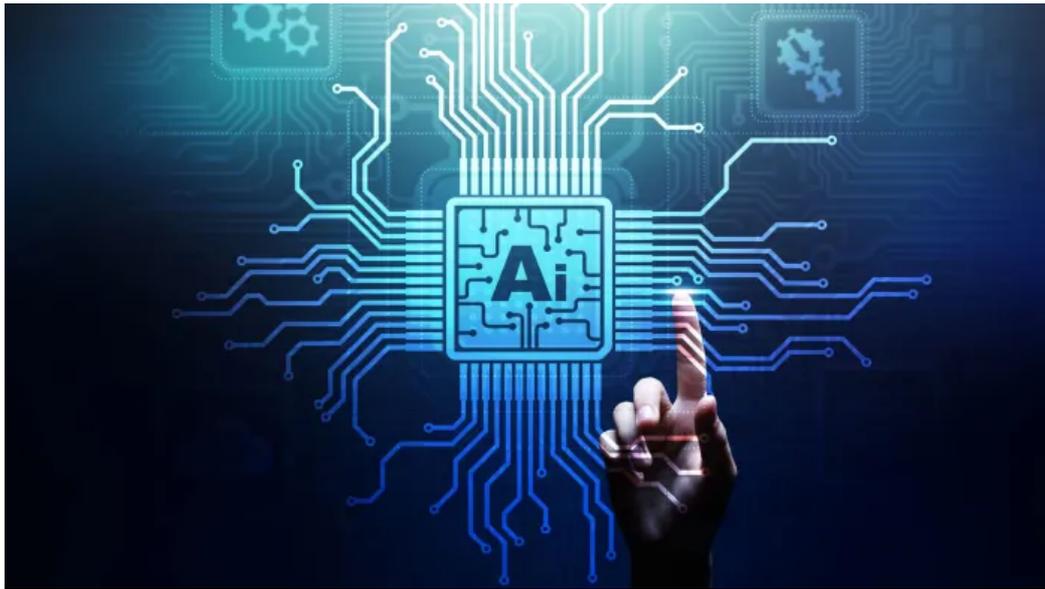


Opinion **Markets Insight**

## Winner-takes-all digital economy poses risk for capital markets

Concentration of business among small number of players presents significant challenge

**PHILIP STAFFORD**



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Philip Stafford in London YESTERDAY

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The trend of human tasks being replaced by algorithms is a perennial and understandable focus for the debate about how technology is changing capital markets.

Policymakers, however, are already focusing on a longer-term trend: how the benefits of scale in digital industries will concentrate activity among a smaller number of investment providers.

The digitisation of capital-markets tasks traditionally done by humans, such as trading equities, is well advanced. Technology has also facilitated new investment strategies, in particular algorithmic trading.

Computer-driven funds that scour the market for signals such as momentum — the idea that stocks that have done well recently will continue to beat the average — collectively account for a fifth of US equity assets under management, according to JPMorgan.

Last week, the US House of Representatives held a [subcommittee meeting](#) to discuss the future impact of artificial intelligence on capital markets. But its chairman, Congressman Bill Foster, a former scientist, kept coming back to a related challenge — the implications of a concentration of business among the most powerful players in the market. Scale will allow the biggest investment firms to process more data, find more correlations and thus improve their returns, he said.

“It’s a reflection of the winner-takes-all nature of digital economies,” added Mr Foster. “As more of finance becomes digitised, you’re going to see more and more of the rewards go to a smaller and smaller number of dominant players.”

He is not alone in this view. In a [speech](#) this month Mark Yallop, chair of the FICC Markets Standards Board, and a former executive at interdealer broker ICAP, tackled the same problem.

The way in which machine-learning models improve — by accessing more data — will benefit those who have the biggest budgets, said Mr Yallop. This “may well in turn create very high barriers to entry for new firms”, he added.

We have already seen glimpses of this future. New technology helped high-frequency traders to break open banks’ dominance of share trading. Their algorithms are able to fire off millions of deals a day without human intervention. The race to be the fastest and smartest has [squeezed out](#) all but a handful of big players such as Virtu Financial, XTX Markets and Citadel Securities.

Markets have also fundamentally changed in the past decade, as improving technology cuts transaction costs. The Bank for International Settlements illustrated on Sunday the extent to which investment managers were becoming active players in [the repo](#) and interest rate derivatives market, a world traditionally dominated by investment banks.

Gross derivatives positions for asset managers and leveraged funds in three-month eurodollar contracts on the CME, the most liquid global interest rate benchmark, grew 37 per cent in the three years to April. By comparison, banks’ positions rose 18 per cent.

Some fear that a greater degree of computer-driven trading will lead to crowded trades. Mr Yallop warned that the rise of algorithms will “make markets more fragile to unforeseen shocks and more interconnected, as multiple users depend on a limited number of underlying data relationships”. And those users will depend on a limited number of banks to act as market buffers.

The past decade has also seen many investment banks drastically curb their daily trading activity, affecting even the most liquid securities. An [academic study](#) published last week by Albert Menkveld and Boyan Jovanovic found that even for the SPDR S&P 500 ETF Trust — an exchange traded fund that is the world’s most-traded equity security — liquidity has suffered on some measures since the financial crisis.

Meanwhile, the number of banks and other intermediaries active in various markets has dropped sharply, Mr Menkveld and Mr Jovanovic found. In 2007, about 50 institutions were willing to facilitate trading in that S&P ETF. By 2018, the number had dwindled to just 10.

Market “depth” for the security, judged by the number of shares available within half a per cent of the best bid price, declined from more than 2m shares in 2007 to under 200,000 in 2018. Mr Menkveld highlighted the impact of the [Volcker rule](#), which prevents banks trading on their own

account. “Regulation does seem to matter, even in what supposedly is a perennially liquid security,” he said.

Collectively the BIS and academics’ findings raise the question of where the big computer-driven investors of tomorrow will turn when they need a counterparty to their trades — and what happens in the market if that source is suddenly switched off.

The BIS hinted that these conditions affected US repo in September, where rates fluctuated rapidly. That should be a warning to the wider capital markets. As digital trading evolves, the balance between competition, market stability and liquidity will be a critical test — for hedge funds, investment banks and regulators alike.

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