

Box 1.1

Opportunities and risks of artificial intelligence investment on economic growth

Artificial intelligence (AI) has advanced rapidly in recent years and is emerging as a potentially transformative technology. Promising fast and low-cost access to advanced intelligence, AI technology has attracted massive investment in software and infrastructure, while also raising expectations for productivity gains. At the same time, the unprecedented speed and scale of the AI investment boom have sparked concerns about its financial sustainability and the broader economic risks if the boom were to falter. This article examines both the short- and long-term opportunities AI may create, as well as the risks associated with its rapid expansion, particularly for the Hong Kong economy.

AI-related investment has increased significantly. Realising the capability of AI as a driver of economic growth requires enormous investment, large technology firms are making unprecedented capital investments to build the infrastructure that powers AI, largely for data centres, chips and computing capacity. The Organisation for Economic Co-operation and Development⁽¹⁾ (OECD) estimated that capital expenditures by AI companies rose by over 30% from less than US\$600 billion in 2024 to around US\$800 billion in 2025, and are projected to grow to over US\$1.2 trillion by 2027. In Hong Kong, related private sector investment, mostly captured by expenditure on acquisitions of machinery, equipment and intellectual property products, recorded strong growth of 34.6% in 2025 and accelerated further to 38.4% in the first half of 2026, partly driven by the surge in enterprise and consumer adoption of AI-empowered products and services.

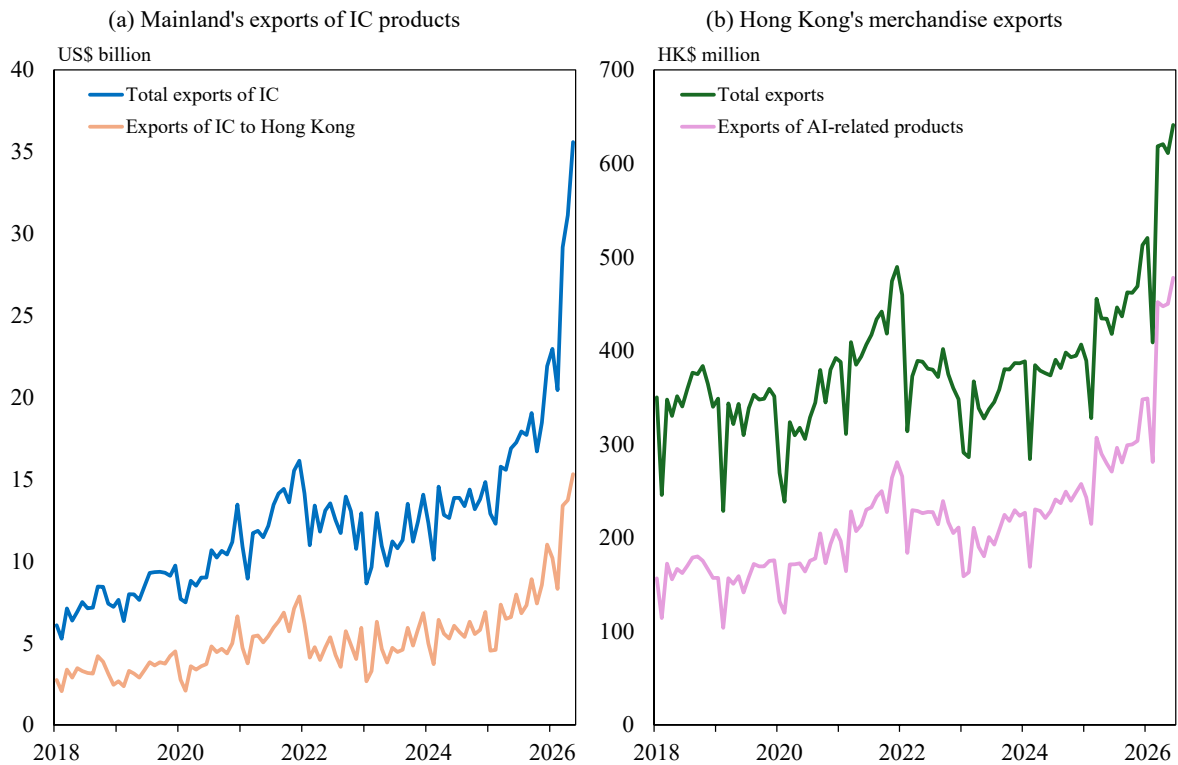
Asia, a major technology product manufacturer and exporter, has benefitted from this demand boom. The World Trade Organization⁽²⁾ estimated that trade in semiconductors, processors, and other AI-enabling products together rose by 21.9% in value terms to US\$4.18 trillion in 2025, outpacing the 7% increase in overall world merchandise trade and accounting for 42% of the total global trade growth. **Hong Kong is a key trading hub for technology-related products.** For instance, the Mainland, a critical supplier and consumer of advanced electronics, routed around one-third of its integrated circuit exports through Hong Kong in the first half of 2026 (*Chart 1a*). Likewise, Hong Kong's trade with Asian economies has surged on the back of vibrant trade flows of electronic products, particularly those related to AI such as memory chips and other integrated circuits, networking devices, etc. Indeed, Hong Kong's merchandise exports of AI-related products rose by 23.5% in 2025 and further by 53.1% in the first half of 2026, outpacing the 39.1% increase in overall merchandise exports (*Chart 1b*). **AI-related products now comprise around 70% of Hong Kong's total merchandise exports.**

(1) Organisation for Economic Co-operation and Development. (2026). *OECD economic outlook, volume 2026 issue 1: Under pressure*. OECD Publishing.

(2) World Trade Organization. (2026). *Global trade outlook and statistics: March 2026*.

Box 1.1 (Cont'd)

Chart 1 : Hong Kong has been a key trading hub of tech-related products



Note: IC refers to integrated circuits; AI refers to artificial intelligence.

Sources: Census and Statistics Department (C&SD); General Administration of Customs.

Hong Kong is also a major platform that finances the AI investment boom. Companies across the AI value chain, from AI platform and infrastructure to applications, have raised funds in Hong Kong through initial public offerings (IPOs). From December 2025 to May 2026, the total amount of funds raised through AI-related IPOs reached HK\$97.9 billion, accounting for around 55% of all IPO proceeds during the period, according to Hong Kong Exchanges and Clearing Limited. Many other listing applications from companies in the AI value chain are also in the pipeline.

AI technology is widely anticipated to lift economic growth through boosting productivity in the years to come. The magnitude of such a boost as estimated by various parties varies, but the prospect is promising. The International Monetary Fund⁽³⁾ estimated that AI could boost global productivity and thus global economic growth by up to 0.8 percentage point per year in the medium term, depending on the speed of adoption and improvements in global AI readiness.

However, profitability expectations in the AI sector contribute to emerging vulnerabilities in financial markets. The current wave of AI-related capital expenditure appears to be predicated on elevated profitability expectations, as reflected in the high equity valuations observed across the technology sector. In such a high-valuation environment, AI-related equities may exhibit heightened sensitivity to shifts in market sentiment, as illustrated by the recent sharp corrections in technology-driven markets, including South Korea and Taiwan, in July.

(3) International Monetary Fund. (2026). *Leveraging artificial intelligence and enhancing countries' preparedness*. Remarks by the IMF Managing Director at the World Government Summit, Dubai, UAE. <https://www.imf.org/en/news/articles/2026/02/03/sp-md-leveraging-artificial-intelligence-and-enhancing-countries-preparedness>

Box 1.1 (Cont'd)

Such risks could have macroeconomic implications, as pointed out by international organisations. In the adverse scenario of tighter financial conditions and disappointing earnings, technology companies may experience difficulties accessing the credit market, thus leading to a retrenchment of investment and losses that spread through related businesses and supply chains. For instance, according to various estimates, total investment spending on information processing equipment and intellectual property (effectively the AI-related investment) accounted for a significant share of GDP growth of the United States (US) in 2025. One estimate⁽⁴⁾ put this share at nearly half of US GDP growth for the year, compared with just 8% in 2023 and 2024. If the AI investment boom were to fade, the economy could face slower GDP growth, weaker business investment, and a sharper correction in technology-led stock markets, with possible spillovers to employment and consumption.

Financial market turbulence could also weigh on household consumption by dampening sentiment and eroding household wealth. Both the Bank for International Settlements⁽⁵⁾ (BIS) and the OECD⁽⁶⁾ have recently warned that repricing in financial markets could pose broader macroeconomic risk. In particular, the BIS has highlighted that compounding factors, such as compressed risk premia, stretched valuations, high leverage in core markets, growing and opaque private credit, and complex financing structures related to AI activities, may undermine the resilience of financial markets.

In conclusion, AI investment holds substantial potential to promote long-term economic growth through productivity enhancement, increased fixed capital formation, and innovation. As firms and consumers continue to adopt AI-enabled products and services, AI-related trade has remained robust. Nevertheless, financial markets have already incorporated much of this optimism into elevated equity valuations in the technology sector. If actual outcomes fall short of expectations, the consequences may include weakened corporate balance sheets, heightened financial instability, and broader economic weakness. **With prudent policy support, AI investment can nevertheless become a durable engine of inclusive growth, innovation, and long-term economic resilience.**

(4) CBRE. (2026). *AI's impact on the economy, employment & productivity*.

<https://www.cbre.com/insights/reports/ais-impact-on-the-economy-employment-and-productivity>

(5) Bank for International Settlements. (2026). *Annual economic report 2026*.

(6) Organisation for Economic Co-operation and Development. (2026). See footnote 1.