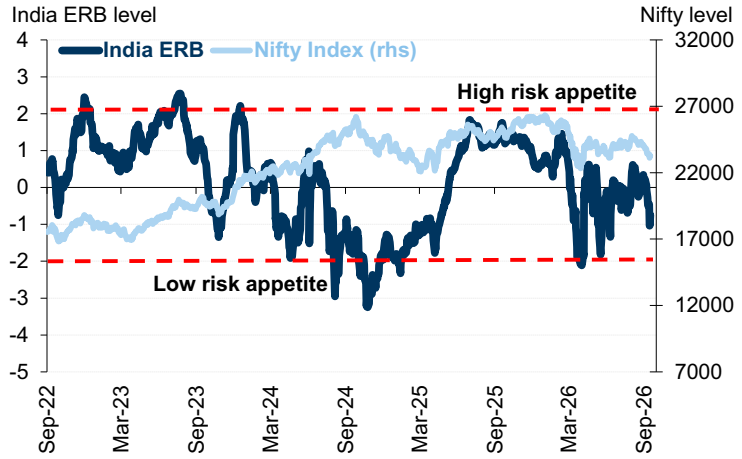
Source: Bloomberg, FactSet, MSCI, Goldman Sachs Global Investment Research

Exhibit 60: GS China-H Equity Risk Barometer



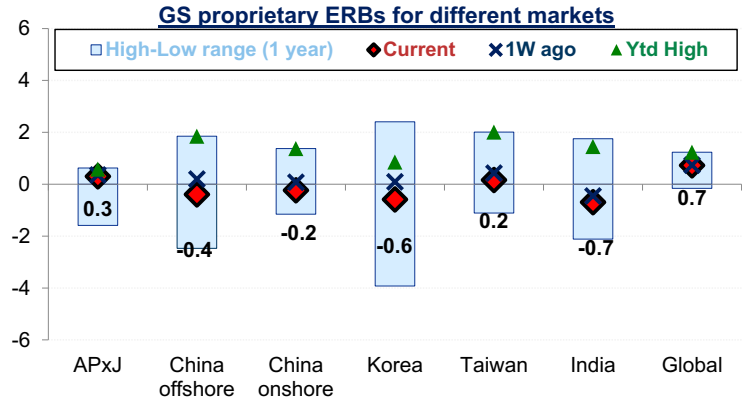
Source: Bloomberg, FactSet, MSCI, Goldman Sachs Global Investment Research

Exhibit 61: GS India Equity Risk Barometer



Source: Bloomberg, FactSet, MSCI, Goldman Sachs Global Investment Research

Exhibit 62: One-year range of our ERBs across the region



Note: Global refers to the GS Risk Appetite Indicator <GSRAII>.

Source: Goldman Sachs Global Investment Research

Disclosure Appendix

Reg AC

We, Sunil Koul, Timothy Moe, CFA, Alvin So, CFA, Tarun Lalwani, CFA, Terry Chan, Si Fu, Ph.D., Kinger Lau, CFA, John Kwon, Amorita Goel, CFA and Mambuna Njie, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

Unless otherwise stated, the individuals listed on the cover page of this report are analysts in Goldman Sachs' Global Investment Research division.

Contributing Authors: Sunil Koul Goldman Sachs International, Timothy Moe, CFA Goldman Sachs (Singapore) Pte, Alvin So, CFA Goldman Sachs (Asia) L.L.C., Tarun Lalwani, CFA Goldman Sachs India SPL, Terry Chan Goldman Sachs (Asia) L.L.C., Si Fu, Ph.D. Goldman Sachs (Asia) L.L.C., Kinger Lau, CFA Goldman Sachs (Asia) L.L.C., John Kwon Goldman Sachs (Singapore) Pte, Amorita Goel, CFA Goldman Sachs (Singapore) Pte, Mambuna Njie Goldman Sachs International.

Unless otherwise stated, the individuals listed in the Contributing Authors disclosure of this report are analysts in Goldman Sachs' Global Investment Research division.

Disclosures

MSCI disclosure

All MSCI data used in this report is the exclusive property of MSCI, Inc. (MSCI). Without prior written permission of MSCI, this information and any other MSCI intellectual property may not be reproduced or redisseminated in any form and may not be used create any financial instruments or products or any indices. This information is provided on an "as is" basis, and the user of this information assumes the entire risk of any use made of this information. Neither MSCI, any of its affiliates nor any third party involved in, or related to, computing or compiling the data makes any express or implied warranties or representations with respect to this information (or the results to be obtained by the use thereof), and MSCI, its affiliates and any such third party hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in, or related to, computing or compiling the data have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages. MSCI and the MSCI indexes are service marks of MSCI and its affiliates. The Global Industry Classification Standard (GICS) were developed by and is the exclusive property of MSCI and Standard & Poor's. GICS is a service mark of MSCI and S&P and has been licensed for use by The Goldman Sachs Group, Inc.

Basket disclosure

The ability to trade the basket(s) discussed in this research will depend upon market conditions, including liquidity and borrow constraints at the time of trade.

Regulatory disclosures

Disclosures required by United States laws and regulations

See company-specific regulatory disclosures above for any of the following disclosures required as to companies referred to in this report: manager or co-manager in a pending transaction; 1% or other ownership; compensation for certain services; types of client relationships; managed/co-managed public offerings in prior periods; directorships; registered market maker. Goldman Sachs trades or may trade as a principal in debt securities (or in related derivatives) of issuers discussed in this report.

The following are additional required disclosures: **Ownership and material conflicts of interest:** Goldman Sachs policy prohibits its analysts, professionals reporting to analysts and members of their households from owning securities of any company in the analyst's area of coverage. **Analyst compensation:** Analysts are paid in part based on the profitability of Goldman Sachs, which includes investment banking revenues. **Analyst as officer or director:** Goldman Sachs policy generally prohibits its analysts, persons reporting to analysts or members of their households from serving as an officer, director or advisor of any company in the analyst's area of coverage. **Non-U.S. Analysts:** Non-U.S. analysts may not be associated persons of Goldman Sachs & Co. LLC and therefore may not be subject to FINRA Rule 2241 or FINRA Rule 2242 restrictions on communications with a subject company, public appearances and trading in securities covered by the analysts.

Additional disclosures required under the laws and regulations of jurisdictions other than the United States

The following disclosures are those required by the jurisdiction indicated, except to the extent already made above pursuant to United States laws and regulations. **Australia:** Goldman Sachs Australia Pty Ltd and its affiliates are not authorised deposit-taking institutions (as that term is defined in the Banking Act 1959 (Cth)) in Australia and do not provide banking services, nor carry on a banking business, in Australia. This research, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act, unless otherwise agreed by Goldman Sachs. In producing research reports, members of Global Investment Research of Goldman Sachs Australia may attend site visits and other meetings hosted by the companies and other entities which are the subject of its research reports. In some instances the costs of such site visits or meetings may be met in part or in whole by the issuers concerned if Goldman Sachs Australia considers it is appropriate and reasonable in the specific circumstances relating to the site visit or meeting. To the extent that the contents of this document contains any financial product advice, it is general advice only and has been prepared by Goldman Sachs without taking into account a client's objectives, financial situation or needs. A client should, before acting on any such advice, consider the appropriateness of the advice having regard to the client's own objectives, financial situation and needs. A copy of certain Goldman Sachs Australia and New Zealand disclosure of interests and a copy of Goldman Sachs' Australian Sell-Side Research Independence Policy Statement are available at: https://www.goldmansachs.com/disclosures/australia-new-zealand/index.html. **Brazil:** Disclosure information in relation to CVM Resolution n. 20 is available at https://www.gs.com/worldwide/brazil/area/gir/index.html. Where applicable, the Brazil-registered analyst primarily responsible for the content of this research report, as defined in Article 20 of CVM Resolution n. 20, is the first author named at the beginning of this report, unless indicated otherwise at the end of the text. **Canada:** This information is being provided to you for information purposes only and is not, and under no circumstances should be construed as, an advertisement, offering or solicitation by Goldman Sachs & Co. LLC for purchasers of securities in Canada to trade in any Canadian security. Goldman Sachs & Co. LLC is not registered as a dealer in any jurisdiction in Canada under applicable Canadian securities laws and generally is not permitted to trade in Canadian securities

and may be prohibited from selling certain securities and products in certain jurisdictions in Canada. If you wish to trade in any Canadian securities or other products in Canada please contact Goldman Sachs Canada Inc., an affiliate of The Goldman Sachs Group Inc., or another registered Canadian dealer. **Hong Kong:** Further information on the securities of covered companies referred to in this research may be obtained on request from Goldman Sachs (Asia) L.L.C. **India:** Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (India) Securities Private Limited, Research Analyst - SEBI Registration Number INH000001493, 10th Floor, Ascent-Worli, Sudam Kalu Ahire Marg, Worli, Mumbai-400 025, India, Corporate Identity Number U74140MH2006FTC160634, Phone +91 22 6616 9000, Fax +91 22 6616 9001. Goldman Sachs may beneficially own 1% or more of the securities (as such term is defined in clause 2 (h) the Indian Securities Contracts (Regulation) Act, 1956) of the subject company or companies referred to in this research report. Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors. Goldman Sachs (India) Securities Private Limited compliance officer and investor grievance contact details, a copy of the annual compliance audit report and other relevant information and disclosures can be found at this link: https://www.goldmansachs.com/worldwide/india/research-analyst. **Japan:** See below. **Korea:** This research, and any access to it, is intended only for "professional investors" within the meaning of the Financial Services and Capital Markets Act, unless otherwise agreed by Goldman Sachs. Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (Asia) L.L.C., Seoul Branch. **New Zealand:** Goldman Sachs New Zealand Limited and its affiliates are neither "registered banks" nor "deposit takers" (as defined in the Reserve Bank of New Zealand Act 1989) in New Zealand. This research, and any access to it, is intended for "wholesale clients" (as defined in the Financial Advisers Act 2008) unless otherwise agreed by Goldman Sachs. A copy of certain Goldman Sachs Australia and New Zealand disclosure of interests is available at: https://www.goldmansachs.com/disclosures/australia-new-zealand/index.html. **Russia:** Research reports distributed in the Russian Federation are not advertising as defined in the Russian legislation, but are information and analysis not having product promotion as their main purpose and do not provide appraisal within the meaning of the Russian legislation on appraisal activity. Research reports do not constitute a personalized investment recommendation as defined in Russian laws and regulations, are not addressed to a specific client, and are prepared without analyzing the financial circumstances, investment profiles or risk profiles of clients. Goldman Sachs assumes no responsibility for any investment decisions that may be taken by a client or any other person based on this research report. **Singapore:** Goldman Sachs (Singapore) Pte. (Company Number: 198602165W), which is regulated by the Monetary Authority of Singapore, accepts legal responsibility for this research, and should be contacted with respect to any matters arising from, or in connection with, this research. **Taiwan:** This material is for reference only and must not be reprinted without permission. Investors should carefully consider their own investment risk. Investment results are the responsibility of the individual investor. **United Kingdom:** Persons who would be categorized as retail clients in the United Kingdom, as such term is defined in the rules of the Financial Conduct Authority, should read this research in conjunction with prior Goldman Sachs research on the covered companies referred to herein and should refer to the risk warnings that have been sent to them by Goldman Sachs International. A copy of these risks warnings, and a glossary of certain financial terms used in this report, are available from Goldman Sachs International on request.

European Union and United Kingdom: Disclosure information in relation to Article 6 (2) of the European Commission Delegated Regulation (EU) (2016/958) supplementing Regulation (EU) No 596/2014 of the European Parliament and of the Council (including as that Delegated Regulation is implemented into United Kingdom domestic law and regulation following the United Kingdom's departure from the European Union and the European Economic Area) with regard to regulatory technical standards for the technical arrangements for objective presentation of investment recommendations or other information recommending or suggesting an investment strategy and for disclosure of particular interests or indications of conflicts of interest is available at https://www.gs.com/disclosures/europeanpolicy.html which states the European Policy for Managing Conflicts of Interest in Connection with Investment Research.

Japan: Goldman Sachs Japan Co., Ltd. is a Financial Instrument Dealer registered with the Kanto Financial Bureau under registration number Kinsho 69, and a member of Japan Securities Dealers Association, Financial Futures Association of Japan Type II Financial Instruments Firms Association, and Investment Management Association of Japan. Sales and purchase of equities are subject to commission pre-determined with clients plus consumption tax. See company-specific disclosures as to any applicable disclosures required by Japanese stock exchanges, the Japanese Securities Dealers Association or the Japanese Securities Finance Company.

Global product; distributing entities

Goldman Sachs Global Investment Research produces and distributes research products for clients of Goldman Sachs on a global basis. Analysts based in Goldman Sachs offices around the world produce research on industries and companies, and research on macroeconomics, currencies, commodities and portfolio strategy. This research is disseminated in Australia by Goldman Sachs Australia Pty Ltd (ABN 21 006 797 897); in Brazil by Goldman Sachs do Brasil Corretora de Títulos e Valores Mobiliários S.A.; Public Communication Channel Goldman Sachs Brazil: 0800 727 5764 and / or contatogoldmanbrasil@gs.com. Available Weekdays (except holidays), from 9am to 6pm. Canal de Comunicação com o Público Goldman Sachs Brasil: 0800 727 5764 e/ou contatogoldmanbrasil@gs.com. Horário de funcionamento: segunda-feira à sexta-feira (exceto feriados), das 9h às 18h; in Canada by Goldman Sachs & Co. LLC; in Hong Kong by Goldman Sachs (Asia) L.L.C.; in India by Goldman Sachs (India) Securities Private Ltd.; in Japan by Goldman Sachs Japan Co., Ltd.; in the Republic of Korea by Goldman Sachs (Asia) L.L.C., Seoul Branch; in New Zealand by Goldman Sachs New Zealand Limited; in Russia by OOO Goldman Sachs; in Singapore by Goldman Sachs (Singapore) Pte. (Company Number: 198602165W); and in the United States of America by Goldman Sachs & Co. LLC. Goldman Sachs International has approved this research in connection with its distribution in the United Kingdom.

Goldman Sachs International ("GSI"), authorised by the Prudential Regulation Authority ("PRA") and regulated by the Financial Conduct Authority ("FCA") and the PRA, has approved this research in connection with its distribution in the United Kingdom.

European Economic Area: Goldman Sachs Bank Europe SE ("GSBE") is a credit institution incorporated in Germany and, within the Single Supervisory Mechanism, subject to direct prudential supervision by the European Central Bank and in other respects supervised by German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin) and Deutsche Bundesbank and disseminates research within the European Economic Area.

General disclosures

This research is for our clients only. Other than disclosures relating to Goldman Sachs, this research is based on current public information that we consider reliable, but we do not represent it is accurate or complete, and it should not be relied on as such. The information, opinions, estimates and forecasts contained herein are as of the date hereof and are subject to change without prior notification. We seek to update our research as appropriate, but various regulations may prevent us from doing so. Other than certain industry reports published on a periodic basis, the large majority of reports are published at irregular intervals as appropriate in the analyst's judgment.

Goldman Sachs conducts a global full-service, integrated investment banking, investment management, and brokerage business. We have investment banking and other business relationships with a substantial percentage of the companies covered by Global Investment Research. Goldman Sachs & Co. LLC, the United States broker dealer, is a member of SIPC (https://www.sipc.org).

Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients and principal trading desks that reflect opinions that are contrary to the opinions expressed in this research. Our asset management area, principal trading desks and investing businesses may make investment decisions that are inconsistent with the recommendations or views expressed in this research.

We and our affiliates, officers, directors, and employees will from time to time have long or short positions in, act as principal in, make a market or act as liquidity provider in, and buy or sell, any securities, derivatives, or other financial instruments referred to in this research (including any financial instruments issued by the companies referred to herein), unless otherwise prohibited by regulation or Goldman Sachs policy.

The views attributed to third party presenters at Goldman Sachs arranged conferences, including individuals from other parts of Goldman Sachs, do not necessarily reflect those of Global Investment Research and are not an official view of Goldman Sachs.

Any third party referenced herein, including any salespeople, traders and other professionals or members of their household, may have positions in the products mentioned that are inconsistent with the views expressed by analysts named in this report.

This research is focused on investment themes across markets, industries and sectors. It does not attempt to distinguish between the prospects or performance of, or provide analysis of, individual companies within any industry or sector we describe.

Any trading recommendation in this research relating to an equity or credit security or securities within an industry or sector is reflective of the investment theme being discussed and is not a recommendation of any such security in isolation.

This research is not an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Clients should consider whether any advice or recommendation in this research is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice. The price and value of investments referred to in this research and the income from them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Fluctuations in exchange rates could have adverse effects on the value or price of, or income derived from, certain investments.

Certain transactions, including those involving futures, options, and other derivatives, give rise to substantial risk and are not suitable for all investors. Investors should review current options and futures disclosure documents which are available from Goldman Sachs sales representatives or at https://www.theocc.com/about/publications/character-risks.jsp and https://www.goldmansachs.com/disclosures/cftc_fcm_disclosures. Transaction costs may be significant in option strategies calling for multiple purchase and sales of options such as spreads. Supporting documentation will be supplied upon request.

Differing Levels of Service provided by Global Investment Research: The level and types of services provided to you by Goldman Sachs Global Investment Research may vary as compared to that provided to internal and other external clients of GS, depending on various factors including your individual preferences as to the frequency and manner of receiving communication, your risk profile and investment focus and perspective (e.g., marketwide, sector specific, long term, short term), the size and scope of your overall client relationship with GS, and legal and regulatory constraints. As an example, certain clients may request to receive notifications when research on specific securities is published, and certain clients may request that specific data underlying analysts' fundamental analysis available on our internal client websites be delivered to them electronically through data feeds or otherwise. No change to an analyst's fundamental research views (e.g., ratings, price targets, or material changes to earnings estimates for equity securities), will be communicated to any client prior to inclusion of such information in a research report broadly disseminated through electronic publication to our internal client websites or through other means, as necessary, to all clients who are entitled to receive such reports.

All research reports are disseminated and available to all clients simultaneously through electronic publication to our internal client websites. Not all research content is redistributed to our clients or available to third-party aggregators, nor is Goldman Sachs responsible for the redistribution of our research by third party aggregators. For research, models or other data related to one or more securities, markets or asset classes (including related services) that may be available to you, please contact your GS representative or go to https://research.gs.com.

Disclosure information is also available at https://www.gs.com/research/hedge.html or from Research Compliance, 200 West Street, New York, NY 10282.

© 2026 Goldman Sachs.

You are permitted to store, display, analyze, modify, reformat, and print the information made available to you via this service only for your own use. You may not resell or reverse engineer this information to calculate or develop any index for disclosure and/or marketing or create any other derivative works or commercial product(s), data or offering(s) without the express written consent of Goldman Sachs. You are not permitted to publish, transmit, or otherwise reproduce this information, in whole or in part, in any format to any third party without the express written consent of Goldman Sachs. This foregoing restriction includes, without limitation, using, extracting, downloading or retrieving this information, in whole or in part, to train or finetune a machine learning or artificial intelligence system, or to provide or reproduce this information, in whole or in part, as a prompt or input to any such system.