



BOX I.1:

Developments in macroeconomic risks associated with Artificial Intelligence

As highlighted in a box in the [June IPoM](#), developments surrounding artificial intelligence (AI) continue to be one of the main drivers of the global economy and financial markets. While concerns about its adoption by firms and individuals have gradually diminished, they have been replaced by two sources of unease. First, whether a given company will be able to earn a return on its investment, insofar as advances achieved by the most sophisticated AI models can be replicated by other firms, affecting relative valuations among competitors. Second, the scale of investment required to remain competitive has been greater than anticipated, affecting expected profitability and the risks associated with the broader sector. This is increasingly reflected in asset prices, with higher equity-price volatility and default risk premia embedded in the bond prices of firms most exposed to the investment cycle. This Box examines the recent AI-related investment cycle and the potential macroeconomic effects of a possible slowdown.

The investment cycle

Aggregate capital expenditure (CAPEX) by the leading U.S. companies involved in AI development reached US\$600 billion over the last four quarters, more than 80% above the level recorded in the preceding four quarters. This represents close to 10% of total investment and accounts for around 40% of the annual change in GDP over that period^{1/}. Also noteworthy is the speed at which the leading companies have been raising their investment plans. At end-2025, increases of around 26% and 9% were expected for 2026 and 2027, respectively. As of the statistical cutoff date for this Report, those figures stood at 90% and 40%^{2/}. AI-related investment would thus reach around US\$1.1 trillion by 2027, equivalent to 3.4% of expected U.S. GDP that year.

Initially, the increase in investment was financed mainly from companies' own funds. In recent quarters, however, borrowing has risen sharply, with cumulative bond issuance through July 2026 more than doubling the previous year's figure (approximately US\$250 billion). Between 2026 and 2028, the sector's financing needs are estimated at around US\$1.5 trillion^{3/}, close to 5 percentage points of U.S. GDP (Figure I.20).

Overall, AI investment has increasingly become a first-order factor for activity, demand, and financial markets, not only in the U.S. but also in a group of Asian economies with high exposure to the AI value chain (see [Box I.1 in the June 2026 IPoM](#)). Consequently, developments in the external conditions facing the Chilean economy over the monetary policy horizon are linked to the evolution of this process.

^{1/} As a percentage of U.S. GDP, this investment rose from 0.95% in early 2025 to 1.9% in the second quarter of 2026. See the calculation methodology in [Álvarez et al. \(2025\)](#).

^{2/} Based on the Bloomberg analyst consensus.

^{3/} Sources: Morgan Stanley, Goldman Sachs, and Moody's.



Asset prices and risk perceptions in the AI cycle

Although earnings reports from leading companies have generally continued to surprise on the upside, various asset-price signals point to market concerns about the future profitability of investments associated with AI development. On the one hand, the default risk premium paid by companies most heavily involved in the investment process has doubled over the past year, while that of comparable firms not exposed to such investment has edged down (Figure I.21). Although the absolute level of this premium remains contained, its recent trajectory suggests emerging doubts about companies' capacity to generate the returns needed to service their higher debt. These concerns are also reflected in equity valuations: the implied volatility of AI-related stocks has risen significantly in recent months, decoupling from that of comparable firms (Figure I.22). Using an event study around corporate earnings announcements, [Álvarez et al. \(2026a\)](#) suggest that this phenomenon may reflect growing doubts about the profitability of investment plans. In particular, they show that AI-related stocks have reacted negatively when companies announce large expansions in their investment plans, even when reported earnings exceed market expectations (Figure I.23). The opposite occurs among comparable non-AI firms, where higher announced investment is associated with a more favorable stock-market reaction. Taken together, this evidence suggests that investors remain significantly concerned about the scale of investment.

A scenario involving a significant slowdown in AI investment would not only reduce the external impetus to the Chilean economy, but would also entail a material tightening of financial conditions. In such a scenario, equity valuations would fall. However, unlike traditional risk-off episodes or downward revisions to the growth outlook, long-term interest rates would face opposing pressures. On the one hand, lower demand for funds to finance AI investment and stronger demand for safe assets would exert downward pressure. On the other hand, weaker growth prospects would exacerbate the already challenging fiscal outlook in the U.S. and other advanced economies, limiting the decline in interest rates. For Chile, this would be compounded by the adverse effect on copper prices, whose recent increase is closely linked to the AI investment cycle (Box II.1).

Conclusions

The AI-related investment cycle remains a first-order driver of global activity and financial markets. Although the baseline scenario assumes that the cycle will continue without major disruptions, various signals embedded in asset prices reveal market concerns surrounding it. In a scenario in which AI investment slows, global growth would weaken, financial conditions would tighten, and copper prices would decline, adversely affecting the external impetus to the Chilean economy.



FIGURE I.20 AI COMPANY BOND ISSUANCE (1)
(billions of US dollars)

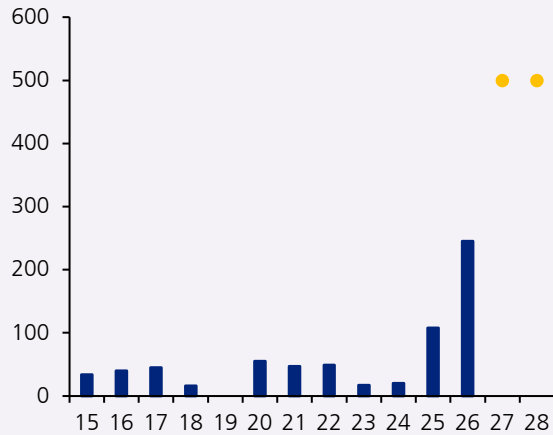
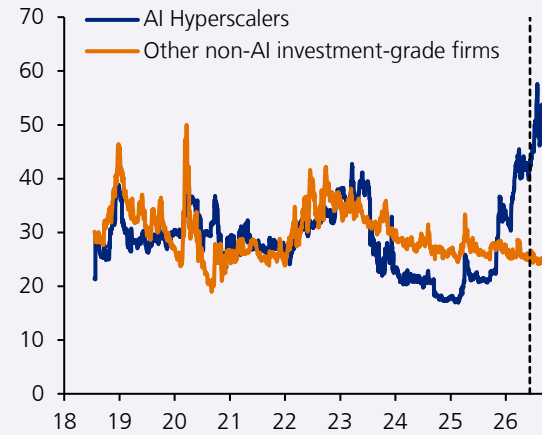


FIGURE I.21 5-YEAR CDS SPREADS (2)
(basis points)



(1) Companies included: Amazon, Alphabet, Microsoft, Meta, and Oracle. For the entire chart through 2025, annual total issuance is reported. For 2026, figures correspond to year-to-date (YTD) values through July. Yellow markers denote estimates from Morgan Stanley and J.P. Morgan. (2) IG refers to firms with an Investment Grade credit rating. The vertical line marks the statistical cutoff date for the June 2026 IPO.

Sources: [Álvarez et al. \(2026a\)](#), Bloomberg, Morgan Stanley and J.P. Morgan.

FIGURE I.22 IMPLIED EQUITY VOLATILITY OF AI AND NON-AI FIRMS (1)
(percent)

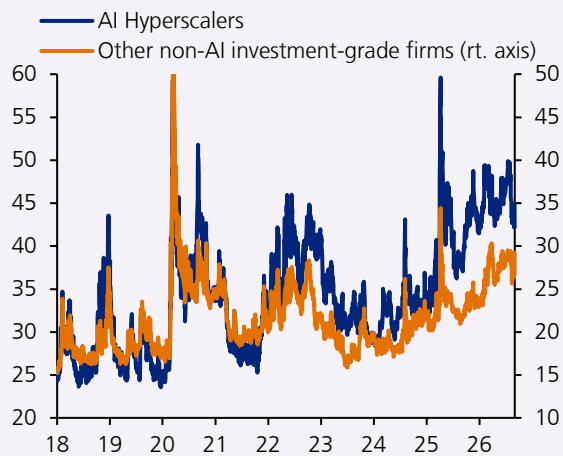
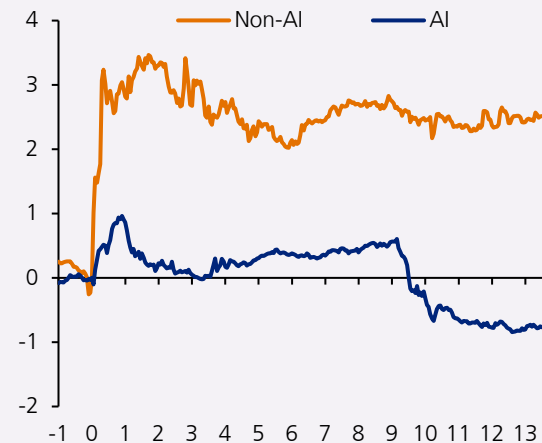


FIGURE I.23 CUMULATIVE RETURNS AROUND ANNOUNCEMENTS OF HIGHER CAPEX (2)
(cumulative percent)



(1) Thirty-day implied volatility computed using the Black-Scholes model. Details on the firms included in each group are provided in [Álvarez et al. \(2026a\)](#). (2) The x-axis denotes hours before and after earnings announcements. Episodes correspond to revisions of CAPEX plans for the current and following year exceeding 5%. $t=0$ denotes the release time of firms' quarterly earnings results. The effect observed nine hours after the announcement reflects the fact that most AI firms release earnings after market close, while the next trading session begins roughly nine hours later.

Sources: [Álvarez et al. \(2026a\)](#) and Bloomberg.