Two Global Investment Themes: AI and Sustainable Investment

Prof. Louis Cheng
Dr. S H Ho Professor of Banking and Finance
Associate Dean (Research), School of Business
Director of Research Centre for ESG
The Hang Seng University of Hong Kong

Major academic appointments and achievements:
- Ranked 60th in Economics & Finance in China in research (2025) by "Research.com"
- Assessment Panel for CRF Schemes (Self-financing sector) of the Research Grant Council (2022-28)
- Professor of Finance (2010-20) & Director of CESEF (2018-20), PolyU
- Council member & Trustee of the Pension Fund of PolyU (2011-13)

Significant industry engagements:
- Member of the Investment Committee of the Hospital Authority Pension (AUM USD 9 Bil, 2016-22)
- Advisor for Bhutan's Green Bond initiative and consultant of United Nations (2019-22)
- Board Member and Honorary Member of the Institute of Financial Planners of Hong Kong (IFPHK)
- Served as a project consultant for:
Investor and Financial Education Council (IFEC), Securities and Futures Commission (SFC), HKEx, Mandatory Provident Fund Scheme Authority (MPFA), Value Partners, Bank of China (HK) Private Banking, Agricultural Bank of China (HK) Private Banking, BCTHK, Fubon Bank, Charles Schwab (US), Tai Fook Securities, and Hong Kong Securities and Investment Institute (HKSI).

Theme 1: AI Investment: Creative Destruction

➢ Traditional facilities and devices become obsolete due to technology and innovation (including AI).
➢ Rather than allowing these phased-out assets to be discarded, a growing opportunity exists by repurposing them in emerging markets, where such assets can still create economic value, supporting circular-economy practices and global sustainability objectives.

➢ Creative Destruction (by Joseph Schumpeter) describes the continuous process of innovation that drives long-term economic growth by destroying the old to create the new, causing short-term job losses and market disruption.
➢ On Feb 23, 2026, DJIA dropped over 800 points (Bloomberg), which was partially driven by the negative sentiment on displacement effect of adopting AI, leading to weakened employment, impaired incomes, tightening credit, and falling wealth (Citrini Research).

Theme 1: AI Investment: Challenges and Opportunities

1. Massive electricity consumption and water usage for cooling of AI data centers sparked social concerns

➢ Causing blackout in Mexico and South Africa
➢ Data centers consume more than 20% of Ireland's electricity
➢ Depleting water in Chile

https://www.nytimes.com/2025/10/20/technology/ai-data-center-backlash-mexico-ireland.html

Energy consumption for AI training

Profit

2. The energy demands of AI training far exceed those of everyday electricity usage.

➢ Google AI-enhanced searches now consumes more electricity annually than countries like Uruguay or Jamaica.
➢ OpenAI's training process consumed electricity equivalent to 5,000 American households' annual consumption

https://climatecosmos.com/world-weather/exposed-the-true-energy-toll-of-every-ai-query/

AI Adoption Bottleneck

3. AI Investment Opportunities

➢ Differentiate between Artificial General Intelligence (AGI) from Agentic AI (i.e., practical, investable AI services), that can generate returns over 3-5 years, often requiring private equity investment rather than public markets.

➢ When selecting high-risk-high-return investments, it is a bad idea to purchase all available choices. This is because only a small subset of these companies ultimately generates the majority of the gains, while the rest are losers.

Theme 2: Sustainable Investment

- Sustainability/ESG, particularly in Asia where natural resources are a key factor

- Sustainability can deliver resilience in investing, which is important under the current geopolitical uncertainties

AI and Sustainable Investment: Financial Performance 2025

Fig 1. Top Global Themes (AUM as of Sept 30, 2025)

Fig 2. Top Themes by Net Flow
(Trailing 1-Year Net Flow, as of Sept. 30, 2025)

Fig 3. Returns for Thematic ETFs

➤ Typical thematic ETF gained **27.8%** in 2025, led by energy transition and artificial intelligence+big data.

➤ However, the 5-year annual return is diverse (ranged from a +29.7% to -32%). Asset flows over the same period broadly mirrored this volatility.
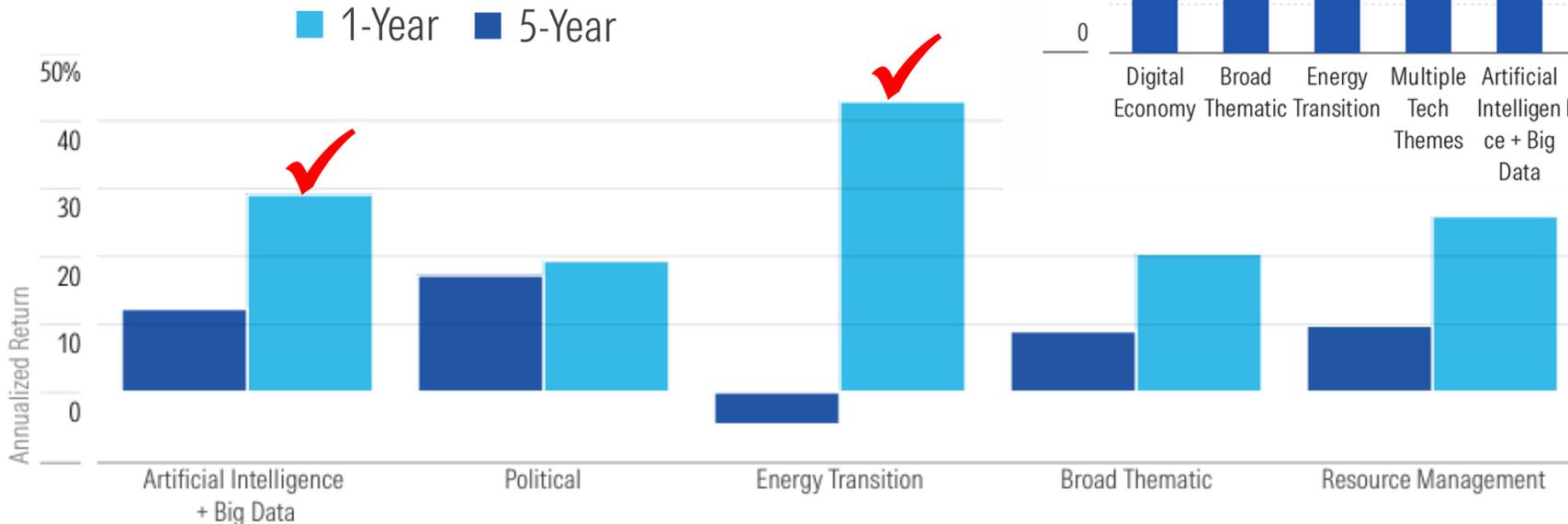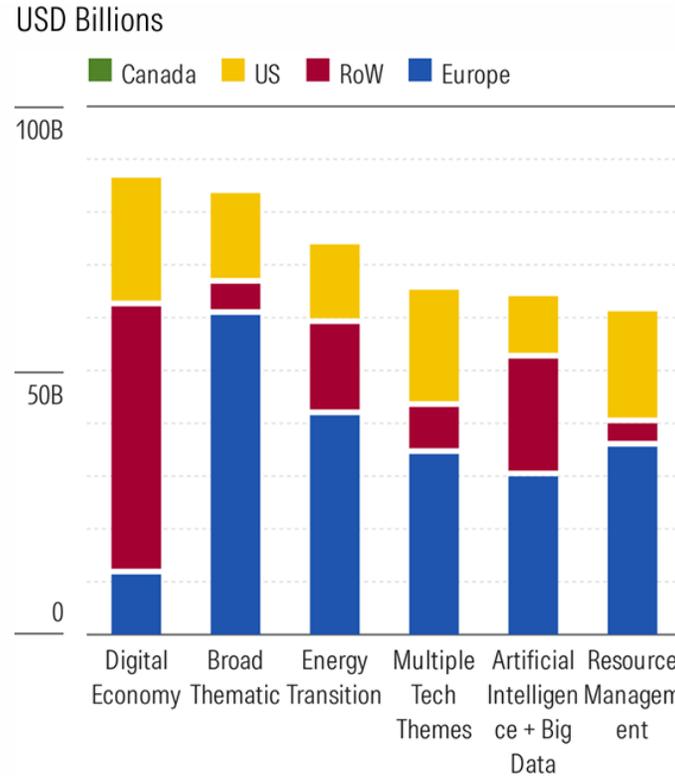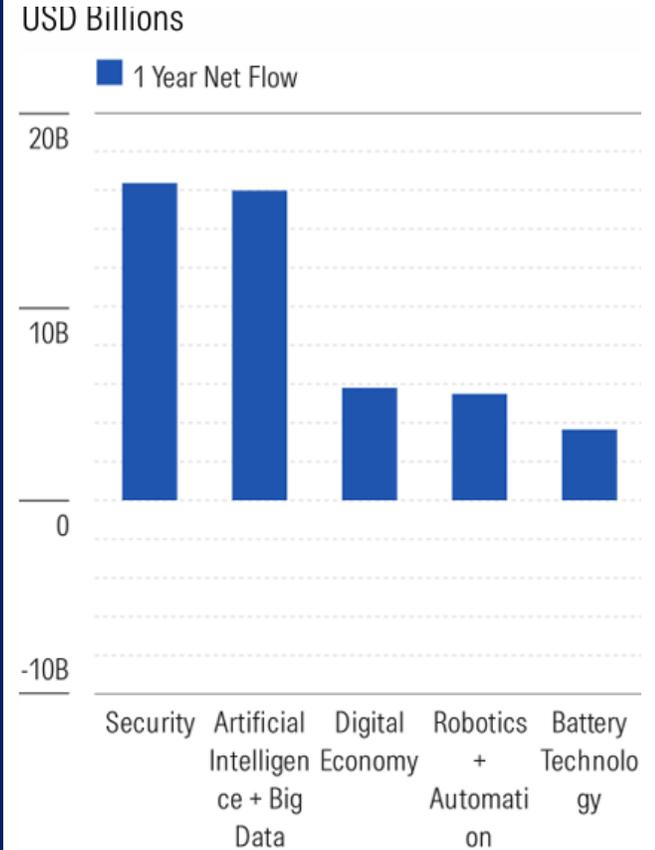

Fig 1. Top Global Themes (AUM as of Sept 30, 2025) — USD Billions; Canada, US, RoW, Europe; Digital Economy, Broad Thematic, Energy Transition, Multiple Tech Themes, Artificial Intelligence + Big Data, Resource Management

Fig 2. Top Themes by Net Flow — USD Billions; 1 Year Net Flow; Security, Artificial Intelligence + Big Data, Digital Economy, Robotics + Automation, Battery Technology

Fig 3. Returns for Thematic ETFs — 1-Year, 5-Year; Annualized Return; Artificial Intelligence + Big Data, Political, Energy Transition, Broad Thematic, Resource Management

Sources: Morningstar Global Thematic Fund Landscape 2025 and Morningstar Markets Observer Q1 2026

~Thank You~