ICSA
INTERNATIONAL COUNCIL of SECURITIES ASSOCIATIONS

August 12, 2011

Mr. Werner Bijkerk
International Organization of Securities Commissions (IOSCO)
Calle Oquendo 12
28006 Madrid
Spain

Re: IOSCO Consultation Report "Regulatory Issues Raised by the Impact of Technological Changes on Market Integrity and Efficiency"

Dear Mr. Bijkerk,

The International Council of Securities Associations (ICSA) is the global forum for the trade associations and self-regulatory organizations that represent and regulate the securities industry.[1]

ICSA welcomes the opportunity to comment on IOSCO's recent Consultation Report entitled, *Regulatory Issues Raised by the Impact of Technological Changes on Market Integrity and Efficiency* (hereinafter referred to as the "Report").

ICSA members support IOSCO's objective in the Report (as mandated by the November 2010 G20 Summit) to "assess the impact of technological developments on market integrity and efficiency...and to seek to ensure that financial markets continue to fulfill their role of financing the real economy." We also understand the difficulties faced by IOSCO in assessing the impact of recent technological changes on market integrity given the extensive nature of the changes that have taken place, the very limited empirical research on this issue that has been undertaken to date and the compressed timeframe for finishing the Report.

In order to accurately identify and assess the risks posed by recent technological developments in a systematic and orderly way, we suggest that it would be important for IOSCO to develop a clearly articulated framework and methodology for risk assessment. Following from this, in order to determine which recommendations should flow from identified risks, principles could be determined by IOSCO to guide it and its members, in

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[1] ICSA is composed of trade associations and self-regulatory organizations that collectively represent and/or regulate the vast majority of the world's financial services firms on both a national and international basis. ICSA's objectives are: (1) to encourage the sound growth of the international securities markets by promoting harmonization in the procedures and regulation of those markets; and (2) to promote mutual understanding and the exchange of information among ICSA members. More information about ICSA is available at: www.icsa.bz

balancing the potential costs and benefits associated with regulatory options and more generally in determining appropriate levels of regulatory intervention. Such a framework would help to ensure that regulatory responses are appropriate, proportionate and evidence-based.

Please find attached ICSA's responses to the specific questions posed in the Report and some more general comments. These responses are consistent with ICSA's support for innovation and flexibility in markets, and appropriate, targeted, sound regulation to avoid or minimize the potential for market abuse.

ICSA members would be pleased to discuss the issues addressed in this letter and attached submission with IOSCO. This is particularly the case since the current crisis and/or the additional research may reveal consequences of HFT which have not been sufficiently considered at the present time. Please do not hesitate to contact us for further information or clarification.

Yours sincerely,

Duncan Fairweather.

Kung Ho Hwang
Chairman, International Council
of Securities Associations (ICSA)

Duncan Fairweather, Chairman
ICSA Standing Committee on
Regulatory Affairs

General Comments

There is no doubt that technological innovation has had a substantial effect over the past several decades on the evolution of financial markets in general and exchange trading in particular. These developments have been largely positive for markets. The pre-electronic era, was far from immune to serious incidents, and because we believe the advantages of technological innovation have outweighed the challenges presented along the way, we would not join calls to roll back market technological innovation.

In this context we have some concerns regarding the approach taken in the Report to technological innovations associated with HFT which may be overly skeptical of the benefits arising from technological innovation in general and HFT in particular.

The Report finds three key risks created by HFT for the market in:

- risks to the efficiency of the markets
- the fairness and integrity of the markets; and
- the stability and resiliency of the market.

However, the identification of these risks is poorly supported by the empirical evidence contained in the Report, which instead appears to rely in large part on anecdotal evidence. The reliance on anecdotal evidence as opposed to empirical research may create the impression that certain risks are well established when in fact it may be more appropriate to portray them as concerns that may or may not be justified, subject to the findings of future research. Similarly, the analysis of the literature on HFT contained in the Report is focused on a small number of papers that suggest in non-definitive terms the potential for negative impacts from HFT. We believe that this approach may not be adequate for IOSCO and its members to form a balanced view of HFT.

Given the issues noted above, we suggest that IOSCO's analysis of concerns around HFT would benefit from a clearly articulated framework and methodology for risk assessment. Similarly, to determine which recommendations should flow from identified risks, principles could be determined by IOSCO which would guide it and its members in balancing the potential costs and benefits associated with regulatory options for HFT, and would help IOSCO more generally in determining appropriate levels of regulatory intervention. In order to support investor protection, market integrity and market efficiency, regulatory intervention needs to be informed by clear evidence of market failure and a comprehensive cost benefit analysis. We believe that a framework methodology paper would help to ensure that any high level principles that IOSCO developed would be consistent with this objective.[2]

[2] As demonstrated by the reliance on its *Objectives and Principles of Securities Regulation* as one of IOSCO's principle documents for securities regulators, it is apparent that IOSCO is aware of the value of key documents that outline principles to guide a methodical and logically consistent approach to regulatory issues.

Q1 What impact have the technological developments in the markets in recent years had on your own trading? Has it encouraged, discouraged or had no impact on your willingness to participate on the lit markets, and how does this differ between asset classes and/or instruments?

As HFT is primarily an exchange traded equities phenomenon our comments to this and the following questions relate to that market unless otherwise stated.

The academic research on HFT, which is still a developing field, appears to suggest that HFT has had a positive impact on market participation. Indeed, as the Report notes, "Traded volumes have significantly increased even in the context of one of the most turbulent decades in the history of financial markets…(and) equity market liquidity has shown a significant degree of resilience…".

However, since the evidence about the impact of HFT on financial markets is patchy, ICSA members support the need for additional research on this issue so that regulators and market participants have a better understanding of the changes that HFT has engendered in individual markets in normal as well as in stressed market conditions. We suggest that new research on HFT should focus particularly on the quality of the liquidity provided by HFT strategies. Additional research is important because of all of the other technological changes that have taken place over the past decade, simultaneous with the increased reliance on HFT. In the absence of empirical research on this issue, it is difficult if not impossible to know the precise linkages between different technological changes, including HFT, and market developments. It is also impossible to know the causality of those linkages without additional research. This is important since, when market conditions are difficult, there is sometimes a tendency to 'blame' HFT, which in turn can impact participation and liquidity adversely.

Q2 What are your views on the suggestion that proprietary trading firms (including HFT firms) that are not currently subject to registration/authorisation by a regulator should be required to obtain such a registration/authorisation? Are there specific regulatory requirements you believe such firms should face? To what extent do your answers differ if the proprietary trading firm accesses the market as the customer of an intermediary firm through DEA (i.e. under that intermediary's trading rules/codes) rather than as a direct member of the market itself?

As IOSCO is aware, regulators in different jurisdictions have taken different approaches to this issue. While regulators in some jurisdictions have opted to require registration/authorization of all proprietary trading firms, regulators in other jurisdictions rely to a large extent on registered broker-dealers to ensure that the market interactions of the broker-dealers' clients, including proprietary trading firms, are fair and orderly. The views of individual ICSA members regarding this issue largely reflect the regulatory approach taken in the jurisdiction(s) where the individual association is most active.

Given the lack of any evidence suggesting that proprietary trading firms that utilize HFT as a trading strategy are engaged in widespread market abuse, ICSA members support the development of high level principles that respect the different regulatory approaches taken in different jurisdictions.

Where a proprietary trading firm is a direct member of a trading venue (i.e. dealing as principal and not as agent), ICSA believes that firm should be subject to the registration or authorisation requirements of the relevant regulator. The minimum suite of regulatory requirements for such a firm should include, but not be limited to: fitness and propriety, internal systems and controls, financial adequacy and record keeping.

Where a proprietary trading firm accesses the market as a customer of a broker-dealer, registration/authorization may not be required. In this case, the intermediary retains regulatory responsibility for the client's access and therefore must carry out extensive due diligence before allowing trading to proceed. Since they are responsible for all order and trade activity, broker-dealers must also have the capacity to continuously monitor the activities of their clients and have the ability to immediately close off order entry when necessary.

In addition, regulators must have the ability and resources necessary to single out and track the activities of any market participant, including proprietary trading firms that utilize HFT, at any point in time in response to evidence or the suspicion of inappropriate behavior, and to take appropriate action when needed.

Q3 What recommendations, if any, would you propose to strengthen the regulatory requirements around pre- and post-trade risk controls? In particular, what measures, if any, do you think regulators should introduce that relate specifically to the use of and risks posed by algorithmic trading and/or HFT?

ICSA is supportive of appropriate pre- and post-trade risk controls that are in place or being arranged already in most major markets. For example pre-trade "fat finger" checks are appropriate for brokers to apply to sponsored access as well as market operators. Post trade circuit-breakers that are appropriately coordinated are also supported by ICSA as sensible technological responses to the increases in speed that technology has facilitated in times of market stress.

However, we do not see any general need for a strengthening of controls or mandating of strengthening of controls, particularly in response to the isolated flash crash event in the U.S. as this appears to have been related to the unique market structure issues in the U.S.

The technology and methodologies around managing market stress in a highly automated market are evolving rapidly and should be allowed to continue to do so. ICSA believes that future more sophisticated solutions may be found that enable a more efficient and effective response than the first generation of circuit breakers. As such, regulators should not be mandating solutions that may soon not be best practice and restricting innovation in this area.

In relation to the 'risks' identified in the Report posed by HFT, as per our general comments ICSA does not believe that a sufficiently strong case has been made for any of these posing a real threat to the market.

In particular:

- The reliance on the Kirilenjo working paper's finding that HFT "appears to have exacerbated the downward move in prices" during the Flash Crash is insufficient to support the Report's claims of risks to the efficiency of the market.

- Anecdotal reports of a "loss of confidence" from "some market participants" and anecdotal concerns about the costs involved in firms competing for the best technology which is "very costly" are not sufficient to support claims of HFT posing risks to the fairness and integrity of markets.[3]

- Concerns around the competitive success of HFT algorithms in undoing the camouflage work of sophisticated large order execution algorithms is not a valid area of concern for regulators.

- IOSCO's report notes that they have not been presented with "clear evidence of the systematic and widespread use of abusive practices by those engaging in HFT" so there are no grounds for concern on IOSCO's part around risks to the fairness and integrity of the markets from HFT.

- Concerns around HFT firms having conflicts of interest by part owning execution venues are no different from other proprietary trading houses holding similar stakes and the same conflict of interest controls should and do apply.

- Risks to the resiliency and stability of markets cannot said to be established by the Kirilenjo paper, and there is no evidence of "rogue algorithms"[4] being any threat beyond that of "fat finger" errors.

- Concerns expressed in the Report around HFT firms becoming direct participants of exchanges without an authority to oversee their activities are more properly seen as a concern with the regulatory structure in those jurisdictions (or the drawing of the regulatory perimeter) rather than as a 'risk' posed by HFT.

- Although ICSA is not aware of any studies which indicate that automated trading is linked to investor confidence and the impact of their willingness to trade, the current macroeconomic conjuncture is widely believed to be affecting market conditions.

ICSA again stresses the need for IOSCO to create a clear framework for the assessment of concerns of risks to markets and of the appropriateness and value of potential regulatory responses to ensure that assessments of risk are fair and accurate and that regulatory responses are warranted and proportionate.

Q4 To what extent do you believe the use of trading control mechanisms such as circuit breakers and limit-up/limit-down systems by trading venues should be mandated? If you believe they should be mandated, should venue operators be permitted to design their own controls or should they be harmonised/coordinated across venues (including between interrelated instruments such as a derivative and its underlying)?

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[3] IOSCO Technical Committee Consultation Report (July 2011), "Regulatory Issues Raised by the Impact of Technological Changes on Market Integrity and Efficiency", pg. 27.
[4] Ibid., pg. 29.

ICSA members support measures to coordinate circuit breakers and limit-up/limit-down systems between different trading venues, as this may serve to reduce volatility across markets.[5] Such rules would need to be crafted in such a way to ensure that trading was halted only when there was a genuine need for market activity to pause on a temporary basis. Venue operators should continue to be responsible for the design and operation of their own controls and this work should be coordinated across venues by the authorities.

Q5 To what extent do you believe market maker schemes offered by trading venues should be subject to mandatory minimum criteria? Should the criteria be determined by the trading venue alone? To what extent do you agree with the suggestion that the use of stub quotes should be prohibited?

ICSA does not believe that there is any case yet made for the regulation of market making schemes offered by trading venues.

Market making is an area of substantial competition and innovation should not be stifled by unnecessary regulatory intervention that may impose criteria not suitable to every product in every market condition.

Trading venues should be allowed to create market making criteria in a competitive environment. At the same time, it is important that any market maker obligations set out in marketplace rules are fully transparent and understood.

Q6 Do you have suggestions for improvements to regulators' surveillance capabilities with respect to the markets and modern trading techniques? Please elaborate. Who should bear the cost of investing in such capabilities and the cost of operating and supervising the markets in order to ensure fairness among market participants? Please elaborate.

To keep pace with the market's evolution regulators' surveillance capabilities must also become more automated and sophisticated. Regulators must also ensure that their staffs have the appropriate level of expertise and that appropriate lines of communication with the industry are maintained so that the regulator is aware of developments in the market. In light of the global and increasingly multi-product nature of HFT, we also encourage cooperation among regulators to leverage additional capabilities on an international basis.

At the same time, a balance must be achieved between the benefits accruing from these additional investments and costs of implementation. Where these costs are levied back to the market they will become a direct addition to the cost of trading, and so should be kept in appropriate check. Sharing of these costs in instances where they are levied on market participants, should be on a fair and equitable basis consistent with costs of service provision and without becoming a barrier to market participation for any class of investor or trader or participant of a particular level of technological competency.

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[5] In its preliminary report on the 'flash crash' of May 2010 the SEC concluded that the imposition of disparate volatility rules may have had the effect of exacerbating, rather than dampening, price volatility since orders may have been routed to other, less liquid venues for immediate execution rather than waiting out the pause in trading.

Beyond this particular case, proscriptions are difficult given the continually evolving nature of the market.

Q7 What do you perceive as the major causes of settlement indiscipline and settlement failures? What steps, if any, do you believe regulators should take to address these causes?

ICSA is not aware of any connection between settlement indiscipline and HFT which often tend to end flat on the day. Indeed, one ICSA member has conducted research in this area and has found that the principal causes of settlement failure in that specific jurisdiction are administrative errors.

In jurisdictions where no single cause of failed trades has been found, additional rules may not be the appropriate solution. Instead, systematic monitoring and enforcement of existing rules should be emphasized, backed up by active use of information from clearing and settlement systems. Joint work by clearing houses, settlement systems and supervisors may also be helpful.

In either case, regulators must monitor overall trade failures for systemic issues where there are increased potential risks to market integrity and fair and efficient markets.

Q8 Have the appropriate steps been taken to limit or manage conflicts of interest that arise where an investment firm simultaneously conducts client-serving activities and proprietary trading or a trading participant is also a shareholder in a venue on which it trades? If you believe conflicts management is inadequate, please explain how this manifests itself and any recommendation you have for how conflicts management could be improved.

In the markets which ICSA participants operate these potential conflicts of interest are well managed and not considered an issue.

There are many advantages to having market participants also being part of the ownership of venues. Many exchanges were formed on a mutual basis and these arrangements ensured that exchanges were receptive to participant needs.

Q9 Do you think existing laws and rules on market abuse and disorderly trading cover computer generated orders and are relevant in today's market environment?

Existing laws and rules on market abuse and disorderly trading continue to be very relevant to computer generated orders and are relevant in today's market environment.

However, as previously outlined, automation and high frequency may make new types of disorderly and manipulative behavior possible and existing manipulative practices easier to execute. Therefore, it is important to ensure that regulators' surveillance and monitoring measures are reviewed and altered if required so that they function correctly as markets evolve. Where disorderly and manipulative types of behaviors are identified as a problem through an appropriate assessment framework, ICSA supports targeted balanced regulation of behaviors that are clearly manipulative or disorderly.

ICSA does not support attempts to regulate technological innovation or competency, or the targeting of investors or traders based on their strength in technology or frequency of trading.

Q10 Are there any strategies employed by HFT firms that raise particular concerns? If so, how would you recommend that regulators address them?

There are some types of investor behaviors that may become possible with HFT that would be abusive or manipulative. These types of investor behaviors should be subject to regulatory scrutiny and enforcement.

However, the approach of categorising particular trading strategies as posing concern is fraught with difficulties in scope and definition. We are of the view that more research is required before it is possible to conclusively determine whether there are certain HFT-enabled strategies that should be addressed. We are aware, for example, that some concerns have been expressed regarding unnecessary intermediation, message latency arbitrage and 'denial of service' type attacks such as 'quote stuffing'. If these concerns can be substantiated, this might help to identify areas in which early research might focus.

It is also the case that existing trading strategies, whether HFT or otherwise, will evolve in ways that may outpace regulatory efforts to categorise them, and entirely new trading strategies will develop at a rapid pace. In view of the continuing rapid pace of development, the authorities should consider making clear that certain behavior is abusive whether carried out by a person or a machine under a person's control. They may also wish to re-emphasise, jurisdiction by jurisdiction, the responsibilities of (i) all market participants and (ii) the responsibilities of regulated firms.

Q11 Should charges or fees be imposed on messages, cancellations or high order-to-trade ratios? If so, how should the fees or charges be determined and on what basis?

Market operators should be allowed to set their fees based on commercial and competitive forces, provided such fees are transparent, allow fair access, and are not designed to encourage disruptive or abusive practices.

It is not normally appropriate for regulators to interfere in the commercial decisions of exchanges. However, in jurisdictions where there is no competition in exchange operation and the exchange is run as a public utility, there may be space for a determination based on use of resources and/or other equitable bases to determine cost allocation. Even in those jurisdictions, however, it would be inappropriate to 'punish' legitimate trading activity and charges should be constructed with conscious neutrality to the investors and trading firms using the exchange. Care should be taken that the appropriately qualified regulator – who may be involved in questions of competition and monopoly rather than being a financial sector regulator – is responsible.

The issue of exchange fee structure of course extends beyond HFT considerations and our comments should be considered in this light.

Q12 Should market operators be required to make their co-location services available on a fair and non-discriminatory basis?

ICSA agrees that market operators should ensure access to co-location services on reasonable terms and on a non-discriminatory basis.

Q13 Should market operators be required to provide testing environments to enable participants in stress test their algorithms? If so, what kind of minimum requirements are reasonable?

ICSA supports market operators providing good testing facilities including test symbols on live markets. However, while the provision of testing environments by market operators is an important part of ensuring market integrity, finely grained regulator intervention presents risks to market innovation and to the overall costs of trading.

Market participants and intermediaries (if applicable) are responsible for all orders and trades flowing through them. They should be able to buy 'canned' market data from the exchanges to test their algorithms but the firms themselves are responsible for appropriate stress testing.

We would not encourage regulators to mandate the provision of testing environments to enable participants to stress test their algorithms. Market operators compete to attract participants to their venue, and as such should be able to retain the discretion to offer this service on a commercial basis.

Q14 To what extent do you have other comments related to the risks to market integrity and efficiency raised by the issues in this report?

Given the need for regulation to be informed by clear evidence of market failure and comprehensive cost-benefit analysis, we would urge IOSCO to be cautious when designing principles for regulation of HFT until more concrete data and analysis regarding the impact of HFT on financial markets is available.

Where areas of concern are identified we would support further research to establish the evidence base before considering regulatory responses.