

GLOBAL ECONOMICS ANALYST

Assessing the Current Pace of AI Investment

- AI investment is a key focus of macro markets, but measuring it is not entirely straightforward. The most frequently cited measure is the projection for almost \$800bn in 2026 capex from US hyperscalers. However, this estimate ignores investment by private and foreign companies and captures non-US and non-AI investment.
- To address these measurement issues, we adjust hyperscaler capex projections to exclude pre-AI investment trends, augment these data with capex estimates for foreign and private AI-exposed companies, and allocate investment globally based on the location of announced hyperscaler investments. After these adjustments, we estimate that 2026 AI investment is set to total \$1019bn globally and \$581bn in the US.
- We crosscheck our estimate with two other approaches. First, gross profit forecast revisions for public companies exposed to the buildout imply \$1060bn in global AI investment in 2026. Second, we estimate a current investment pace of \$1002bn globally and \$545bn in the US based on official national account and trade data. Taken together, these estimates point to AI-investment totals of \$1tn globally and just under \$600bn in the US in 2026.
- The AI capex growth outlook, including how high AI investment rises as a share of GDP and when capex growth slows, is a key source of uncertainty for macro markets right now. Extrapolating our 2026 estimates based on analyst forecasts for public company capex suggests that AI capex will rise from 1.8% of GDP in the US (0.9% globally) in 2026 to 2.5% of GDP in the US (1.3% globally) in 2027, with a further increase to 2.8% (1.4% globally) in 2028. These levels are consistent with those in prior general-purpose technology (GPT) buildouts.
- A dashboard approach will probably be most useful in assessing when AI capex growth will slow. Leading indicators still point to a robust growth outlook, although a nowcast based on trade data points to a moderate slowdown in investment (albeit from a very robust pace) in June and July. Official US data imply that recent increases in AI investment have increasingly been driven by cost inflation, suggesting that spending increases in 2026 may provide a smaller boost to real investment than in 2025 (we still see the boost to the level of US GDP as limited due to measurement biases and high imported content of AI hardware).

Joseph Briggs

+1(212)902-2163
joseph.briggs@gs.com
Goldman Sachs & Co. LLC

Sarah Dong

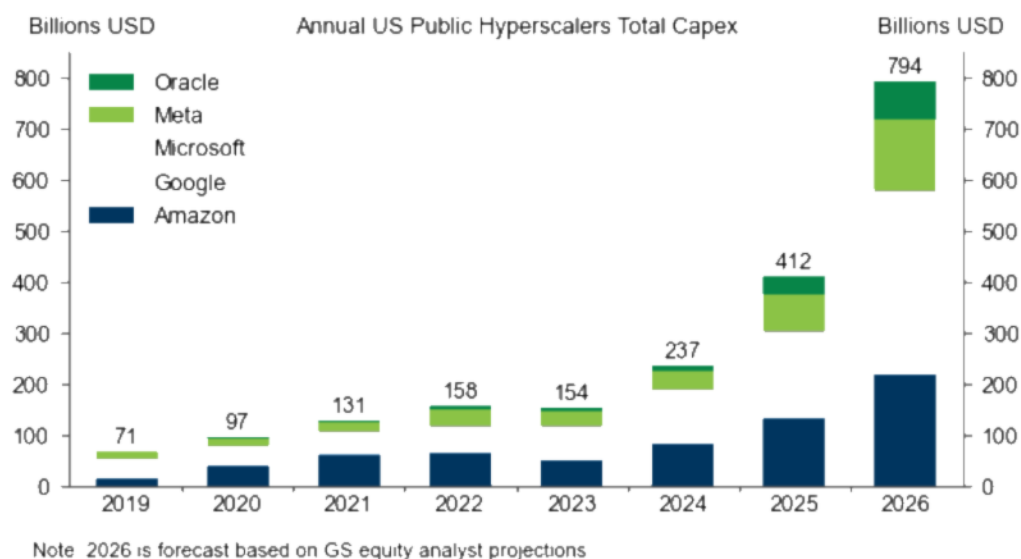
+1(212)357-9741 | sarah.dong@gs.com
Goldman Sachs & Co. LLC

Assessing the Current Pace of AI Investment

Global and US AI investment is a key focus of macro markets, but measuring it is not straightforward. The most frequently cited measure for US investment in 2026 is the approximately \$800bn in capex by US hyperscalers (consensus forecasts as of July 30th; [Exhibit 1](#)). While easy to measure, this estimate has several well-known drawbacks.

First, it ignores investment by private US companies that play a pivotal role in the AI ecosystem (this view is [reflected](#) in private company valuations), as well as capex from other public US companies that play smaller but still important roles in the AI infrastructure buildout (our credit team recently [highlighted](#) that hyperscalers have directly accounted for only 40% of AI-related supply in 2026). Second, it ignores investment from non-US companies, particularly those [in China](#) and [Asia](#) more broadly. Third, hyperscaler investment totaled over \$150bn even prior to the AI boom, suggesting that some current capex is unrelated to AI. Fourth, US hyperscalers operate globally, so some share of investment is realized outside the US.

Exhibit 1: Hyperscalers Are Set to Spend just under \$800bn on Capex in 2026 According to Current Consensus Forecasts



Source: FactSet, Goldman Sachs Global Investment Research

In this *Global Economics Analyst*, we combine different data sources to assess the pace of US and global AI investment in 2026.

An Augmented Measure of Hyperscaler Capex

To directly address the drawbacks highlighted above, we augment the standard hyperscaler capex measures in several different ways.

1. First, we include capex projections for public companies other than hyperscalers in the US that are included in our various GS AI baskets¹. We also collect media reports

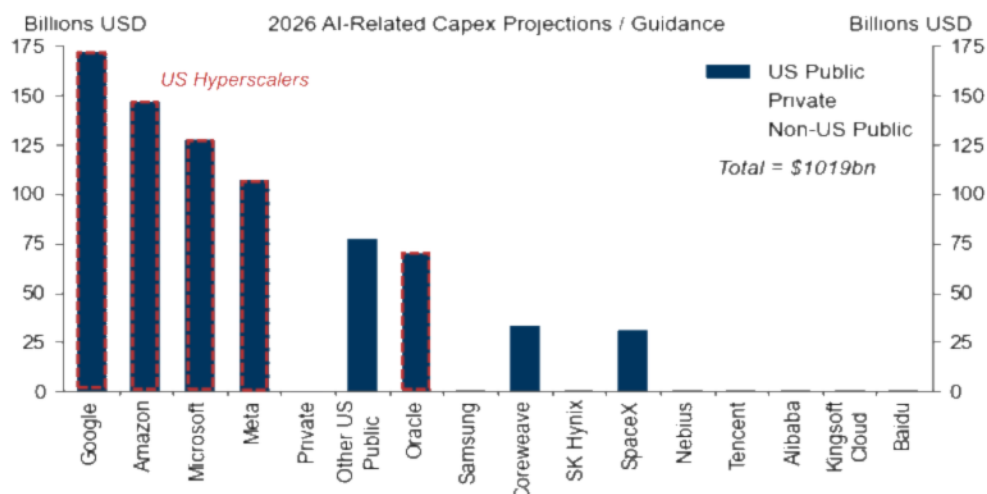
¹ Including: GS US Broad AI (GSTMTAIP), GS US Optical Networking (GSXUOPTI), GS US Liquid Cooling Equipment (GSXUCOOL), GS US AI Semis (GSCBSMHX), GS US AI Inference (GSXUINFR), GS TMT Memory Exposed (GSTMTMEM), and GS AI Data Centers & Electrical Equipment (GSTMTDAT).

of capex for key private companies that are pivotal in the AI ecosystem.

2. Second, we add in capex projections for AI-exposed companies outside of the US.
3. Third, we adjust total capex spending by subtracting off 2022 capex levels for US hyperscalers (this adjustment is motivated by our equity analysts' views that nearly all incremental capex since 2022 has been allocated toward AI projects). We similarly attribute all capex for the private companies we include to AI. For less directly exposed and non-US companies, we also assume capex in excess of 2022 levels is AI related.²

Whenever possible, we exclude financial leases that could otherwise be double counted as hardware capex by other companies. Following these adjustments, we estimate that global AI-related investment will total \$1019bn in 2026 ([Exhibit 2](#)).

Exhibit 2: Our Augmented Hyperscaler Capex Estimate Points to \$1019bn in AI Investment in 2026

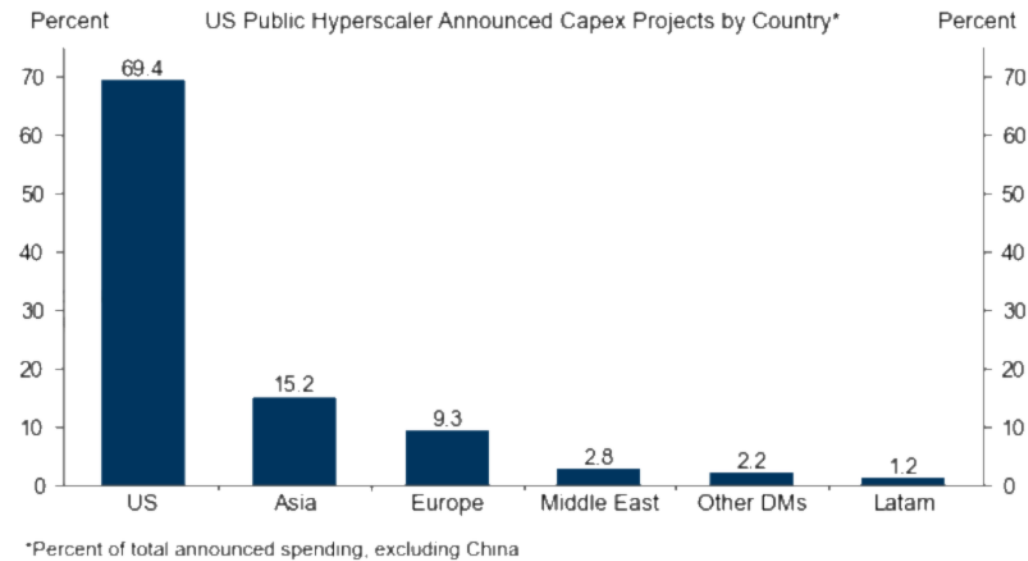


Source: Goldman Sachs Global Investment Research

To allocate this global aggregate to where investment takes place, we leverage [data](#) on the reported locations of announced investment projects (mainly from US hyperscalers). These estimates suggest that around 70% of US hyperscaler capex is going to projects in the US, while 15% is attributable to projects in Asia and 9% in Europe. We further assume that AI investment for most other non-hyperscalers (both private and global companies) follows a similar pattern, but that AI investment by major Chinese and Korean AI-exposed companies occurs outside of the US.

² Based on advice of our Korean analysts, we assume that all capex to expand memory production capacity is AI-related.

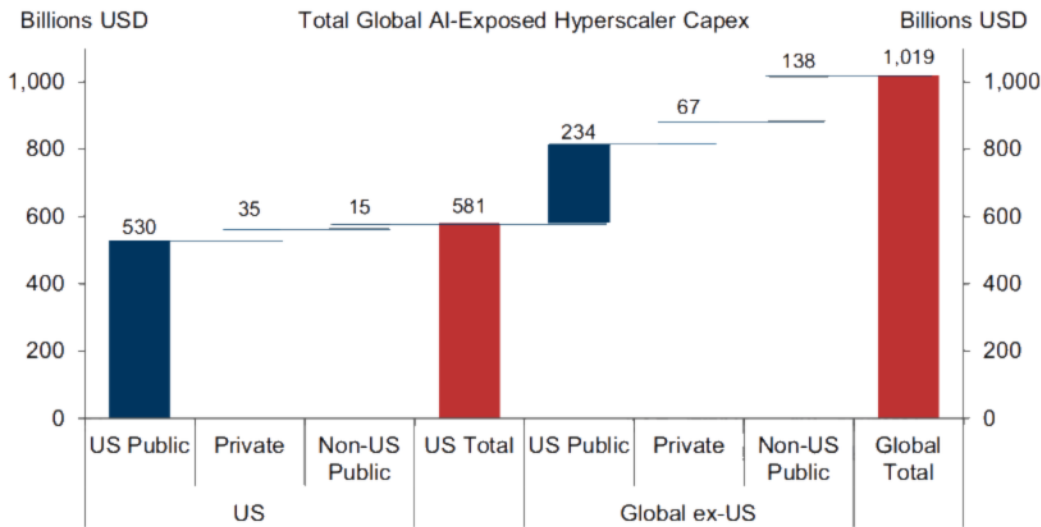
Exhibit 3: Hyperscaler Investment Announcements Suggest Around 70% of US Hyperscaler Capex is Domestic



Source: Nextgig, Goldman Sachs Global Investment Research

Under these assumptions, we estimate that out of \$1019bn in global AI investment, \$581bn is occurring in the US. The key takeaways from our augmented estimates are 1) that the commonly cited \$794bn in hyperscaler capex shown in [Exhibit 1](#) likely understates the total amount of global AI capex by around \$200bn and 2) overstates the amount of US investment by \$200bn.

Exhibit 4: We Estimate \$1019bn in Global and \$581bn in US AI Investment For 2026



Source: Goldman Sachs Global Investment Research

Cross-Checking AI Investment

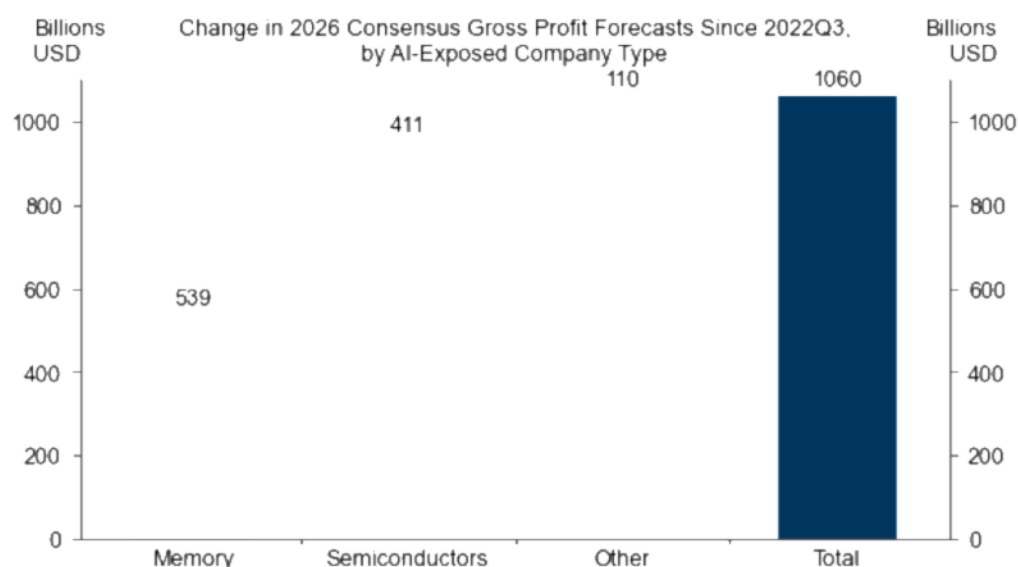
While we believe our augmented hyperscaler AI capex estimates provide a reasonable assessment of both global and US AI investment, they rely on several assumptions that are hard to verify. Furthermore, for some companies that do not report property, plant,

and equipment investment separately from financial leases in their capex statements, we run the risk of double-counting some amount of AI capex. We therefore cross-check our estimate against two other approaches.

First, in [earlier work](#) we suggested using revenue realizations and forecast revisions relative to 2022 projections for public companies exposed to the AI buildout as a proxy for overall AI investment. While this approach helps control for spending that would have otherwise occurred in an ex-AI counterfactual, it will double count spending between companies engaged in the AI buildout. For example, the cost of memory and chip fabrication is embedded in the revenue of chip designers. Such concerns have become increasingly pertinent as the AI-ecosystem has become more interdependent in recent years.

To address this issue, we update our methodology to look at gross profit realizations and forecast revisions (still vs. 2022), which should better capture the increase in final demand driven by AI. As shown in [Exhibit 5](#), this approach suggests that AI-related spending has increased by just over \$1tn since 2022.

Exhibit 5: Revisions to Global AI-Exposed Company Gross Profits Imply Just Over \$1tn in AI Investment in 2026

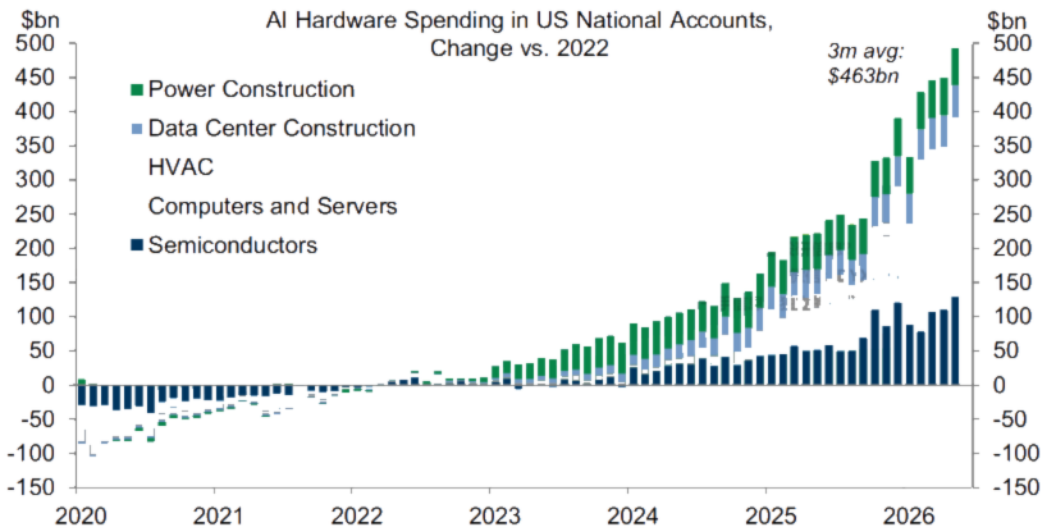


Source: Goldman Sachs Global Investment Research

Second, we also previously [suggested](#) using official government data to trace out the increase in nominal AI investment.

In the case of the US this is straightforward. Applying the US national accounts commodity-flow method—which records investment as the sum of domestic production, net imports, and changes in inventories—we find that annualized nominal AI-related hardware investment has risen to just under \$500bn (vs. 2022 levels) through May 2026 ([Exhibit 6](#)). Combined with [our estimate](#) that AI-related R&D and IPP investment has added another \$100bn to nominal US investment, we estimate that current US investment totals just under \$600bn annualized.

Exhibit 6: US National Accounts Data Suggest Just Under \$500bn in US AI Hardware Investment

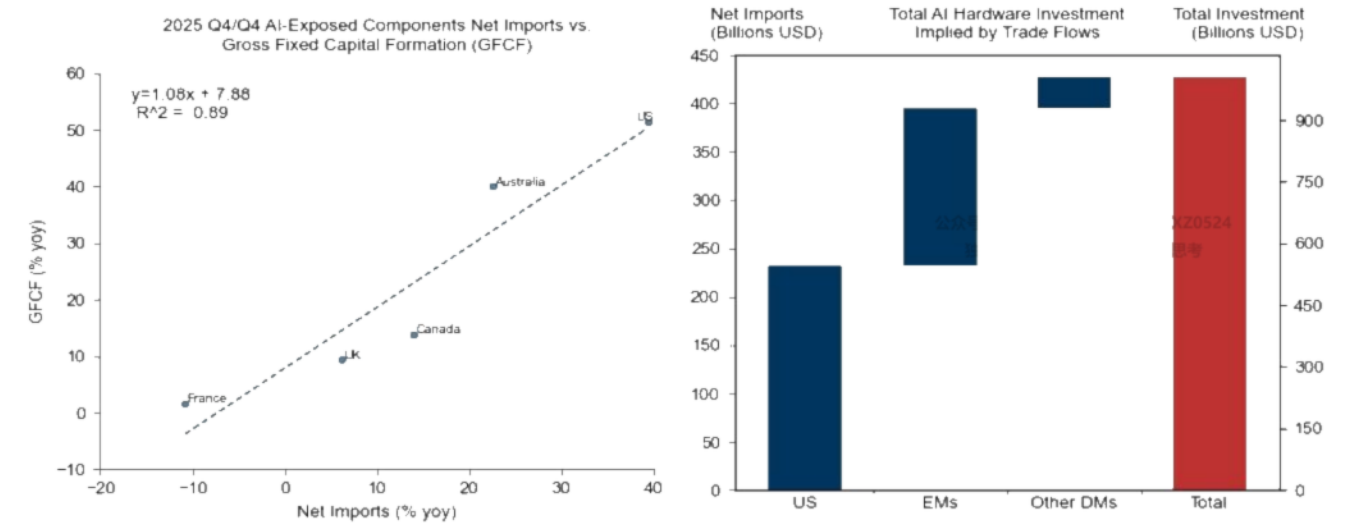


Source: Census Bureau, Bureau of Economic Analysis, Haver Analytics

For most other countries with less detailed data (or where detailed data is reported with substantial lag), it is more difficult to directly estimate AI investment based on official statistics. For the limited number of countries where constructing a proxy for AI-related investment is possible, however, we find that growth in AI-related net imports—which is generally very timely and disaggregated —provides a reasonable proxy for overall AI investment (left chart, Exhibit 7).

We therefore leverage the global trade data and the observed relationship between US imports and total AI investment to impute total investment in other economies. As shown in the right chart of Exhibit 7, this approach implies \$1002bn in global AI investment.

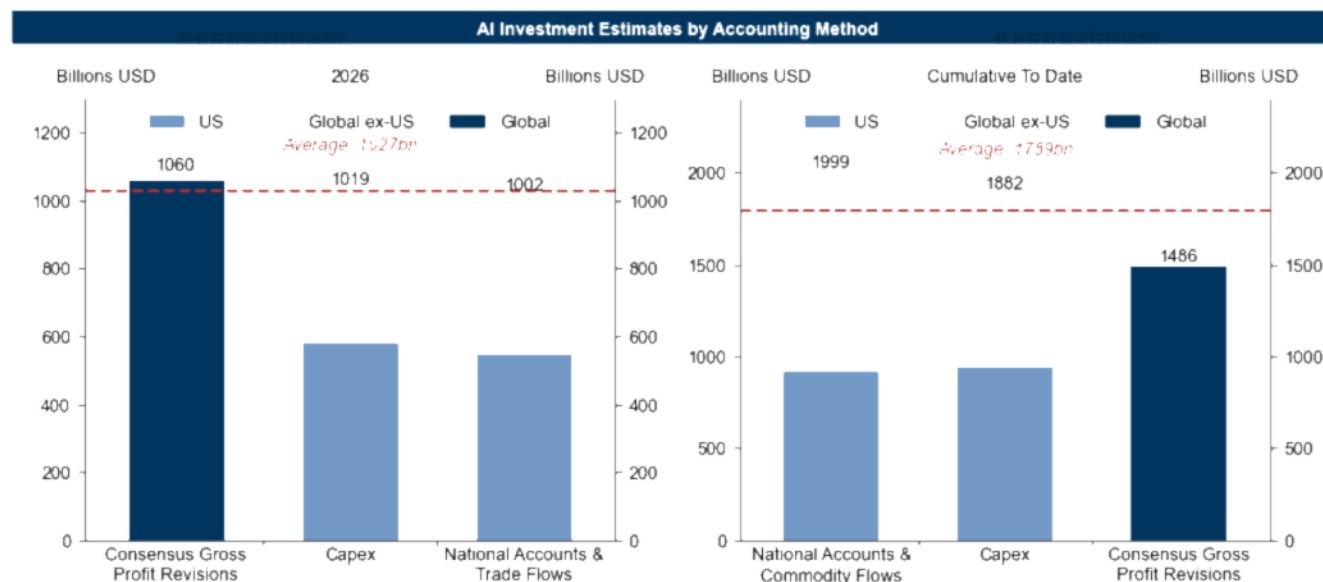
Exhibit 7: Imputing AI-Investment Based on Available National Accounts and Global Trade Data Point to \$1002bn in Global AI Investment



Source: Haver Analytics, Goldman Sachs Global Investment Research

Our two cross-checks imply a current pace of investment remarkably similar to our preferred measure of augmented hyperscaler capex (left chart, [Exhibit 8](#)), with each suggesting that AI investment will total around \$1tn globally and just under \$600bn in the US in 2026. And while the cumulative investment totals since 2022 implied by applying our different methodologies to prior years diverge a bit, on average they suggest that cumulative investment in AI will total \$1.8tn by the end of this year.

Exhibit 8: On Average, Our Estimates Point to Just Over \$1tn in Global AI Investment in 2026 and \$1.8tn in Cumulative Global AI Investment Since 2022



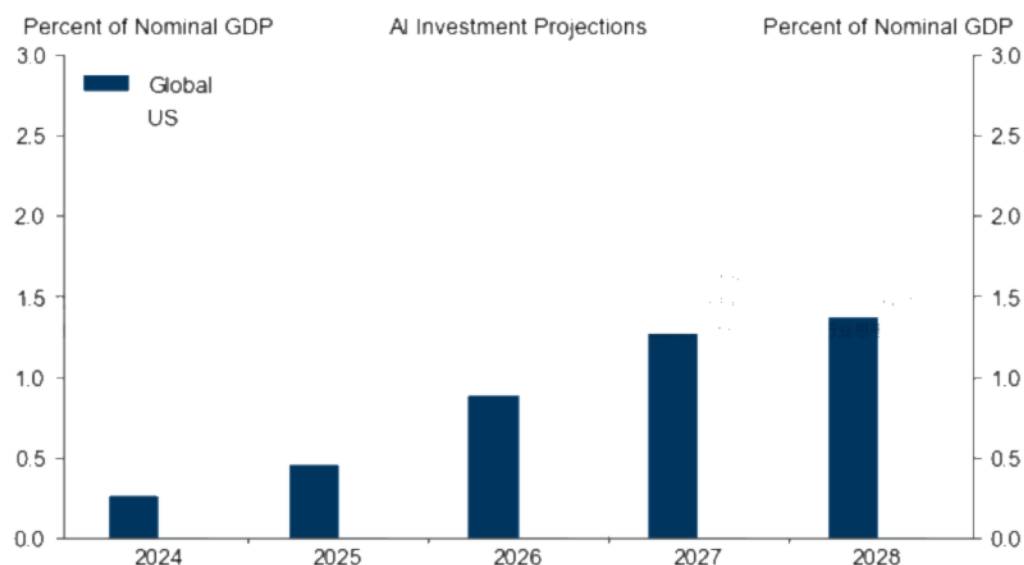
Source: Goldman Sachs Global Investment Research

What Do These Data Tell Us About the AI Investment Outlook?

The AI capex growth outlook, including how high AI investment ultimately rises as a share of GDP and when capex growth slows, is a key source of uncertainty for macro markets right now. While a full analysis is beyond the scope of this report, our estimates and data collection provide a useful starting point for both questions.

On the first question regarding the capex peak as a share of GDP, we extrapolate our preferred estimates that AI investment will total \$1033bn globally and \$590bn in the US using consensus estimates for public company capex, which our findings suggest are a reasonable proxy for overall AI capex. This results in a forecast for total AI investment as a share of US GDP through 2028. It implies that AI capex will rise from 1.8% of GDP in the US (with global AI investment totaling 0.9% of global GDP) in 2026 to 2.5% of GDP in the US (1.3% globally) in 2027, with a further increase to 2.8% (1.4% globally) in 2028.

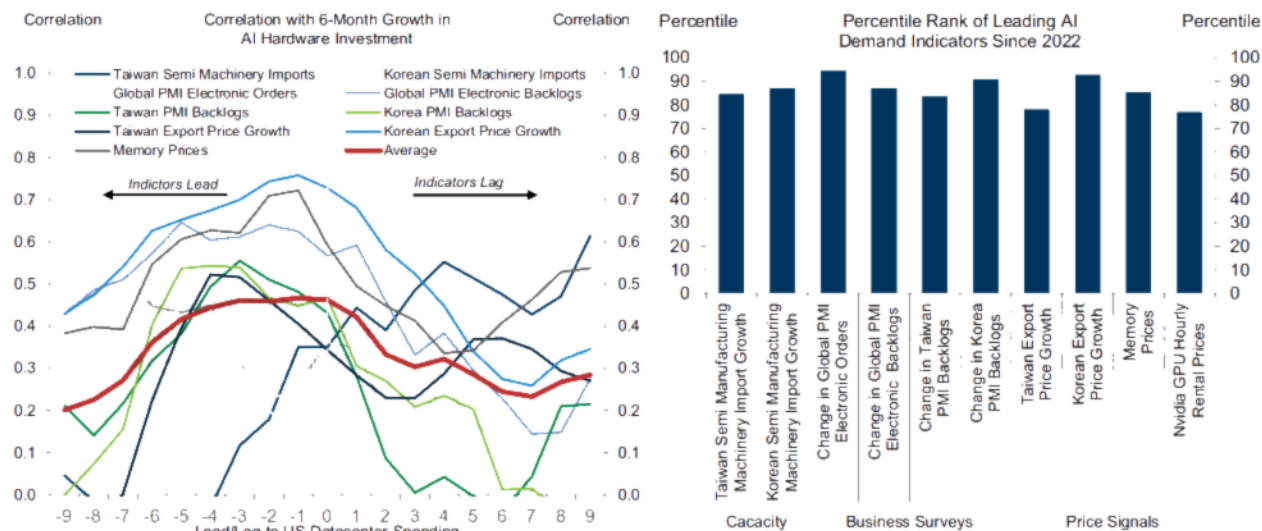
These levels are consistent with the 2-5% of GDP peak investment impulses observed in prior general-purpose technology (GPT) buildouts. And while our US portfolio strategy team has flagged that consensus capex projections for 2027 are likely too conservative, even significant upward revisions would leave the level of AI Investment as a share of GDP comfortably within the historical range observed in prior technology cycles.

Exhibit 9: Consensus Projections Imply Capex Will Rise to 2.8% of US and 1.4% of Global GDP by 2028


Source: Goldman Sachs Global Investment Research

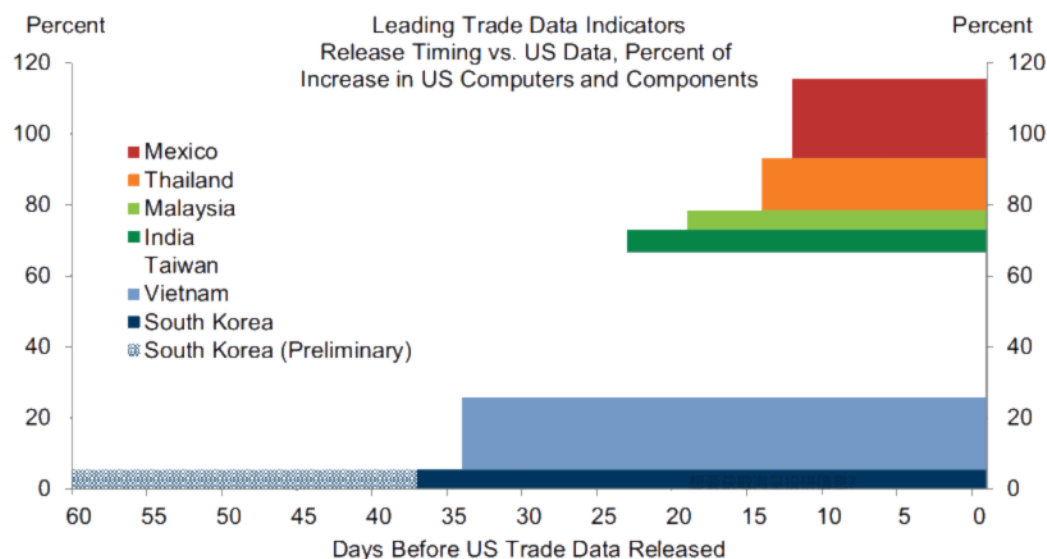
On the second question regarding a slowdown in capex growth, a dashboard approach is most appropriate. Along these lines, we compile a broad set of leading indicators—including semiconductor manufacturing equipment imports in Taiwan and South Korea, relevant PMI indicators and components, import prices, and memory purchase and GPU rental prices—to check whether a slowdown is imminent.

We define our indicators as 6-month percent changes for quantity and price variables and 6-month level changes for PMI components (based on our [prior findings](#) that changes are most predictive of activity shifts). We find that our selected indicators indeed provide leading information (left chart, [Exhibit 10](#)) of US AI capex growth (measured according to [Exhibit 6](#)). The good news for the capex outlook is that all leading indicators rank near the top end of their range since 2022. This pattern suggests a robust near-term growth outlook.

Exhibit 10: Leading Indicators Continue to Point Towards Robust AI Capex Growth

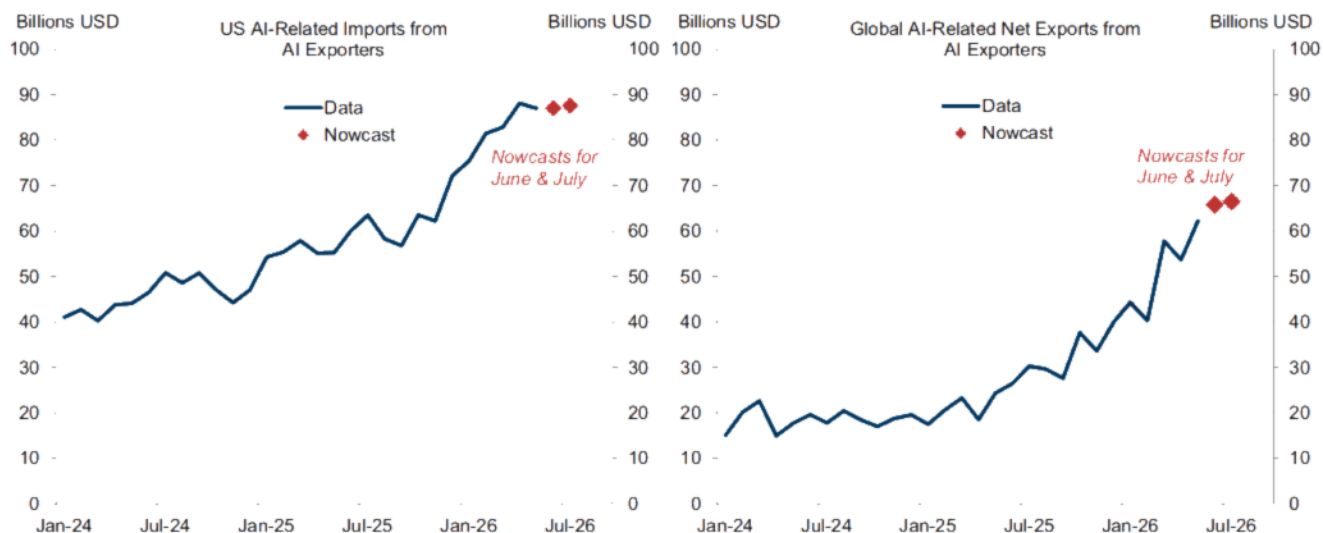
Source: Haver Analytics, Goldman Sachs Global Investment Research

We can also track a potential near-term slowdown in capex growth based on trade data from EM economies that report early. As shown in [Exhibit 11](#), several key providers of AI equipment—most notably Korea and Taiwan—report bilateral or product-specific trade data up to 1-2 months ahead of the US and therefore will likely provide an early signal that capex growth is slowing.

Exhibit 11: EM Exporters Provide Early Signals on US AI Investment...

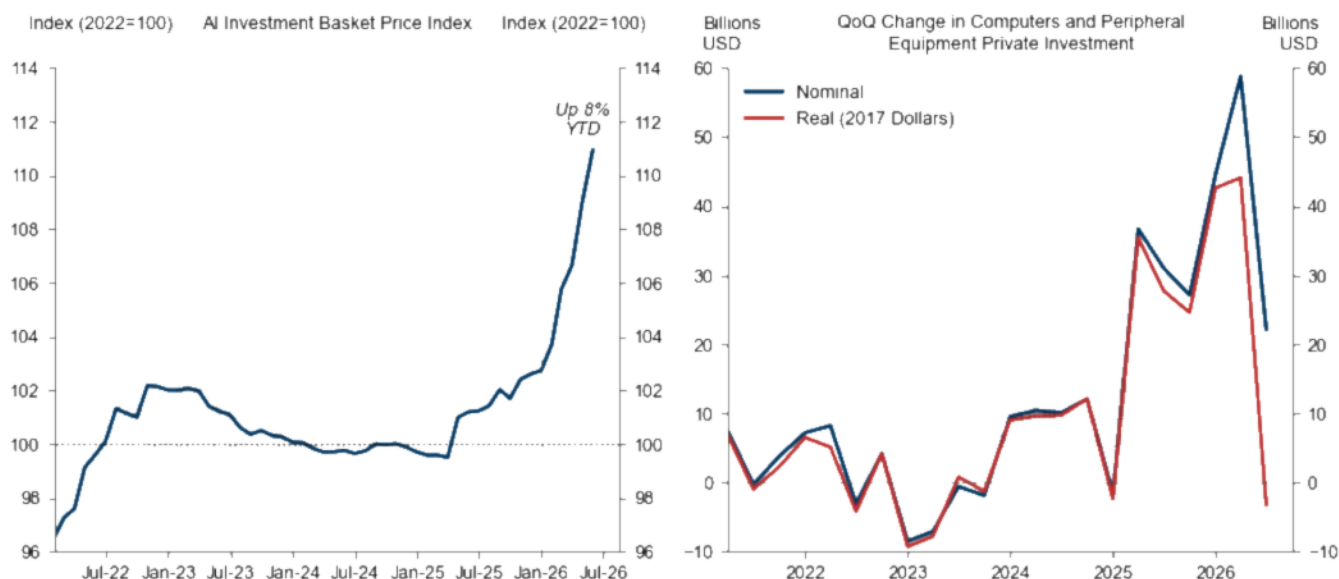
Source: Goldman Sachs Global Investment Research

In [Exhibit 12](#) we leverage these data to statistically nowcast US imports as well as global net exports of AI-related hardware. Based on early signals (particularly from [Taiwan](#) and [Korea](#)), our nowcast implies a slowdown in AI-related investment (albeit from a very robust pace) in June and July.

Exhibit 12: ... And Early Signals Currently Point to More Moderate Growth Over the Summer

Source: Goldman Sachs Global Investment Research

Finally, the official US data compiled for our analysis imply that AI investment is increasingly driven by cost inflation. Combining the hardware spending allocations shown in [Exhibit 6](#) with their corresponding price deflators (reweighted by import prices and PPIs according to the share of domestic vs. imported content) suggests that official US statistics attribute 8% of the YTD increase in nominal spending to cost inflation rather than real investment (left chart, [Exhibit 13](#)). If these trends continue in 2026H2, AI-related spending increases in 2026 may provide a smaller boost to real investment than in 2025, as was the case in 2026H1 (right chart, [Exhibit 13](#)).

Exhibit 13: Official US Data Attribute a Higher Share of AI-Related Hardware Spending to Price Inflation

Source: Haver Analytics, Bureau of Economic Analysis, Census Bureau, Goldman Sachs Global Investment Research

We continue to see the impact on overall GDP levels as limited because of measurement biases—the US national accounts do not count semiconductor purchases as investment goods—and the high import content of AI hardware is netted out of topline GDP.

Joseph Briggs

Sarah Dong

The Global Economics Team

Jan Hatzius
+1(212)902-0394
jan.hatzius@gs.com
Goldman Sachs & Co. LLC

Joseph Briggs
+1(212)902-2163
joseph.briggs@gs.com
Goldman Sachs & Co. LLC

Sarah Dong
+1(212)357-9741
sarah.dong@gs.com
Goldman Sachs & Co. LLC

Megan Peters
+44(20)7051-2058
megan.l.peters@gs.com
Goldman Sachs International

