

MEMORY'S MARGINS: Separating Structural Improvement from Cyclical Peak

MEMORY AT THE EXTREMES

The MSCI Emerging Markets Index is up over 22% year-to-date¹ on the back of a historic rally in semiconductor stocks. Remarkably, the index's top eight contributors are all semiconductor-related businesses, together accounting for more than three-quarters of its gains this year². This is not surprising: two-thirds of the index's expected 2026 earnings per share growth is attributable to the chip sector³. Within semis, memory suppliers Samsung and SK Hynix are key beneficiaries, with their margin expansion driving a significant share of the sector's earnings uplift. Understanding the mechanics of that expansion, and its historical durability, is critical to assessing the earnings landscape.

THE MARGIN MATH

Memory profitability is overwhelmingly a story of pricing. Costs per gigabit are relatively fixed in the short run, as fabrication plants take years to build and ramp. When dynamic random-access memory (DRAM) prices rise, nearly every incremental dollar flows to gross profit. The illustrative profit and loss (P&L) in the table below shows how tripling DRAM prices translates into a sixfold increase in gross profit and a doubling of the gross margin.

	Normal	Boom	% Change
DRAM Price	100	300	200%
Gross Profit	40	240	500%
Gross Margin	40%	80%	100%

For illustrative purposes only. Values are hypothetical and not drawn from any specific company's financial statements. The example assumes a base gross margin of 40%, consistent with the approximate normalized margin range observed across major DRAM manufacturers (Samsung, SK Hynix, Micron) over the prior decade, as reported in company filings and compiled by Capital IQ.

High-bandwidth memory (HBM) for AI servers drove DRAM demand, but it is accounting for only approximately 12% of DRAM bit demand in 2026. While HBM demand is likely price-inelastic, conventional memory demand is dominated by end markets with meaningful price elasticity: handsets (21%), conventional servers (30%), and PCs/other (36%)⁴. The key question for investors is how durable current commodity DRAM pricing is.

1. USD, TR as of 5/8/2026

2. FactSet, Pzena analysis

3. FactSet, Pzena analysis. Data as of May 6, 2026.

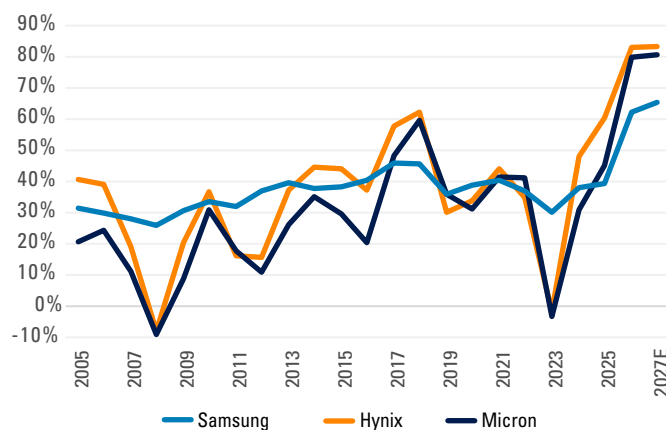
Semiconductors = GICS "Semiconductors & Semiconductor Equipment" + Samsung Electronics (for MSCI EM). Energy = GICS "Oil Gas & Consumable Fuels" + "Energy Equipment & Services."

4. Sanford C. Bernstein & Co., UBS, Pzena analysis

MARGINS IN HISTORICAL CONTEXT

This generational memory pricing boom has produced an unprecedented level of margin expansion for the major manufacturers. Current gross margins are well above prior-cycle peaks. Industry structure has improved over the last two decades through consolidation, but commoditized memory has always been characteristically cyclical. Periods of extreme margin expansion have historically triggered a supply response and demand destruction, resulting in price collapses. Margins at today's elevated levels have proven difficult to sustain. Samsung's diversified business model has historically exhibited materially lower cyclicality, offering some insulation relative to pure-play memory companies.

Samsung/Hynix/Micron Gross Margins



Source: Company reports, Capital IQ estimates, Pzena analysis

THE BOTTOM LINE

Semiconductors are the engine of emerging markets' earnings growth so far in 2026, with memory at the center of the story. The operating leverage inherent in the business model amplifies returns in strong pricing environments but also means earnings are sensitive to commodity price shifts. With industry consolidation providing a more supportive backdrop than that of prior cycles, we believe that the structural case for memory is stronger than it has been historically. The challenge is distinguishing structural improvement from cyclical peaks and managing the exposure accordingly.

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