



IOSCO consultation report on technological changes and its impact on market integrity and efficiency. July 2011.

IOSCO has published, on the sixth of July 2011, a consultation report about the regulatory issues raised by the impact of technological changes on market integrity and efficiency. This report is the response to the G 20 mandate who, at the Seoul Summit (November 2010), demanded from IOSCO the drafting of some recommendations (to be ready before June 2011) to promote market integrity and efficiency and to mitigate the risks of last technological developments to the financial system.

The most outstanding **technological developments**, that enhance more competitive markets in which inter-related trades are made in fractions of a second but that at the same time **pose new risks**, are the following:

a) The algorithmic trading has fostered changes in the profile of market participants (high frequency traders have emerged); occasionally it may contribute to the transmission of shocks across trading venues and may cause markets disorders (liquidity erosion that diminish the investors confidence, which could be specially serious related to institutional investors).

b) The market fragmentation and dark liquidity, with the development of so-called dark pool (markets without pre transparency) where the Indications of Interest (IOI) give information about trading opportunities not possessed by the public, and the dark orders (orders without pre transparency) in transparent markets. The EC in its consultation on the MiFID review clarifies that the IOIs must be subject to full pre-trade transparency requirements.

c) The Direct Electronic Access (DEA), which means that the firms offer direct trading connectivity -intermediated or non intermediated- between the venue and the firms' clients; this practice may produce markets disruptions and non-compliances of market rules, intermediary credit risk for client's trades, lack of information from the market to the intermediary, lack of understanding on the part of intermediaries of the programming in the algorithms used by DEA customers, and unfair clients treatment.

d) The co-location services exist when firms trading systems are used by market participants who place their own data centre in a location close to trading venue servers; it offers low latency -necessary in some trading strategies- but may raise potential distortion of equal access to the market and of competitiveness between market participants if some participants may receive information on order book trading interests and executions sooner than others.

e) The tick size, is the size of the minimum price by which an instrument's price can move and depends on the price and/or liquidity so that those with low price and high liquidity will tend to have a lower tick size and viceversa. If the tick size is low it can benefit retail investors by increasing competition, tightening spreads and lowering trading costs. On the other hand, competitive lowering of tick sizes to attract trading volumes from HFT firms may ultimately affect the price formation process and reduce market depth, meanwhile if the tick size is larger, sophisticated traders strategies based on introduction/amendment/cancellation of orders are made less attractive which can make more meaningful the core principle of time priority.

f) The fee structure has become more complex, may have changed market behaviours and reflects competition between trading venues; some types of fee structures may raise risk of distorting the price formation process and discrimination between members.

g) The High Frequency Trading (HFT) is identified by the use of sophisticated technological tools that employ algorithms, the high daily portfolio turnover and order to trade ratio (a large number of orders are cancelled in comparison to trades executed), the positions are held for few seconds –even only fractions of a second- and, at the end of the day, the positions are flat (so no risk are carried overnight and cost associated with margins positions are saved). HFT efficacy depends on the ability to be faster than competitors and to take advantage of services such as DEA and co-location. It is used with different strategies: “quasi market maker”, arbitrage or directional.

Some empirical studies suggest that HFT has a positive impact on efficiency of the price discovery mechanism (because the only sources used are public market information and macroeconomic data), on liquidity and on the intra-day volatility. Nevertheless it could be a risk to market efficiency that might be amplified by the difficulty met by some investors in correctly interpreting the effective level of liquidity. In order to help ensure that the integrity of markets is preserved, it is necessary that access to technological infrastructures (included co-location) is offered in a transparent and non-discriminatory manner to all market participants and if the search for hidden liquidity and order anticipation (through reserved orders and sliced orders) is undertaken on a large scale.

IOSCO proposal about possible future actions: a) trading firms level, establish specific charges or a tax on high order entry or cancellation rates, consider the obligatory registration/authorisation of those firms that are non-intermediary members of trading venues, reassess whether requirements for managing conflicts of interest are sufficient, revise pre-trade risk controls and assess whether HFT algorithm traders should provide for specific forms of stress-testing or internal controls; b) market level, consider whether trading controls mechanism (order entry controls, circuit breakers or limit-up/limit-down systems), consider trade cancellation arrangements (in the event of a sudden extreme price movement), consider stress testing, revise the market makers obligations in relation to the liquidity (banning the so-called stub-quotes), assess whether specific changes or fees on high order and introduce minimum tick sizes and minimum order book resting time; c) market structure level, consider banning flash order (exposed on a market for less than a second), evaluate what could be done to improve market surveillance (screening supervision, audit trails), introduce larger trader reporting for HTF or algorithmic orders and review market manipulation rules and laws apply to computer generated orders taking into account the market new tendencies.

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