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BERNSTEIN
SOCIETE GENERALE GROUP

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Global Semis and Semi Caps

Global Semis – Can semi cap work if memory doesn't?



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In the current volatile market, many investors agree with our long semi cap call, but worry that they are all correlated with memory share prices anyway. Today's note reviews the share price history and debunks the myth.

Historical correlation of memory and SPE share prices is not high. We use top 3 companies and top 5 WFE companies as benchmark. During 2012-2018, memory and SPE companies correlation was only 0.4. Since 2019 the correlation has increased, but only to 0.6. Conversely, SPE and SOX have had consistently high correlation of 0.8-0.9.

SPE and memory share prices can go in different directions. There have been a few noticeable periods: From Jan 2015-Dec 2016 WFE was up 21.9% while memory was down 16.2%, gaining 38.2% outperformance in two years; In Jan 2021-Dec 2022, WFE was up 15.3% while memory was down 34%, gaining 49% outperformance in two years. While we are positive on both WFE and memory from here, investors can still benefit from diversification between WFE and memory, rather than worrying that both must go up and down together. This is especially the case considering that WFE growth is needed to add memory capacity, which is the cause of memory price volatility.

Mean reversion? Memory and WFE performance might be the same in the long run… as was the case during 2011-2019. While memory outperformed WFE by a whopping 661% since June 2025, it was just reversing the lengthy underperformance during 2019-June 2025, and only managed to catch up in Feb 2026 when both were up 36x in15 years. Now that memory has significantly outperformed WFE, if mean reversion happens it could favor WFE from here.

Fundamentally, we like WFE long here. Memory capex is clearly accelerating; SK hynix has recently announced their KRW 100tn (~$67bn) additional investment in their new Cheongju fabs, and the Korean government seems to be considering measures to support the initiatives from Samsung and SK hynix in building fabs in the Southwestern Korea. We see consensus upward revision potential for WFE market and company EPS through 2028, and we expect further growth ahead.

For memory, though we don't think LTA can help much (replay of our recent webinar), the shortage & the imminent HBM price hike will still bring significant upward earnings revisions. We still like Samsung, SK hynix, & Micron esp. after the recent pullback (report). We rate KIOXIA Underperform on valuation & long-term threat from China (report).

See the Disclosure Appendix of this report for required disclosures, analyst certifications and other important information. Alternatively, visit our Global Research Disclosure Website.

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BERNSTEIN TICKER TABLE

			10 Jul 2026		TTM	Reported EPS				Reported P/E (x)	
Ticker	Rating	Cur	Closing Price	Price Target	Rel. Perf.	Cur	2025A	2026E	2027E	2025A	2026E	2027E
8035.JP (Tokyo Electron)	O	JPY	72,940	59,200	124.0%	JPY	1,250.88	1,504.14	1,848.77	58.3	48.5	39.5
ASML.NA (ASML)	O	EUR	1,569.00	2,300.00	109.8%	EUR	24.72	32.73	48.68	63.5	47.9	32.2
ASML (ASML)	O	USD	1,797.32	2,623.00	103.5%	USD	27.95	37.01	55.05	56.3	42.5	28.6
005930.KS (SEC- Samsung)	O	KRW	286,500	440,000	322.4%	KRW	6,611.53	48,393	77,273	43.3	5.9	3.7
005935.KS (SEC-Pref - Samsung)	O	KRW	194,300	374,000	237.0%	KRW	6,611.53	48,393	77,273	29.4	4.0	2.5
SMSN.LI (Samsung)	O	USD	4,834.00	7,350.00	303.0%	USD	116.15	812.39	1,290.80	41.6	6.0	3.7
000660.KS (SK hynix)	O	KRW	2,201,000	3,300,000	612.1%	KRW	60,341	395,677	568,862	36.5	5.6	3.9
MU (Micron)	O	USD	979.30	1,300.00	674.8%	USD	8.29	67.39	158.99	118.2	14.5	6.2
6857.JP (Advantest)	O	JPY	29,830	39,200	117.3%	JPY	514.52	735.65	870.09	58.0	40.5	34.3
6146.JP (DISCO)	O	JPY	72,560	85,000	20.0%	JPY	1,246.28	1,733.62	2,127.33	58.2	41.9	34.1
6920.JP (Lasertec)	O	JPY	44,380	50,000	84.3%	JPY	937.82	893.18	976.61	47.3	49.7	45.4
6525.JP (Kokusai)	O	JPY	10,840	8,240.00	192.2%	JPY	128.63	200.23	260.07	84.3	54.1	41.7
7735.JP (Screen)	M	JPY	18,150	12,600	156.9%	JPY	486.61	572.60	662.24	37.3	31.7	27.4
BESI.NA (Besi)	O	EUR	255.30	280.00	82.8%	EUR	1.66	3.34	5.84	153.8	76.4	43.7
AMAT (Applied Materials)	O	USD	602.50	525.00	183.6%	USD	9.42	12.17	15.56	64.0	49.5	38.7
LRCX (Lam Research)	O	USD	350.33	340.00	226.0%	USD	4.14	5.68	7.98	84.7	61.7	43.9
KLAC	O	USD	231.52	197.50	128.7%	USD	3.33	3.69	5.12	69.6	62.7	45.2
285A.JP (KIOXIA)	U	JPY	77,000	40,000	2959.6%	JPY	1,014.00	10,013	9,656.84	75.9	7.7	8.0
JPL			2,639.99									
EDME			1,593.41									
SPX			7,575.39									
ASIAX			1,947.59									
EM			1,807.54									

O - Outperform, M - Market-Perform, U - Underperform, NR - Not Rated, CS - Coverage Suspended

MU, AMAT, LRCX, KLAC estimate is Adjusted EPS; MU, AMAT, LRCX, KLAC valuation is Adjusted P/E (x);

Source: Bloomberg, Bernstein estimates and analysis.

INVESTMENT IMPLICATIONS

We rate TEL (TP=¥59,200), Advantest (TP=¥39,200), Disco (TP=¥85,000), Lasertec (TP=¥50,000), Kokusai (TP=¥8,240.00), ASML (TP=€2,300.00) and Besi (TP=€280.00) Outperform.

We rate Screen (TP=¥12,600) Market-Perform.

Samsung Electronics: We rate Samsung Electronics Outperform with price target of KRW 440,000.

SK hynix : We rate SK hynix Outperform with price target of KRW 3,300,000.

Micron: We rate Micron Outperform with price target of US$1,300.00.

KIOXIA: We rate KIOXIA Underperform with price target of JPY 40,000.

AMAT (Outperform, $525.00): Exposure to key inflections is strong and valuation vs peers remains attractive.

LRCX (Outperform, $340.00): The company is benefiting from key inflections (GAA, packaging, HBM, NAND upgrades) and CY26/27
commentary seems supportive.

KLAC (Outperform, $197.50 PT): Amid positive WFE trends KLAC posseses structural growth drivers, a strong and durable competitive position, lower China replacement risk, and disciplined capital allocation, warranting premium valuation, in our view.

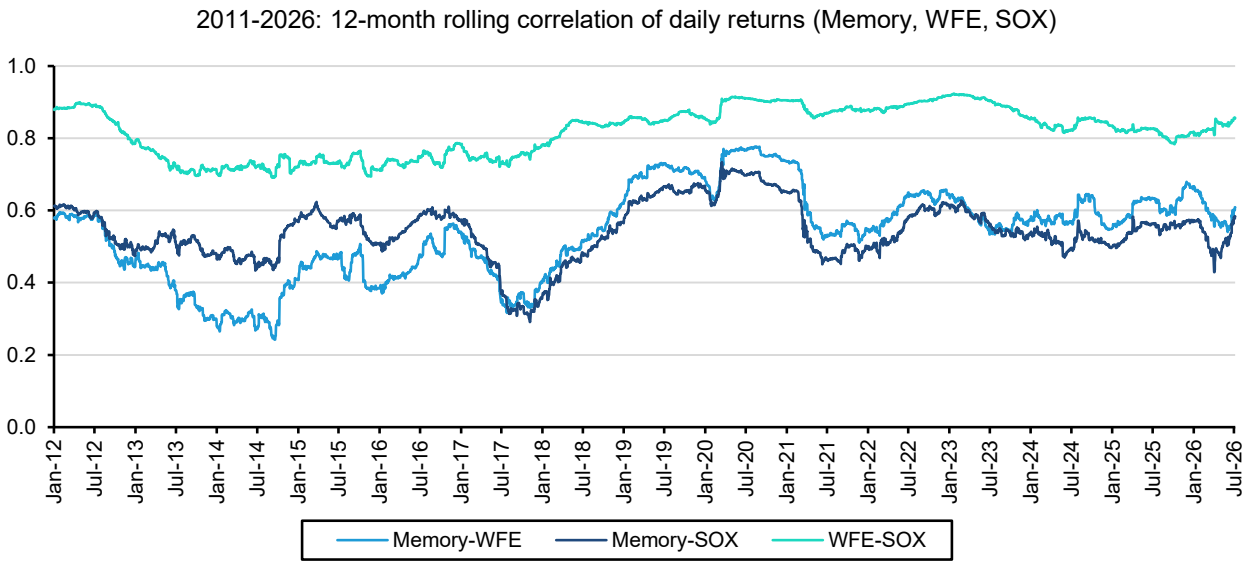
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DETAILS

Share price has been volatile recently, especially for memory stocks. A big question from investors today is whether semicap can still work if memory stocks stop working. As such, we conducted a historical analysis and conclude that while the overall correlation between memory and semicap is strong, there has been multiple instances where semicap continued to work even though memory stocks were muted.

Exhibit 1 shows the correlation between memory, semicap and the broader semiconductor sector. It can be observed that the correlation between semicap and the overall semis has been historically tight — averaging at 0.82, while **memory has historically shown a weaker correlation with other sectors**, with both correlations (vs. WFE and vs. SOX) averaging at 0.54. The monthly returns show a similar pattern as in Exhibit 2. WFE vs. SOX move more or less in tandem, whereas it is somewhat noticeable that memory moves idiosyncratically to the broader semiconductor peers, often for an.

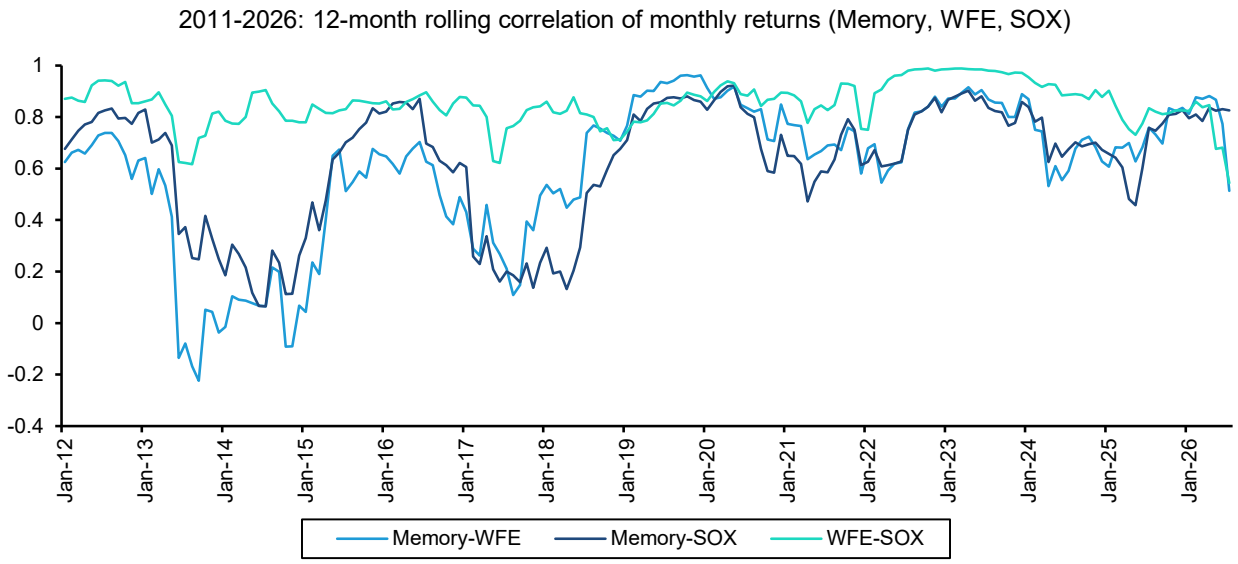
EXHIBIT 1: **Correlation between memory and other parts of semis has historically been lower and more volatile.**



Memory basket includes MU, SK hynix, and SEC. WFE basket includes AMAT, LRCX, ASML, KLAC and TEL.
Source: Bloomberg, Bernstein analysis.

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EXHIBIT 2: **WFE vs. SOX correlation is usually more stable, but memory tends to move more idiosyncratically.**

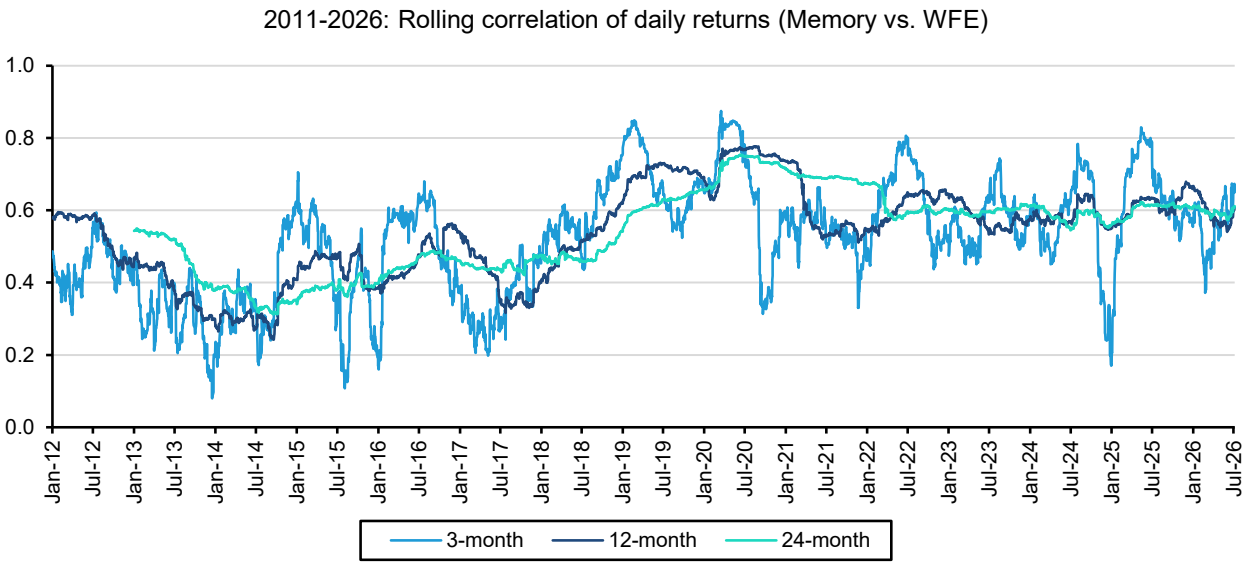


Source: Bloomberg, Bernstein analysis.

As we established above that semicap and the broader SOX is tightly correlated, we shift our attention to how memory and semicap correlates. Exhibit 3 adds the short-term (3-month) and long-term (24-month) perspective of how the two subsectors behave in relation to each other. Although the relationship itself is positive, but it is easily identifiable that the two sectors move between periods of stronger and weaker correlations.

If we define periods of weaker fit as 12-month rolling correlation below 0.4, three periods (June 2013 - Nov 2014 / Nov 2015 - Jan 2016 / Jun 2017 - Dec 2017) fit under this category. Conversely, two periods of strong fit — as defined as 12-month rolling correlation of above 0.7 — appear during Apr 2019 - Dec 2019 / Mar 2020 - Mar 2021. Of note, July 2026 month-to-date averages at 0.6, slightly above historical mean of 0.54.

EXHIBIT 3: **And if we look at shorter term, correlation between memory and WFE can be much more volatile.**



Source: Bloomberg, Bernstein analysis.

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These periods of weak / strong fits (Exhibit 4) suggest that daily correlation should not be interpreted as cumulative return dispersion. Historically, low Memory-WFE correlation has not always resulted in large return divergence, and likewise, high Memory-WFE correlation has not necessarily resulted in similar returns. In particular, episodes #4 and #5 show that WFE can materially outperform memory even during strong-correlation periods, while episode #3 shows that weak daily correlation can still end up with almost identical cumulative returns. This indicates that sector correlation captures common semiconductor factor exposure, but relative returns remain driven heavily by subsector-specific drivers.

We believe this distinction is important because historical data shows that memory and WFE can share broad semiconductor beta while still delivering meaningfully different return outcomes. Therefore, the relevant investment question is not simply whether memory and WFE are correlated, but whether the current volatility is memory-specific or broad enough to impair WFE fundamentals as well.

EXHIBIT 4: **Weak or strong correlation does not reliably predict Memory-WFE return gaps. Return dispersion depends more on subsector drivers than on correlation alone**

Episode #	Start	End	Average Corr.	Memory Return	WFE Return	Memory – WFE Dispersion
1	01/06/2013	16/11/2014	0.320	66.9%	43.7%	23.2%
2	31/10/2015	29/01/2016	0.385	(22.2%)	(0.2%)	(22.1%)
3	23/06/2017	01/01/2018	0.353	19.9%	19.2%	0.7%
4	18/04/2019	13/12/2019	0.716	16.3%	40.6%	(24.3%)
5	11/03/2020	10/03/2021	0.753	73.9%	93.7%	(19.8%)

Source: Bloomberg, Bernstein analysis.

Now that we have established that semicap has historically been able to outperform memory both when the correlation is weak or strong, we move beyond the statistical observation and discuss what was actually happening in the real world during each period, dissecting different semiconductor cycles.

The cycle-regime table (Exhibit 5) is intended to answer that question. Rather than using rolling-correlation breakpoints that are purely statistical and somewhat artificial, the regimes below are grouped around recognizable semiconductor supply / demand backdrops such as memory up/downcycles, COVID / chip shortage, HBM and AI capex.

EXHIBIT 5: **Most of the time memory and WFE moved in the same direction but there has been at least two cycles where they moved in completely different directions.**

Cycle regime	Average Corr.	Memory Return	WFE Return	Memory – WFE Dispersion
2012-14 Memory consolidation / recovery	0.414	159.1%	118.2%	41.0%
2015-16 Semi downturn	0.457	(16.2%)	21.9%	(38.2%)
2017-19 Memory peak	0.542	108.9%	132.4%	(23.5%)
2020 COVID	0.739	36.9%	52.2%	(15.2%)
2021-22 Chip shortage / rates	0.600	(34.0%)	15.3%	(49.3%)
2023-24 HBM acceleration	0.583	67.4%	59.5%	7.9%
2025-26 AI capex / memory scarcity	0.607	955.1%	220.3%	734.8%

Source: Bloomberg, Bernstein analysis.

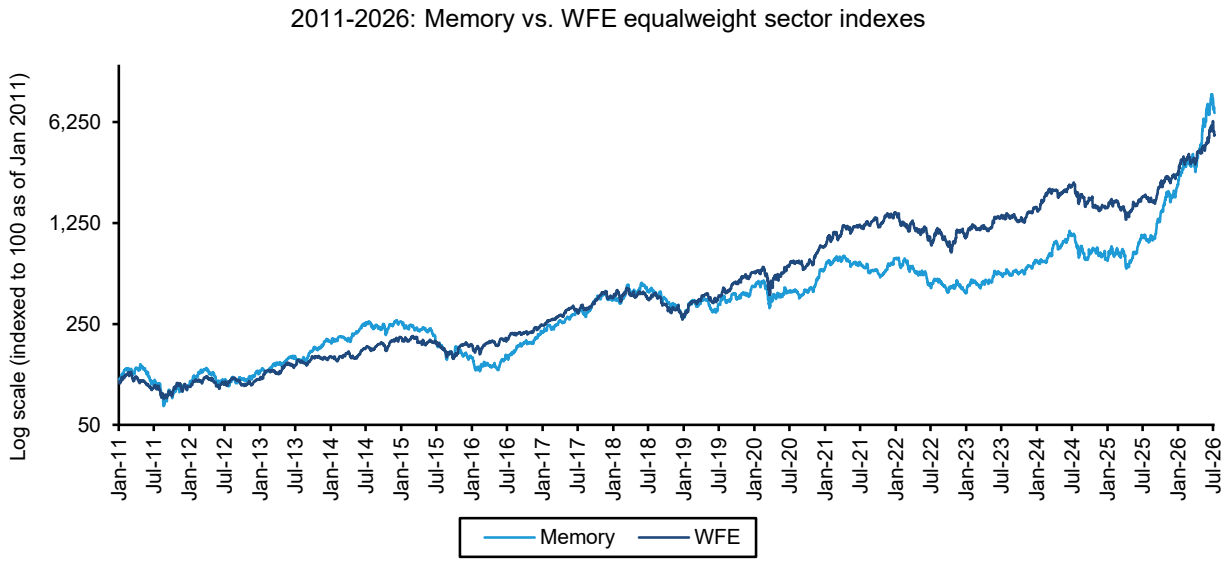
The regime analysis supports the same conclusion as the rolling-correlation episodes: Memory and WFE are related, but can move in completely different directions. Also, across different cycles, strong correlation has not prevented large cumulative return gaps either. In 2015-16, memory declined while WFE rose; in 2019-20, WFE materially outperformed despite high Memory-WFE correlation; and in 2021-22, WFE again outperformed through a shortage/capex cycle and subsequent rates correction.

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It is true that the current cycle stands out starkly from prior cycles/regimes if we just simply looked at the magnitude of returns. Memory has returned near-tenfold returns versus a measly 220% return for WFE, creating a massive memory-WFE dispersion — by far the largest gap in the regime table, overtaking semicap in Feb 2026 after a long period of relative underperformance (Exhibit 6). Although, this created a Memory-WFE dispersion that is far larger than any prior regime in the sample. In fact, memory's premium over WFE has shot up recently to historically unseen levels, now $+2\,\sigma$ above the historical mean (Exhibit 7), reflecting the memory companies' pricing power due to HBM / conventional DRAM scarcity driven by both increasing AI server memory content and tight supply.

This does not mean WFE should follow memory lower if memory pricing normalizes. Rather, the historical framework suggests that an unwind of an extreme memory premium can coexist with continued WFE strength, provided that WFE fundamentals remain supported by AI capex, leading-edge foundry / logic investment, advanced packaging, and technology-transition demand. In other words, the relevant question is less about whether memory and WFE are correlated; the question is whether current memory volatility is broad enough to impair WFE demand, or whether it is mainly a memory-specific normalization from an unusually stretched cycle.

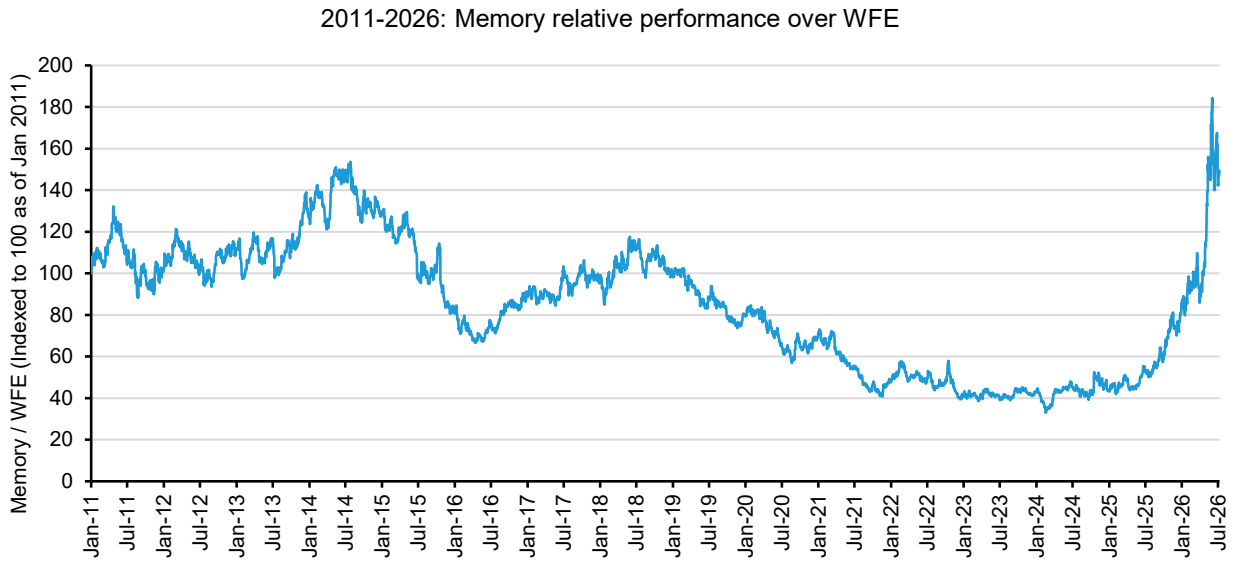
EXHIBIT 6: **While both memory and WFE has rallied strongly over the years, memory has recently overtaken semicap…**



Source: Bloomberg, Bernstein analysis

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EXHIBIT 7: **...but memory's premium over WFE is has been stretched well above historical average.**



Source: Bloomberg, Bernstein analysis.

For Semicap: We continue to be constructive on semicap because we believe WFE will continue to rise even though memory price is expected to normalize in 2027, driven by both a strong logic / foundry investment and further memory capacity build out.

Fundamentally, we like WFE long here. Memory capex is clearly accelerating; SK hynix has recently announced their KRW 100tn (~$67bn) additional investment in their new Cheongju fabs, and the Korean government seems to be considering measures to support the initiatives from Samsung and SK hynix in building fabs in the Southwestern Korea. We see consensus upward revision potential for WFE market and company EPS through 2028, and we expect further growth ahead.

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