

# Report on “Algorithmic and High-frequency Trading in Hong Kong’s Equity Market: Adoption, Market Impact and Risk Management”

The following is issued on behalf of the Hong Kong Monetary Authority:

The Hong Kong Institute for Monetary and Financial Research (HKIMR), the research arm of the Hong Kong Academy of Finance (AoF), today (June 28) released an Applied Research report titled "Algorithmic and High-frequency Trading in Hong Kong's Equity Market: Adoption, Market Impact and Risk Management".

The report, after providing an overview of algorithmic trading (AT) and high-frequency trading (HFT) across international financial markets, discusses the results of research analysis and the findings of a survey focusing on Hong Kong's equity market that have been conducted by the HKIMR with the help of external collaborators. The report also details the potential risks emerging from AT/HFT and reviews the mitigating measures and best practices used internationally and in Hong Kong to monitor and manage these risks, as well as the current regulatory oversight of AT/HFT activities.

"The research findings suggest that overall AT/HFT activities in Hong Kong's equity market have remained modest and stable over the period between August 2018 and July 2020. Although a higher level of AT/HFT activities is not associated with a deterioration of market liquidity or increased market volatility during the period investigated, further validation is needed to gather evidence regarding the resilience and stability of liquidity provided by AT/HFT participants and the impact of AT/HFT on market volatility during turbulent times. Meanwhile, the report highlights that the adoption of AT/HFT technologies can give rise to new sources of risk, and measures have been proposed or implemented by market participants and exchanges to mitigate the risks and enhance the effectiveness of traditional risk management practices. We hope that this report serves as a useful starting point towards a better understanding of AT/HFT in Hong Kong and it is able to offer meaningful insights regarding the potential risks emerging from AT/HFT," said Deputy Chief Executive of the HKMA and Deputy Chairman of the HKIMR, Mr Edmond Lau.

The report is available on the [AoF/HKIMR website](#).

About the AoF

The AoF is set up with full collaboration amongst the HKMA, the Securities and Futures Commission, the Insurance Authority and the Mandatory Provident Fund Schemes Authority. By bringing together the strengths of the industry, the regulatory community, professional bodies and the academia, it

aims to serve as (i) a centre of excellence for developing financial leadership; and (ii) a repository of knowledge in monetary and financial research, including applied research.

#### About the HKIMR

The HKIMR is the research arm of the AoF. Its main remit is to conduct research in the fields of monetary policy, banking and finance that are of strategic importance to Hong Kong and the Asia region. The Applied Research studies undertaken by the HKIMR are on topics that are highly relevant to the financial industry and regulators in Hong Kong, and they aim to provide insights on the long-term development strategy and direction of Hong Kong's financial industry.