10 Aug 2026 13:06:08 ET | 19 pages

Taiwan Electronics & Semiconductors

Taiwan monthly tracker and what's new in AI – Ready for the new product cycle kick-off in 2H26

Laura (Chia Yi) Chen [AC]
+886-2-8726-9090
laura.cy.chen@citi.com

Jack Chen
+886-2-8726-9091
jack1.chen@citi.com

Angela Hsu
+886-2-8726-9083
angela.hc.hsu@citi.com

Michael Hung
+886-2-8726-9092
michael.hung@citi.com

Nicholas Lai
+886-2-8726-9093
nicholas.lai@citi.com

CITI'S TAKE

With the new AI infrastructure ramping up in 2H26, including Vera Rubin NVL72, AMD's Helio rack and Trainium 3 and TPU v8 series in ASIC camps, we expect stronger 2H26 momentum in the Taiwanese tech supply chain. We note that specs upgrade cycle continues to benefit thermal, power and upstream sector on higher ASP. With new GPU/ASIC product cycle starting from 2H26, we expect robust order visibility ahead. We continue to prefer companies with further price hike potential and GM upside such as ABF substrate, advanced node foundry and OSAT supply chain.

Semiconductor foundry - advanced foundry and OSAT continue outperforming - Both TSMC and ASEH reported on-track July sales, up 6% MoM and 12% MoM respectively, with solid 45% and 43% YoY growth thanks to continuous demand upside from leading-edge foundry and advanced packaging. While non-AI demand looks lukewarm, we note that fabless companies including Realtek and Novatek are showing better than expected July momentum on MoM basis and YoY growth due to pull-in demand. We see accelerating growth for AI semiconductor supply chain in the next few months thanks to new GPUs/ASIC cycle. We note WinWay's solid record monthly sales (NT$1.6bn, up 10% MoM, 156% YoY) reflect a ramp-up in new capacity and the digestion of strong order. Note that TSMC has lifted its full-year revenue growth to be +40% YoY, and ASEH also is looking for 35% YoY growth for IC ATM business thanks to ascend advanced node and packaging demand.

Substrate, PCB and CCL – Entering an AI chip production ramp from 3Q26 onward, ABF sector sees benefits from price hike and rising unit shipments. Taiwan 3 ABF names posted up 8-16% MoM growth in July sales. We expect ABF demand to continuously grow in 3Q/4Q26 with potential price hikes. Within the ABF sector, we like NYPCB and Unimicron. For the CCL sector, we expect robust momentum as well backed by CCL shortage. We expect another price hike, initiated by EMC, in 3Q or 4Q26 with TUC following. Within the CCL sector, we like EMC. Meanwhile, we expect TUC's Thailand to come online, driving its 3Q26 business. For the PCB sector, given GM pressure from CCL price hike, we currently are cautious about 3Q26 outlook, which GCE and Tripod would report on Aug 11th. However, if both names would be able to mitigate the impact in 3Q26, we think it might be a good entry point for GCE and Tripod, given great selloff in July.

AI data center and hardware supply chain – Thanks to remaining strong GB300 system shipment and initial ramp for VR NVL72, we look for a sequentially improving outlook for ODMs including Hon Hai, Wistron and Quanta. We maintain our 55-60k NVL rack shipment for 2026 and expect VR NVL 72 more substantial contribution in late 3Q26/4Q26. For the Trainium supply chain, we already see the design service maker Alchip reporting July sales of NT$7.4bn (up 108% MoM and 182% YoY), and we expect to see strong momentum from Winwynn, Accton, GCE and TUC thanks to Trainium 3 ramping up.

See Appendix A-1 for Analyst Certification, Important Disclosures and Research Analyst Affiliations.

ODMs and PC Supply chain – For NB ODMs, overall NB shipments in July declined 31% MoM as end demand has been dampened by the increasing retail prices due to components cost hikes and the high base effect of Jun at the quarter end. We now see downstream NB ODMs becoming more conservative over the unit shipment outlook in 2H. Given the early pull-in and the increasing constraint in components procurement, we expect 3Q26E NB shipments to decline -8% QoQ/-18% YoY. While the price hike effect in the NB products should partially offset shipment decline, we expect increasing margins dilution impact given the Buy and Sell model for NB.

Component and power - Jul-26 sales as reported by thermal players (AVC & Auras) were up from Jun at +10% MoM/+65% YoY. We believe the revenue momentum is resuming after the GPU platform transition in 2Q26. We expect both companies to see sequential revenue growth in 3Q26E, driven by the ramp-up of the AI ASIC platform and the incremental order of GB300. Vera Rubin's contribution is expected to begin at the end of 3Q26. On power supply, Delta's July sales were NT$67bn (up 2% MoM and 48% YoY), in line with market expectations. With higher power consumption for VR NVL72, even 800V adoption is not mandatory, and we see value upgrade trend to benefit Delta on better revenue growth trend ahead.

For passive components - Yageo reported continuously trending up monthly sales in Jul-26, ahead of mgmt.'s guidance for the current quarter. This was driven by demand for AI-related applications remaining strong, and both standard and specialty products continuing to show steady growth. The broad-based business momentum and the elevated BB ratio at 2.2 could support continued revenue growth into 3Q26E.

BBU — Jul-26 sales data from Dynapack and AES provide further evidence that BBU demand remains robust. Dynapack's group sales reached NT$1.2bn, up 21% y/y despite a modest 3% m/m decline due to weaker low margin IT demand. More importantly, we estimate its BBU sales tripled m/m to c.NT$600mn as shipment of a previously delayed BBU product resumed from mid-July. We expect this ramp to continue, driving solid top-line momentum of the company. Meanwhile, AES maintained strong sales momentum at a high level in July-26 +28% y/y and +2% m/m, following its robust 2Q performance, indicating that healthy demand remains. Taken together, the July-26 sales strengthen our positive investment thesis on BBU sector – AIDC BBU adoption continues to accelerate higher power products are supporting both sales growth and margins, and expanding customer programs should provide solid earnings visibility into 2H26 and 2027. Dynapack remains our preferred BBU play given its more pronounced growth inflection and earnings upside.

Figure 1. Overall Taiwan Technology Supply Chains – Revenues Trend

Ticker	Company	Jul revenues (TWDm)	YoY	MoM	Citi 3Q26E QoQ	Cons. 3Q26E QoQ	Citi 3Q26E Tracking	Cons. 3Q26E Tracking	7M26 (TWDm)	YoY	Jun-26 YoY	May-26 YoY	Apr-26 YoY	Mar-26 YoY	Feb-26 YoY	Closing Prices (NT$)
Wafer/materials																
6488.TWO	GWC	4,978	20%	-12%	6%	7%	31%	31%	34,177	-4%	-2%	-3%	-10%	0%	-17%	854
3532.TW	Formosa Sumco	1,303	29%	6%	na	na	na	na	8,222	18%	24%	24%	14%	16%	-4%	283
5434.TW	Topco Scientific	8,174	43%	9%	na	5%	na	38%	47,536	24%	33%	19%	12%	31%	14%	514
6182.TWO	Wafer Works	994	19%	3%	na	na	na	na	6,197	11%	14%	12%	3%	8%	-2%	93
Sub-Total		**15,449**	**32%**	**1%**					**96,131**	**11%**	**16%**	**10%**	**3%**	**15%**	**-3%**	
Semi materials/equipment																
1560.TW	Kinik	886	27%	6%	na	9%	na	33%	5,672	24%	16%	18%	19%	31%	24%	688
8028.TW	Phoenix Silicon	515	37%	7%	na	13%	na	32%	3,245	30%	34%	46%	31%	26%	19%	264
3131.TW	Grand Process	793	42%	26%	na	34%	na	34%	4,116	20%	15%	7%	-4%	0%	52%	2,470
3583.TW	Scientech	973	7%	-6%	na	8%	na	30%	7,089	7%	-3%	1%	11%	6%	13%	696
3680.TWO	Gudeng	871	72%	16%	na	4%	na	36%	5,051	29%	38%	16%	53%	-23%	25%	446
6187.TWO	All Ring	1,055	73%	4%	na	22%	na	37%	4,821	43%	87%	44%	26%	20%	16%	1,090
6196.TW	Marketech	7,519	101%	-1%	na	0%	na	35%	43,027	47%	121%	65%	46%	18%	5%	507
6438.TW	Syrntek	638	5%	8%	na	na	na	na	4,207	11%	-3%	10%	33%	16%	9%	147
8091.TWO	Feedback Tech	333	85%	5%	na	-14%	na	44%	1,875	56%	72%	82%	35%	62%	14%	239
Sub-Total		**13,583**	**66%**	**2%**					**79,101**	**41%**	**65%**	**42%**	**35%**	**13%**	**13%**	
Probe card/testing equipment																
6223.TWO	MPI	1,805	67%	-2%	10%	10%	31%	31%	10,972	52%	65%	58%	53%	39%	46%	6,225
6515.TW	Winway	1,600	156%	10%	25%	18%	36%	39%	8,104	82%	288%	120%	51%	69%	-4%	6,830
6510.TWO	CHPT	615	50%	7%	19%	22%	31%	31%	3,612	30%	40%	34%	30%	26%	9%	2,845
7769.TW	Hon Precision	5,246	101%	-1%	1%	8%	38%	35%	29,765	93%	107%	84%	112%	111%	57%	6,280
2360.TW	Chroma	5,434	175%	32%	6%	4%	38%	39%	30,823	102%	73%	133%	129%	63%	86%	2,030
Sub-Total		**14,700**	**119%**	**11%**					**83,276**	**85%**	**94%**	**94%**	**97%**	**73%**	**53%**	
Design service/Semi IP																
3443.TW	GUC	5,769	158%	17%	17%	11%	35%	37%	31,114	103%	104%	132%	157%	33%	60%	4,530
3661.TW	Alchip	7,433	182%	108%	23%	245%	79%	28%	19,173	-14%	15%	-33%	-32%	-47%	-77%	3,800

3529.TWO	eMemory	676	24%	279%	na	11%	na	55%	2,866	20%	47%	12%	13%	30%	12%	2,835
3035.TW	Faraday	1,062	10%	-25%	na	-2%	na	33%	6,964	-46%	27%	-45%	-43%	-69%	-74%	178
6533.TW	Andes	120	22%	-68%	na	-9%	na	23%	1,013	56%	247%	2%	23%	40%	12%	250
6643.TWO	M31	166	29%	32%	na	35%	na	29%	982	-3%	-24%	-18%	31%	-25%	2%	441
Sub-Total		**15,227**	**130%**	**44%**					**62,112**	**14%**	**51%**	**13%**	**14%**	**-30%**	**-40%**	
IC design																
2454.TW	Mediatek	48,475	12%	-16%	5%	2%	30%	31%	349,808	1%	3%	5%	-4%	13%	-16%	3,960
2379.TW	Realtek	12,895	33%	5%	-3%	1%	35%	34%	86,871	13%	21%	22%	11%	4%	-7%	758
2401.TW	Sunplus	746	38%	2%	na	na	na	na	4,628	22%	35%	29%	14%	22%	-7%	28
2388.TW	VIA	1,136	43%	-9%	na	na	na	na	6,743	36%	34%	88%	85%	69%	-4%	81
3034.TW	Novatek	10,296	27%	3%	8%	6%	33%	34%	62,102	1%	19%	9%	1%	-10%	-24%	544
6462.TWO	EGIS	796	64%	114%	na	na	na	na	4,712	70%	-24%	136%	12%	100%	33%	102
5269.TW	ASMedia	783	-38%	-10%	8%	11%	27%	26%	7,004	-2%	-22%	-19%	-18%	40%	18%	1,400
5274.TWO	Aspeed	1,524	98%	16%	12%	15%	35%	34%	8,542	68%	67%	69%	82%	64%	66%	16,540
4966.TWO	Parade	1,353	-4%	-19%	na	10%	na	29%	9,593	-1%	12%	1%	-4%	3%	-5%	600
2458.TW	Elan	878	-13%	-17%	na	-4%	na	29%	7,308	2%	7%	4%	6%	20%	-11%	146
6104.TWO	Genesys	338	4%	-6%	na	na	na	na	2,453	0%	6%	2%	-7%	-4%	-4%	95
Sub-Total		**79,221**	**17%**	**-10%**					**549,764**	**4%**	**8%**	**10%**	**0%**	**11%**	**-14%**	
Foundry																
2330.TW	TSMC	467,581	45%	6%	15%	14%	32%	32%	2,872,064	37%	68%	30%	17%	45%	22%	2,380
2303.TW	UMC	23,844	19%	3%	12%	10%	31%	32%	153,615	12%	23%	18%	11%	5%	6%	123
5347.TW	VIS	4,706	30%	-21%	11%	8%	30%	31%	31,482	15%	34%	19%	10%	7%	-10%	158
6770.TW	PSMC	6,669	71%	3%	na	11%	na	35%	37,532	43%	69%	59%	32%	28%	12%	68
Sub-Total		**502,799**	**43%**	**5%**					**3,094,693**	**35%**	**64%**	**30%**	**17%**	**42%**	**21%**	
OSAT																
3711.TW	ASEH	73,784	43%	12%	22%	22%	32%	32%	438,509	25%	33%	29%	19%	15%	16%	630
2449.TW	KYEC	3,991	37%	10%	9%	12%	33%	32%	25,324	36%	29%	37%	35%	36%	41%	249
6147.TWO	Chipbond	2,523	39%	10%	3%	0%	37%	38%	14,910	21%	11%	11%	11%	11%	11%	154
8150.TW	Chipmos	2,823	44%	11%	na	8%	na	35%	17,142	30%	-9%	-9%	-9%	-9%	-9%	93
6239.TW	Powertech	8,270	29%	8%	8%	6%	33%	34%	52,700	32%	-5%	-5%	-5%	-5%	-5%	289
2441.TW	Greatek	1,998	42%	7%	na	na	na	na	12,004	25%	9%	9%	9%	9%	9%	129

3374.TWO	Xintec	861	31%	13%	na	na	na	na	4,959	33%	1%	1%	1%	1%	1%	337
Sub-Total		**94,249**	**41%**	**12%**					**565,549**	**26%**	**32%**	**28%**	**21%**	**17%**	**18%**	
PCB																
3037.TW	Unimicron	16,254	44%	9%	18%	15%	32%	33%	96,590	31%	36%	32%	28%	23%	16%	992
3044.TW	Tripod	9,822	57%	23%	6%	5%	37%	38%	55,644	35%	42%	47%	29%	24%	11%	402
8046.TW	Nanya PCB	5,440	50%	16%	19%	18%	34%	34%	30,192	39%	50%	36%	39%	39%	13%	1,130
3189.TW	Kinsus	4,549	36%	8%	20%	15%	30%	32%	28,150	31%	32%	33%	27%	25%	10%	836
6213.TW	ITEQ	4,749	97%	13%	na	20%	na	34%	25,422	35%	48%	29%	14%	14%	9%	428
6274.TWO	TUC	5,908	122%	21%	17%	19%	35%	35%	30,264	91%	106%	124%	96%	72%	27%	1,460
2383.TW	Elite Materials	19,207	129%	8%	17%	17%	35%	35%	99,549	89%	121%	115%	94%	57%	45%	5,290
6153.TW	Career	566	21%	2%	na	na	na	na	3,296	4%	25%	10%	-14%	1%	-17%	17
8039.TW	Taiflex	847	-6%	1%	na	na	na	na	5,959	1%	-7%	1%	-1%	10%	-5%	226
2313.TW	Compeq	6,955	16%	1%	na	21%	na	29%	46,495	14%	21%	13%	-3%	11%	0%	215
2367.TW	Unitech Print	1,631	25%	19%	na	na	na	na	9,640	-3%	-4%	16%	-22%	-15%	-19%	44
2368.TW	Gold Circuit	10,015	77%	21%	14%	14%	36%	36%	53,675	70%	78%	87%	58%	63%	54%	926
8358.TWO	Co-Tech	1,009	55%	5%	na	12%	na	32%	6,346	45%	43%	41%	36%	43%	51%	346
8155.TWO	Allied Circuit	557	52%	3%	na	na	na	na	3,687	36%	32%	30%	29%	33%	28%	309
6672.TW	Ventec	665	91%	16%	na	19%	na	35%	3,525	42%	68%	35%	37%	33%	5%	252
Sub-Total		**88,173**	**64%**	**12%**					**498,434**	**44%**	**55%**	**52%**	**36%**	**32%**	**20%**	
Distributor																
3036.TW	WT Micro	182,966	95%	1%	2%	1%	30%	31%	1,267,932	111%	188%	153%	79%	119%	29%	229
3702.TW	WPG Holdings	146,096	91%	-24%	na	-17%	na	39%	920,874	60%	132%	83%	39%	29%	9%	130
2347.TW	Synnex	72,339	127%	-5%	na	-20%	na	45%	399,707	85%	136%	130%	84%	65%	5%	92
3010.TW	Wah Lee	8,540	31%	10%	na	na	na	na	54,223	20%	14%	28%	13%	24%	22%	123
Sub-Total		**409,941**	**96%**	**-11%**					**2,642,736**	**84%**	**147%**	**117%**	**77%**	**67%**	**18%**	
Compound Semi																
3105.TWO	Win Semi	1,892	31%	7%	na	12%	na	32%	11,739	33%	30%	40%	49%	34%	26%	386
2455.TW	VPEC	422	45%	29%	na	21%	na	36%	2,347	30%	24%	47%	38%	17%	16%	385
8086.TW	AWSC	419	18%	3%	na	2%	na	32%	2,939	40%	16%	37%	49%	48%	43%	118
3081.TWO	LandMark	501	177%	19%	na	11%	na	37%	2,627	121%	128%	119%	115%	89%	91%	2,535
4968.TW	Richwave	320	-2%	1%	na	10%	na	29%	2,228	4%	-1%	7%	0%	3%	-7%	96

Sub-Total		**3,554**	**37%**	**10%**					**21,880**	**36%**	**30%**	**42%**	**46%**	**34%**	**27%**	
iPhone																
3008.TW	Largan	4,877	-11%	31%	30%	35%	27%	27%	34,086	7%	-10%	42%	23%	11%	-3%	4,400
3406.TW	Genius	2,422	2%	39%	5%	39%	41%	31%	14,245	14%	5%	30%	25%	14%	5%	546
6269.TW	Flexium	2,045	4%	19%	18%	29%	32%	29%	12,892	2%	-1%	-6%	0%	9%	-9%	66
4958.TW	ZDT	17,601	32%	3%	36%	33%	27%	27%	106,759	17%	33%	37%	12%	7%	-4%	471
2317.TW	Hon Hai	946,513	54%	15%	14%	7%	33%	35%	5,589,373	38%	52%	40%	30%	46%	8%	265
Sub-Total		**1,059,473**	**48%**	**13%**					**6,361,924**	**32%**	**47%**	**36%**	**23%**	**38%**	**4%**	
Server																
5274.TWO	Aspeed	1,524	98%	16%	12%	15%	35%	34%	8,542	68%	67%	69%	82%	64%	66%	16,540
6669.TW	Wiwynn	117,686	39%	6%	31%	26%	32%	34%	672,346	41%	30%	18%	30%	14%	103%	6,010
2059.TW	King Slide	6,407	356%	44%	na	46%	na	41%	22,687	137%	221%	172%	79%	39%	31%	11,905
2368.TW	Gold Circuit	10,015	77%	21%	14%	14%	36%	36%	53,675	70%	78%	87%	58%	63%	54%	926
8210.TW	Chenbro Micom	2,462	42%	-24%	na	15%	na	27%	17,391	53%	98%	37%	5%	45%	50%	1,075
Sub-Total		**138,094**	**47%**	**7%**					**774,641**	**45%**	**36%**	**26%**	**32%**	**18%**	**96%**	
ODM/OEM																
2324.TW	Compal	81,006	38%	-15%	-5%	0%	36%	34%	520,604	19%	58%	22%	16%	17%	-22%	36
3231.TW	Wistron	308,219	61%	-4%	10%	14%	31%	30%	2,049,965	88%	54%	39%	112%	118%	177%	193
6669.TW	Wiwynn	117,686	39%	6%	31%	26%	32%	34%	672,346	41%	30%	18%	30%	14%	103%	6,010
2317.TW	Hon Hai	946,513	54%	15%	14%	7%	33%	35%	5,589,373	38%	52%	40%	30%	46%	8%	265
2382.TW	Quanta	366,274	131%	-5%	5%	-7%	34%	38%	2,212,088	93%	103%	94%	121%	88%	43%	314
2356.TW	Inventec	90,190	66%	-12%	-23%	-17%	44%	40%	560,358	41%	62%	35%	37%	47%	-1%	66
Sub-Total		**1,995,903**	**61%**	**3%**					**12,209,302**	**49%**	**57%**	**42%**	**46%**	**54%**	**29%**	
PC																
2357.TW	Asus	84,131	53%	-21%	-6%	-9%	35%	36%	550,233	41%	56%	9%	46%	34%	19%	818
2353.TW	Acer	26,904	22%	-3%	na	0%	na	32%	184,631	23%	-3%	37%	68%	2%	26%	31
2379.TW	Realtek	12,895	33%	5%	-3%	1%	35%	34%	86,871	13%	21%	22%	11%	4%	-7%	758
6104.TWO	Genesys	338	4%	-6%	na	na	na	na	2,453	0%	6%	2%	-7%	-4%	-4%	95
2458.TW	Elan	878	-13%	-17%	na	-4%	na	29%	7,308	2%	7%	4%	6%	20%	-11%	146
5269.TW	Asmedia	783	-38%	-10%	8%	11%	27%	26%	7,004	-2%	-22%	-19%	-18%	40%	18%	1,400
4966.TWO	Parade	1,353	-4%	-19%	na	10%	na	29%	9,593	-1%	12%	1%	-4%	3%	-5%	600

2324.TW	Compal	81,006	38%	-15%	-5%	0%	36%	34%	520,604	19%	58%	22%	16%	17%	-22%	36
3533.TW	Lotes	3,369	19%	9%	15%	15%	31%	31%	22,280	17%	17%	9%	15%	23%	5%	1,960
Sub-Total		**211,658**	**39%**	**-15%**					**1,390,977**	**26%**	**43%**	**18%**	**50%**	**20%**	**-2%**	
Motherboards																
2376.TW	Giga-Byte	44,213	60%	3%	-9%	-11%	34%	35%	293,482	50%	69%	5%	74%	75%	47%	350
2377.TW	Micro-Star	19,342	0%	9%	15%	12%	34%	35%	125,512	-6%	5%	5%	5%	5%	5%	155
3515.TW	ASRock	6,610	131%	79%	na	50%	na	44%	30,082	19%	48%	-16%	-47%	55%	-30%	216
2425.TW	Chaintech	1,910	144%	-21%	na	na	na	na	10,890	121%	376%	95%	88%	61%	114%	50
6150.TWO	Tul	479	17%	8%	na	na	na	na	3,071	-27%	-30%	-54%	-69%	-41%	42%	61
Sub-Total		**72,555**	**42%**	**8%**					**463,038**	**27%**	**38%**	**-4%**	**27%**	**34%**	**24%**	
Networking																
6285.TW	Wistron Neweb	16,913	90%	7%	na	-4%	na	45%	85,507	32%	84%	35%	16%	4%	-7%	256
5388.TW	Sercomm	7,980	51%	10%	na	0%	na	39%	45,242	57%	71%	70%	66%	87%	21%	94
3596.TW	Acrcadyan Tech	4,847	8%	2%	na	6%	na	33%	31,513	3%	4%	4%	1%	2%	-7%	174
4906.TW	Gemtek Tech	1,550	32%	30%	na	na	na	na	8,265	-21%	-5%	-12%	-23%	-40%	-46%	36
2345.TW	Accton	39,473	72%	0%	14%	18%	36%	35%	205,131	62%	61%	57%	54%	44%	83%	2,165
Sub-Total		**70,762**	**65%**	**3%**					**375,659**	**44%**	**59%**	**44%**	**36%**	**28%**	**31%**	
Panel																
2409.TW	AUO	20,370	-3%	-18%	13%	0%	25%	29%	160,293	-1%	14%	-1%	-4%	1%	-17%	27
3481.TW	Innolux	18,890	-2%	-13%	na	10%	na	27%	149,234	14%	17%	10%	12%	33%	6%	52
Sub-Total		**39,260**	**-2%**	**-16%**					**309,527**	**5%**	**15%**	**4%**	**-48%**	**14%**	**-7%**	
Memory																
2408.TW	Nanya Tech	43,868	720%	49%	na	29%	na	41%	175,504	661%	621%	730%	717%	560%	587%	502
3006.TW	Elite Semi	6,785	491%	40%	na	na	na	na	27,998	281%	328%	297%	349%	188%	128%	276
2337.TW	Macronix	7,725	180%	11%	na	27%	na	32%	37,318	138%	216%	176%	154%	96%	60%	134
8299.TWO	Phison	27,162	378%	9%	na	-2%	na	41%	136,017	264%	301%	301%	237%	221%	169%	2,040
6485.TWO	Asolid	115	11%	20%	na	na	na	na	748	-10%	-7%	-6%	-19%	-13%	-40%	65
2451.TW	Transcend	5,195	308%	3%	na	14%	na	24%	37,639	403%	382%	470%	594%	381%	246%	296
3260.TWO	A-Data	18,379	331%	25%	na	23%	na	39%	82,651	207%	212%	210%	170%	181%	114%	411
8271.TW	Apacer	2,791	165%	-4%	na	na	na	na	19,510	236%	201%	224%	361%	293%	194%	236
4967.TW	Team Group	2,545	99%	-16%	na	119%	na	15%	19,178	71%	35%	113%	79%	120%	-22%	281

Sub-Total		**141,337**	**375%**	**26%**					**661,431**	**260%**	**278%**	**293%**	**277%**	**202%**	**160%**	
MCU/PMIC/MOSFET																
6415.TW	Silergy	2,357	59%	13%	na	5%	na	37%	13,217	30%	38%	32%	28%	12%	2%	465
3707.TWO	Episil Tech	648	31%	4%	na	na	na	na	3,978	26%	30%	28%	31%	22%	13%	62
2481.TW	Pan Jit	1,448	31%	4%	na	4%	na	35%	8,824	16%	27%	14%	9%	19%	-1%	138
3016.TW	Episil-Precision	482	51%	8%	na	6%	na	35%	2,850	31%	41%	37%	33%	20%	15%	107
5425.TW	Taiwan Semi	1,731	24%	4%	na	na	na	na	11,201	6%	9%	12%	3%	0%	-11%	84
8261.TW	Advanced Power	293	10%	-1%	na	4%	na	32%	1,951	8%	16%	1%	5%	11%	-3%	179
2342.TW	Mosel Vitelic	184	11%	4%	na	na	na	na	1,192	-4%	5%	-3%	-3%	-11%	-15%	37
5299.TWO	Excelliance Mos	122	-6%	-3%	na	na	na	na	912	-3%	-4%	2%	0%	3%	-9%	102
6138.TWO	Anpec Elec	700	9%	1%	na	9%	na	31%	4,743	12%	11%	15%	14%	16%	6%	289
8081.TW	Global Mixed-Mod	839	10%	13%	na	10%	na	34%	5,187	0%	7%	-3%	-4%	-1%	-14%	268
Sub-Total		**8,802**	**30%**	**7%**					**54,055**	**15%**	**21%**	**16%**	**15%**	**10%**	**-2%**	
Power Supply																
2308.TW	Delta	67,073	48%	2%	18%	15%	31%	32%	409,682	42%	55%	44%	44%	38%	31%	1,815
2301.TW	Lite-on	19,006	38%	2%	na	14%	na	32%	115,118	27%	37%	30%	25%	23%	17%	272
6412.TW	Chicony Power	2,531	-13%	-18%	na	7%	na	28%	18,759	-8%	-1%	-10%	-12%	-5%	-22%	79
Sub-Total		**88,610**	**43%**	**1%**					**543,558**	**36%**	**48%**	**38%**	**36%**	**32%**	**25%**	
Heat Dissipation																
3653.TW	Jentech	3,213	91%	21%	na	9%	na	40%	15,793	36%	58%	38%	27%	19%	-15%	4,135
3017.TW	AVC	18,590	57%	6%	19%	16%	32%	33%	116,749	80%	66%	61%	72%	112%	75%	2,765
3324.TWO	Auras	3,765	117%	39%	na	14%	na	38%	21,014	83%	62%	94%	41%	92%	67%	1,010
Sub-Total		**25,569**	**68%**	**11%**					**153,556**	**75%**	**65%**	**62%**	**61%**	**95%**	**62%**	
Passive Components																
2327.TW	Yageo	16,131	52%	5%	10%	10%	33%	33%	98,753	33%	39%	47%	22%	23%	20%	573
2492.TW	Walsin Tech	4,444	42%	12%	na	na	na	na	25,372	19%	26%	16%	16%	11%	-4%	274
Sub-Total		**20,575**	**49%**	**6%**					**124,126**	**29%**	**36%**	**40%**	**21%**	**20%**	**15%**	
BBU																
6781.TW	AES-KY	1,723	28%	2%	na	na	36%	33%	11,061	26%	26%	21%	17%	26%	25%	1,195
3211.TWO	Dynapack	1,229	21%	-3%	na	na	26%	29%	8,065	22%	21%	-11%	19%	76%	0%	370
Sub-Total		**2,952**	**25%**	**0%**					**19,126**	**24%**	**23%**	**5%**	**17%**	**46%**	**14%**	

Source: Citi Research, TEJ, Bloomberg

Companies Mentioned:

Accton (2345.TW; NT$2165.0; 1; 10 Aug 26; 13:30) | Acer (2353.TW; NT$31.0; Not Rated; 10 Aug 26; 13:30) | ADATA Technology Co Ltd (3260.TWO; NT$411.0; Not Rated; 10 Aug 26; 15:00) | Advanced Energy Solution (6781.TW; NT$1195.0; 1; 10 Aug 26; 13:30) | Advanced Micro Devices (AMD.O; US$483.36; 1; 07 Aug 26; 16:00) | Advanced Power Electronics Corp (8261.TW; NT$179.0; Not Rated; 10 Aug 26; 13:30) | Advanced Wireless Semiconductor Co (8086.TWO; NT$118.0; Not Rated; 10 Aug 26; 15:00) | Alchip (3661.TW; NT$3800.0; 1; 10 Aug 26; 13:30) | All Ring Tech Co Ltd (6187.TWO; NT$1090.0; Not Rated; 10 Aug 26; 15:00) | Allied Circuit Co Ltd (8155.TWO; NT$308.5; Not Rated; 10 Aug 26; 15:00) | Alphabet Inc (GOOGL.O; US$354.3; 1; 07 Aug 26; 16:00) | Amazon.com, Inc. (AMZN.O; US$274.48; 1; 07 Aug 26; 16:00) | Andes Technology Corp (6533.TW; NT$250.0; Not Rated; 10 Aug 26; 13:30) | Anpec Electronics Corp (6138.TWO; NT$288.5; Not Rated; 10 Aug 26; 15:00) | Apacer Technology Inc (8271.TW; NT$235.5; Not Rated; 10 Aug 26; 13:30) | Arcadyan Technology Corp (3596.TW; NT$174.0; Not Rated; 10 Aug 26; 13:30) | ASE Technology Holding (3711.TW; NT$630.0; 1; 10 Aug 26; 13:30) | Asia Vital Components (3017.TW; NT$2765.0; 1; 10 Aug 26; 13:30) | ASMedia (5269.TW; NT$1400.0; 2; 10 Aug 26; 13:30) | ASolid Technology Co Ltd (6485.TWO; NT$65.2; Not Rated; 10 Aug 26; 15:00) | Aspeed Technology (5274.TWO; NT$16540.0; 1; 10 Aug 26; 15:00) | ASRock Inc (3515.TW; NT$215.5; Not Rated; 10 Aug 26; 13:30) | ASUSTeK Computer (2357.TW; NT$818.0; 1; 10 Aug 26; 13:30) | AUO (2409.TW; NT$27.0; 2; 10 Aug 26; 13:30) | Auras Technology (3324.TWO; NT$1010.0; 1; 10 Aug 26; 15:00) | Career Technology MFG Co Ltd (6153.TW; NT$16.6; Not Rated; 10 Aug 26; 13:30) | Chaintech Technology Corp (2425.TW; NT$49.55; Not Rated; 10 Aug 26; 13:30) | Chenbro Micom Co Ltd (8210.TW; NT$1075.0; Not Rated; 10 Aug 26; 13:30) | Chicony Power Technology (6412.TW; NT$79.4; Not Rated; 10 Aug 26; 13:30) | Chipbond Technology (6147.TWO; NT$154.0; 1; 10 Aug 26; 15:00) | ChipMOS Technologies Inc (8150.TW; NT$92.9; Not Rated; 10 Aug 26; 13:30) | CHPT (6510.TWO; NT$2845.0; 1H; 10 Aug 26; 15:00) | Chroma ATE (2360.TW; NT$2030.0; 1; 10 Aug 26; 13:30) | Co-Tech Development Corp (8358.TWO; NT$346.0; Not Rated; 10 Aug 26; 15:00) | Compal Electronics (2324.TW; NT$36.3; 3; 10 Aug 26; 13:30) | Compeq Manufacturing Co Ltd (2313.TW; NT$215.0; Not Rated; 10 Aug 26; 13:30) | Delta Electronics (2308.TW; NT$1815.0; 1; 10 Aug 26; 13:30) | Dynapack International (3211.TWO; NT$370.0; 1; 10 Aug 26; 15:00) | Egis Technology Inc (6462.TWO; NT$101.5; Not Rated; 10 Aug 26; 15:00) | Elan (2458.TW; NT$145.5; Not Rated; 10 Aug 26; 13:30) | Elite Material (2383.TW; NT$5290.0; 1; 10 Aug 26; 13:30) | Elite Semiconductor Microelectronics Technology Inc (3006.TW; NT$275.5; Not Rated; 10 Aug 26; 13:30) | eMemory Technology Inc (3529.TWO; NT$2835.0; Not Rated; 10 Aug 26; 15:00) | Episil-Precision Inc (3016.TW; NT$107.0; Not Rated; 10 Aug 26; 13:30) | Excelliance MOS Corp (5299.TWO; NT$102.0; Not Rated; 10 Aug 26; 15:00) | Faraday (3035.TW; NT$178.0; Not Rated; 10 Aug 26; 13:30) | Feedback Technology Corp (8091.TWO; NT$239.0; Not Rated; 10 Aug 26; 15:00) | Flexium Interconnect (6269.TW; NT$65.9; 2; 10 Aug 26; 13:30) | Formosa Sumco Technology Corp (3532.TW; NT$283.0; Not Rated; 10 Aug 26; 13:30) | Gemtek Technology (4906.TW; NT$35.6; Not Rated; 10 Aug 26; 13:30) | Genesys Logic Inc (6104.TWO; NT$94.5; Not Rated; 10 Aug 26; 15:00) | Genius Electronic Optical (3406.TW; NT$546.0; 3; 10 Aug 26; 13:30) | Gigabyte Technology (2376.TW; NT$349.5; 1; 10 Aug 26; 13:30) | Global Mixed Mode Technology Inc (8081.TW; NT$268.0; Not Rated; 10 Aug 26; 13:30) | Globalwafers Co (6488.TWO; NT$854.0; 1; 10 Aug 26; 15:00) | Gold Circuit Electronics (2368.TW; NT$926.0; 1; 10 Aug 26; 13:30) | Grand Process Technology Corp (3131.TWO; NT$2470.0; Not Rated; 10 Aug 26; 15:00) | Greatek Electronics Inc (2441.TW; NT$129.0; Not Rated; 10 Aug 26; 13:30) | GUC (3443.TW; NT$4530.0; 1H; 10 Aug 26; 13:30) | Gudeng Precision Industrial Co Ltd (3680.TWO; NT$446.0; Not Rated; 10 Aug 26; 15:00) | Hon Hai Precision (2317.TW; NT$264.5; 1; 10 Aug 26; 13:30) | Hon Precision (7769.TW; NT$6280.0; 1; 10 Aug 26; 13:30) | Innolux Corp (3481.TW; NT$52.3; Not Rated; 10 Aug 26; 13:30) | Inventec (2356.TW; NT$66.0; 1; 10 Aug 26; 13:30) | ITEQ Corp (6213.TW; NT$427.5; Not Rated; 10 Aug 26; 13:30) | Jentech Precision Industrial Co Ltd (3653.TW; NT$4135.0; Not Rated; 10 Aug 26; 13:30) | King Slide Works (2059.TW; NT$11905.0; Not Rated; 10 Aug 26; 13:30) | King Yuan Electronics Co (2449.TW; NT$248.5; 1; 10 Aug 26; 13:30) | Kinik Co (1560.TW; NT$688.0; Not Rated; 10 Aug 26; 13:30) | Kinsus Interconnect Technology (3189.TW; NT$836.0; 1; 10 Aug 26; 13:30) | LandMark Optoelectronics Corp (3081.TWO; NT$2535.0; Not Rated; 10 Aug 26; 15:00) | Largan Precision (3008.TW; NT$4400.0; 1; 10 Aug 26;

13:30) | Lite-On Technology (2301.TW; NT$271.5; Not Rated; 10 Aug 26; 13:30) | Lotes (3533.TW; NT$1960.0; 1; 10 Aug 26; 13:30) | M31 Technology Corp (6643.TWO; NT$441.0; Not Rated; 10 Aug 26; 15:00) | Macronix International (2337.TW; NT$133.5; Not Rated; 10 Aug 26; 13:30) | Marketech International Corp (6196.TW; NT$507.0; Not Rated; 10 Aug 26; 13:30) | Mediatek (2454.TW; NT$3960.0; 1; 10 Aug 26; 13:30) | Micro-Star (2377.TW; NT$155.0; 2; 10 Aug 26; 13:30) | Mosel Vitelic Inc (2342.TW; NT$37.1; Not Rated; 10 Aug 26; 13:30) | MPI (6223.TWO; NT$6225.0; 1H; 10 Aug 26; 15:00) | Nanya Technology (2408.TW; NT$502.0; 3; 10 Aug 26; 13:30) | Novatek (3034.TW; NT$544.0; 2; 10 Aug 26; 13:30) | NVIDIA Corp (NVDA.O; US$223.96; 1; 07 Aug 26; 16:00) | NYPCB (8046.TW; NT$1130.0; 1; 10 Aug 26; 13:30) | Panjit International Inc (2481.TW; NT$137.5; Not Rated; 10 Aug 26; 13:30) | Parade (4966.TWO; NT$600.0; Not Rated; 10 Aug 26; 15:00) | Phison Electronics (8299.TWO; NT$2040.0; Not Rated; 10 Aug 26; 15:00) | Phoenix Silicon International Corporation (8028.TW; NT$264.0; Not Rated; 10 Aug 26; 13:30) | Powertech Technology (6239.TW; NT$288.5; 1; 10 Aug 26; 13:30) | PSMC (6770.TW; NT$67.6; Not Rated; 10 Aug 26; 13:30) | Quanta Computer (2382.TW; NT$313.5; 1; 10 Aug 26; 13:30) | Realtek (2379.TW; NT$758.0; 1; 10 Aug 26; 13:30) | RichWave Technology Corp (4968.TW; NT$96.0; Not Rated; 10 Aug 26; 13:30) | Scientech Corp (3583.TW; NT$696.0; Not Rated; 10 Aug 26; 13:30) | Sercomm (5388.TW; NT$93.6; Not Rated; 10 Aug 26; 13:30) | Silergy Corp (6415.TW; NT$465.0; Not Rated; 10 Aug 26; 13:30) | Sunplus Technology Co Ltd (2401.TW; NT$27.95; Not Rated; 10 Aug 26; 13:30) | Symtek Automation Asia Co Ltd (6438.TW; NT$147.0; Not Rated; 10 Aug 26; 13:30) | Synnex Technology (2347.TW; NT$91.9; Not Rated; 10 Aug 26; 13:30) | Taiflex Scientific Co Ltd (8039.TW; NT$226.0; Not Rated; 10 Aug 26; 13:30) | Taiwan Semiconductor Co Ltd (5425.TWO; NT$84.3; Not Rated; 10 Aug 26; 15:00) | Team Group Inc (4967.TW; NT$280.5; Not Rated; 10 Aug 26; 13:30) | Topco Scientific Co Ltd (5434.TW; NT$514.0; Not Rated; 10 Aug 26; 13:30) | Transcend Information (2451.TW; NT$295.5; Not Rated; 10 Aug 26; 13:30) | Tripod Technology (3044.TW; NT$401.5; 1; 10 Aug 26; 13:30) | TSMC (2330.TW; NT$2380.0; 1; 10 Aug 26; 13:30) | TUC (6274.TWO; NT$1460.0; 1; 10 Aug 26; 15:00) | Tul Corp (6150.TWO; NT$60.6; Not Rated; 10 Aug 26; 15:00) | UMC (2303.TW; NT$123.0; 1; 10 Aug 26; 13:30) | Unimicron (3037.TW; NT$992.0; 1; 10 Aug 26; 13:30) | Unitech Printed Circuit Board Corp (2367.TW; NT$44.25; Not Rated; 10 Aug 26; 13:30) | Vanguard International Semi. (5347.TWO; NT$157.5; 1; 10 Aug 26; 15:00) | Ventec International Group Co Ltd (6672.TW; NT$251.5; Not Rated; 10 Aug 26; 13:30) | VIA Technologies Inc (2388.TW; NT$80.7; Not Rated; 10 Aug 26; 13:30) | Visual Photonics Epitaxy Co Ltd (2455.TW; NT$384.5; Not Rated; 10 Aug 26; 13:30) | Wafer Works Corp (6182.TWO; NT$93.0; Not Rated; 10 Aug 26; 15:00) | Wah Lee Industrial Corp (3010.TW; NT$122.5; Not Rated; 10 Aug 26; 13:30) | Walsin Technology Corp (2492.TW; NT$273.5; Not Rated; 10 Aug 26; 13:30) | WIN Semiconductors Corp (3105.TWO; NT$385.5; Not Rated; 10 Aug 26; 15:00) | WinWay Technology (6515.TW; NT$6830.0; 1H; 10 Aug 26; 13:30) | Wistron (3231.TW; NT$193.0; 1; 10 Aug 26; 13:30) | Wiwynn (6669.TW; NT$6010.0; 1; 10 Aug 26; 13:30) | WNC Corp (6285.TW; NT$256.0; Not Rated; 10 Aug 26; 13:30) | WPG Holdings (3702.TW; NT$130.0; Not Rated; 10 Aug 26; 13:30) | WT Micro (3036.TW; NT$229.0; 1; 10 Aug 26; 13:30) | Xintec Inc (3374.TWO; NT$337.0; Not Rated; 10 Aug 26; 15:00) | Yageo (2327.TW; NT$573.0; 1; 10 Aug 26; 13:30) | Zhen Ding Technology (4958.TW; NT$470.5; 1; 10 Aug 26; 13:30)

If you are visually impaired and would like to speak to a Citi representative regarding the details of the graphics in this document, please call USA 1-888-500-5008 (TTY: 711), from outside the US +1-210-677-3788

Appendix A-1

ANALYST CERTIFICATION

The research analysts primarily responsible for the preparation and content of this research report are either (i) designated by "AC" in the author block or (ii) listed in bold alongside content which is attributable to that analyst. If multiple AC analysts are designated in the author block, each analyst is certifying with respect to the entire research report other than (a) content attributable to another AC certifying analyst listed in bold alongside the content and (b) views expressed solely with respect to a specific issuer which are attributable to another AC certifying analyst identified in the price charts or rating history tables for that issuer shown below. Each of these analysts certify, with respect to the sections of the report for which they are responsible: (1) that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc. and its affiliates; and (2) no part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in this report.

IMPORTANT DISCLOSURES

Citigroup Global Markets Inc. or its affiliates beneficially owns 1% or more of any class of common equity securities of Dynapack International. This position reflects information available as of the prior business day.

Within the past 12 months, Citigroup Global Markets Inc. or its affiliates has acted as manager or co-manager of an offering of securities of Alphabet Inc,Amazon.com, Inc.,Gigabyte Technology,NVIDIA Corp,PSMC,Quanta Computer,Unimicron,WT Micro,Wistron,Zhen Ding Technology.

Citigroup Global Markets Inc. or its affiliates has received compensation for investment banking services provided within the past 12 months from ASMedia,AUO,Advanced Micro Devices,Alphabet Inc,Amazon.com, Inc.,Gigabyte Technology,Hon Hai Precision,NVIDIA Corp,PSMC,Quanta Computer,TSMC,UMC,Unimicron,WT Micro,Wistron,Zhen Ding Technology.

Citigroup Global Markets Inc. or its affiliates expects to receive or intends to seek, within the next three months, compensation for investment banking services from ASUSTeK Computer,Alphabet Inc,Hon Hai Precision,WT Micro,Wistron.

Citigroup Global Markets Inc. or its affiliates received compensation for products and services other than investment banking services from ASE Technology Holding,ASMedia,ASUSTeK Computer,AUO,Accton,Advanced Energy Solution,Advanced Micro Devices,Alchip,Alphabet Inc,Amazon.com, Inc.,Asia Vital Components,Aspeed Technology,Auras Technology,CHPT,Chipbond Technology,Compal Electronics,Delta Electronics,GUC,Genius Electronic Optical,Gigabyte Technology,Globalwafers Co,Gold Circuit Electronics,Hon Hai Precision,Inventec,KINIK COMPANY,King Yuan Electronics Co,Largan Precision,Lotes ,Mediatek,Micro-Star,NVIDIA Corp,NYPCB,Nanya Technology,PSMC,Quanta Computer,Realtek,TSMC,Tripod Technology,UMC,Vanguard International Semi.,WPG HOLDINGS LIMITED,WT Micro,WinWay Technology,Wistron,Wiwynn,Yageo,Zhen Ding Technology in the past 12 months.

Citigroup Global Markets Inc. or its affiliates currently has, or had within the past 12 months, the following as investment banking client(s): ASMedia,ASUSTeK Computer,AUO,Advanced Micro Devices,Alphabet Inc,Amazon.com, Inc.,Gigabyte Technology,Hon Hai Precision,NVIDIA Corp,PSMC,Quanta Computer,TSMC,UMC,Unimicron,WT Micro,Wistron,Zhen Ding Technology.

Citigroup Global Markets Inc. or its affiliates currently has, or had within the past 12 months, the following as clients, and the services provided were non-investment-banking, securities-related: ASE Technology Holding,ASUSTeK Computer,AUO,Advanced Energy Solution,Advanced Micro Devices,Alphabet Inc,Amazon.com, Inc.,Asia Vital Components,Aspeed Technology,Auras Technology,CHPT,Chipbond Technology,Compal Electronics,Delta Electronics,GUC,Gigabyte Technology,Globalwafers Co,Gold Circuit Electronics,Hon Hai Precision,Inventec,Lotes ,Mediatek,Micro-Star,NVIDIA Corp,NYPCB,Nanya Technology,PSMC,Quanta Computer,Realtek,TSMC,Tripod Technology,UMC,WT Micro,WinWay Technology,Wistron,Wiwynn,Yageo,Zhen Ding Technology.

Citigroup Global Markets Inc. or its affiliates currently has, or had within the past 12 months, the following as clients, and the services provided were non-investment-banking, non-securities-related: ASE Technology Holding,ASMedia,ASUSTeK Computer,AUO,Accton,Advanced Energy Solution,Advanced Micro Devices,Alchip,Alphabet Inc,Amazon.com, Inc.,Asia Vital Components,Aspeed Technology,Auras Technology,CHPT,Chipbond Technology,Compal Electronics,Delta Electronics,GUC,Genius Electronic Optical,Gigabyte Technology,Globalwafers Co,Gold Circuit Electronics,Hon Hai Precision,Inventec,KINIK COMPANY,King Yuan Electronics Co,Largan Precision,Lotes ,Mediatek,Micro-Star,NVIDIA Corp,NYPCB,Nanya Technology,PSMC,Quanta Computer,Realtek,TSMC,Tripod Technology,UMC,Vanguard International Semi.,WPG HOLDINGS LIMITED,WT Micro,WinWay Technology,Wistron,Wiwynn,Yageo,Zhen Ding Technology.

Citigroup Global Markets Inc. and/or its affiliates has a significant financial interest in relation to Advanced Micro Devices,Alphabet Inc,Amazon.com, Inc.,Mediatek,NVIDIA Corp,TSMC. (For an explanation of the determination of significant financial interest, please refer to the policy for managing conflicts of interest which can be found at www.citiVelocity.com.)

Analysts' compensation is determined by Citi Research management and Citigroup's senior management and is based upon activities and services intended to benefit the investor clients of Citigroup Global Markets Inc. and its affiliates (the "Firm"). Compensation is not linked to specific transactions or recommendations. Like all Firm employees, analysts receive compensation that is impacted by overall Firm profitability which includes investment banking, sales and trading, and principal trading revenues. One factor in equity research analyst compensation is arranging corporate access events between institutional clients and the management teams of covered companies. Typically, company management is more likely to participate when the analyst has a positive view of the company.

For financial instruments recommended in the Product in which the Firm is not a market maker, the Firm is a liquidity provider in such financial instruments (and any underlying instruments) and may act as principal in connection with transactions in such instruments. The Firm is a regular issuer of traded financial instruments linked to securities that may have been recommended in the Product. The Firm regularly trades in the securities of the issuer(s) discussed in the Product. The Firm may engage in securities transactions in a manner inconsistent with the Product and, with respect to securities covered by the Product, will buy or sell from customers on a principal basis.

Unless stated otherwise neither the Research Analyst nor any member of their team has viewed the material operations of the Companies for which an investment view has been provided within the past 12 months.

For important disclosures (including copies of historical disclosures) regarding the companies that are the subject of this Citi Research product ("the Product"), please contact Citi Research, 388 Greenwich Street, 6th Floor, New York, NY, 10013, Attention: Legal/Compliance [E6WYB6412478]. In addition, the same important disclosures, with the exception of the Valuation and Risk assessments and historical disclosures, are contained on the Firm's disclosure website at https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures. Valuation and Risk assessments can be found in the text of the most recent research note/report regarding the subject company. Pursuant to the Market Abuse Regulation a history of all Citi Research recommendations published during the preceding 12-month period can be accessed via Citi Velocity (https://www.citivelocity.com/cv2) or your standard distribution portal. Historical disclosures (for up to the past three years) will be provided upon request.

Citi Research Equity Ratings Distribution

	12 Month Rating			**Catalyst Watch**		
Data current as of 01 Jul 2026	**Buy**	**Hold**	**Sell**	**Buy**	**Hold**	**Sell**
Citi Research Global Fundamental Coverage (Neutral=Hold)	61%	32%	7%	36%	48%	16%
% of companies in each rating category that are investment banking clients	38%	42%	27%	42%	37%	36%

Guide to Citi Research Fundamental Research Investment Ratings:
Citi Research stock recommendations include an investment rating and an optional risk rating to highlight high risk stocks.
Risk rating takes into account both price volatility and fundamental criteria. Stocks will either have no risk rating or a High risk rating assigned.
Investment Ratings: Citi Research investment ratings are Buy, Neutral and Sell. Our ratings are a function of analyst expectations of expected total return ("ETR") and risk. ETR is the sum of the forecast price appreciation (or depreciation) plus the dividend yield for a stock within the next 12 months. The target price is based on a 12 month time horizon. The Investment rating definitions are: Buy (1) ETR of 15% or more or 25% or more for High risk stocks; and Sell (3) for negative ETR. Any covered stock not assigned a Buy or a Sell is a Neutral (2). For stocks rated Neutral (2), if an analyst believes that there are insufficient valuation drivers and/or investment catalysts to derive a positive or negative investment view, they may elect with the approval of Citi Research management not to assign a target price and, thus, not derive an ETR. Citi Research may suspend its rating and target price and assign "Rating Suspended" status for regulatory and/or internal policy reasons. Citi Research may also suspend its rating and target price and assign "Under Review" status for other exceptional circumstances (e.g. lack of information critical to the analyst's thesis, trading suspension) affecting the company and/or trading in the company's securities. In both such situations, the rating and target price will show as "—" and "-" respectively in the rating history price chart. Prior to 11 April 2022 Citi Research assigned "Under Review" status to both situations and prior to 11 Nov 2020 only in exceptional circumstances. As soon as practically possible, the analyst will publish a note re-establishing a rating and investment thesis. Investment ratings are determined by the ranges described above at the time of initiation of coverage, a change in investment and/or risk rating, or a change in target price (subject to limited management discretion). At times, the expected total returns may fall outside of these ranges because of market price movements and/or other short-term volatility or trading patterns. Such interim deviations will be permitted but will become subject to review by Research Management. Your decision to buy or sell a security should be based upon your personal investment objectives and should be made only after evaluating the stock's expected performance and risk.

Catalyst Watch/Short Term Views ("STV") Ratings Disclosure:
Catalyst Watch and STV Upside/Downside calls: Citi Research may also include a Catalyst Watch or STV Upside or Downside call to indicate the analyst expects the share price to rise (fall) in absolute terms over a specified period of 30 or 90 days in reaction to one or more specific near-term catalysts or events impacting the company or the market. A Catalyst Watch will be published when Analyst confidence is high that an impact to share price will occur; it will be a STV when confidence level is moderate. A Catalyst Watch or STV Upside/Downside call will automatically expire at the end of the specified 30/90 day period. The Catalyst Watch will also be automatically removed if share price performance (calculated at market close) exceeds 15% against the direction of the call (unless over-ridden by the analyst). The analyst may also remove a Catalyst Watch or STV call prior to the end of the specified period in a published research note. A Catalyst Watch/STV Upside or Downside call may be

different from and does not affect a stock's fundamental equity rating, which reflects a longer-term total absolute return expectation. For purposes of FINRA ratings-distribution-disclosure rules, a Catalyst Watch/STV Upside call corresponds to a buy recommendation and a Catalyst Watch/STV Downside call corresponds to a sell recommendation. Any stock not assigned to a Catalyst Watch Upside, Catalyst Watch Downside, STV Upside, or STV Downside call is considered Catalyst Watch/STV No View. For purposes of FINRA ratings distribution-disclosure rules, we correspond Catalyst Watch/STV No View to Hold in our ratings distribution table for our Catalyst Watch/STV Upside/Downside rating system. However, we reiterate that we do not consider No View to be a recommendation. For all Catalyst Watch/STV Upside/Downside calls, risk exists that the catalyst(s) and associated share-price movement will not materialize as expected.

RESEARCH ANALYST AFFILIATIONS / NON-US RESEARCH ANALYST DISCLOSURES

The legal entities employing the authors of this report are listed below (and their regulators are listed further herein). Non-US research analysts who have prepared this report (i.e., all research analysts listed below other than those identified as employed by Citigroup Global Markets Inc.) are not registered/qualified as research analysts with FINRA. Such research analysts may not be associated persons of the member organization (but are employed by an affiliate of the member organization) and therefore may not be subject to the FINRA Rule 2241 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

Citigroup Global Markets Taiwan Securities Company Limited	Angela Hsu; Jack Chen; Michael Hung; Laura (Chia Yi) Chen; Nicholas Lai

OTHER DISCLOSURES

Any price(s) of instruments mentioned in recommendations are as of the prior day's market close on the primary market for the instrument, unless otherwise stated.

The completion and first dissemination of any recommendations made within this research report are as of the Eastern date-time displayed at the top of the Product. If the Product references views of other analysts then please refer to the price chart or rating history table for the date/time of completion and first dissemination with respect to that view.

Regulations in various jurisdictions require that where a recommendation differs from any of the author's previous recommendations concerning the same financial instrument or issuer that has been published during the preceding 12-month period that the change(s) and the date of that previous recommendation are indicated. For fundamental coverage please refer to the price chart or rating change history within this disclosure appendix or the issuer disclosure summary at https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures.

Citi Research has implemented policies for identifying, considering and managing potential conflicts of interest arising as a result of publication or distribution of investment research. A description of these policies can be found at https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures.

The proportion of all Citi Research research recommendations that were the equivalent to "Buy","Hold","Sell" at the end of each quarter over the prior 12 months (with the % of these that had received investment firm services from Citi in the prior 12 months shown in brackets) is as follows; Q1 2026 Buy 33%(63%), Hold 44% (52%), Sell 23% (46%), RV 0.5% (89%): Q4 2025 Buy 33% (63%), Hold 44% (50%), Sell 23% (46%), RV 0.4% (91%); Q3 2025 Buy 33% (61%), Hold 44% (52%), Sell 23% (50%), RV 0.4% (80%); Q2 2025 Buy 33%(63%), Hold 44% (51%), Sell 23% (49%), RV 0.4% (86%). For the purposes of disclosing recommendations other than for equity (whose definitions can be found in the corresponding disclosure sections), "Buy" means a positive directional trade idea; "Sell" means a negative directional trade idea; and "Relative Value" means any trade idea which does not have a clear direction to the investment strategy.

European regulations require a 5 year price history when past performance of a security is referenced. CitiVelocity's Charting Tool (https://www.citivelocity.com/cv2/#go/CHARTING_3_Equities) provides the facility to create customisable price charts including a five year option. This tool can be found in the Data & Analytics section under any of the asset class menus in CitiVelocity (https://www.citivelocity.com/). For further information contact CitiVelocity support (https://www.citivelocity.com/cv2/go/CLIENT_SUPPORT). The source for all referenced prices, unless otherwise stated, is DataCentral, which sources price information from LSEG Data & Analytics. Past performance is not a guarantee or reliable indicator of future results. Forecasts are not a guarantee or reliable indicator of future performance.

Investors should always consider the investment objectives, risks, and charges and expenses of an ETF carefully before investing. The applicable prospectus and key investor information document (as applicable) for an ETF should contain this and other information about such ETF. It is important to read carefully any such prospectus before investing. Clients may obtain prospectuses and key investor information documents for ETFs from the applicable distributor or authorized participant, the exchange upon which an ETF is listed and/or from the applicable website of the applicable ETF issuer. The value of the investments and any accruing income may fall or rise. Any past performance, prediction or forecast is not indicative of future or likely performance. Any information on ETFs contained herein is provided strictly for illustrative purposes and should not be deemed an offer to sell or a solicitation of an offer to purchase units of any ETF either explicitly or implicitly. The opinions expressed are those of the authors and do not necessarily reflect the views of ETF issuers, any of their agents or their affiliates.

Citigroup Global Markets India Private Limited and/or its affiliates may have, from time to time, actual or beneficial ownership of 1% or more in the debt securities of the subject issuer.

Please be advised that pursuant to Executive Order 13959 as amended (the "Order"), U.S. persons are prohibited from investing in securities of any company determined by the United States Government to be the subject of the Order. This research is not intended to be used or relied upon in any way that could result in a violation of the Order. Investors are encouraged to rely upon their own legal counsel for advice on compliance with the Order and other economic sanctions programs administered and enforced by the Office of Foreign Assets Control of the U.S. Treasury Department.

This communication is directed at persons who are "Eligible Clients" as such term is defined in the Israeli Regulation of Investment Advice, Investment Marketing and Investment Portfolio Management law, 1995 (the "Advisory Law"). Within Israel, this communication is not intended for retail clients and Citi will not make such products or transactions available to retail clients or to non-Eligible Clients. The presenter is not licensed as investment advisor or investment marketer by the Israeli Securities Authority (“ISA”) and this communication does not constitute investment or marketing advice. The information contained herein may relate to matters that are not regulated by the ISA. Any securities which are the subject of this communication may not be offered or sold to any Israeli person except pursuant to a security offering exemption according to the Israeli Securities Law, 1968and the public offering rules provided thereunder.

Citi Research broadly and simultaneously disseminates its research content to the Firm’s institutional and retail clients via the Firm’s proprietary electronic distribution platforms (e.g., Citi Velocity and various Global Wealth platforms). As a convenience, certain, but not all, research content may be distributed through third party aggregators. Clients may receive published research reports by email, on a discretionary basis, and only after such research content has been broadly disseminated. Certain research is made available only to institutional investors to satisfy regulatory requirements. The level and types of services provided by Citi Research analysts to clients may vary depending on various factors such as the client’s individual preferences as to the frequency and manner of receiving communications from analysts, the client’s risk profile and investment focus and perspective (e.g. market-wide, sector specific, long term, short-term etc.), the size and scope of the overall client relationship with the Firm and legal and regulatory constraints.

Pursuant to Comissão de Valores Mobiliários Resolução 20 and ASIC Regulatory Guide 264, Citi is required to disclose whether a Citi related company or business has a commercial relationship with the subject company. Considering that Citi operates multiple businesses in more than 100 countries around the world, it is likely that Citi has a commercial relationship with the subject company.

Securities recommended, offered, or sold by the Firm: (i) are not insured by the Federal Deposit Insurance Corporation; (ii) are not deposits or other obligations of any insured depository institution (including Citibank); and (iii) are subject to investment risks, including the possible loss of the principal amount invested. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security. Any decision to purchase securities mentioned in the Product must take into account existing public information on such security or any registered prospectus. Although information has been obtained from and is based upon sources that the Firm believes to be reliable, we do not guarantee its accuracy and it may be incomplete and condensed. Note, however, that the Firm has taken all reasonable steps to determine the accuracy and completeness of the disclosures made in the Important Disclosures section of the Product. The Firm's research department has received assistance from the subject company(ies) referred to in this Product including, but not limited to, discussions with management of the subject company(ies). Firm policy prohibits research analysts from sending draft research to subject companies. However, it should be presumed that the author of the Product has had discussions with the subject company to ensure factual accuracy prior to publication. Statements and views concerning ESG (environmental, social, governance) factors are typically based upon public statements made by the affected company or other public news, which the author may not have independently verified. ESG factors are one consideration that investors may choose to examine when making investment decisions. All opinions, projections and estimates constitute the judgment of the author as of the date of the Product and these, plus any other information contained in the Product, are subject to change without notice. Prices and availability of financial instruments also are subject to change without notice. Notwithstanding other departments within the Firm advising the companies discussed in this Product, information obtained in such role is not used in the preparation of the Product. Although Citi Research does not set a predetermined frequency for publication, if the Product is a fundamental equity or credit research report, it is the intention of Citi Research to provide research coverage of the covered issuers, including in response to news affecting the issuer. For non-fundamental research reports, Citi Research may not provide regular updates to the views, recommendations and facts included in the reports. Notwithstanding that Citi Research maintains coverage on, makes recommendations concerning or discusses issuers, Citi Research may be periodically restricted from referencing certain issuers due to legal or policy reasons. Where a component of a published trade idea is subject to a restriction, the trade idea will be removed from any list of open trade ideas included in the Product. Upon the lifting of the restriction, the trade idea will either be re-instated in the open trade ideas list if the analyst continues to support it or it will be officially closed. Citi Research may provide different research products and services to different classes of customers (for example, based upon long-term or short-term investment horizons) that may lead to differing conclusions or recommendations that could impact the price of a security contrary to the recommendations in the alternative research product, provided that each is consistent with the rating system for each respective product.

Investing in non-U.S. securities, including ADRs, may entail certain risks. The securities of non-U.S. issuers may not be registered with, nor be subject to the reporting requirements of the U.S. Securities and Exchange Commission. There may be limited information available on foreign securities. Foreign companies are generally not subject to uniform audit and reporting standards, practices and requirements comparable to those in the U.S. Securities of some foreign companies may be less liquid and their prices more volatile than securities of comparable U.S. companies. In addition, exchange rate movements may have an adverse effect on the value of an investment in a foreign stock and its corresponding dividend payment for U.S. investors. Net dividends to ADR investors are estimated, using withholding tax rates conventions, deemed accurate, but investors are urged to consult their tax advisor for exact dividend computations. Investors who have received the Product from the Firm may be prohibited in certain states or other jurisdictions from purchasing securities mentioned in the Product from the Firm. Please ask your Financial Consultant for additional details. Citigroup Global Markets Inc. takes responsibility for the Product in the United States. Any orders by US investors resulting from the information contained in the Product may be placed only through Citigroup Global Markets Inc.

The Citigroup legal entity that takes responsibility for the production of the Product is the legal entity which the first named author is employed by.

The Product is made available in **Australia** through Citigroup Global Markets Australia Pty Limited. (ABN 64 003 114 832 and AFSL No. 240992), participant of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. Citigroup Global Markets Australia Pty Limited is not an Authorised Deposit-Taking Institution under the Banking Act 1959, nor is it regulated by the Australian Prudential Regulation Authority.

The Product is made available in **Brazil** by Citigroup Global Markets Brasil - CCTVM SA, which is regulated by CVM - Comissão de Valores Mobiliários ("CVM"), BACEN - Brazilian Central Bank, APIMEC - Associação dos Analistas e Profissionais de Investimento do Mercado de Capitais and ANBIMA – Associação Brasileira das Entidades dos Mercados Financeiro e de Capitais. Av. Paulista, 1111 - 14º andar(parte) - CEP: 01311920 - São Paulo - SP.

This Product is available in **Chile** through Banchile Corredores de Bolsa S.A., an indirect subsidiary of Citigroup Inc., which is regulated by the Comisión Para El Mercado Financiero. Enrique Foster Sur, 20, piso 6, Las Condes, Santiago, Chile.

Disclosure for investors in the Republic of Colombia :This communication or message does not constitute a professional recommendation to make investment in the terms of article 2.40.1.1.2 of Decree 2555 de 2010 or the regulations that modify, substitute or complement it. Para la elaboración y distribución de informes de investigación y de comunicaciones generales de que trata este artículo no se requiere ser una entidad vigilada por la Superintendencia Financiera de Colombia.

The Product is made available in **Germany** by Citigroup Global Markets Europe AG ("CGME"), which is regulated by the European Central Bank and the German Federal Financial Supervisory Authority (Bundesanstalt fur Finanzdienstleistungsaufsicht BaFin). Börsenplatz 9, 60313 Frankfurt am Main, Germany.

Unless otherwise specified, if the analyst who prepared this report is based in Hong Kong and it relates to “securities” (as defined in the Securities and Futures Ordinance (Cap.571 of the Laws of Hong Kong)), the report is issued in Hong Kong by Citigroup Global Markets Asia Limited. Citigroup Global Markets Asia Limited is regulated by Hong Kong Securities and Futures Commission. If the report is prepared by a non-Hong Kong based analyst, please note that such analyst (and the legal entity that the analyst is employed by or accredited to) is not licensed/registered in Hong Kong and they do not hold themselves out as such. Please refer to the section “Research Analyst Affiliations / Non-US Research Analyst Disclosures” for the details of the employment entity of the analysts.

The Product is made available in **India** by Citigroup Global Markets India Private Limited (CGM), which is regulated by the Securities and Exchange Board of India (SEBI), as a Research Analyst (SEBI Registration No. INH000000438). CGM is also actively involved in the business of merchant banking (SEBI Registration No. INM000010718) and stock brokerage ((SEBI Registration No. INZ000263033) in India, and is registered with SEBI in this regard. Registration granted by SEBI, enlistment with Bombay Stock Exchange (BSE) and certification from National Institute of Securities Markets (NISM) in no way guarantee performance of the intermediary or provide any assurance of returns to investors. CGM’s registered office is at 1202, 12th Floor, First International Financial Centre (FIFC), G Block, Bandra Kurla Complex, Bandra East, Mumbai – 400098 & registered Tel: +91 22 61759999. Citi maintains robust policies, procedures,controls, and training to ensure continued compliance with all applicable rulesand regulations. All recommendations contained herein are made by dulyqualified research analysts. CGM’s Corporate Identity Number is U99999MH2000PTC126657, and its Compliance Officer [Vishal Bohra] contact details are: Tel:+91-022-61759994, Fax:+91-022-61759851, Email: cgmcompliance@citi.com. The Investor Charter in respect of Research Analysts, the Compliance Audit Report and Complaints information can be found at https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures. The grievance officer [Niraj Mody] contact details are Tel: +91-22-42775002, Email: EMEA.CR.Complaints@citi.com. Investment in securities market are subject to market risks. Read all the related documents carefully before investing. SEBI prescribed Client Terms & Conditions can be found at https://www.citivelocity.com/rendition/authfilelinksvcs/eppublic/V1/file?paramData=ZmlsZU5hbWU9L1MzL0dETVMvcHViRGlzY2xvc3VyZUh0bWxzL2dkbV9kaXNfc2ViaV9UZXJtc29mVXNlLmh0bWw

The Product is made available in **Indonesia** through PT Citigroup Sekuritas Indonesia. Citibank Tower 10/F, Pacific Century Place, SCBD lot 10, Jl. Jend Sudirman Kav 52-53, Jakarta 12190, Indonesia. Neither this Product nor any copy hereof may be distributed in Indonesia or to any Indonesian citizens wherever they are domiciled or to Indonesian residents except in compliance with applicable capital market laws and regulations. This Product is not an offer of securities in Indonesia. The securities referred to in this Product have not been registered with the Capital Market and Financial Services Authority (OJK) pursuant to relevant capital market laws and regulations, and may not be offered or sold within the territory of the Republic of Indonesia or to Indonesian citizens through a public offering or in circumstances which constitute an offer within the meaning of the Indonesian capital market laws and regulations.

The Product is made available in **Japan** by Citigroup Global Markets Japan Inc. ("CGMJ"), which is regulated by Financial Services Agency, Securities and Exchange Surveillance Commission, Japan Securities Dealers Association, Tokyo Stock Exchange and Osaka Securities Exchange. Otemachi Park Building, 1-1-1 Otemachi, Chiyoda-ku, Tokyo 100-8132 Japan. In the event that an error is found in an CGMJ research report, a revised version will be posted on the Firm's Citi Velocity website. If you have questions regarding Citi Velocity, please call (81 3) 6270-3019 for help.

The product is made available in the **Kingdom of Saudi Arabia** in accordance with Saudi laws through Citigroup Saudi Arabia, which is regulated by the Capital Market Authority (CMA) under CMA license (17184-31). 2239 Al Urubah Rd – Al Olaya Dist. Unit No. 18, Riyadh 12214 – 9597, Kingdom Of Saudi Arabia.

The Product is made available in **Korea** by Citigroup Global Markets Korea Securities Ltd. (CGMK), which is regulated by the Financial Services Commission, the Financial Supervisory Service and the Korea Financial Investment Association (KOFIA). The address of CGMK is Citibank Center, 50 Saemunan-ro, Jongno-gu, Seoul 03184, Korea. KOFIA makes available registration information of research analysts on its website. Please visit the following website if you wish to find KOFIA registration information on research analysts of CGMK. http://dis.kofia.or.kr/websquare/index.jsp?w2xPath=/wq/fundMgr/DISFundMgrAnalystList.xml&divisionId=MDIS03002002000000&serviceId=SDIS03002002000. The Product is made available in Korea by Citibank Korea Inc., which is regulated by the Financial Services Commission and the Financial Supervisory Service. Address is Citibank Center, 50 Saemunan-ro, Jongno-gu, Seoul 03184, Korea. This research report is intended to be provided only to Professional Investors as defined in the Financial Investment Services and Capital Market Act and its Enforcement Decree in Korea.

The Product is made available in **Malaysia** by Citigroup Global Markets Malaysia Sdn Bhd (Registration No. 199801004692 (460819-D)) ("CGMM") to its clients and CGMM takes responsibility for its contents as regards CGMM's clients. CGMM is regulated by the Securities Commission Malaysia. Please contact CGMM at Level 43 Menara Citibank, 165 Jalan Ampang, 50450 Kuala Lumpur, Malaysia in respect of any matters arising from, or in connection with, the Product.

The Product is made available in **Mexico** by Citi México Casa de Bolsa, S.A. de C.V., Grupo Financiero Citi México which is a wholly owned subsidiary of Citigroup Inc. and is regulated by Comision Nacional Bancaria y de Valores. Prolongación Reforma 1196, 24 floor, Colonia Santa Fe, Alcaldía Cuajimalpa de Morelos, C.P. 05348, Ciudad de México.

The Product is made available in **Poland** by Biuro Maklerskie Banku Handlowego (DMBH), separate department of Bank Handlowy w Warszawie S.A. a subsidiary of Citigroup Inc., which is regulated by Komisja Nadzoru Finansowego. Biuro Maklerskie Banku Handlowego (DMBH), ul.Senatorska 16, 00-923 Warszawa.

The Product is made available in **Singapore** through Citigroup Global Markets Singapore Pte. Ltd. ("CGMSPL"), a capital markets services and Exempt Financial Advisor license holder, and regulated by Monetary Authority of Singapore. Please contact CGMSPL at 8 Marina View, 21st Floor Asia Square Tower 1, Singapore 018960, in respect of any matters arising from, or in connection with, the analysis of this document. This Product is intended for recipients who are accredited, expert and institutional investors as defined under the Securities and Futures Act 2001. For Citi Private Bank, the Product is made available in Singapore by Citi Private Bank through Citibank, N.A., Singapore Branch. Citibank N.A., Singapore Branch is a licensed bank in Singapore that is regulated by the Monetary Authority of Singapore. Please contact your Private Banker in Citibank N.A., Singapore Branch if you have any queries on or any matters arising from or in connection with this document. The Product is intended for recipients who are accredited, expert and institutional investors as defined under the Securities and Futures Act 2001. For Citibank Singapore Limited ("CSL"), the Product is distributed in Singapore by CSL to selected Citigold/Citigold Private Clients. CSL provides no independent research or analysis of the substance or in preparation of the Product. Please contact your Citigold//Citigold Private Client Relationship Manager in CSL if you have any queries on or any matters arising from or in connection with this document. The Product is intended for recipients who are accredited investors as defined under the Securities and Futures Act (Cap. 289).

Citigroup Global Markets (Pty) Ltd. is incorporated in the **Republic of South Africa** (company registration number 2000/025866/07) and its registered office is at 145 West Street, Sandton, 2196, Saxonwold. Citigroup Global Markets (Pty) Ltd. is regulated by JSE Securities Exchange South Africa, South African Reserve Bank and the Financial Services Board. The investments and services contained herein are not available to private customers in South Africa.

The Product is made available in the **Republic of China (Taiwan)** through Citigroup Global Markets Taiwan Securities Company Ltd. ("CGMTS"), 14F, 15F and 16F, No. 1, Songzhi Road, Taipei 110, Taiwan, subject to the license scope and the applicable laws and regulations in the Republic of China (Taiwan). CGMTS is regulated by the Securities and Futures Bureau of the Financial Supervisory Commission of Taiwan, the Republic of China (Taiwan). No portion of the Product may be reproduced or quoted in the Republic of China (Taiwan) by the press or any third parties [without the written authorization of CGMTS]. Pursuant to the applicable laws and regulations in the Republic of China (Taiwan), the recipient of the Product shall not take advantage of such Product to involve in any matters in which the recipient may have conflicts of interest. If the Product covers securities which are not allowed to be offered or traded in the Republic of China (Taiwan), neither the Product nor any information contained in the Product shall be considered as advertising the securities or making recommendation of the securities in the Republic of China (Taiwan). The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security or financial products. Any decision to purchase securities or financial products mentioned in the Product must take into account existing public information on such security or the financial products or any registered prospectus.

The Product is made available in **Thailand** through Citicorp Securities (Thailand) Ltd., which is regulated by the Securities and Exchange Commission of Thailand. 399 Interchange 21 Building, 18th Floor, Sukhumvit Road, Klongtoey Nua, Wattana ,Bangkok 10110, Thailand.

Disclosure for investors in the Republic of Turkey: The Product is made available in **Turkey** through Citibank AS which is regulated by Capital Markets Board. Tekfen Tower, Eski Buyukdere Caddesi # 209 Kat 2B, 23294 Levent, Istanbul, Turkey. Under Capital Markets Law of Turkey (Law No: 6362), the investment information, comments and recommendations stated here, are not within the scope of investment advisory activity. Comments and recommendations stated here rely on the individual opinions of the ones providing these comments and recommendations. These opinions may not fit to your financial status, risk and return preferences. For this reason, to make an investment decision by relying solely to this information stated here may not bring about outcomes that fit your expectations. Furthermore, Citi Research is a division of Citigroup Global Markets Inc. (the “Firm”), which does and seeks to do business with companies and/or trades on securities covered in this research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report, however investors should also note that the Firm has in place organisational and administrative arrangements to manage potential conflicts of interest of this nature.

In the **U.A.E**, these materials (the "Materials") are communicated byCitigroup Global Markets Limited, DIFC branch ("CGML"), an entityregistered in the Dubai International Financial Center ("DIFC") andlicensed and regulated by the Dubai Financial Services Authority ("DFSA",license #CL0221) to Professional Clients and Market Counterparties, as definedin DFSA regulations, only and should not be relied upon or distributed toRetail Clients. Financial products and/or services to which the Materialsrelate will only be made available to Professional Clients and MarketCounterparties. Citigroup Global Markets Limited DIFC Branch registered addressis Level 3, Gate District Building 02, Dubai International Financial Centre andcan be contacted on +971 4 509 97 90.

The Product is made available in **United Kingdom** by Citigroup Global Markets Limited, which is authorised by the Prudential Regulation Authority (“PRA”) and regulated by the Financial Conduct Authority (“FCA”) and the PRA. This material may relate to investments or services of a person outside of the UK or to other matters which are not authorised by the PRA nor regulated by the FCA and the PRA and further details as to where this may be the case are available upon request in respect of this material. Citigroup Centre, Canada Square, Canary Wharf, London, E14 5LB.

The Product is made available in **United States** and **Canada** by Citigroup Global Markets Inc., which is a member of FINRA and registered with the US Securities and Exchange Commission. 388 Greenwich Street, New York, NY 10013.

Unless specified to the contrary, within EU Member States, the Product is made available by Citigroup Global Markets Europe AG ("CGME"), which is regulated by the European Central Bank and the German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht-BaFin).

The Product is not to be construed as providing investment services in any jurisdiction where the provision of such services would not be permitted.

Subject to the nature and contents of the Product, the investments described therein are subject to fluctuations in price and/or value and investors may get back less than originally invested. Certain high-volatility investments can be subject to sudden and large falls in value that could equal or exceed the amount invested.The yield and average life of CMOs (collateralized mortgage obligations) referenced in this Product will fluctuate depending on the actual rate at which mortgage holders prepay the mortgages underlying the CMO and changes in current interest rates. Any government agency backing of the CMO applies only to the face value of the CMO and not to any premium paid. Certain investments contained in the Product may have tax implications for private customers whereby levels and basis of taxation may be subject to change. If in doubt, investors should seek advice from a tax adviser. The Product does not purport to identify the nature of the specific market or other risks associated with a particular transaction. Advice in the Product is general and should not be construed as personal advice given it has been prepared without taking account of the objectives, financial situation or needs of any particular investor. Accordingly, investors should, before acting on the advice, consider the appropriateness of the advice, having regard to their objectives, financial situation and needs. Prior to acquiring any financial product, it is the client's responsibility to obtain the relevant offer document for the product and consider it before making a decision as to whether to purchase the product.

Card Insights. Where this report references Card Insights data, Card Insights consists of selected data from a subset of Citi’s proprietary credit card transactions. Such data has undergone rigorous security protocols to keep all customer information confidential and secure; the data is highly aggregated and anonymized so that all unique customer identifiable information is removed from the data prior to receipt by the report’s author or distribution to external parties. This data should be considered in the context of other economic indicators and publicly available information. Further, the selected data represents only a subset of Citi’s proprietary credit card transactions due to the selection methodology or other limitations and should not be considered as indicative or predictive of the past or future financial performance of Citi or its credit card business.

Citi Research product may source data from dataCentral. dataCentral is a Citi Research proprietary database, which includes the Firm's estimates, data from company reports and feeds from LSEG Data & Analytics. The source for all referenced prices, unless otherwise stated, is DataCentral. Past performance is not a guarantee or reliable indicator of future results. Forecasts are not a guarantee or reliable indicator of future performance. The printed and printable version of the research report may not include all the information <(e.g. certain financial summary information and comparable company data) that is linked to the online version available on the Firm's proprietary electronic distribution platforms.

Where included in this report, MSCI sourced information is the exclusive property of Morgan Stanley Capital International Inc. (MSCI). Without prior written permission of MSCI, this information and any other MSCI intellectual property may not be reproduced, redisseminated or used to create any financial products, including any indices. This information is provided on an "as is" basis. The user assumes the entire risk of any use made of this information. MSCI, its affiliates and any third party involved in, or related to, computing or compiling the information 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 information have any liability for any damages of any kind. MSCI, Morgan Stanley Capital International and the MSCI indexes are services marks of MSCI and its affiliates. Where data is attributed to Morningstar that data is © 2026 Morningstar, Inc. All Rights Reserved. That information: (1) is proprietary to Morningstar and/or its content providers; (2) may