KGI

CIO Insights

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Decomposing the Value of Artificial Intelligence

What It Takes to Justify the Amount of Capex in AI

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Investment Strategies

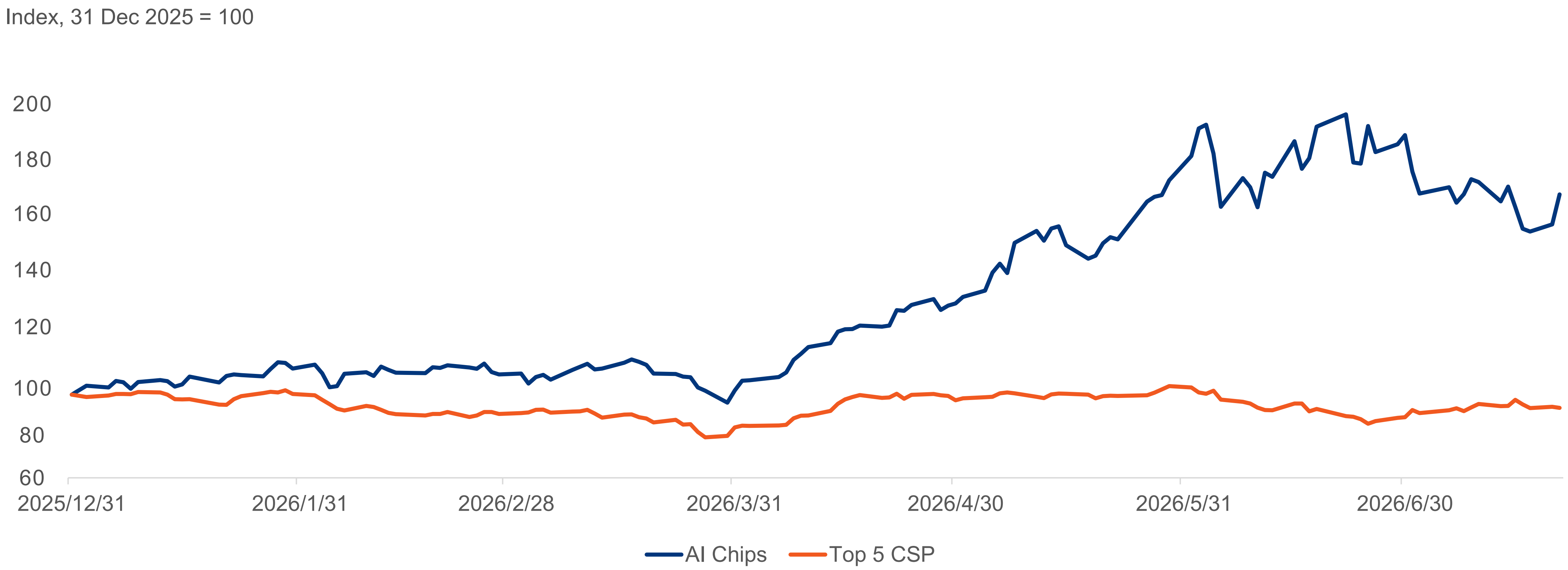
Heavy Retail Participation to Provide Strong Support for Technical Rebound

- **Artificial Intelligence is an unstoppable technology trend that operates independently of capital market cycles.** However, whether AI investments will yield a reasonable return will, sooner or later, be reflected in share price trends. There are times when a strong industry trend and good companies can still be a bad investment. Conversely, fundamentally weak industries or companies can sometimes be good investments if market expectations are low enough.
- The market has already begun to penalize those that have spent heavily on AI. It is only a matter of time before hyperscalers cut their capex, either due to funding constraints or a low return on investment. We expect this to be a potential catalyst for a performance reversal between the two groups – AI Chips vs. Hyperscalers – given that free cash flow trends will immediately reverse. We advise investors to refer to the **Outperformance Note** of Hyperscalers over AI Chip companies.
- Given the heavy retail participation in AI-related trades, we believe any major decline in stock prices will be followed by a powerful technical bounce-back or a buy-the-dip response from retail investors. We therefore advise investors to execute a **Decumulator** on AI Chip companies following any major bounce-back, to gradually reduce their positions.
- We also expect the current crowded AI trade to broaden into other value-oriented, resilient sectors such as Healthcare, Defense, and Energy. We believe a large cap US value fund will best capture this diversification trend. Once CPI inflation normalizes in 2027, we believe Gold will regain its safe-haven status.

Source: KGI

Chip Makers Win; Hyperscalers Bleed

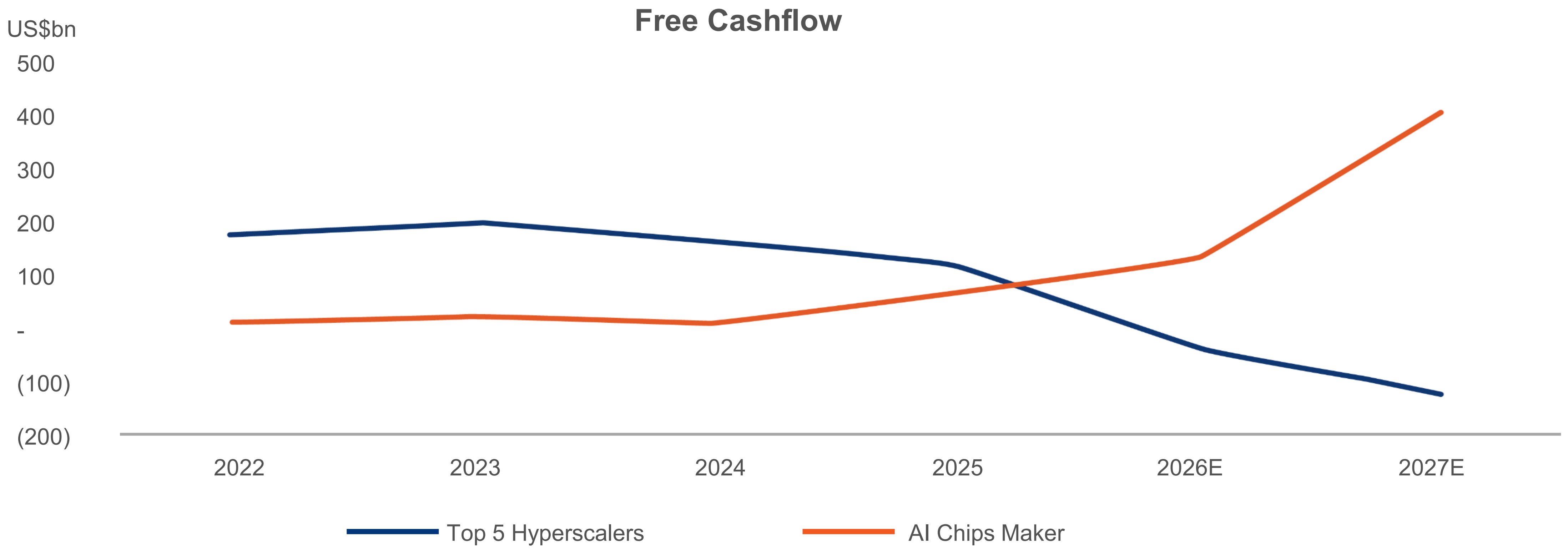
The Market Signal Is Clearer Than Ever – It Remains Skeptical About the Returns on AI Spending



Source: Bloomberg, KGI, Note: AI Chips includes Nvidia, Micron, Broadcom, Marvell; Top 5 CSP includes Amazon, Alphabet, Meta, Microsoft, Oracle

What if the Hyperscalers Decide to Cut Capex?

If AI Spending Slows, This Would Only Represent Downside Risk to the FCF of Chip Makers



Source: JP Morgan, UBS, KGI, Note: AI Chips includes Nvidia, Micron, Broadcom, Marvell; Top 5 CSP includes Amazon, Alphabet, Meta, Microsoft, Oracle

Decomposing the Value of AI

Before Assessing Who Captures AI's Economic Surplus, We Decompose Where Value Is Generated

01 – COST SAVINGS (Efficiency Gain)

Efficiency & Labor Substitution

Automating routine tasks and reducing headcount. Addressed in Slides 6-8: the arithmetic is challenged by social and political friction, meaning capex is difficult to justify on efficiency alone.

+

02 – VALUE CREATION (Creation of Alpha)

Alpha & Competitive Advantage

Generating genuinely new insight, product, or edge beyond the model itself. The focus of the remainder of this presentation: where does real value-add come from, and who captures it?

Source: KGI

The US$2.2 Trillion Question

The Narrative of AI Is That It Can Enhance Efficiency by Replacing Human Labor

Hyperscalers will spend a cumulative US$2.2 trillion on AI capex by 2027. For this capital to be justified, it must deliver on its core promise: making labor materially more efficient and cutting company labor costs at scale.

EST. Capex (2026-27) of US CSP and Neo-Cloud Players

US$ bn	2024	2025	2026F	2027F
Amazon	83	132	199	228
Google	53	91	187	242
Microsoft	56	83	158	192
Meta	37	70	135	162
Oracle	11	35	66	77
Top-5 US CSP	239	412	744	902
YoY (%)	60	72	81	21
China CSP	21	32	38	41
YoY (%)	135	49	19	7
Neo-Cloud & Enterprise	24	37	77	89
YoY (%)	30	50	111	15

Source: Bloomberg, KGI

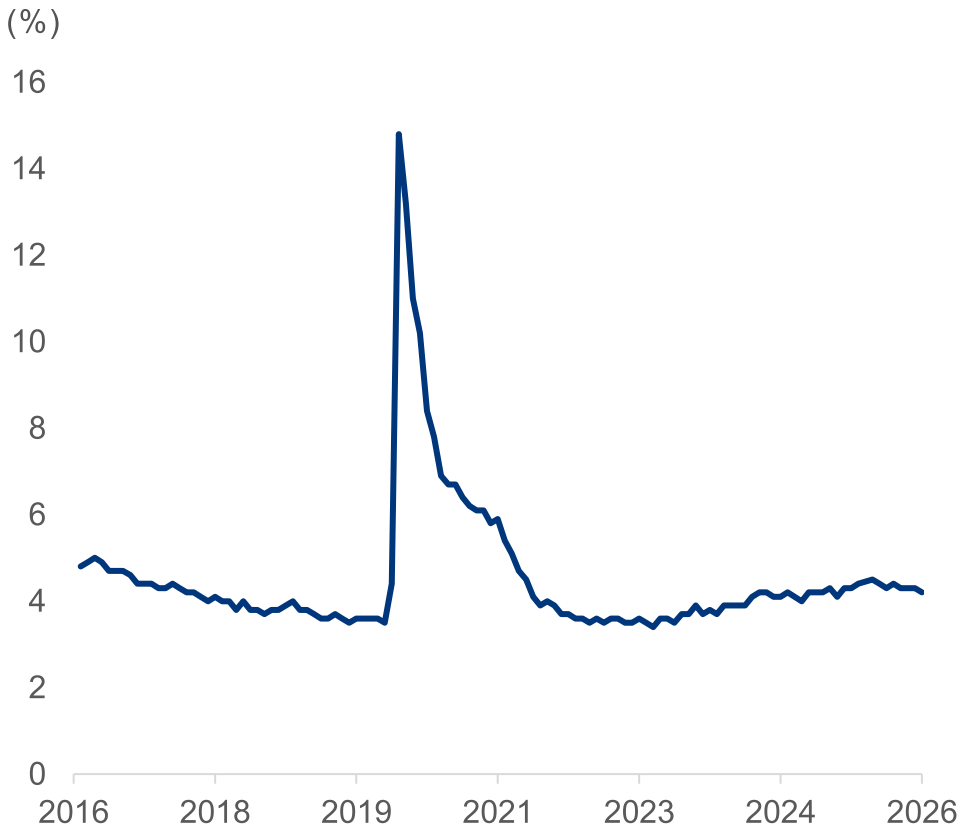
Justifying Us$2.2tn Requires Eliminating 5.7% of Employment

To Justify Cumulative Capex, This Will Imply Pushing the Unemployment Rate to Almost 10%

Working population (No. of ppl) in the US	162	mn
Median Income (US$)	64,220	
Total payroll (US$)	10,420,337	mn
% reduction in employment	5.67%	
Savings/p.a. (US$)	590,541	mn

Unit: US$ Million	Year 1	Year 2	Year 3	Year 4	Year 5
Labour cost savings	590,541	590,541	590,541	590,541	590,541
Discount rate @9%					
Discount factor	1.09	1.19	1.3	1.41	1.54
Present Value	541,781	497,047	456,006	418,354	383,811
Sum of Present Value	2,297,000				

The US Unemployment Rate



Source: Bloomberg, KGI

The Real Ceiling on AI Deployment Is Social, Not Technical

If Reaching 10% Unemployment Is Not Feasible, the Capex Deployed May Not Be Justified

The binding constraint on AI is not model capability – it is social and political acceptance. Early resistance is already emerging and likely to intensify.

- New York State announced a one-year moratorium on new data center construction due to community opposition
- U.S. senators have proposed AI taxes to compensate displaced workers
- Public resistance cites noise, energy and water use, and neighborhood disruption
- Displaced workers vote; AI models do not

Source: KGI

When Everyone Uses AI, Output Converges to Beta (Average)

It Is the User (Human) Who Can Drive Differentiation (Alpha), Not AI

As AI achieves near-total adoption, a paradox emerges: the tool that promised infinite creativity is producing numbing uniformity. When all users draw from the same foundational models, output gravitates to a statistical mean.

- A consultant's AI-generated report becomes indistinguishable from a competitor's
- AI is a brilliant assimilator of consensus knowledge – it reproduces the most probable answer
- In finance terms: this is beta – the passive, undifferentiated market return
- Widespread adoption turns novel output into a commodity

Source: KGI

Alpha Relocates to Three Human Capabilities

Alpha Does Not Disappear – It Relocates From the Model Itself to the Human Who Orchestrates It

1. PROPRIETARY DATA

Private, exclusive data fed into the model's context creates a protected cognitive space competitors cannot replicate.

2. THE DIFFERENT QUESTION

Sophisticated question formulation steers the model away from the central tendency toward the unexplored tail.

3. CONTRARIANISM

The courage to override the model's consensus output with experiential, unquantifiable judgment.

Source: KGI

The Alpha of Proprietary Data

The Ability to Collect Private Data Drives Value Creation

Public models trained on public data produce public conclusions. The first and most defensible source of alpha is the exclusive, private data an organization feeds into the model's context – an act of creating a protected cognitive space, not merely fine-tuning.

SCENARIO A

Public Model → + Public Data → = Commoditized Beta Output

SCENARIO B

Public Model → + Proprietary Data → = Defensible Alpha Output

Example: a law firm analyzing a negotiation with a decade of its own confidential settlement data is not using the same AI as everyone else – the value lies in the exclusivity of the fuel, not the engine's horsepower.

Source: KGI

The Alpha of the Different Question

It Is the User of AI Who Can Drive the Differentiation

Even with identical data access, output quality is governed by the sophistication of the prompt. Question formulation is a strategic capability, not a typing trick.

The alpha was not in the answer – it was incubated in the human's contrarian hypothesis that framed the question. This steers the model away from the central tendency toward the unexplored tail of the probability distribution.

Type	Prompt / Outcome
Beta	"Analyze our market position." → Competent, generic, consensus output.
Alpha	"Assume our two largest competitors are hiding a cash-flow problem – stress-test our pricing strategy against that hidden variable." → Contrarian, non-obvious, differentiated output.

Source: KGI

The Alpha of Strategic Contrarianism

The User Decides When to Override AI

The ultimate human advantage: looking at the model's consensus output and choosing to disobey it. This is a synthesis of the model's logical world with the messy, instinctive, experiential world it cannot see.

- The executive who overrides AI's recommendation to cut a failing unit based on an unquantifiable conviction about a cultural shift
- The investor who fades a probabilistic trade because they see a paradigm-shifting narrative not yet tokenized into data
- Requires courage and first-principles understanding independent of the AI

Source: KGI

AI Has Cost Structure Worse Than a (Window) OS

The Marginal Cost of a Software Is Close to Zero

Traditional software scales at near-zero marginal cost. AI does not: every query consumes real electricity and compute, sitting atop a mountain of GPU and data-center capex that depreciates in years, not decades.

Category	Gross Margin Range	Key Driver of Cost
Traditional Software	70–85%	Near-zero marginal cost per user; "build once, sell infinitely"
Mature SaaS	70–85%	Low incremental hosting cost; high operating leverage at scale
AI-Native Applications	40–65%	Variable inference cost (GPU compute) on every query
Pure-Play AI Model Providers (OpenAI, Anthropic)	33–56%	Massive inference + model training infrastructure costs
Hyperscalers / Cloud (AWS, Azure, Google Cloud)	~50–55% (AI workloads est.)	Data center capex, GPU depreciation, energy costs
General Manufacturing	25–40%	Raw materials, labor, capital equipment

Source: KGI

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