**Japan’s High-Frequency Trading: The Product of a Unique Evolution**

**Section 1 The Merits and Deficiencies of High-Frequency Trading in Japan**

**Is High-Frequency Trading Fintech?**

High-frequency trading (HFT), which had been actively practiced in the United States since the early 2000s, began becoming more widespread in Japan around 2010. Today, after almost ten years, opinion is still divided regarding the impact of HFT on Japanese financial markets, and many aspects of this impact have yet to be fully evaluated. HFT defies straightforward judgement, due to a marked lack of clarity regarding matters such as the actual status of HFT activity, its effect on financial markets, and the possible existence of unfair trading.

Do AI-driven algorithmic trading, together with HFT as one of its subclasses, really constitute significant fields in fintech? If fintech is understood in the broadest sense as a fusion of finance and technology, then algorithmic trading and HFT are undoubtedly fintech fields.

　However, defining fintech more narrowly, as “innovations in financial fields that enhance the convenience of numerous users,” results in greater ambiguity as to whether or not HFT constitutes fintech.

Indeed, it is undeniable that many people have a negative impression of HFT, as “a way for only a few market participants to make money,” or believe that “advances in HFT technologies have not led to win-win situations that benefit more participants, but rather to zero-sum games,” or that “HFT manipulates the market and harms the interests of other investors, particularly individual investors.”

Professor Joseph E. Stiglitz of Colombia University has concluded that, while HFT firms profit from making trades faster than do other firms, this result leads to excessive investment and wasted costs in social terms.

Moreover, the involvement of HFT is suspected each time a “flash crash” occurs, where market prices fluctuate significantly over a short period of time. Consequently, HFT is often criticized as a destabilizing influence on financial markets.

**The Social Significance of HFT Should Not be Ignored**

At the same time, however, much empirical analysis in Japan and throughout the world indicates that HFT enhances market functioning, including increasing the liquidity and improving the efficiency of markets. There is a far greater volume of research demonstrating HFT’s positive impact than there is any empirical analysis showing that HFT destabilizes financial markets.

　It may therefore be reasonable to suggest that HFT has broad social significance, as it benefits society as a whole by enhancing market functioning. This importance of this issue should not be underestimated.

**The Movement Toward Greater Regulation of HFT around the World**

　Even if HFT clearly enhances market functioning under normal conditions, can the same be said in the case of an emergency? If markets become turbulent for some reason, it is possible that HFT may actually amplify this instability. To date however, there has not been sufficient evidence of this effect.

　In addition, it cannot be denied that HFT firms may, intentionally or otherwise, be engaged in unfair trading practices, such as market manipulation. It is also possible that trading by HFT firms may deprive other investors, particularly individual investors, of opportunities to gain profits. These issues too, still await thorough evaluation.

Countries around the world have proceeded to strengthen regulation and implement systems to respond to these risks potentially associated with HFT. In Japan, specifically, a registration system for HFT firms was instituted in April 2018.

　It is to be hoped that this increased regulation does not overly constrain those HFT activities that contribute to the public good, including its enhancement of market functioning, but rather mitigates risks that may lead to the potential problems described above.

The regulation of HFT requires sophisticated technology, and represents a new frontier for regulators. In fact, the level of technology used by regulators has been cited as one reason why, as yet, very few cases of unfair trading by HFT firms have been exposed in Japan. The future cooperation of private sector organizations is needed to improve the level of technology used by regulators.

**HFT May Play a Role in Shaping Business Models in Japan's Securities Industry**

　At the end of this paper, I present the latest trends in the activities of Japan’s securities companies and HFT firms. This includes an examination of the mechanism, already common in the United States, whereby a Japanese online securities broker may pass on share trading orders submitted by individual investors to a HFT firm in return for receiving a rebate (compensation) from the HFT firm. This practice has begun to be adopted by Japanese online securities brokers, leading to an increasingly strong relationship of mutual dependence between HFT firms and securities companies.

　Japan’s online securities brokers are confronted with an extremely fragile earnings base in the context of a persisting low interest rate environment. In the future, it is conceivable that these brokers may grow even more dependent than their United States counterparts on rebate income from HFT firms, obtained through mechanisms such as this.

Continued, strict monitoring will be necessary to ensure that these practices are not conducted out in a way that significantly damages the interests of individual investors.