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Tech Bytes

LTAs – How They Are Affecting Memory

WHAT'S CHANGED

SK hynix (000660.KS)	From	To
Price Target	W1,700,000	W2,600,000

Memory has become a critical bottleneck in AI infrastructure. LTAs with customers to secure supply are transforming a traditionally cyclical business into a secured, high-margin, long-term revenue stream. However, they also create a "memory tax" on the rest of the industry.

The memory market is undergoing a structural transformation in how its products are being contracted through long-term agreements (LTA) of 3-5 years: These have existed during semiconductor booms, but recent LTAs differ from past ones with weak binding power. They may include receiving large up-front payments that could dictate volume commitments by producers and be deducted as unfulfilled promised volumes are shipped. These are likely non-cancellable, non-refundable (NCNR) contracts, in our view; effectively, they are insurance or binding power in case the customer cancels existing LTAs in the future.

The cyclical impact may become less cyclical: LTAs can instill stability, improve earnings predictability, and reduce the risk of overbuilding capacity with better supply management for memory companies. Even if there is excess supply from capacity expansion, long-term contracted volumes buffer both pricing and margin, reducing the severity of memory downturns. With volumes already determined, capex increases are aimed at confirmed demand from hyperscalers rather than speculative forecasts, helping to eliminate inventory risk and enhancing mass production efficiency.

Raising SK hynix EPS estimates and price target: We raise our SK hynix EPS estimates 6% for 2026, 3% for 2027, and 14% for 2028 to reflect downside protection from LTAs to 2028, stronger commodity pricing assumptions, and stronger HBM pricing reset in 2027. We now assume flat commodity pricing into 1H28 and HBM ASP growth of +15% YoY over 2026-28e, vs. prior expectations for HBM pricing declines. This also lifts our long-term HBM revenue and EPS contribution because of a higher base. Our residual income model-based price target rises to W2.6mn, implying 38% upside.

Stock implications: LTAs lock in future supply and pricing, providing long-term earnings/FCF visibility and causing re-rating. LTAs improve risk management and predictability, in a way similar to hedging long-term price volatility. Fixed volume, agreed prices, and prepayments as insurance can improve the P/E multiple discount that entails a maximum margin of safety to compensate for future cyclical price erosion.

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Breaking the Memory Cycle with LTAs

Shifting away from volatile boom-and-bust commodity cycles: Traditional demand drivers (PC, mobile, consumer) have been displaced by data centers as the primary customers – this is a structural realignment that will only intensify. Given long lead times and persistence of supply shortage mismatch, LTAs are now absolute necessities to secure capacity. A strategic supply chain partnership is being established in which suppliers and customers collaborate closely from the technology development stage to ensure stable supply and transactions. The aim for memory producers is to lock in long-term orders and prices, establish a stable high-margin model, and mitigate industry cyclical volatility.

These are all likely to drive a re-rating that has yet to be priced in.

LTAs – a structural shift in memory cycle dynamics: LTAs in the current memory cycle have evolved into structured, multi-year commercial frameworks rather than simple volume commitments. Leading CSPs are now locking in supply through agreements that incorporate prepayments, pricing mechanisms, and margin protection. According to TrendForce, most of the LTA negotiations are targeting a pricing range with a ceiling price tracking above 2Q26 contract price. In terms of down payment, some suppliers have secured as much as 50% for 2027 demand and 100% for 2028. Although specific terms vary among different suppliers and customers (some only set floor pricing, or minimum margin protections), those terms have provided substantial buffer to memory suppliers entering 2028.

Despite negotiations that are still ongoing, we expect more than 50% of the supplies over the next 2-3 years will be bound through LTAs, with additional upside potential likely from non-AI customers.

Memory scarcity is driving a shift in long-term agreements: We estimate the AI semiconductor market to grow 50-60% through 2030, per TSMC's recent increased semiconductor TAM forecast of USD\$1.5tr (raised from USD\$1tr). This compares to DRAM supply growth during the same period that may be capped at around 30% in bit shipments per annum, given significant EUV tool bottleneck from 2027 – we see risk of sold-out conditions at ASML in view of unprecedented capacity shortages for both advanced logic and DRAM.

These agreements highlight a clear shift in customer behavior. Hyperscalers are no longer procuring memory opportunistically but are instead securing long-term supply to support AI infrastructure build-outs. At the same time, suppliers are leveraging LTAs to stabilize pricing, secure upfront capital, and protect profitability

It's different this time: Korean memory companies are incorporating binding conditions into LTA negotiations to provide maximum insurance and profitability. Companies are unlikely to disclose much detail of LTAs because of NDAs (non-disclosure agreements). However, we expect to see clear evidence over the course of this year of material cash inflows on producers' balance sheets, offset by deferred revenue obligations. This should make it clear that these agreements are playing out, and that they are not the "take or pay" penalties of the past. Prepaid revenue deals would be much harder to renegotiate than penalties. Our view is not based on the contracts themselves, but based on evidence that hyperscaler customers are thinking differently.

Exhibit 1: LTAs framework estimates – old vs. new

Feature	Traditional LTAs	Current LTA Frameworks
Duration	Quarterly, annual, or soft multi-year	Typically 3-5 years
Volume commitment	Often flexible / best-effort	Pre-agreed supply allocation or volume commitment
Pricing	Frequently renegotiated with the cycle	Pricing formula, range, floor, collar, or fixed mechanism
Customer commitment	Limited penalty / weak binding power	Prepayment, collateral, financial guarantee, or stronger binding terms in some agreements
Supplier benefit	Some demand visibility	Revenue visibility, margin protection, upfront capital, improved capacity planning
Customer benefit	Allocation during shortage	Strategic supply security for AI infrastructure buildout
Investor relevance	Limited valuation impact	Potential P/E re-rating if earnings become more contracted and less cyclical

Source: Company data, TrendForce, Morgan Stanley Research estimates.

What companies are saying

The memory market is undergoing a structural transformation in how its products are being contracted: Long-term agreements have existed in past semiconductor booms, but recent LTAs differ from past ones with weak binding power. They span nearly 3–5 years and specify exact pricing as well as quantities.

Micron (covered by Joseph Moore): Micron announced in its March 18 earnings report: "For the first time in its history, it has signed a five-year Strategic Customer Agreement (SCA)..." which includes multi-year supply volumes and price commitments.

SK hynix: "We are signing LTAs considering demand visibility, customer relationships, product mix, and strategic importance." (March 25 annual shareholders' meeting, President Kwak Noh-jung). During its most recent 1Q26 earnings call (April 23), SK hynix elaborated: "As the memory shortage persists, customer requests to secure medium- to long-term supply volumes have significantly increased. Memory today has become so critical that customers now see memory price and supply uncertainties as key business risks...A multiyear LTA must provide business stability for both parties by ensuring supply stability to the customer and demand visibility and stable revenue structure to the seller. Accordingly, unlike past LTAs, we are comprehensively reviewing various approaches and structural options."

Samsung Electronics: SEC indicated demand for LTAs from US hyperscalers during its March 18 annual shareholders' meeting. "We are pushing to convert quarterly and annual supply contracts into multi-year agreements spanning 3–5 years." Samsung confirmed during its 1Q26 earnings call (April 30) that it has already signed some multi-year contracts. EVP Jaejune Kim stated: "Due to our NDAs with customers, we are not able to go into too much detail on our multiyear contracts with customers...major customers are quite confident in future AI and AI-related demand, and they have been approaching us, seeking supply volume commitments for the medium to longer term. Based on these requests, we have been pursuing multiyear supply agreements...and have already signed finalized contracts with some customers. Unlike existing supply contracts which are based on mutual trust, these multiyear contracts present a higher level of binding commitments."

SanDisk (covered by Joseph Moore): SanDisk has re-branded its LTA strategy as "New Business Models" (NBMs) – a term it uses to distinguish these agreements from traditional, weaker LTAs. During its 3QF26 earnings call (April 30), CEO David Goeckeler stated: "I am pleased to share that we have successfully advanced those conversations with five multiyear partnerships signed so far. These partnerships are structured to lock in committed supply for our customers and committed financials for SanDisk. Our customers' commitments are backed by firm financial guarantees." "We have customers that are literally putting up billions of dollars of collateral through various financial instruments that will survive for the life of these contracts. And if they don't meet their obligations on consistent purchasing every quarter, then that financial commitment immediately comes to us as a compensation for that contract not being concluded."

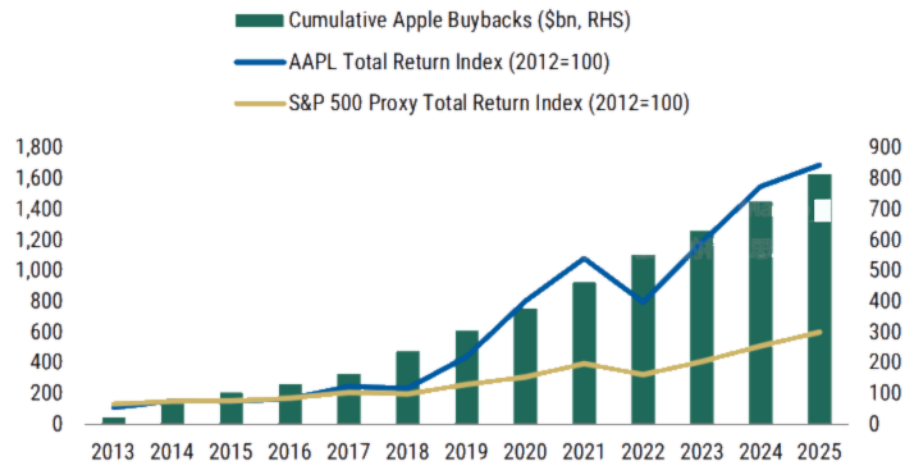
Kioxia (covered by Kazuo Yoshikawa): Management has indicated that long-term supply agreements with hyperscale customers are expanding into fiscal years 2028–2029, improving revenue visibility and creating a *de facto* backlog in the memory market.

LTAs drive sustained FCF – and hence shareholder returns and re-rating

We believe three- to five-year LTAs could mark a structural shift for memory companies: They may do so by reducing price/cycle volatility and improving through-cycle FCF visibility. As the industry moves past the heavy upfront capex phase, higher utilization, more predictable demand, and better pricing discipline should allow FCF yields to expand materially over 2026-28E ([Exhibit 5](#)). This matters because sustained FCF generation can increasingly be translated into per-share value through buybacks.

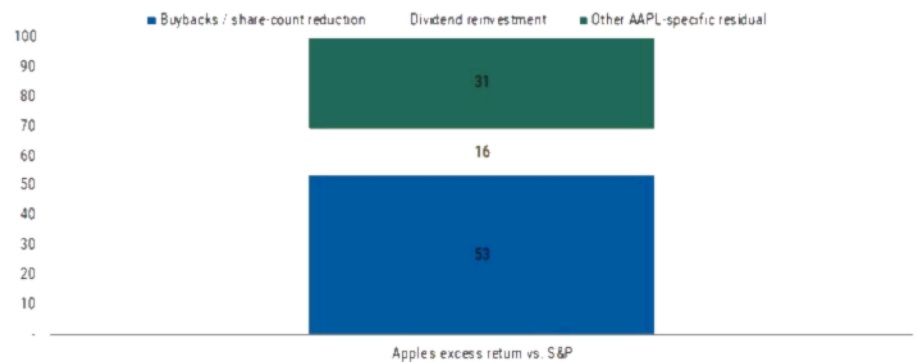
Apple stock provides a useful playbook of what's to come: AAPL has been one of the best performing technology stocks of the past decade. This was driven via consistent share buy-backs and share-count reduction as a major driver of long-term excess return. Our value attribution analysis suggests that buybacks and dividends together accounted for ~70% of AAPL's excess compounded return vs. the S&P 500 proxy. We are not arguing that memory stocks become Apple-like on share price performance, but that as LTAs reduce cyclicity and FCF yields rise, Hynix and Samsung could have a more durable capital return story, supporting both higher shareholder returns and potential re-rating.

Exhibit 2: Apple: sustained buybacks coincided with material long-term outperformance



Source: Factset, Morgan Stanley Research

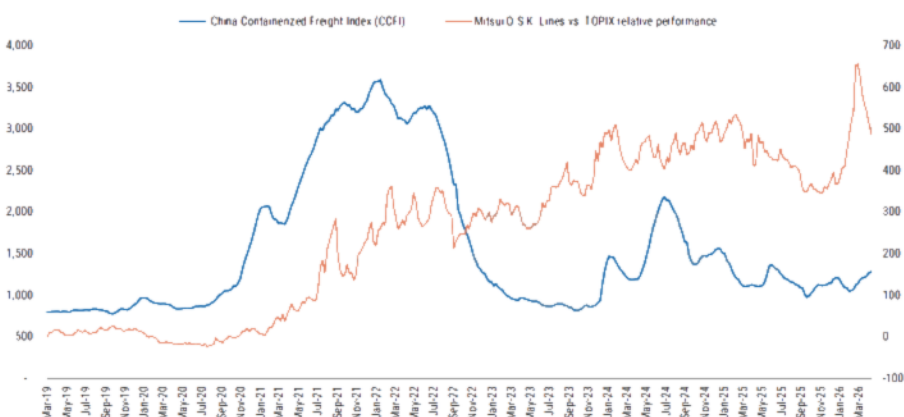
Exhibit 3: Apple: buybacks and dividends drove ~70% of excess compounded return vs. S&P proxy



Source: Factset, Morgan Stanley Research

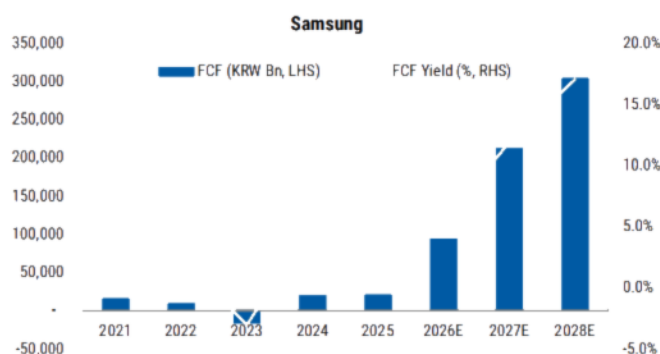
Japanese shipping companies are another example of how memory valuation can re-rate: The Japanese shipping industry during Covid (2021) showed pricing dynamics similar to DRAM – shipping rates increased more than three-fold and stocks were trading on 2x P/E multiples given the market's view of a mean reversion of shipping rates. However, despite freight costs falling back 90% from peak and forward EPS down almost 80%, these stocks re-rated after Covid in response to much higher and more sustainable dividend payout ratios following significant cash generation during COVID-induced shipping price inflation. ([Exhibit 4](#)).

Exhibit 4: Continued outperformance from enhanced dividend payout ratio after Covid



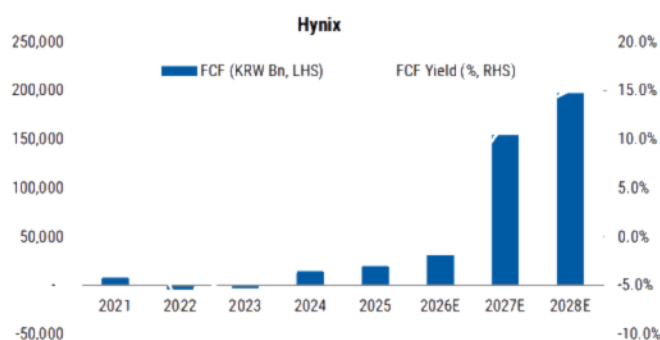
Source: FactSet, Morgan Stanley Research

Exhibit 5: Samsung's FCF and FCF yield



Source: FactSet, Morgan Stanley Research. Note: Historical FCF yield is calculated based on the year-end share price; forecast period is based on last close.

Exhibit 6: Hynix's FCF and FCF yield



Source: FactSet, Morgan Stanley Research. Note: Historical FCF yield is calculated based on the year-end share price; forecast period is based on last close.

Quantifying LTAs

Our sensitivity analysis ([Exhibit 7](#)) suggests that the market is not yet assigning any meaningful P/E premium to Samsung's and Hynix's LTA-backed memory earnings and FCF. We assume HBM is effectively 100% LTA-backed, while commodity memory LTA coverage ranges from 50% to 80%. We then apply a 6-12x P/E range to the LTA-backed portion of earnings, while valuing the remaining non-LTA commodity memory earnings at 5x.

- Even under the most conservative case – assuming only 50% of commodity memory is covered by LTAs and applying just a 6x P/E to the LTA portion while valuing the remaining non-LTA business at 5x – implied group P/E is ~5.5x for both Samsung and SK hynix.
- This is already above Samsung's current F27e P/E of 5.3x and SK hynix's current F27e P/E of 5x. At 70% commodity LTA coverage and a 10x LTA multiple, implied group P/E rises to ~8.5x for Samsung and ~8.6x for SK hynix. In the 80%/12x upside case, implied group P/E reaches ~10.5x for Samsung and ~10.7x for SK hynix.
- This suggests that the market is effectively valuing LTA-backed earnings almost the same as traditional cyclical commodity memory earnings. In our view, that is too conservative if these agreements prove to be binding, cash-backed, and durable through the cycle.

Exhibit 7: LTA scenarios – Samsung's and Hynix's implied group P/E sensitivity

Samsung - implied group P/E sensitivity								
Commodity LTA % down: LTA P/E across	6.0x	7.0x	8.0x	9.0x	10.0x	11.0x	12.0x	
50%	5.5x	6.0x	6.5x	7.0x	7.6x	8.1x	8.6x	
60%	5.6x	6.2x	6.8x	7.4x	8.0x	8.6x	9.2x	
70%	5.7x	6.4x	7.1x	7.8x	8.5x	9.2x	9.9x	
80%	5.8x	6.6x	7.4x	8.1x	8.9x	9.7x	10.5x	
Samsung current FY27 P/E		5.3x						

SK hynix - implied group P/E sensitivity								
Commodity LTA % down: LTA P/E across	6.0x	7.0x	8.0x	9.0x	10.0x	11.0x	12.0x	
50%	5.5x	6.1x	6.6x	7.2x	7.7x	8.3x	8.8x	
60%	5.6x	6.3x	6.9x	7.5x	8.2x	8.8x	9.5x	
70%	5.7x	6.5x	7.2x	7.9x	8.6x	9.4x	10.1x	
80%	5.8x	6.6x	7.5x	8.3x	9.1x	9.9x	10.7x	
SK hynix current FY27 P/E		5.0x						

Source: Morgan Stanley Research estimates

SK hynix – Earnings Estimate Revisions and Price Target Change

We have updated for 1Q26 actuals and reflect our latest industry checks and the impact of LTA on 2026-28e financials, similar to changes made for Samsung ([Samsung Electronics: Labor Overhang – A Clearing Event \(6 May 2026\)](#)).

- On commodity pricing, we previously forecasted a muted pricing trend in 2H27 and a down-cycle starting in 2028. We raise our 1H28 pricing forecast to flat to reflect downside protection from LTAs.
- We raise HBM pricing. Previously, we expected down 5-10% YoY during 2026-28e owing to market competition. We now project +15% YoY throughout 2026-28e via product migration as the previous assumptions of pricing competition ([news](#)) no longer hold. There have been reports of potential HBM price hikes ([news](#)), but this is not in our base case assumptions – we await confirmation from SK hynix. However, our increased 2028e base price is already significantly higher than previous assumptions, resulting in increased longer-term revenue and earnings contribution from HBM.
- Our other assumptions remain largely unchanged.

As a result, our 2026e, 2027e and 2028e EPS are raised by 6%, 3%, and 14%, respectively.

Our new price target, based on our residual income, is raised to W2.6mn, implying 38% upside from here. Our price target rises more than our 2026-28 EPS estimate revisions because of the higher base that affects long-term earnings.

We raise our bull case scenario value to W3.0mn, implying 60% upside and 6.7x 2027e P/E. This reflects potential doubling in HBM prices, to US\$3/Gb, with pricing sustained at an even high level of around US\$4/Gb in the longer term.

Exhibit 8: Earnings Estimate Revisions

(W bn)	FY26E			FY27E			FY28E		
	Previous	Revised	Change	Previous	Revised	Change	Previous	Revised	Change
Sales	335,034	347,635	4%	487,189	515,354	6%	505,430	586,029	16%
DRAM (& HBM)	249,923	260,943	4%	370,194	393,041	6%	387,771	454,660	17%
NAND	83,797	84,588	1%	115,682	120,209	4%	116,346	129,264	11%
Operating Profit	276,791	277,967	0%	407,567	419,983	3%	403,298	460,987	14%
DRAM (& HBM)	214,203	218,807	2%	319,658	333,514	4%	323,164	375,715	16%
NAND	62,588	59,161	-5%	87,909	86,469	-2%	80,134	85,271	6%
OP Margin	83%	80%	-3pp	84%	81%	-2pp	80%	79%	-1pp
DRAM (& HBM)	86%	84%	-2pp	86%	85%	-1pp	83%	83%	-1pp
HBM	72%	70%	-2pp	69%	69%	1pp	64%	70%	6pp
NAND	75%	70%	-5pp	76%	72%	-4pp	69%	66%	-3pp
Net Profit	214,166	226,427	6%	316,738	326,334	3%	310,625	354,688	14%
EPS for consensus	300,498	318,486	6%	444,418	459,012	3%	435,841	498,894	14%

Source: Company data, Morgan Stanley Research estimates

Exhibit 9: Key Assumptions

	FY26E			FY27E			FY28E		
	Previous	Revised	Change	Previous	Revised	Change	Previous	Revised	Change
DRAM Bit (1Gb Eq, mn)	115,331	115,331	0.0%	144,606	144,606	0.0%	176,997	179,663	1.5%
DRAM Bit Growth	21.7%	21.7%	0.0pp	25.4%	25.4%	0.0pp	22.4%	24.2%	0.1pp
DRAM ASP (1Gb eq; US\$)	1.8	1.8	0%	1.96	2.00	2%	1.62	1.8	13%
DRAM OPM	83.8%	83.9%	0.0pp	84.6%	84.9%	0.2pp	81.2%	82.6%	1.4pp
HBM Bit (1Gb Eq, mn)	13,922	13,922	0%	18,496	18,496	0%	21,173	23,838	13%
HBM ASP (1Gb eq; US\$)	1.9	1.96	3%	1.97	2.28	16%	1.87	2.63	41%
HBM OPM	69.4%	69.7%	0.3pp	65.9%	69.3%	3.4pp	60.8%	69.8%	9.0pp
Conv.DRAM ASP	1.8	1.8	0%	2.0	2.0	0%	1.6	1.7	7%
Growth YoY	251.4%	251.4%	0%	8.2%	8.2%	0%	(18.5%)	(12.5%)	nm
NAND Bit (1GB, mn)	209,102	213,397	2.1%	261,065	260,702	(0.1%)	317,075	316,635	(0.1%)
NAND Bit Growth	12.4%	14.7%	0.2pp	24.9%	22.2%	-0.1pp	21.5%	21.5%	0.0pp
NAND ASP (1GB eq; US\$)	0.3	0.3	7%	0.31	0.3	7%	0.24	0.3	15%
NAND OPM	68.8%	69.9%	1.1pp	70.0%	71.9%	1.9pp	61.1%	66.0%	4.8pp
USD/KRW rate	1,450	1,450	0.0%	1,341	1,341	0.0%	1,312	1,312	0.0%
Number of Shares (mn)	710,950	710,950	0.0%	710,950	710,950	0.0%	710,950	710,950	0.0%

Source: Company data, Morgan Stanley Research estimates

Exhibit 10: Residual Income Model

RIM													
Fiscal period	FY24A	FY25A	FY26E	FY27E	FY28E	FY29E	FY30E	FY31E	FY32E	FY33E	FY34E	FY35E	Terminal value
Forecast year		0	1	2	3	4	5	6	7	8	9	10	
Total Shareholder Equity	73,916	113,916	337,731	662,105	1,020,097	1,320,683	1,584,534	1,837,906	2,103,066	2,434,444	2,830,972	3,305,489	3,404,654
Core Net Profit	19,797	42,948	225,948	325,440	359,148	301,741	265,007	254,643	266,430	332,649	397,799	475,787	490,061
Residual income		32,148	199,978	267,950	262,422	167,146	97,957	57,852	39,825	71,742	95,037	122,941	126,629
ROE		45.73%	100.06%	65.10%	42.70%	25.78%	18.24%	14.88%	13.52%	14.66%	15.11%	15.51%	14.61%
Discount period		0.00	0.50	1.50	2.50	3.50	4.50	5.50	6.50	7.50	8.50	9.50	10.50
Discount factor		1.00	0.95	0.85	0.76	0.68	0.61	0.55	0.49	0.44	0.40	0.36	0.36
PV of Equity Capital		32,147.6	189,384.8	227,583.4	199,899.8	114,191.5	60,020.2	31,791.3	19,627.5	31,711.3	37,675.5	43,710.4	45,021.7
Beginning Equity Capital		337,731											
PV of Equity Capital		1,000,617											
PV of Continuing Value		545,558											
Total Equity Value		1,883,906											
FD shares outstanding ('000)		728,002											
Per share value		2,600,000											
Current Price		1,880,000											
Upside Potential		38%											

Source: Company data, Morgan Stanley Research estimates

Exhibit 11: Financial Summary

Income Statement

(W bn)	FY24A	FY25A	FY26E	FY27E	FY28E
Revenue	66,193	97,147	347,635	515,354	586,029
Gross Profit	31,828	58,692	317,459	481,825	541,597
SG&A	-8,361	-11,485	-39,491	-61,842	-80,610
EBITDA	36,049	61,121	296,571	448,533	499,645
Operating profit/loss	23,467	47,207	277,967	419,983	460,987
Financial Income	-853	4,699	2,280	2,667	5,440
Pretax profit	23,885	50,466	292,658	422,649	466,426
Net Profit	19,797	42,948	225,948	325,440	359,148
Margins					
Gross Margin	48.1%	60.4%	91.3%	93.5%	92.4%
EBITDA Margin	54.5%	62.9%	85.3%	87.0%	85.3%
Operating Margin	35.5%	48.6%	80.0%	81.5%	78.7%
Net Income	29.9%	44.2%	65.0%	63.1%	61.3%
Growth Rates					
Sales		46.8%	257.8%	48.2%	13.7%
EBITDA		69.5%	385.2%	51.2%	11.4%
Operating Income		101.2%	488.8%	51.1%	9.8%
Net Income		116.9%	426.1%	44.0%	10.4%

Balance Sheet

(W bn)	FY24A	FY25A	FY26E	FY27E	FY28E
Cash & Cash Equivalents	11,205	11,644	40,267	193,359	389,143
Trade and other receivables	14,360	21,409	77,446	99,596	102,104
Inventory	13,314	13,657	21,605	30,402	36,399
Other current assets	1,017	4,378	4,378	4,378	4,378
Current Assets	42,279	64,414	157,023	341,061	545,350
Tangible Assets	60,157	76,947	118,506	164,585	211,130
Intangible Assets	4,019	4,465	6,876	9,550	12,250
Other non-current assets	5,493	3,852	16,290	16,290	16,290
Total Assets	119,855	166,171	381,898	711,899	1,072,711
Trade and other payables	15,716	18,939	11,692	18,023	21,611
Short term Borrowings	5,252	9,022	8,181	7,478	6,708
Other current liabilities	3,689	5,352	5,352	5,352	5,352
Current Liabilities	24,965	33,996	25,508	31,135	33,954
Borrowings	5,038	3,804	3,804	3,804	3,804
Long-term other payables	529	442	442	442	442
Other Non-current liabilities	15,190	13,933	13,933	13,933	13,933
Total Liabilities	45,940	52,255	44,167	49,795	52,614
Capital Stock	3,658	3,658	3,658	3,658	3,658
Retained Earnings	65,418	105,599	329,893	655,161	1,008,694
Total Shareholders' Equity	73,916	113,916	337,731	662,105	1,020,097
Total Liabilities & SE	119,855	166,171	381,898	711,899	1,072,711
Net Debt	6,993	681	(25,623)	(184,121)	(381,444)

Cash Flow Statement

(W bn)	FY24A	FY25A	FY26E	FY27E	FY28E
Net Income (Loss)	19,797	42,948	225,948	325,440	359,148
Add: Depreciation & Amortization	12,582	13,914	18,604	28,550	38,659
Less: Changes in Working Capital	5,600	(624)	(83,671)	(24,616)	(4,916)
Less: Net tax expense	(20,014)	(11,437)	(66,710)	(97,209)	(107,278)
Less: Net interest expense	(4,332)	(1,389)	(841)	(703)	(769)
Cash flows from operating activities	29,796	47,544	93,330	231,461	284,844
Acquisition of PP&E	(15,898)	(28,409)	(62,574)	(77,303)	(87,904)
Other Operating cashflows	16,163	4,133	0	0	0
Cash flows from Investing activities	(18,005)	(45,782)	(62,574)	(77,303)	(87,904)
Changes in LT Borrowings	(7,376)	1,918	0	0	0
Changes in Short term Borrowing	0	0	0	0	0
Dividend Payout	0	0	0	0	0
Other Investing Cashflows	(602)	(447)	0	0	0
Cash flows from Financing activities	(8,704)	(1,232)	(2,133)	(1,066)	(1,155)
Cash and cash equivalents - closing	11,205	11,644	40,267	193,359	389,143
Increase(decrease) in cash & cash equivalents	3,087	531	28,623	153,092	195,784
FX impact	530	(91)	0	0	0

Ratio Analysis

(W bn)	FY24A	FY25A	FY26E	FY27E	FY28E
ROE (AOY)	31.1%	45.7%	100.3%	65.3%	42.2%
ROE (EOY)	26.8%	37.7%	67.0%	49.3%	34.8%
ROA	18.0%	30.0%	82.6%	59.7%	39.7%
ROIC (AOY)	16.9%	28.9%	86.0%	74.9%	58.9%
Asset Turnover	0.6	0.6	0.9	0.7	0.5
Days sales outstanding	79	80	81	71	64
Days inventory outstanding	114	100	113	116	107
Days payable outstanding	180	204	104	98	83
Current Ratio	1.7	1.9	6.2	11.0	16.1
Debt to Equity	0.6	0.5	0.1	0.1	0.1
Net Debt to Equity	0.1	0.0	(0.1)	(0.3)	(0.4)
EPS, for consensus	27,182	59,300	318,486	459,012	498,894
BVPS (MW)	101,515	157,273	475,685	933,197	1,430,466
DPS	2,204	3,000	3,000	1,500	1,625
EBITDA	36,049	61,121	296,571	448,533	499,645
P/E	9	10	2	1	1
P/BV	2.33	3.94	1.30	0.66	0.43
EV/EBITDA	5	7	1	1	0
EV/Sales	2.71	4.63	1.18	0.50	0.10
Dividend Yield (%)	0.93	0.48	0.48	0.24	0.26
FCF	17,568	23,394	82,775	248,701	298,778
Share Price (KRW)	236,500	620,000	620,000	620,000	620,000
Shares Outstanding (000 AOY)	728,002	724,177	710,950	710,950	710,950

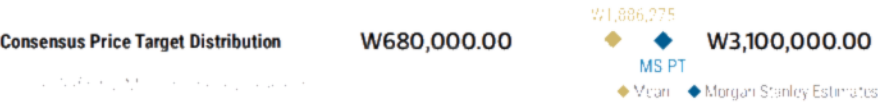
Source: Company data, Morgan Stanley Research estimates

Risk Reward – SK hynix (000660.KS)

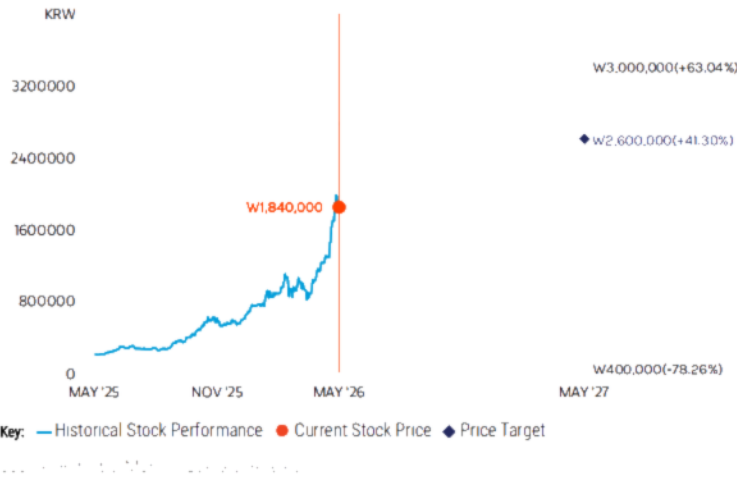
Robust commodity super-cycle supported by AI in 2026

PRICE TARGET W2,600,000

Base case, residual income valuation model. We assume a cost of equity of 11.5% (5% risk-free rate, 6.5% risk premium, 1.0 beta) and a terminal growth rate of 3%.



RISK REWARD CHART



BULL CASE W3,000,000

Memory TAM grows; AI HBM leadership is extended

We see a stronger-than-expected commodity cycle for DRAM and NAND, supported by AI inference demand moving into 2027. Our bull scenario valuation implies 6.7x 2027e P/E.

BASE CASE W2,600,000

Commodity up-cycle

We see a stronger-than-expected commodity cycle for DRAM and NAND, supported by AI inference demand in 2026 and into 2027. HBM competition risks remain but are being increasingly recognized by the market. Our price target implies 5.7x 2027e P/E, underpinned by Hynix's leadership in HBM and a sharp rebound in commodity memory pricing.

BEAR CASE W400,000

Weaker macro climate, HBM competition intensifies

We assume a period of AI computing digestion in 2026, leading to more aggressive margin erosion for the HBM segment owing to competitors' aggressive capacity expansion and pricing competition, as well as faster DRAM pricing drops with muted demand recovery. In our long-term assumptions for the bear case, we assume margin erosion for the HBM segment amid rising competition. Our bear case valuation implies 1.3x 2026e P/B.

OVERWEIGHT THESIS

- We believe the commodity cycle is likely to stay robust in 2026 and into 2027, thanks to AI inference demand growth.
- Our earnings estimates reflect downside protection from LTAs into 2028, stronger commodity pricing assumptions, and stronger HBM pricing reset in 2027.
- We do not think this is the time to rotate out of outperformers such as SK hynix.
- Our sensitivity analysis suggests that the market is not yet assigning any meaningful P/E premium to the company's LTA-backed memory earnings and FCF.

Consensus Rating Distribution



Risk Reward Themes

Pricing Power: Positive

Secular Growth: Positive

Self-help: Positive



Risk Reward – SK hynix (000660.KS)

KEY EARNINGS INPUTS

Drivers	2025	2026e	2027e	2028e
Revenue Growth (%)	125.9	679.1	1,472.8	785.3
OPM (%)	48.6	80.0	81.5	78.7
CAPEX (%)	(2,840,890.0)	(6,257,430.9)	(7,730,302.6)	(8,790,428.5)

INVESTMENT DRIVERS

- Supply and demand outlook for DRAM, NAND, and HBM
- Global demand for data center products (server DRAM, enterprise SSD)

GLOBAL REVENUE EXPOSURE



For more information on the company's global revenue exposure, please visit [here](#).

MS ALPHA MODELS

1/5
MOST
3 Month
Horizon

For more information on the company's MS Alpha Models, please visit [here](#).

RISKS TO PT/RATING

RISKS TO UPSIDE

- ASP growth re-acceleration
- Preemptive production cuts or disruption
- Sharp demand improvements
- Significant increase in capital returns

RISKS TO DOWNSIDE

- End demand turning weaker than expected
- Rising competition for DDR5, causing overspending on the supply side.
- Inventories remaining elevated at cloud and Chinese smartphone customers.

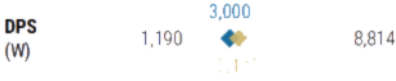
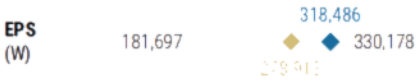
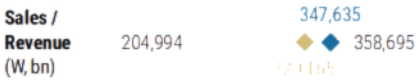
OWNERSHIP POSITIONING

Inst. Owners, % Active 73.8%

For more information on the company's ownership positioning, please visit [here](#).

MS ESTIMATES VS. CONSENSUS

FY Dec 2026e



◆ Mean ◆ Morgan Stanley Estimates

For more information on the company's MS Estimates vs. Consensus, please visit [here](#).

Risk Reward Reference links

1. View explanation of Options Probabilities methodology - [Options_Probabilities_Exhibit_Link.pdf](#)
2. View descriptions of Risk Rewards Themes - [RR_Themes_Exhibit_Link.pdf](#)
3. View explanation of regional hierarchies - [GEG_Exhibit_Link.pdf](#)
4. View explanation of Theme/Exposure methodology - [ESG_Sustainable_Solutions_External_Link.pdf](#)
5. View explanation of HERS methodology - [ESG_HERS_External_Link.pdf](#)