



# Dark pools, HFT and competition

A speech by Shane Tregillis, Commissioner, Australian Securities and Investments Commission

Stockbrokers Association of Australia Conference 2011, Hilton Sydney

26 May 2011

This year's annual stockbroker's conference is occurring at a watershed for the Australian equity markets with a competitor for ASX due to commence before the end of 2011.

## **Dynamic markets**

Our futures and equity trading markets have always been dynamic. However, on a periodic basis, changes occur that reshape more fundamentally the landscape.

In the 1980s we saw the merger of the state based exchanges into the national stock exchange.

In the 1990s there were a series of major market structure changes including:

- the shift to fully electronic trading and consequential closure of the trading floors;
- the creation of an electronic share register (the CHESS system);
- demutualisation of the ASX:
- the creation by the SFE of its own local clearing house; and
- closure of the futures trading floor.

And then in this decade we saw the merger of the futures and equity exchanges and significant changes to market dynamics arising from automated order processing.

All of these changes were challenging for market participants—and some did better than others in taking advantage of the new opportunities whereas others struggled to adjust their business models to the new environment.

The introduction of competition between equities exchanges in Australia is another such game changer.

I suspect we are just at the beginning in fully understanding the way in which competition, driven by technology and the increasing global nature of the markets, will impact the market and market participants in coming years.

These changes will also have a significant impact on ASIC as the market regulator going forward. It is clear that ASIC will need new skills, technology and capabilities in the coming years.

All we can be sure of now is that the change will be dramatic, and will play out in unexpected ways.

## Fundamentals remain the same

Despite these changes some fundamentals remain the same.

At the heart of any successful market is confidence. As we know, and as we saw during the financial crisis and the US flash crash, where confidence evaporates, and it can do so, suddenly and dramatically, markets cease to be the deep, liquid and efficient places for the buying and selling of securities.

The impact was felt not only on the financial sector but also on the real economy more broadly.

It is a well known truism that once confidence is lost it is very difficult to regain.

It is for this reason that investor confidence in our markets is at the heart of ASIC's market regulation agenda. The focus of ASIC's regulation is on achieving three clear outcomes for the markets.

- first, the infrastructure of the public markets and clearing systems is robust:
- second, trading, clearing and settlement are efficient, orderly and transparent; and
- third, opportunities for market misconduct are minimised.

# Impact of competition

ASIC appreciates that, at a practical level, the regulatory changes we have introduced for competition have a significant impact on your day-to-day business operations. They may require IT changes, new systems and compliance procedures for the new regulatory and client obligations, such as those relating to best execution, and consequential changes to your mid and back office systems.

We are all now at the 'pointy end' of implementation for the market operators and participants. ASIC has an IT build in order to ensure we can connect the new market data into our surveillance system. So we also appreciate some of the very practical issues involved. This change is also occurring at a time when many of you have embarked on IT upgrades for commercial reasons or in response to changes in ASX trading systems.

Our approach in implementing the current regulatory changes is to work closely with you to assist in the transition by:

 establishing and publishing a clear timetable for the introduction of the new obligations related to competition;

- adopting a phased approach in introducing our rules to allow industry participants time to adjust in key areas such as best execution; and
- working closely with market operators and industry participants on testing and readiness issues.

Your feedback and willingness to engage with ASIC through the Association and individually during the consultation process is very much appreciated. Even reading our hefty consultation documents was no doubt a daunting challenge—even more so in the lead up to the Christmas and New Year season.

On testing and market readiness, as many of you will be aware, we are working with the Association and AFMA to convene a regular IT forum. We hope this can serve as a valuable forum for raising common IT and operational issues during the implementation phase. The next meeting is currently being planned for early June.

### **Best execution**

One of the most significant regulatory changes arising from competition is the 'best execution' obligation for market participants. As we have set out in our consultation paper<sup>1</sup>, best execution is essential in ensuring that customers get the most appropriate outcome in a multi-market environment. We examined other mechanisms to achieve this outcome. These included a 'trade through' rule and mandating membership of all exchanges along Canadian and US lines.

But we considered that a more flexible approach based on best execution obligations at the participant level suited Australian circumstances better at this stage.

Many of you will be now working through the practical issues involved in meeting the best execution rule and guidance. Some of the common questions we have received to date include:

- How differentiated should the best execution policy be for different clients, products, markets?
- What will ASIC's tolerance be for participants having only a single venue in their best execution policy?
- What is the timing of disclosure to existing clients?
- Can I have a standard opt-out clause for my HFT clients in my Terms and Conditions?

<sup>&</sup>lt;sup>1</sup> Consultation Paper 145 Australian equity market structure: Proposals (CP 145).

- Do clients need to consent?
- How will ASIC assess compliance with best execution?

No doubt there will be other questions.

We deal with a number of these issues in the regulatory guidance we have issued to date. For example, we make it clear that there should not be standard opt-out clauses in customer agreements and that in the first 12 months we will accept as a transitional measure that some brokers will choose to only deal on ASX's TradeMatch. After this, we expect all brokers to be able to demonstrate how they are achieving best execution across both markets.

We have also set out in Table 7 of RG 223<sup>2</sup> a range of issues we expect your best execution policy and procedures will need to address. I suggest you to take a close look at the guidance we have issued on best execution in RG 223.

If considered useful, ASIC would also be happy to work with the Association to arrange a specific workshop for industry participants on best execution market integrity rules and guidance.

# Dark pools and HFTs

Let me turn now to the issues of 'dark pools' and high frequency trading (HFT).

These are very topical issues in Australia and globally. Unlike most of the issues we deal with in regulating markets, these are topics that seem to excite the popular imagination.

In large part the term 'dark pool' evokes a strong reaction. As any reader of pulp fiction or those whose kids have gone through the scary movie stage know, nothing good is generally to be found in a dark pool.

Alfred Hitchcock even called one of his TV dramas in the 1950s *The Dark Pool*. For me the term conjures up the famous 'shark approaching music theme' from the movie *Jaws* and the deliberately distorted perspective of the film's iconic poster showing a tiny, lone figure blissfully swimming against the backdrop of the massive shark lurking just beneath the surface.

Then again, these matters always depend on your perspective. From the point of view of the shark, I am sure this all seems just like another day at the office and an interesting opportunity.

\_

<sup>&</sup>lt;sup>2</sup> Regulatory Guide 223 Guidance on ASIC market integrity rules for competition in exchange markets (RG 223).

In the same way, I suspect views on the benefits and risks of dark pools—or to give them a more technical name, 'non pre-trade transparent trading venues' (including internalisation of crossings by market participants)—depends on your perspective.

So what are ASIC's and other regulators' concerns and what are we doing?

IOSCO has just released a report, *Principles for dark liquidity*, <sup>3</sup> that provides a useful overview of the issues, a description of the regulatory approaches to dark liquidity taken by regulators internationally and a set of principles to guide regulators, venues and general users of dark liquidity.

ASIC has set out its views in the market competition consultation paper and our response document. We accept that various forms of non pre-trade transparent trading have always been part and parcel of our market structure. In large part, this was to minimise the impact of larger block transactions. The block thresholds and crossing rules have been designed to ensure an appropriate balance between exposure of trading on the market and facilitating larger transactions.

What has changed is that technology and the emergence of multiple pools of liquidity (both in formal venues and via internalisation within market participants) more readily facilitate smaller and greater numbers of non pretrade orders being transacted off the lit markets. The changes to the 10-second crossing rule a few years ago also mean that crossings are no longer exposed to the market before being crossed internally on the books of a participant.

While in the short term it may seem everyone is better off by these developments, the actual result may be quite different. Since most of the dark liquidity is priced by reference to the prices on the public markets, increased flows of dark liquidity can widen spreads on the lit market resulting in everyone being worse off. This is what the research seems to suggest.

This is a classic case of a collective action problem where individual incentives conflict with what would be a better outcome for all. Ironically, the fact that non pre-trade transparent venues tend to set their price by reference to the lit markets reinforces the importance of the quality of price formation process on these markets.

Accordingly, we remain of the view that the quality of price formation on public markets continues to be an important public policy issue (for investors in valuing assets and companies in capital raising) that we intend to address.

<sup>&</sup>lt;sup>3</sup> Technical Committee of the International Organization of Securities Commissions, *Principles for dark liquidity: Final report* (FR 06/11), OICV-IOSCO, May 2011.

One of the lessons from overseas is that we need to pay attention and deal with the issues early given the dynamics involved. By the time everyone agrees on the extent of the problem, we may well have already passed a tipping point.

We propose to start re-engaging the industry on these issues over coming weeks. As part of this process, we are reviewing research internationally and domestically on:

- the impact of dark liquidity on the quality of price formation on public markets. There is recent empirical evidence in the United States that the shift of trading into the 'dark' due to more internalisation of order flow is resulting in wider spreads and reduced depth on public markets, potentially contributing to more volatility;<sup>4</sup> and
- the quality of execution received by clients. We are particularly interested in price improvement. There are reports from the United States that clients are routinely only receiving 0.001 to 0.0001 cents per share (not meaningful price improvements) from internalisation of order flow. Similar concerns are emerging in Canada. Regulators in both jurisdictions are reviewing this. This is also an important issue in Australia.

We are considering a range of alternatives to our proposed 20K threshold for pre-arranged crossings, some of which were raised in response to CP 145. They include:

- the Canadian approach of applying a threshold to passive orders only (with meaningful price improvement). In Canada, IIROC, the market supervisor, would set the threshold;
- requiring display of orders in lit markets for a minimum period.
  However, we are conscious of some of the problems that gave rise to the removal of the 10-second exposure rule on ASX a few years ago; and
- a US-style volume threshold.

We are considering these and other options (including the possibility of combining some of these measures). We will commence dialogue with the industry shortly.

Pending this review, we have harmonised across all markets some of the current ASX exceptions to pre-trade transparency. One difference is that participants will now be able to execute trades below block size off-market and report them to either ASX or Chi-X provided they are at or within the spread of the national best bid and offer.

<sup>&</sup>lt;sup>4</sup> D Weaver, 'Off-exchange reporting and market quality in a fragmented market structure', Rutgers Business School, Rutgers University, 2 May 2011.

We expect participants to have appropriate systems and processes in place to ensure trades that rely on this exception are done at a price that is actually at or within the spread. This includes appropriate record-keeping to evidence to ASIC.

We will have little tolerance for participants that try to push the barriers on this exception.

# **High frequency trading (HFT)**

In CP 145 we discussed the increasing use of high-speed computer programs to generate, route and execute orders. HFT is regarded as a subset of this trading characterised by the generation of large numbers and cancellation of orders and holding positions for very short time horizons. High frequency traders aim to end the day with a zero position on their books. We noted concerns about the impact of HFT on liquidity and volatility in the market.

Some institutional traders continue to express concerns they are disadvantaged by high frequency traders in the lit markets. This can lead some to seek alternative venues in dark pools.

While the various academic and other studies currently seem to paint a relatively benign or even positive picture of HFT's impact on liquidity and volatility in normal market conditions, I consider we will also need to look closely at the whether HFT contributes to incentives for trading in non-lit venues and its impact on the dynamics of changes now occurring in the markets.

ASIC's current focus is very much around ensuring that as trading becomes faster and more automated using more sophisticated programs (algorithms), risk controls at the firm and market level keep pace.

ASIC's Market & Participants Supervision team, led by Greg Yanco, has been talking to industry about the testing and controls that might be needed for automated order processing and use and testing by firms of algorithms.

Greg will go into more detail tomorrow morning at the Executive breakfast, but, in summary, we are still seeing too many occasions when algorithms are not properly understood by those using them and potentially disrupting the market.

At the market level, we have been doing more work on volatility controls designed to limit or pause trading during volatile trading conditions. We will be testing possible thresholds and consider the impact on cancellation ranges.

We propose to consult on this issue further in the third quarter this year. At the same time we will also look at questions of the appropriate supervision of high frequency traders, including by licensing or market integrity rules, and implications for capacity limitations, including implications for ASIC's own surveillance system capabilities.

These are also issues under active review in North America and Europe. The SEC has issued a consultation paper on volatility controls and in Europe they are reviewing the obligations of high frequency traders as participants in the markets.

We will continue to keep this work under review to assess whether or not it is relevant to the issues we face in the Australian market place.

# Other markets work on the ASIC agenda

There are also some other areas of work that I will briefly mention in passing that may be of interest.

## **Capital monitoring**

ASIC takes over from ASX capital monitoring in August this year.

Consistent with our approach generally, we will convert the current ASX capital rules into ASIC rules without substantive change in content. We intend to ensure there is a level playing field between participants on the two competing markets.

We also want to avoid unnecessary duplication in reporting on capital where firms are participants in both markets by requiring only a single monthly report to ASIC. We will be issuing a consultation paper in the near future on draft ASX/ASX 24 market integrity rules for capital.

At an appropriate stage once the transfer of capital monitoring to ASIC has settled down, we will review whether we need revisit the capital requirements for brokers and whether there are opportunities to streamline and improve the rules and reporting processes involved.

## Third party clearing

On the ASX's plan to increase minimum core capital requirements for direct clearing participants from \$5m to \$10m, you will be aware that the Reserve Bank and ASIC have expressed the position that depth in the third-party clearing market is a precondition for ASX Clear's plans to implement these changes. Among other things, this is to address concerns regarding concentration risk in the third-party clearing industry.

Due to limited developments in these third-party services since the changes were announced, ASX Clear has pushed back its planned date for this increase from 1 January 2012 to 1 January 2013.

This timetable is likely to be reviewed again later in the year and it is expected that ASX—in conjunction with ASIC and the RBA—will consider developments in the third-party clearing market in determining whether it is appropriate to pursue this timetable.

## Market integrity rules

We also continue to be committed to harmonising the market integrity rules across markets. There are clear benefits for participants, and indeed for ASIC, in having a harmonised rule book.

There is a lot on at the moment so we are currently reviewing the timing of doing so and will engage with industry on this in the new financial year.

#### ASIC's surveillance costs

I know the industry will be interested in how ASIC's surveillance costs for a multi-market environment will be recovered. As the Government will make the relevant Corporations Fees Regulations on any cost recovery regime, this is a subject the Government will consult on separately. We understand this consultation will start in the near future and will cover the nature of the costs to be recovered and the basis for their recovery.

#### Deterrence

Finally, let me briefly mention what we are doing in deterrence. ASIC continues to retain a strong focus on deterrence of market misconduct. In order to ensure investor confidence in our markets, a strong reputation for market integrity is paramount. Our approach to deterrence, based on a useful UK FSA formulation, is all about ensuring opportunities for market misconduct are minimised in three key ways:

- first, by ensuring better controls by industry participants;
- second, by detecting incidents of market misconduct quickly in our realtime surveillance and supervision; and
- third, because potential wrongdoers have a real fear of being detected and facing a meaningful, timely sanction.

The first element in the statement emphasises that dealing with market misconduct is a shared responsibility. Market participants have to play their

part to ensure that opportunities for insider trading and market manipulation are minimised.

For our part, ASIC's focus is on ensuring market participants have proper internal controls in place. We do so by undertaking surveillances, monitoring and remediation work, and risk-based assessment visits. Greg Yanco will run through our activities and findings tomorrow in more detail.

A number of our reviews found poor order record-keeping and this is an issue we will target in a future thematic review across the market. We are also planning to do further work covering key areas such as market integrity rule compliance, unauthorised discretionary trading, managed discretionary accounts, compliance monitoring and adequacy of management supervision.

## Effective timely detection

The second element in the statement is the ability to detect incidents of market abuse quickly. Since 1 August 2010, ASIC has undertaken the real-time market surveillance using the SMARTs system. We will also be building the necessary data links to ensure we are able to conduct surveillance across both market operators when competition starts.

However, it is clear the world is changing rapidly and we will need to upgrade our skills and technology to be able to better detect potential abuse trading patterns in the more complex, high-speed world we are entering.

This is why we are working with the industry to fine-tune the guidance on our proposed rule on enhanced suspicious activity reporting. This rule is an important market integrity measure against a backdrop of recent market developments (including the introduction of competition) and supplements the existing anti-money laundering legislation.

We are in active discussions with our overseas colleagues on emerging types of market abuse in other jurisdictions, and in the near future we will need to upgrade our systems so that they can generate not only individual alerts but are capable of identifying patterns of trading across multiple trading venues and asset classes.

#### **Effective sanctions**

The third element is that potential wrongdoers have a real fear of being caught and of facing a meaningful sanction.

ASIC's approach in more recent times has been (generally) to pursue criminal proceedings for these offences. ASIC's view is that criminal insider trading and market manipulation proceedings and sanctions, including

imprisonment, are what will 'focus the minds' of those who may be inclined to stray (so-called 'general deterrence').

We currently have 74 enforcement matters relating to market integrity and, since 1 January 2009, we have had 20 significant market misconduct outcomes relating to insider trading and market manipulation, including:

- seven outcomes (five convictions and two guilty pleas) for insider trading;
- six outcomes (five convictions and one civil penalty) for market manipulation; and
- seven brokers have also been banned from providing financial services, for having engaged in either insider trading or market manipulation.

In addition, there have been four outcomes (one civil penalty action and three infringement notices) concerning continuous disclosure obligations.

We have a further six insider trading and market manipulation matters pending before the courts on criminal charges.

In December 2010, the Government revised the penalties for market misconduct offences in order to add to the deterrence impact and bring the offences in line with those applying to cartel activity under the Trade Practices Act.<sup>5</sup>

### Conclusion

I started by noting this conference is happening at a time of significant change in the industry. This annual conference provides an excellent opportunity to reflect on the significant changes now occurring and how they are likely to impact on your businesses going forward.

I have set out the three clear outcomes ASIC seeks to achieve in its regulation in support of investor confidence in our markets, and some of the current key market structure issues we are reviewing.

Greg Yanco will focus on some of the more immediate issues that ASIC is paying some attention to in our supervision work in his comments tomorrow at the Executive breakfast.

For a corporation, the proposed penalties are the greater of:

<sup>&</sup>lt;sup>5</sup> For an individual, the new penalties for both insider trading and market manipulation are:

<sup>•</sup> the greater of \$495,000, or three times the profit gained or loss avoided; and/or

<sup>•</sup> up to 10 years imprisonment.

<sup>• \$4.95</sup> million;

<sup>•</sup> three times the profit gained or loss avoided; or

<sup>•</sup> up to 10% of the body corporate's annual turnover in the relevant period.

We understand the regulatory changes required to introduce competition impact on your day to day business and that the next few months will be challenging for you as competition becomes a reality.

ASIC remains committed to working closely with you over the next few months to help industry take all steps to be ready and enable a smooth transition to competition in the Australian equity market.

We will also continue to strongly focus on deterrence of market misconduct to ensure all investors, domestic and international, have confidence in the integrity of Australia's markets.

Thank you.