BofA SECURITIES

Global Memory Tech

Weekly theme: post J-curve cycle, Micron vs Samsung/Hynix, strong exports

Industry Overview

Moving beyond J-curve, with no hard landing

We believe the memory cycle will move beyond the J-shaped phase of sequential growth as of 4Q26. This is consistent with Micron's recent results and new guidance: sales rose 31% QoQ in the Aug'26 quarter, vs 74% in the May'26 quarter, and are guided to rise only 13.5% in the Nov'26 quarter. This trend may be used for the bearish thesis (memory sector), but fundamental upside remains high for three reasons: 1) high margins – Micron guided to an 86% gross margin for the Nov'26 quarter despite sharply lower QoQ sales growth and rising employee incentives; 2) low P/E multiples – just 5-7x for most memory stocks, even on 2028E EPS; and 3) record-high buybacks or cash dividends. Like Asian memory chipmakers, Micron appears to believe that the memory shortage could become more severe through 2027 (vs new chip demand), despite additional fabs coming online across Asia and the US. Net-net, growth deceleration should not be a concern as long as sales/OP at 10x the levels of the 2018/21 upturns prove sustainable, as indicated by Micron's results and guidance.

Similarities and differences: Micron vs Samsung/Hynix

We also learned that Micron's six strategies broadly align with those of Samsung Electronics and SK Hynix: 1) active shareholder returns; 2) increasing LTAs with a more diversified customer base, including Big Tech and OEMs; 3) new fab construction but limited wafer-capacity expansion because of longer manufacturing cycle times; 4) chip supply that remains insufficient relative to long-term demand; 5) stable ASPs, with top-line growth driven more by volume than by aggressive DRAM/NAND price increases; 6) and a strong commitment to HBM, with significant capacity expansion vs conventional DRAM and more notable ASP increases for 2027 annual contracts. That said, earnings results and outlooks still differ by company: 3Q DRAM ASP QoQ (Samsung/Hynix: likely up 23-25% vs Micron: up high-teens); 3Q NAND ASP QoQ (Samsung/Hynix: up 15-18% vs Micron: ~30%); payout ratio (Samsung: 50% of FCF so far; Hynix: 50%+; Micron: 100% once a certain target cash holding is achieved in the Nov'26 quarter vs US$75bn in the Aug'26 quarter); the LTA share of long-term sales through 2030 (Samsung: 60-70%; Hynix: 50%+; Micron: 35%+); and 1c (gamma) node migration (Samsung: not yet for DDR5 – still HBM4-centric; Hynix: already mainstream for high-end DDR5; Micron: clearly stated as its largest production node).

Strong Sept exports on HBM, DDR5, and rush orders

Korea's semis exports rose sharply in Sept (+29% MoM/+263% YoY). We see three drivers: 1) the successful HBM4 ramp-up, accounting for 50%+ of total HBM sales; 2) a 20-30%+ rise QoQ in DDR5 prices despite rising LTAs; and 3) quarter-end rush orders, incl. eSSD/NAND. Aggregating July, Aug, and Sept exports also point to robust 3Q growth of 30% QoQ, broadly in line with our 3Q memory revenue estimates for Hynix (+32%) and Samsung (+27%). Samsung's 3Q preliminary OP – our estimate is W107tn – is due on 8 Oct and could readily meet the Street's bullish consensus of ~W110tn, supported by strong Sept sales and ASPs led by HBM4, DDR5, and even NAND. Spot prices remained broadly stable this week, with DDR5 slightly higher but DDR4 and NAND lower.

>> Employed by a non-US affiliate of BofAS and is not registered/qualified as a research analyst under the FINRA rules.
Refer to "Other Important Disclosures" for information on certain BofA Securities entities that take responsibility for the information herein in particular jurisdictions.
BofA Securities does and seeks to do business with issuers covered in its 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. Investors should consider this report as only a single factor in making their investment decision.
Refer to important disclosures on page 13 to 15. Analyst Certification on page 11. 13023558

Timestamp: 01 October 2026 10:51AM EDT

01 October 2026

Equity
Global
Technology

Simon Woo, CFA >>
Research Analyst
Merrill Lynch (Seoul)
+82 2 3707 0554
simon.woo@bofa.com

Dai Shen >>
Research Analyst
Merrill Lynch (Hong Kong)
dai.shen@bofa.com

Vivek Arya
Research Analyst
BofAS
vivek.arya@bofa.com

Mikio Hirakawa >>
Research Analyst
BofAS Japan
mikio.hirakawa@bofa.com

Matt Shin >>
Research Analyst
Merrill Lynch (Seoul)
matt.shin2@bofa.com

Exhibit 1: DDR5 still rising but softened, DDR4 and NAND seen as of early Oct
Spot-market prices among DRAM and NAND

US$	Current	WoW	QoQ	YoY
DRAM spot				
16Gb DDR5	57.9	1%	24%	655%
16Gb DDR4	83.7	-1%	12%	545%
8Gb DDR4	46.3	1%	28%	628%
4Gb DDR3	13.7	0%	13%	483%
NAND spot				
1Tb wafer	30.6	-1%	26%	448%
512Gb wafer	19.4	-2%	-2%	521%
256Gb wafer	17.9	0%	76%	928%

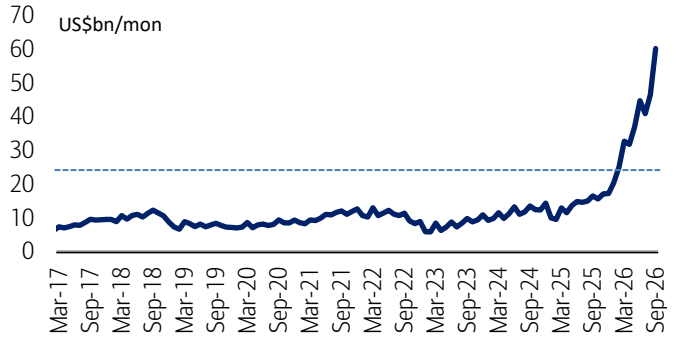
Source: DRAMeXchange

BofA GLOBAL RESEARCH

ASP: Average selling price
CPU: Central processing unit
DDR4/5: 4th/5th gen double-data rate DRAM
DRAM: Dynamic random-access memory
eSSD: Enterprise solid-state drive
HBM: High bandwidth memory
HBM4: 6th gen of HBM
LTA: Long-term agreement
NAND: Not-AND memory
OEMs: Original equipment manufacturers

Korea semis exports

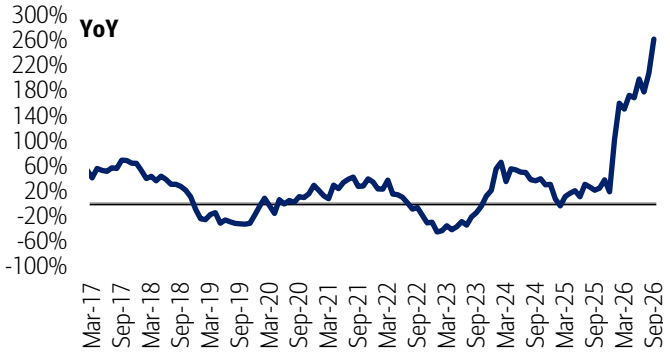
Exhibit 2: Significant MoM growth in Sept (+29%), resulting in a new record-high in Sep (US$60bn), which is around 4x higher than month-average in 2025; mostly driven by HBM4, DDR5 and rush order
Korea semis exports - US$bn/month



Source: MoTIR

BofA GLOBAL RESEARCH

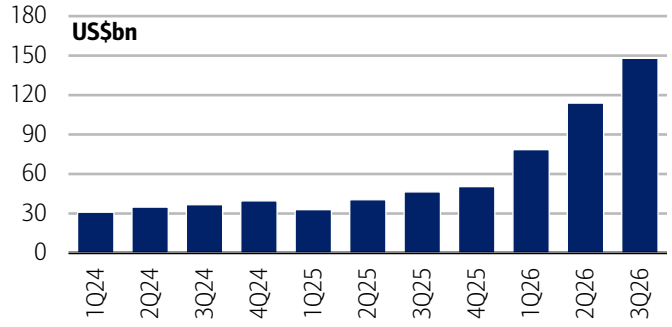
Exhibit 3: Robust YoY growth in Sept (+263%) and strong trend should likely continue throughout 4Q26
Korea semis exports - YoY change in monthly US$bn



Source: MoTIR

BofA GLOBAL RESEARCH

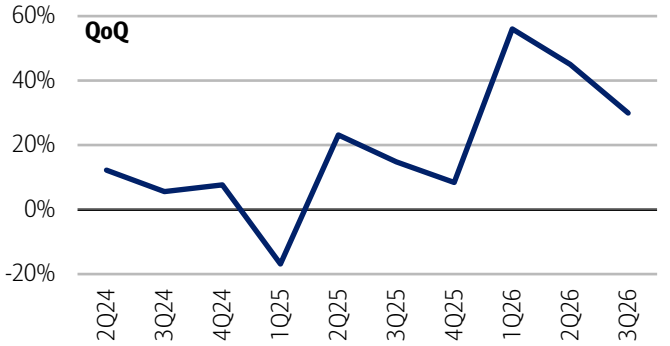
Exhibit 4: Record-high quarterly exports in 3Q26 (US$148bn; +219% YoY), which is nearly ~3.5x higher than 2025-avg
Quarterly Korea semis exports



Source: MoTIR

BofA GLOBAL RESEARCH

Exhibit 5: 3Q26 QoQ growth still resilient at +30% - in line with our 3Q memory forecasts for Samsung and Hynix (also up 30%+/- QoQ)
Quarterly Korea semis exports – QoQ growth

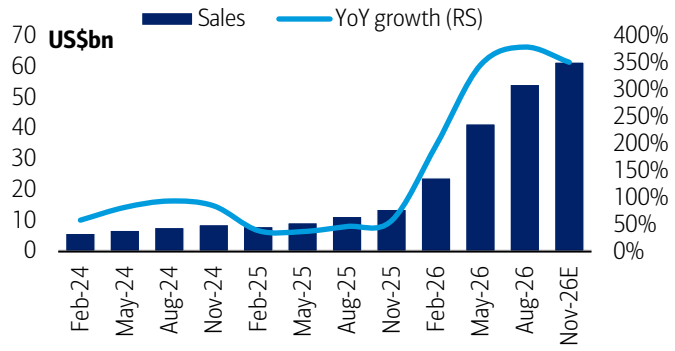


Source: MoTIR

BofA GLOBAL RESEARCH

Micron's FY4Q26 (Aug-Q) results

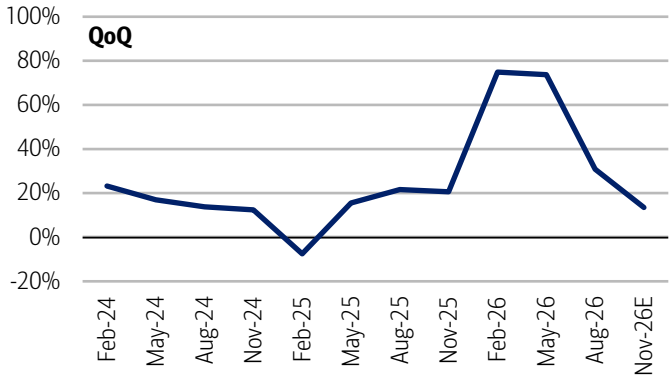
Exhibit 6: Stronger-than-expected Aug-Q sales (US$54bn; up 31%/379% QoQ/YoY); Nov-Q sales guidance (US$61.5bn) implies +13%/351% QoQ/YoY growth)
Micron – Quarterly sales and YoY growth



Source: Company, BofA Global Research estimates

BofA GLOBAL RESEARCH

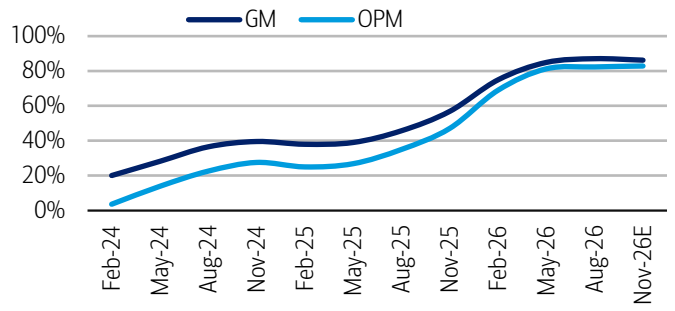
Exhibit 7: Sharp sales deceleration in terms of QoQ growth likely in 2H26 after steep hike in 1H26; but positive growth continues
Micron – Quarterly sales QoQ growth



Source: Company, BofA Global Research estimates

BofA GLOBAL RESEARCH

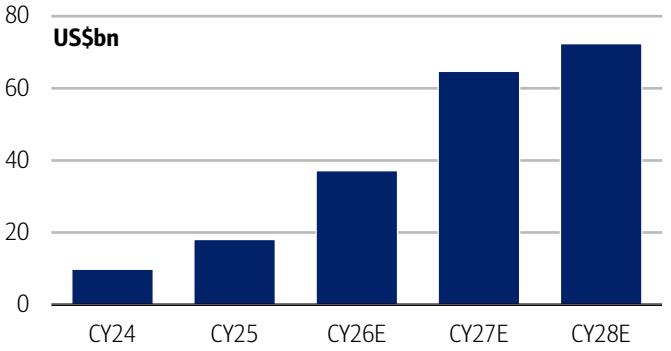
Exhibit 8: Record-high margins well-maintained in Aug-Q (GM 87%, OPM 82%); management indicated that GM in Nov-Q (86%) should be the floor in FY27 and expects higher GM throughout FY27
Micron – Gross margin and OP margin trend



Source: Company, BofA Global Research estimates

BofA GLOBAL RESEARCH

Exhibit 9: Near 2x higher capex in CY26 and annual capex of US$60bn+ pa expected
Micron – Annual capex outlook

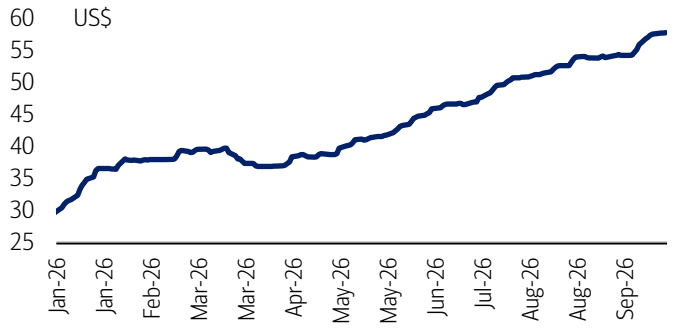


Source: Company, BofA Global Research estimates

BofA GLOBAL RESEARCH

Key 6 memory price charts

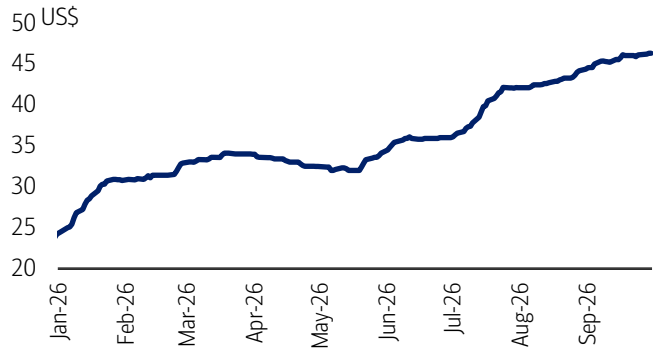
Exhibit 10: DDR5 spot prices slightly up this week to hit an all-time high of $58, price overall up ~+100% YTD extending the 4Q25 rally
16Gb DDR5 spot price – daily, Jan '26 - Sep '26



Source: DRAMeXchange

BofA GLOBAL RESEARCH

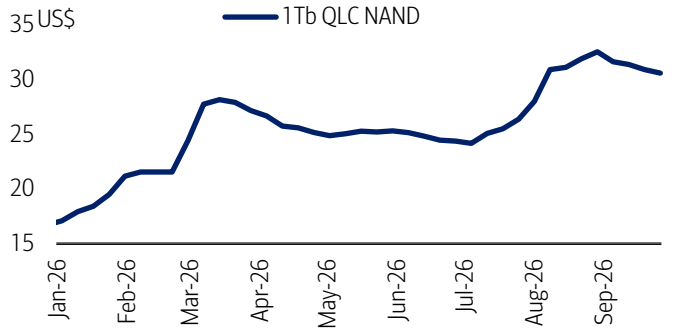
Exhibit 11: 8Gb DDR4 spot prices remained stable at around $45, with no signs of a downturn yet
8Gb DDR4 spot price trend, Jan '26 - Sep '26



Source: DRAMeXchange

BofA GLOBAL RESEARCH

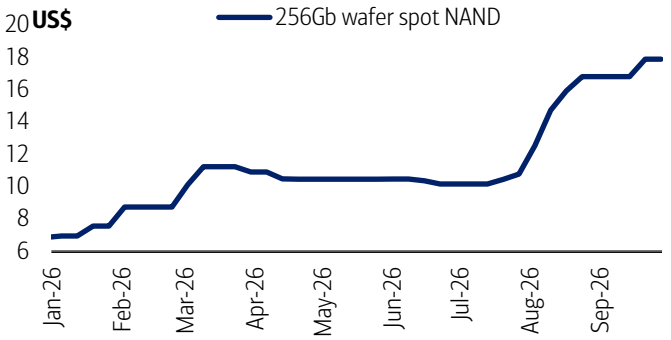
Exhibit 12: NAND spot prices softened through Sep after recovering from July through August.
1Tb NAND wafer spot price – weekly, Jan '26 - Sep '26



Source: DRAMeXchange

BofA GLOBAL RESEARCH

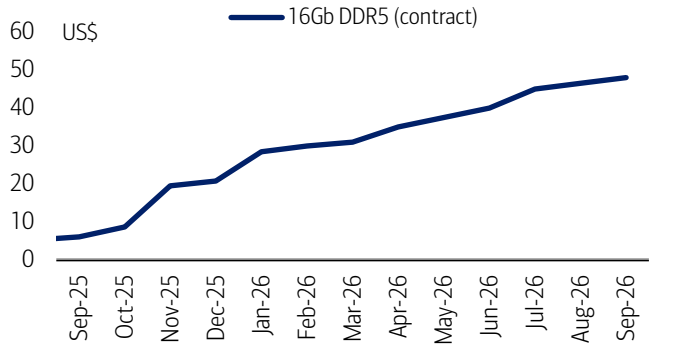
Exhibit 13: In contrast, low-density NAND wafer contract price rebounded sharply through Aug-Sep
256Gb NAND wafer spot price – weekly, Jan '26 - Sep '26



Source: DRAMeXchange

BofA GLOBAL RESEARCH

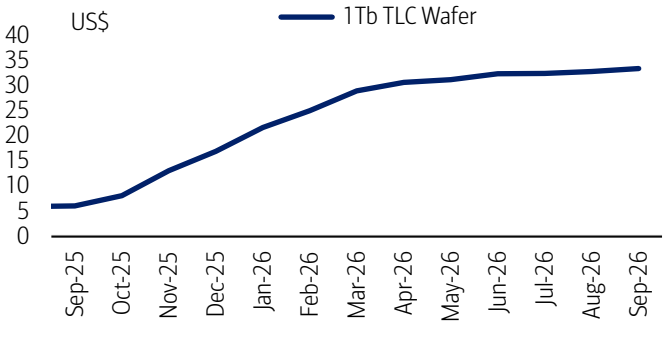
Exhibit 14: Sept contract price up further MoM (+3%); no sign for price cut even after 500%+ rally YoY
16Gb DDR5 contract price trend, Sep '25- Sep '26



Source: TrendForce

BofA GLOBAL RESEARCH

Exhibit 15: Sept contract price up (+2% MoM) despite muted spot or the sharp rally in 4Q25-1Q26
1Tb NAND wafer contract price trend, Sep '25- Sep '26

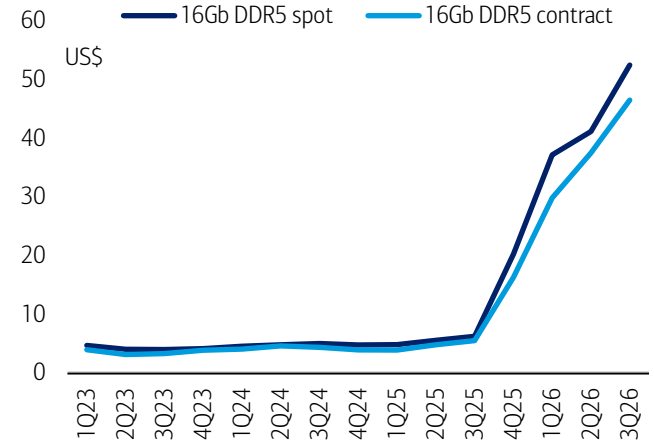


Source: TrendForce

BofA GLOBAL RESEARCH

Quarterly average price trend

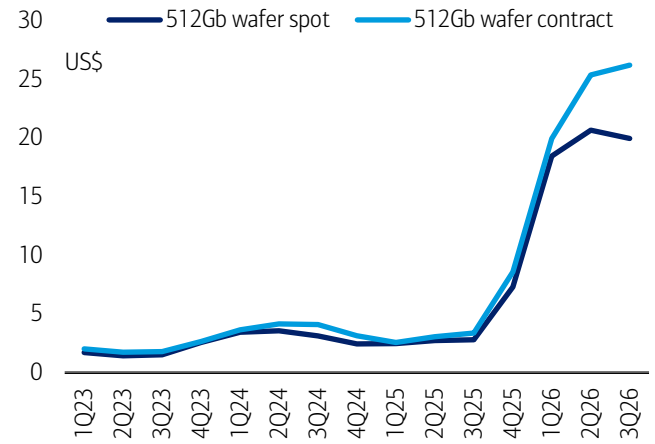
Exhibit 16: DRAM spot and contract prices reached record highs of ~$48–55, with gains moderating in 2Q–3Q26 after the sharp rally seen in 4Q25–1Q26.
DRAM spot and contract price - quarterly average trend



Source: DRAMeXchange, TrendForce

BofA GLOBAL RESEARCH

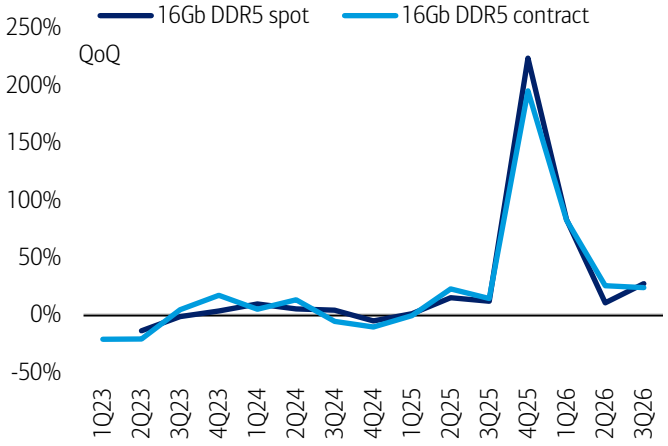
Exhibit 17: NAND wafer contract prices have surged significantly ahead of spot prices, with now at record-high levels; spot slightly corrected
NAND wafer spot and contract price - quarterly average trend



Source: DRAMeXchange, TrendForce

BofA GLOBAL RESEARCH

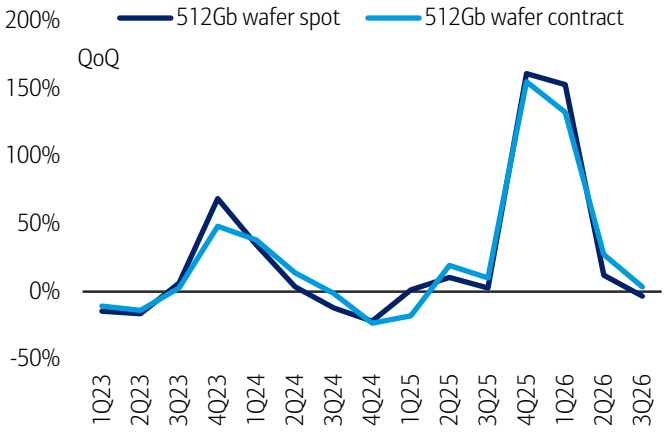
Exhibit 18: Momentum remained positive at +20-30% QoQ in 3Q26, improving from 2Q26 levels but well below the exceptional rally seen in 4Q25–1Q26.
PC DRAM spot / contract prices (quarter-avg) – QoQ change



Source: TrendForce, DRAMeXchange, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 19: Prices were broadly flat in 3Q26, versus +15-30% QoQ growth in 2Q26, following the sharp ~150% rallies seen in both 4Q25 and 1Q26.
NAND spot / contract prices (quarter-avg) – QoQ change

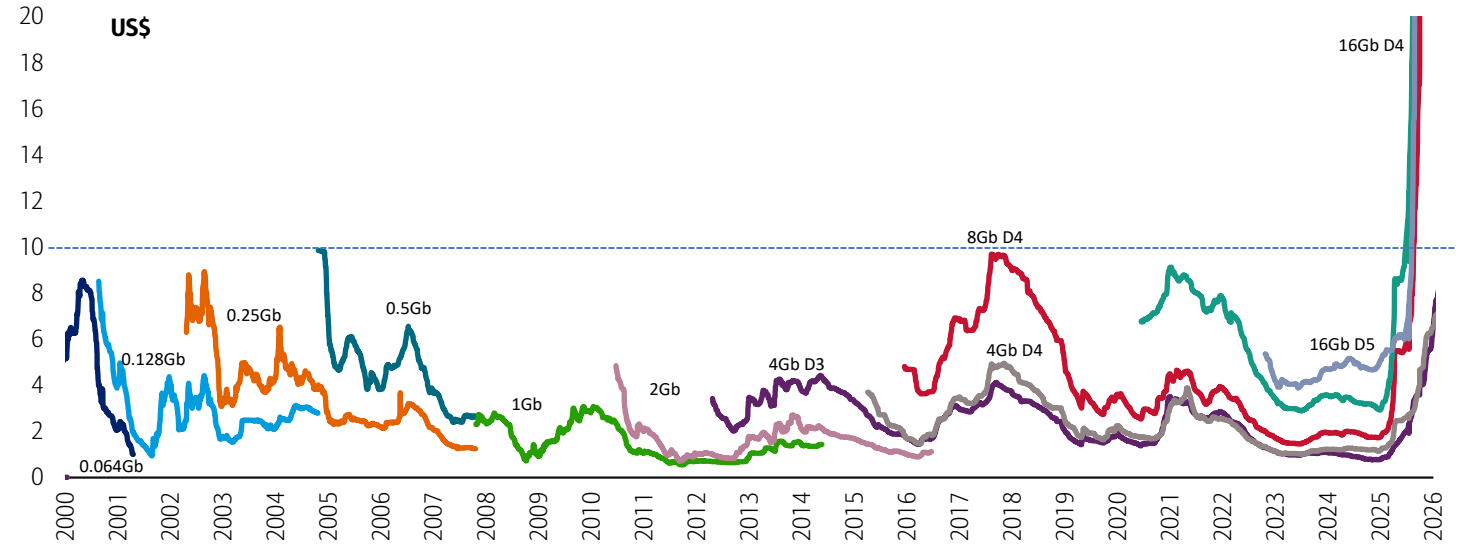


Source: TrendForce, DRAMeXchange, BofA Global Research

BofA GLOBAL RESEARCH

Memory spot price long term trend

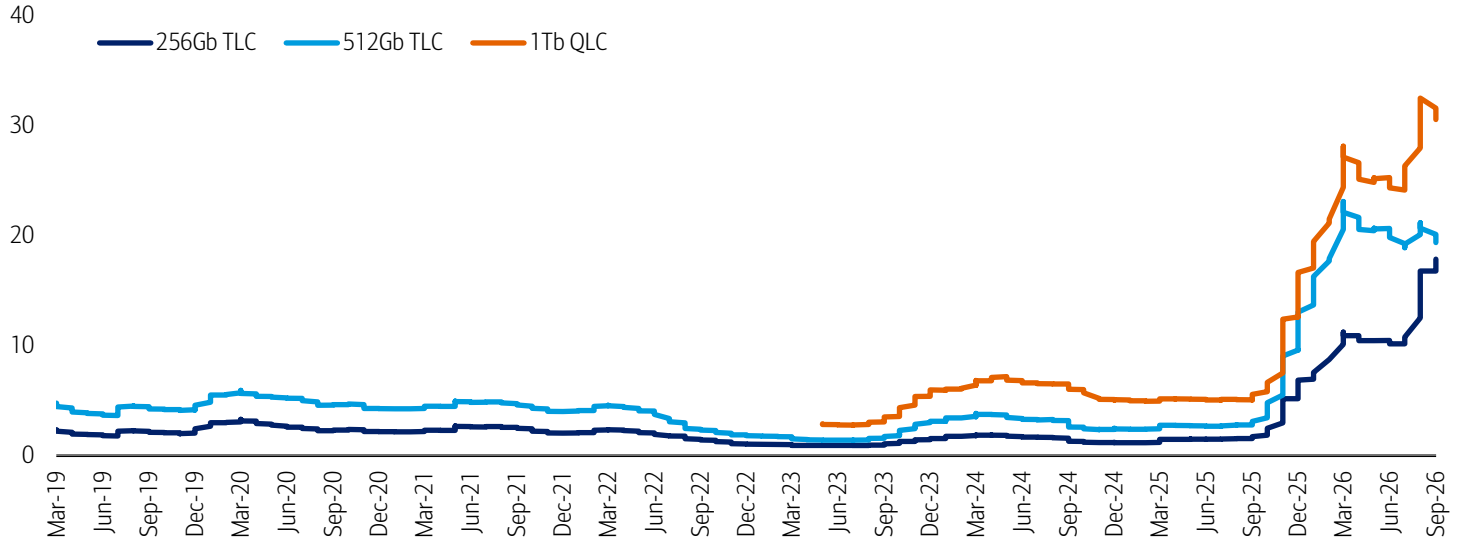
Exhibit 20: DRAM spot prices rebounded gradually through June/July/Aug/Sep, to hit all-time high levels. Prices have reached multi-decade highs, with 16Gb DDR5 (for PC) at ~$58 and DDR4 at ~$85, driven by supply reallocation toward HBM and server DRAM—well above the prior ~$10 peak in Oct-17
DRAM spot price – long-term trend (2000-2026)



Source: DRAMeXchange

BofA GLOBAL RESEARCH

Exhibit 21: NAND wafer prices (512Gb and 1Tb) softened in September after a sharp August rebound; notably prices remained flat to slightly lower through 2Q26, following the exceptionally strong rally across 4Q25 and 1Q26. However, 256Gb NAND wafer price recovered in Sep-26
NAND wafer spot price – long-term trend (2019-2026)

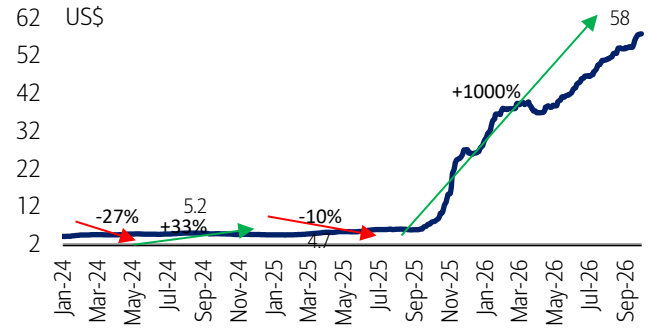


Source: DRAMeXchange

BofA GLOBAL RESEARCH

DRAM spot and contract price trend

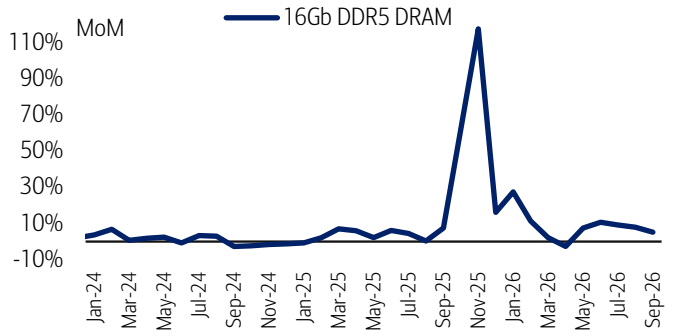
Exhibit 22: Price recovery extended from May through September, reaching a record high of $58, driven by sharp gains in Oct (+70%), Nov (+60%), and Jan (+25%), before moderating during Feb–Apr.
16Gb DDR5 spot price – daily, Jan '24 - Sep '26



Source: DRAMeXchange

BofA GLOBAL RESEARCH

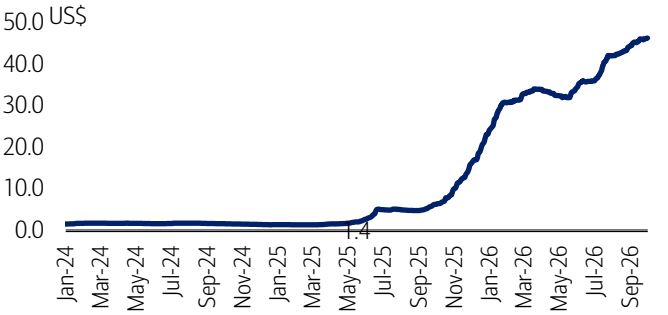
Exhibit 23: Still up in Sep (+5%) following a modest uptick observed through May/Jun/Jul/Aug (+7-10%)
16Gb DDR5 spot month-average price – MoM change, Jan '24 - Sep '26



Source: DRAMeXchange

BofA GLOBAL RESEARCH

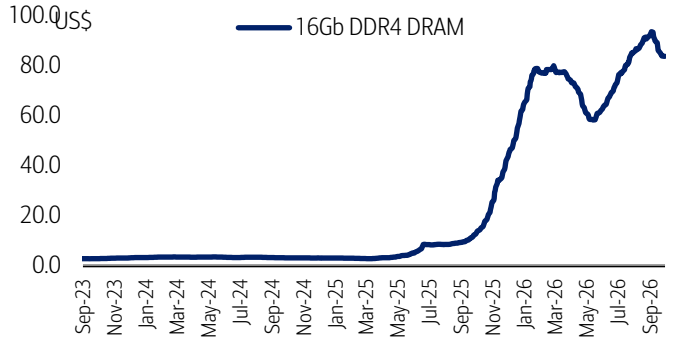
Exhibit 24: 8Gb DDR4 spot prices stable at $45 level, still well above the prior ~$10 peak in October 2017, driven by ongoing supply cuts from major vendors
8Gb DDR4 spot price trend, Jan '24 - Sep '26



Source: DRAMeXchange

BofA GLOBAL RESEARCH

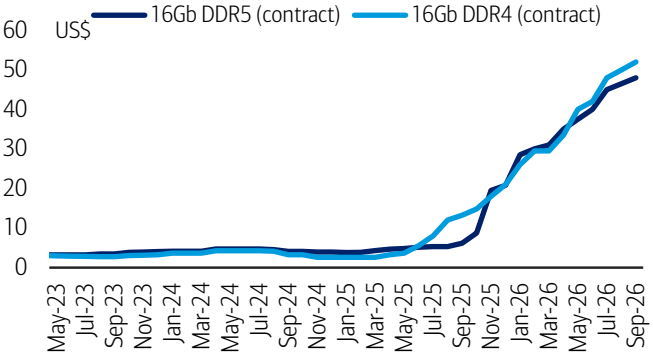
Exhibit 25: Broadly flat in Sep, after rebounding to record highs during Jun–Aug following a ~25% correction from April–mid-May, price still ~2000% above the Oct-25 low (~$3)
16Gb DDR4 spot price trend, Sep '23 - Sep '26



Source: DRAMeXchange

BofA GLOBAL RESEARCH

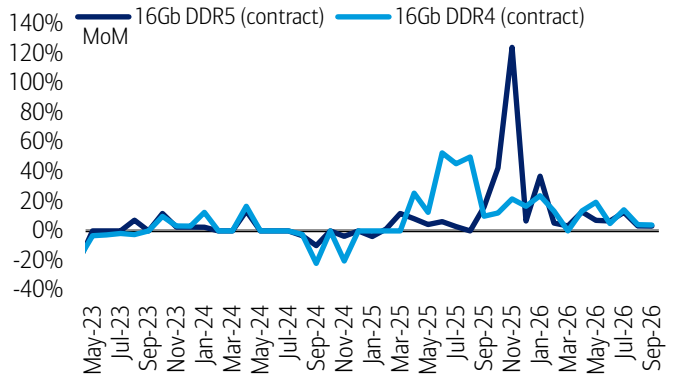
Exhibit 26: DDR4 and DDR5 (16Gb) contract prices are similar at US$50 level – DDR5 price premium no longer exists due to DDR4 shortage
16Gb DDR5 vs 16Gb DDR4 contract price trend, May '23- Sep '26



Source: TrendForce

BofA GLOBAL RESEARCH

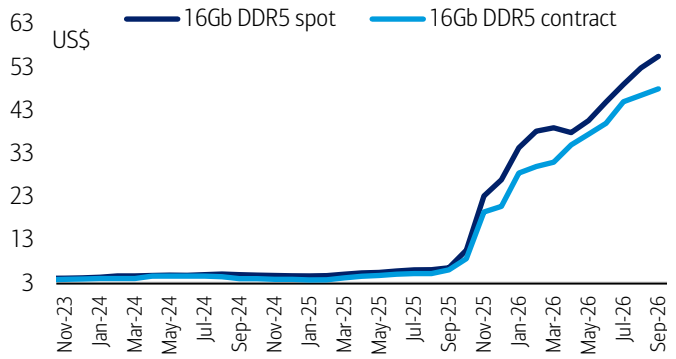
Exhibit 27: DDR5 and DDR4 contract prices up only low-single in Aug/Sep vs +10-15% MoM in July; price strong through 2H25-1H26
16Gb DDR5 vs 16Gb DDR4 contract price change - MoM, May '23- Sep'26



Source: TrendForce

BofA GLOBAL RESEARCH

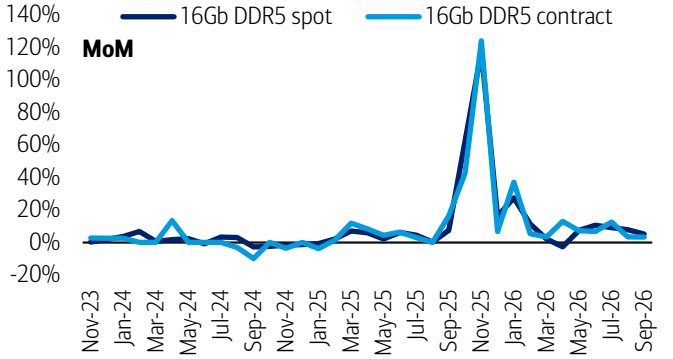
Exhibit 28: 16Gb DDR5 spot and contract prices are in the range of US$50-55 vs historical range of US$3-5
16Gb DDR5 spot vs contract price trend (US$), Nov '23-Sep '26



Source: DRAMeXchange, TrendForce

BofA GLOBAL RESEARCH

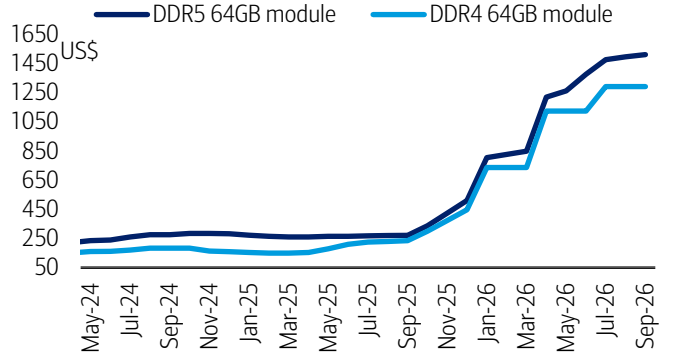
Exhibit 29: Sep price broadly flat following Jun-Aug recovery; prices had witnessed a sharp rally in Oct–Dec'25
16Gb DDR5 spot vs contract price trend – MoM change, Nov '23-Sep '26



Source: DRAMeXchange, TrendForce

BofA GLOBAL RESEARCH

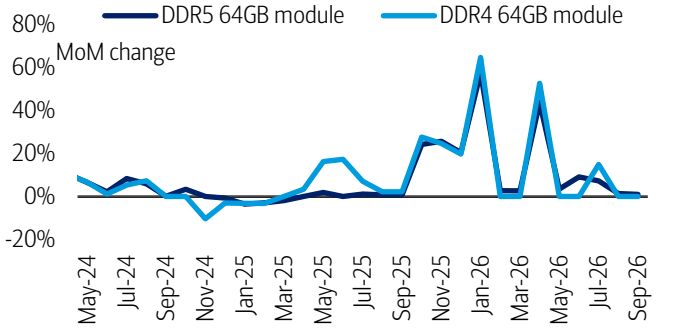
Exhibit 30: Current price of 64GB DDR4/DDR5 modules hit all-time high of more than US$1,000 level (DDR5: US$1,515, DDR4: US$1,295)
Server DRAM contract price trend – DDR5 vs DDR4 modules, May'24-Sep'26



Source: TrendForce

BofA GLOBAL RESEARCH

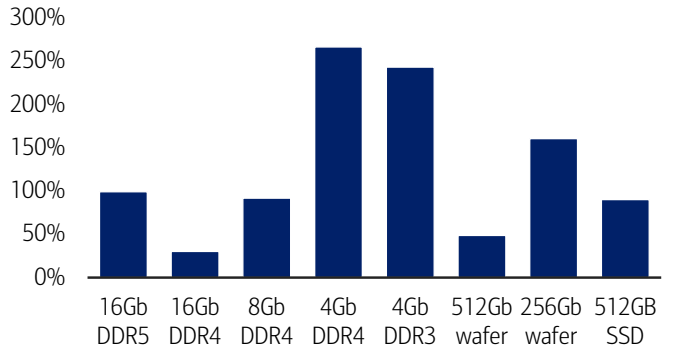
Exhibit 31: DDR5/DDR4 server contract prices remained broadly flat in Aug/Sep after recovering +7-15% MoM in July, remained stable in May/Jun-26
MoM change of server DRAM contract prices, May'24-Sep'26



Source: TrendForce

BofA GLOBAL RESEARCH

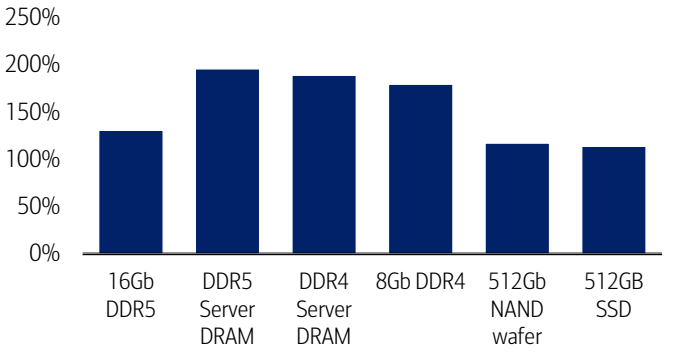
Exhibit 32: DRAM and NAND spot price overall up 100%+ YTD,
YTD change of DRAM and NAND spot price



Source: DRAMeXchange, TrendForce, BofA Global Research

BofA GLOBAL RESEARCH

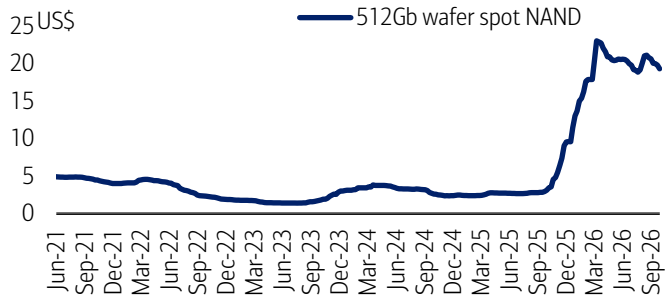
Exhibit 33: DRAM and NAND contract price overall up 100-200%YTD,
YTD change of DRAM and NAND contract price



Source: DRAMeXchange, TrendForce, BofA Global Research

NAND spot and contract price trend

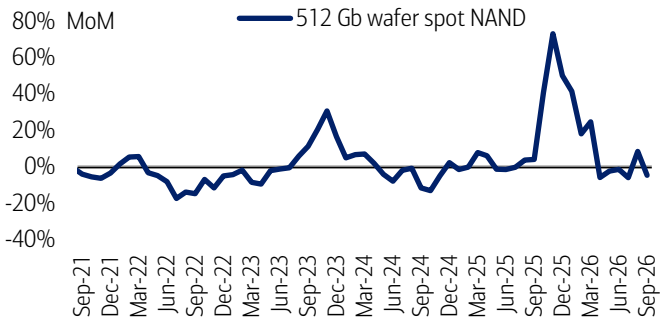
Exhibit 34: NAND spot prices softened in Sept, following a sharp recovery in Aug; remained largely flat to slightly weaker through 2Q26 and most of July; prices are still up more than 50% YTD and nearly 8x above the February 2025 trough
512Gb NAND wafer spot price – weekly, Jun'21 - Sep'26



Source: DRAMeXchange

BofA GLOBAL RESEARCH

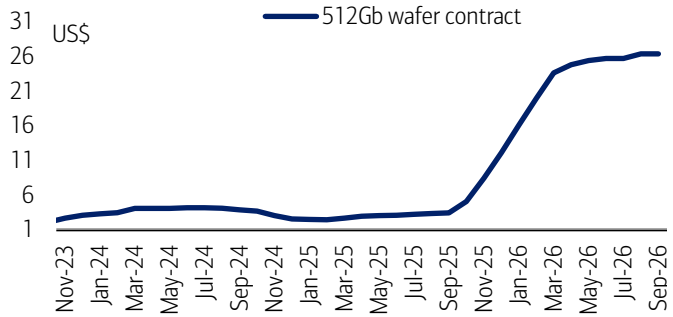
Exhibit 35: Down in Sep (-4%) after a sharp recovery in Aug (+8%). Remained subdued through Apr-Jul (down 2-5%) following strong 4Q25 (+150%) and 1Q26 (+80%) rally.
512Gb NAND wafer spot average – MoM change, Sep'21 - Sep'26



Source: DRAMeXchange

BofA GLOBAL RESEARCH

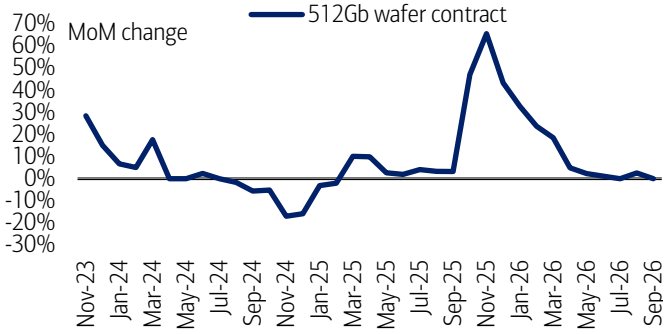
Exhibit 36: Current contract price at ~$27, around 10x vs Feb-25 bottom of $2.5; prices significantly up in 4Q25/1H26 and remained broadly stable thereafter
NAND wafer contract price trend, Nov '23-Sep '26



Source: TrendForce, DRAMeXchange, BofA Global Research

BofA GLOBAL RESEARCH

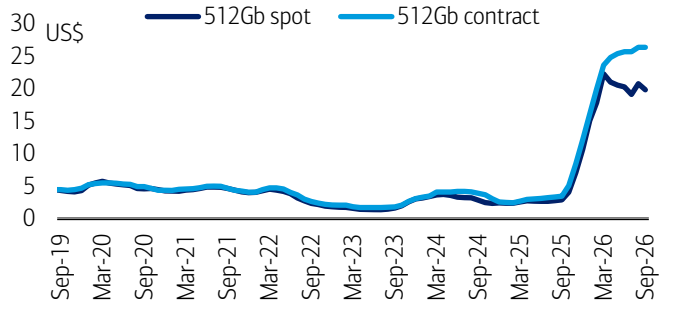
Exhibit 37: Only low-single digit recovery observed through Apr-Sep following Jan/Feb/Mar'26 rally (up 20-30% MoM) and Oct/Nov/Dec upturn (up 40-60% MoM)
MoM change of NAND contract price (512Gb wafer), Nov '23-Sep '26



Source: DRAMeXchange, TrendForce, BofA Global Research

BofA GLOBAL RESEARCH

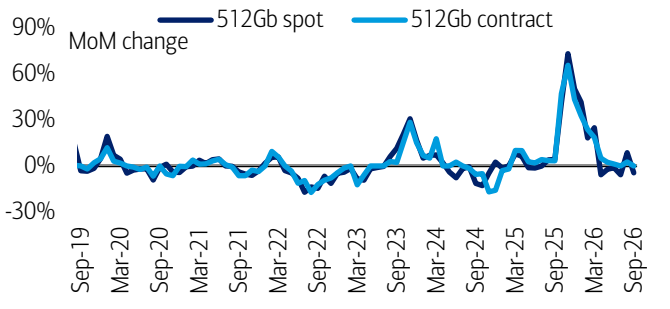
Exhibit 38: Current NAND contract price still near record-high level vs modest correction for spot; that said, the contract prices are still a few times higher than 2025 summer level
512Gb NAND wafer spot vs contract price trend (US$), Sep'19 - Sep'26



Source: DRAMeXchange, TrendForce

BofA GLOBAL RESEARCH

Exhibit 39: NAND contract price flat in Sep vs spot fell 4% MoM post Aug recovery and normalizing in Apr-Jul; strong rally seen in Oct'25 – Dec'25 (up 40-50% per month) and Jan-Mar'26 (20-30% per month)
512Gb NAND spot vs contract price trend – MoM change, Sep'19 - Sep'26

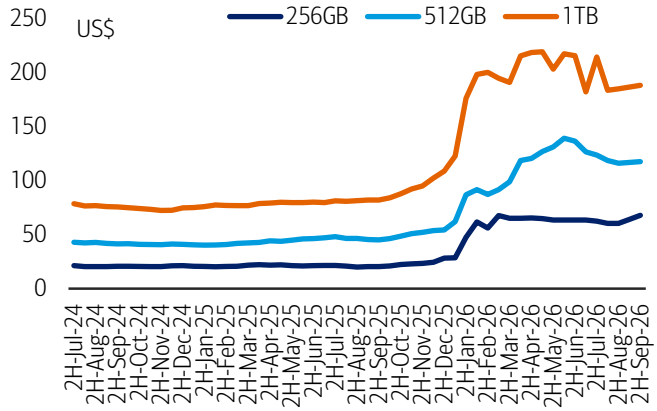


Source: DRAMeXchange, TrendForce

BofA GLOBAL RESEARCH

SSD and panel price trend

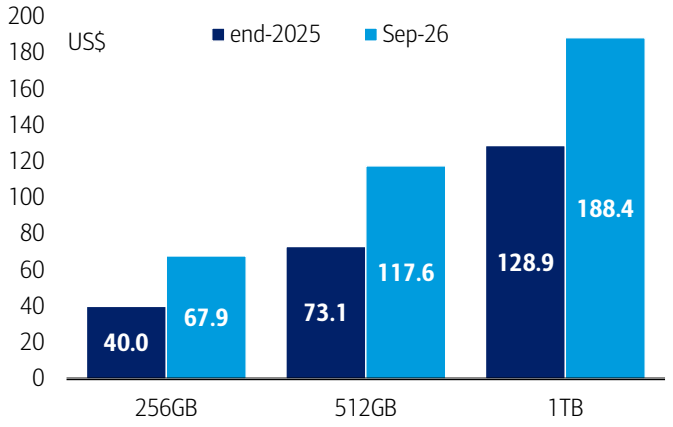
Exhibit 40: Sep SSD prices slightly up vs Aug correction; strong rally witnessed in 1H26 following 2025 gradual recovery
Client SSD price trend – mostly for PC (not server), Jun'24 - Sep'26



Note: SSD prices are as of 14 Sep 2026, reported by DRAMeXchange. TB = terabyte.
Source: DRAMeXchange

BofA GLOBAL RESEARCH

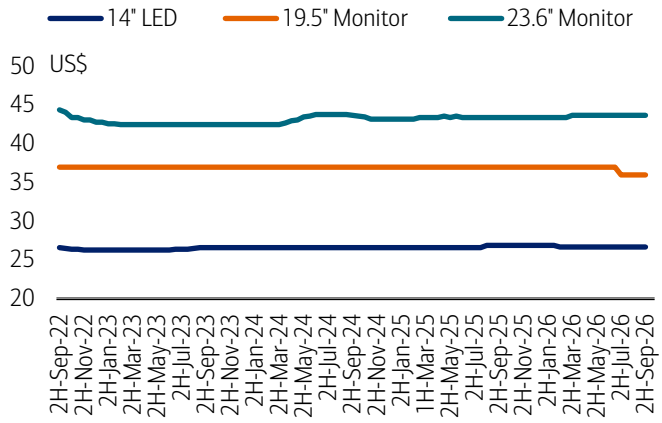
Exhibit 41: Sep prices have more than doubled compared to end-2025 levels, while the 2025 increase was more modest at around 35–40%
Client SSD (for PC) price comparison – current vs. end-2025



Note: SSD prices are as of 14 Sep 2026, reported by DRAMeXchange
Source: DRAMeXchange

BofA GLOBAL RESEARCH

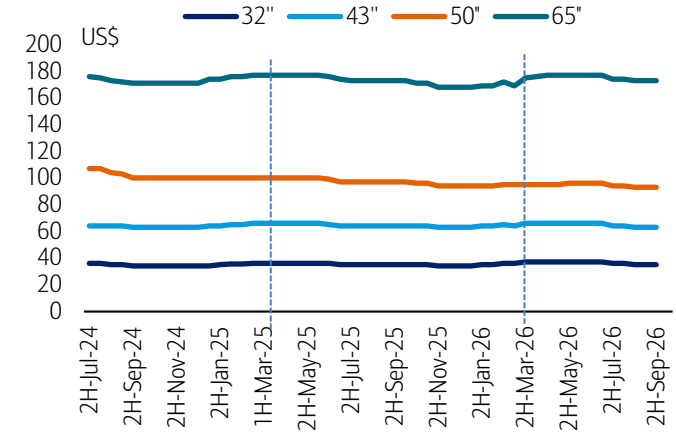
Exhibit 42: Broadly stable YTD – more China dominant supply vs minimal from Korea
LCD IT panel price trend – US$/panel, Sep '22-Sep '26



Note: Panel price update from WitsView as of 21 Aug 2026
Source: WitsView

BofA GLOBAL RESEARCH

Exhibit 43: Prices slightly up through 1H26 vs slightly down in Jul-Aug and flat in Sep; prices remained broadly flat through 2025
LCD TV panel price trend – US$/panel, Jul '24-Sep '26



Note: Panel price update from WitsView as of 21 Aug 2026
Source: WitsView

BofA GLOBAL RESEARCH

Valuation and stock performance

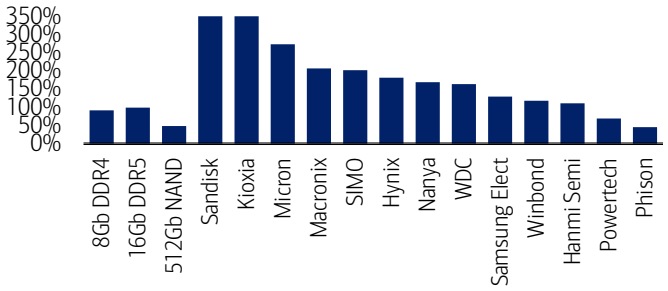
Exhibit 44: Memory stocks broadly recovered throughout Aug-Sep following sharp correction in July. Fundamentals remain strong supported by robust HBM demand, and continued hyperscaler AI CapEx expansion; most DRAM stocks still trade just at 5-7x based on 2026/27 EPS
Valuation comparison among memory and semiconductor supply chain stocks

	Ticker	Rating	Price (Local)	Mcap ($bn)	P/E FY26	P/E FY27E	P/E FY28E	P/Book FY26	P/Book FY27E	P/Book FY28E	EV/EBITDA FY27E	EV/EBITDA FY28E	EV/Sales FY27E	EV/Sales FY28E	ROE FY26	ROE FY27E	ROE FY28E	Div. yield FY27E	Div. yield FY28E
Memory/DRAM																			
SK Hynix	HXSCF	C-1-7	1,776,000	989.3	5.1	4.9	4.9	3.3	2.2	1.6	3.1	3.0	2.5	2.3	98.2%	52.9%	38.1%	4.3%	5.3%
Samsung	SSNLF	C-1-7	268,500	1,192.1	6.2	4.8	4.9	2.7	1.9	1.4	3.0	3.0	1.9	1.8	52.4%	45.2%	32.5%	4.0%	4.1%
Micron	MU	C-1-7	1,065.11	1,202.9	14.1	6.2	5.4	8.7	4.4	3.0	4.8	4.3	4.0	3.5	89.7%	95.8%	68.8%	0.1%	0.1%
Nanya	NNYAF	B-1-7	519.00	56.3	7.4	5.4	6.7	3.7	2.4	2.0	3.2	4.0	2.5	2.5	72.7%	54.5%	33.1%	7.4%	7.5%
Memory/NAND																			
Kioxia	XIYUF	C-1-9	19,100	200.1	5.9	4.5	3.6	5.3	2.4	1.5	2.8	2.3	2.4	1.9	144.4%	74.2%	50.5%	0.0%	0.0%
Sandisk	SNDK	C-1-9	1,739.89	254.8	n/a	7.4	7.0	16.4	4.7	2.7	5.1	4.8	4.3	4.1	88.0%	103.2%	52.1%	0.0%	0.0%
Western Digital	WDC	C-1-7	454.46	156.6	n/a	23.7	14.3	18.8	10.9	6.3	15.9	10.5	8.9	6.0	54.9%	61.3%	58.5%	0.1%	0.1%
SIMO	SIMO	C-1-7	280.00	9.5	24.0	26.3	21.2	7.7	6.3	5.1	18.3	14.9	4.4	3.9	39.1%	27.2%	27.4%	1.0%	1.1%
Phison	PISNF	C-1-8	2,110.00	14.7	5.8	10.0	15.5	3.5	2.9	2.7	6.3	9.7	1.4	1.7	92.3%	37.0%	20.7%	5.5%	0.0%
US/Taiwan semis																			
NVIDIA	NVDA	C-1-7	228.38	5,504.0	25.1	14.5	9.9	19.1	10.8	6.8	12.4	8.8	8.3	5.9	96.8%	90.7%	77.6%	0.5%	0.6%
AMD	AMD	C-1-9	611.76	998.7	80.3	37.6	24.8	13.4	9.8	6.9	29.4	19.4	10.9	7.6	18.3%	31.0%	34.8%	0.0%	0.0%
Broadcom	AVGO	C-1-7	351.19	1,676.5	30.3	18.9	11.3	15.3	9.7	5.8	14.7	8.8	9.9	5.9	60.0%	65.1%	66.3%	0.8%	0.9%
Intel	INTC	C-1-9	120.23	635.4	81.8	59.8	41.2	4.8	4.5	4.0	21.2	16.6	8.4	7.2	5.9%	7.9%	10.6%	0.0%	0.0%
Arm	ARM	C-2-9	289.66	309.4	130.5	98.5	74.5	28.5	21.0	15.5	74.6	55.7	37.0	28.6	25.1%	25.0%	24.5%	0.0%	0.0%
Qualcomm	QCOM	C-3-7	184.04	193.2	17.5	17.4	14.8	6.7	6.3	5.4	14.0	12.2	4.6	4.1	44.4%	36.9%	38.0%	2.0%	2.0%
TSMC	TSMWF	B-1-7	2,510	2,045.0	22.8	16.1	13.4	8.3	5.7	4.2	10.8	9.1	8.0	6.8	43.0%	42.0%	36.1%	1.0%	1.0%
MediaTek	MDTKF	C-1-7	4,980	251.1	72.6	30.3	12.5	18.3	12.2	6.8	24.1	10.3	6.0	3.1	26.1%	48.1%	69.3%	2.7%	6.4%
Equipment																			
ASML	ASMLF	B-1-7	1,596.80	704.0	38.5	27.5	21.2	22.5	17.1	12.7	21.9	17.2	10.4	8.5	68.0%	70.3%	68.3%	0.9%	1.2%
AMAT	AMAT	C-1-7	511.38	405.8	40.1	27.6	21.8	14.4	10.1	7.3	23.5	18.8	8.7	7.3	41.9%	42.9%	38.2%	0.5%	0.5%
Lam	LRCX	C-1-7	328.51	411.1	56.4	35.6	27.9	32.9	18.0	13.1	28.9	23.9	11.9	9.7	65.7%	65.5%	54.0%	0.4%	0.4%
TEL	TOELF	C-1-7	12,580	187.4	7.3	5.3	4.2	2.2	1.8	1.4	3.4	2.7	1.3	1.0	33.6%	37.2%	38.1%	9.4%	12.0%
Hanmi Semi	HNSIF	C-1-7	256,500	18.9	75.8	42.4	24.1	26.1	17.4	11.0	31.5	17.7	17.3	10.4	39.4%	48.9%	55.7%	0.8%	1.2%
BESI	BESVF	C-1-7	191.80	17.7	41.3	26.2	17.4	19.5	15.1	11.5	20.7	13.8	10.5	7.5	61.7%	65.6%	75.9%	3.6%	5.1%
ASMPT	ASMVF	C-1-7	160.00	8.6	37.8	24.2	17.0	3.7	3.4	3.0	14.8	10.9	2.4	1.7	10.1%	14.7%	18.7%	1.7%	2.0%

Source: Company reports, BofA Global Research estimates; Mcap = market capitalization, ROE = return on equity, Div = dividend. Price as of latest close.

BofA GLOBAL RESEARCH

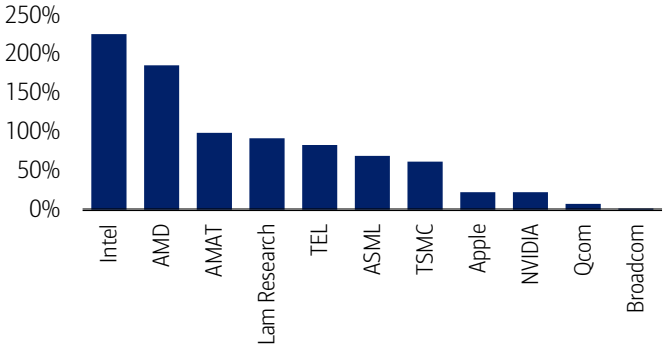
Exhibit 45: Memory stocks were broadly up this week supported by stronger AI-driven DRAM/NAND pricing and HBM demand; current share prices are still far higher than end-2025 levels
Memory companies – 2026 YTD stock performance comparison



SanDisk and Kioxia shows above 400% YTD return
Source: Bloomberg, DRAMeXchange

BofA GLOBAL RESEARCH

Exhibit 46: CPU names such as Intel and AMD outperforming other US big tech names such as NVIDIA/Apple/QCOM
Global major tech companies – 2026 YTD stock performance comparison



Source: Bloomberg

BofA GLOBAL RESEARCH

Analyst Certification

We, Simon Woo, CFA and Matt Shin, hereby certify that the views each of us has expressed in this research report accurately reflect each of our respective personal views

about the subject securities and issuers. We also certify that no part of our respective compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

Special Disclosures

BofA Securities is currently acting as financial advisor to One Investment Management Ltd in connection with the proposed acquisition with PayPay Corporation, a subsidiary of SoftBank Group Corp., of shares of T&D Financial Life Insurance Company, a consolidated subsidiary of T&D Holdings, Inc., which was announced on June 4, 2026.

BofA Securities is currently acting as joint financial advisor to ABB Ltd in connection with the sale of its Robotics Division to SoftBank Group Corp, which was announced on October 8, 2025.

Disclosures

Important Disclosures

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. VOLATILITY RISK RATINGS, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. INVESTMENT RATINGS reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster[R1]
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

[R1]Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. *Coverage Cluster* is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

Other Important Disclosures

From time to time research analysts conduct site visits of covered issuers. BofA Global Research policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.
Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.
The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.
Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.
Refer to BofA Global Research policies relating to conflicts of interest.
"BofA Securities" includes BofA Securities, Inc. ("BofAS") and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. "BofA Securities" is a global brand for BofA Global Research.
Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:
BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by the Financial Sector Conduct Authority; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at www.bofaml.com/BofASEdisclaimer; BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Zurich): Bank of America Europe Designated Activity Company, Zurich Branch, regulated by the Swiss Financial Market Supervisory Authority FINMA, the ECB and CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSFC); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.
This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSFC; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of

its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofASE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the Electronic Communications Disclaimers for further information.

This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities.

This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are not regulated in a manner similar to U.S. securities markets. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

This report may contain a short-term trading idea or recommendation, which highlights a specific near-term catalyst or event impacting the issuer or the market that is anticipated to have a short-term price impact on the equity securities of the issuer. Short-term trading ideas and recommendations are different from and do not affect a stock's fundamental equity rating, which reflects both a longer term total return expectation and attractiveness for investment relative to other stocks within its Coverage Cluster. Short-term trading ideas and recommendations may be more or less positive than a stock's fundamental equity rating.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned herein. Investors in such securities and instruments, including ADRs, effectively assume currency risk.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities or digital assets that may have been recommended or discussed in this report. BofAS or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments recommended or discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information.

In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

Copyright and General Information:

Copyright 2026 Bank of America Corporation. All rights reserved. iQdatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. This document and its content is provided solely for informational purposes and cannot be used for training or developing artificial intelligence (AI) models or as an input in any AI application (collectively, an AI tool). Any attempt to utilize this document or any of its content in connection with an AI tool without explicit written permission from BofA Global Research is strictly prohibited. BofA Global Research utilizes AI, including machine learning and other technologies, to enhance the services we provide to our clients. These technologies assist our analysts in various aspects of their work, including but not limited to data analysis, content extraction, content creation, data aggregation and summarization and identifying relevant information from diverse sources. All AI-driven processes are subject to review by BofA Global Research employees. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities.

Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to sustainability in this material is limited as discussed herein and is not intended to provide a comprehensive view on any sustainability claim with respect to any issuer or security.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.
The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.
All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.
Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.
In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.
Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.