Preventing market abuse: Can market surveillance really improve amidst fragmentation and low-cost competition?

Stock exchanges perform a vital function in society by enabling the listing and trading of securities. At the same time they have an obligation to maintain high quality market surveillance in order to maintain public confidence in the securities market. The main challenges facing market surveillance today are increased fragmentation and abusive trading practices.

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In November 2007, the Markets in Financial Instruments Directive 2004/39/EC (MiFID) was introduced to, among other things, open up the national exchange monopolies to competition, and to enhance efficiency, market transparency and investor protection.[1]

Nearly four years on we can establish that MiFID has paved way for radical structural changes in the European equity markets. The opening of the European equity markets to competition introduced a new set of conditions that have literally forced all market participants, including exchanges, brokers, investors, listed companies and regulators, to continuously reassess and adapt their operations. The task is complex and demanding.

Competition

We have seen the European equity markets change from local national monopolies to competitive cross border markets. Entry barriers have been lowered to give way to new entrants to the market. Today, there are three MiFID regulated categories of trading venues with differing levels of transparency characteristics where trading may take place: a regulated market (RM), a multilateral trading facility (MTF) or through a broker acting as a systematic internalizer (SI[2]). Competition between trading venues has soared as a result of MiFID and the number of trading venues have risen dramatically.[3]

Efficiency

When looking at trading costs, it seems that competition has decreased the costs per transaction charged by trading venues. According to a study commissioned by the European Commission[4], the costs per transaction have decreased significantly: since 2006 to 2009 by 33 %. However, it can be debated whether market participants have been able to benefit from

[1] MiFID is European Union law that provides harmonized regulation for investment services and financial markets across the 30 member states of the European Economic Area. Its main objectives are to increase competition and consumer protection. MiFID is part of the European Commission's Financial Services Action Plan, an attempt by the European Union to create a single market for financial services and encourage the integration of EU capital markets.

[2] Brokers that internalize trades by executing against their own accounts on which orders are executed.

[3] See http://mifiddatabase.cesr.eu for the list of RMs, MTFs and SIs.

[4] *Monitoring prices, costs and volumes of trading and post trading services*, July 2009, www.oxera.com

the decrease, since the fragmented landscape of trading has forced the brokers and institutional investors to connect and administer the execution of trades to multiple venues across Europe. The routing of orders to scan the markets across Europe, as well as the technological arms race in the quest for speed, has required substantial investments in trading technology, which again have increased costs. Let us hope the costs are transitional.

The fragmented trading landscape has attracted new trading strategies, the most debated being high frequency trading.[5] In order to attract these traders and their activities, the trading platforms have introduced innovative pricing models and service offerings. To give an extremely simplified description of the debate, some claim that high frequency trading destroys market structure and is therefore detrimental to the market, while others claim that such trading activities substantially improve market since they improve liquidity in the market. Since the debate is rather heated and very much ongoing elsewhere, it is left outside the scope of this paper. Let us just say that the jury is still out on this one and will most likely stay there for some time to come.

Market transparency

Sunlight is said to be the best of disinfectants and this applies to the financial markets as well. Investor protection and investor confidence is very much influenced by the level of market transparency. One of the objectives of MiFID was to boost investor confidence by greater market transparency. Four years on we can establish that this objective has not been met. In fact, market transparency has radically worsened. Before MiFID, the trading of shares of a listed company was concentrated to the exchange where the company was listed. After MiFID, the shares can be traded on multiple alternative trading venues, MTFs, within the European Union. The admission to trading requires only a decision to be taken by the trading venue. The listed company is often not even aware of all the venues where its shares are traded. Also, an increasing portion of the trading takes place outside of MiFID regulated venues, and today there are designated electronic systems, so called ‘broker crossing networks’ or internal dark pools, set up specifically to handle trading directly between brokers and institutional investors[6].

Before MiFID, the surveillance department of an exchange had a comprehensive picture of order books and transaction flows of its listed shares. Now an increasing portion of such trading takes place on alternative trading venues, which naturally has fractured this picture. Today, the same share may be traded on multiple venues, but each venue only has responsibility and mandate for surveillance of its own marketplace. As a result, no one has an overall responsibility for surveillance in a given share on a European level, which means that

[5] High-frequency traders use computer programs or sophisticated hardware to trade. Typically, speed is essential and no positions are taken overnight.

[6] Broker crossing networks are very similar to regulated markets and to MTFs in terms of the kind of trading they do but they are not required to conduct market surveillance as operators but only as brokers. Therefore, they are only obliged to follow the requirements of the Market Abuse Directive 2003/6/EC.

no one has a consolidated view of the transactions across all venues. Also, there is no system for surveillance of order-level information across different venues on a European level.[7]

The regulators' picture is even worse. It has become increasingly difficult for regulators to get an overview of the market that they have the responsibility to monitor. The fragmentation is of course the main reason but also the increase in the trading taking place cross border outside of their jurisdictions. The regulators are national and have a national mandate. MiFID has moved the trading across border outside the reach of the national regulator. Cross border exchange of information between regulators does take place but in a limited scale and not as expediently as is required to investigate a fast moving and increasingly automated financial market.

In Europe the regulators rely to a great extent on an electronic reporting system, Transaction Reporting Exchange Mechanism (TREM), that was introduced with MiFID. Article 25 of MiFID established a transaction reporting regime where brokers are obliged to submit reports of executed transactions to their respective national regulators. The purpose of the regime "*is to enable competent authorities to monitor the activities of investment firms and to ensure that they act honestly, fairly and professionally and in a manner that promotes the integrity of the market*"[8]. Also, according to CESR, "*Transaction reporting is a key element used in the detection and investigation of suspected market abuse*"[9]. TREM operates on an end-of-day basis. TREM has endured some teething problems, mainly to do with the quality and comparability of the reported data, and has yet much to prove. The review of MiFID, the so called MiFID II, will hopefully mend most of the problems.

Most European regulators lack the ability to monitor markets on an intraday basis, so while they may with the help of TREM pull together a post-trade end-of-day snapshot of market activity, this does not necessarily reflect most of the events that occurred in real time during the trading day.

For some reason MiFID did not address how cross border real time market surveillance should be conducted and organized on a European level. It left the process and organization of such surveillance activities outside its scope. This is puzzling. Real time surveillance of the market and the enforcement of violation of market rules are fundamental to maintain and promote public trust in the markets.

[7]According to Articles 26 and 43 of MiFID, both traditional exchanges, the so called regulated markets, and MTFs are obliged to maintain effective arrangements and procedures for the regulatory monitoring of the compliance with their rules and to monitor the transactions undertaken on their venues. The duty of regulated markets and MTFs to monitor the markets is almost identically regulated by MiFID. At the time MiFID was implemented it was widely discussed whether the market surveillance activities of an MTF in practice reach the level of a regulated market. Some claimed that MTFs were not expected to invest as much into surveillance as regulated markets. Even though this may have been the case at that time, today most agree that there exists a level regulatory playing field as regards the surveillance of regulated markets and MTFs.

[8] See section 2. in CESR Level 3 Guidelines on MiFID Transaction reporting (CESR/07-301).

[9] See section 3. in CESR's Call for Evidence (CESR/ 09-074).

In an attempt to map the issues in relation to fragmentation, the Committee of European Securities Regulators (CESR) invited trading venues and regulators to a CESR-Pol [10] *Roundtable on the impact of trading fragmentation on market surveillance activities of regulators and trading venues in the post-MiFID environment* in Paris in May 2010. Several European trading venues and regulators participated. The roundtable discussed whether market abuse had increased post MiFID. CESR had called for the participants to present evidential data on the increase in market abuse post MiFID and to provide examples of possible new abusive strategies/practices that would have evolved post MiFID. Since the trading venues do not have insight in the order books or transaction flows of other trading venues, no evidential data could be provided. However, it was easy for the roundtable to conclude that a fragmented trading environment that lacked overall oversight had made it easier for cross venue and cross jurisdictional market abuse to go undetected.

MiFID II is expected to propose some strengthening of market surveillance on a European level. Trading venues would be required to cooperate and exchange information to better detect cross venue and cross jurisdictional market abuse. Even though this is warmly welcomed it will only solve a part of the problem since the surveillance would be on an ad hoc basis. There would still not be a consolidate view of the order books or the transaction flows.

Market abuse

Market manipulation

Examples of abusive trading practices that we see in the market from time to time are for example practices called *layering* and *front running*. When somebody is layering, he sends multiple orders priced closely to the current best bid and offer to create the false impression of liquidity in a share. Since the activity and pricing in the respective trading venues affect each other and there is currently no system for monitoring order information across venues, it is evident that this abusive practice has been facilitated. A typical example of front running is when a broker trades ahead of a client's order and benefits from the price movement caused by this order. Moreover, market participants can manipulate dark pools by placing orders onto the lit books that narrow or move the best bid and offer reference. These trading practices typically involve at least two different venues and take advantage of the fact that it within the current surveillance structure there is currently no system for monitoring information across venues.

Below are two real life cases of market manipulation where the perpetrator took advantage of trading across multiple venues. The first case took place on one of our exchanges and the second took place in the United States.

Manipulation in underlying warrant

A market maker in a share listed on NASDAQ OMX called our surveillance department to highlight a trading pattern that took place in the share and which caused

[10] An operational group under CESR

the market maker to lose money. A member had for some time been selling down the share through a direct market access (DMA) account. The sell down took place in small volumes and with a small price impact. Warrants related to the share were listed on another exchange.

It emerged that the member, with same DMA account, also had placed an order with a deviated price in the warrant. With the sell down in the share listed on NASDAQ OMX the member moved the price in the warrant and got an execution at a lower price in the warrant.

The manipulation was done through knowledge that the quotation in the warrant automatically was updated by the new price in the share. By establishing a new level in the share price the member could gain by buying the warrant at a lower price. The member then turned the trade in the warrant when share price got back to normal and the warrant was quoted higher. The member earned around EUR 0.025 in spread when turning the trade. This was done systematically through a period of time and in multiple shares and related warrants.

This trading pattern is difficult to detect since our surveillance department only sees one side of the manipulative trade. And the same applies to the surveillance department where the warrant is listed. Neither trade seen separately gives reason for suspicion from a trading surveillance point of view. The manipulation would most certainly have continued undetected would it not have been for the vigilance of the market maker.

Cross market manipulation

In this case a member firm that provided DMA access was used to manipulate share prices across venues by one of its DMA clients. When the DMA client wanted to buy a share, the client sold a massive amount of the share at one venue 10 minutes before closing. The impact of the sell down caused a drop in the respective share prices in the other venues, including the primary market where the DMA client then executed the buy in the closing auction.

The DMA client stood for 96.6 % of the selling in the non primary market and represented 91.6% of the buying interest in the closing auction on the primary market.

The manipulation would most likely have been undetected if the surveillance department of the primary market would not have been able to access data from the non primary market. Since the surveillance departments of the trading venues in the United States have access to data across venues, these abusive trading practices can be detected.

High frequency trading needs to be mentioned when discussing market manipulation since many critics of such trading practices claim that high frequency traders deliberately manipulate the market. It is true that a typical high frequency trader makes use of the fragmented trading landscape and some have been very successful in doing so. Fragmentation

creates arbitrage opportunities and these automated modern day market makers make use of the discrepancies between venues. Hence to claim that high frequency trading would be market manipulation is wrong. Then again, as within all categories of market traders, the unfortunate fact is that there will always be a few rotten eggs that conduct market manipulation.

Insider trading

Traces of insider trading are easy to hide in a fast moving fragmented financial market. Since less visibility attracts less scrutiny trades may be made across venues and across related asset classes to hide activity and volume. And since there are very limited, if not non-existing, tools in place for regulators to create consolidated audit trails to detect patterns, a fragmented equity market is inviting to insider trading. Or as Frank Partnoy of the University of San Diego states in The Economist (Oct 15th-21st 2011 issue, p.69): "Before you were trying to find a needle in a haystack [but] at least you could see the needle gleaming. Now you have to find a needle in a million haystacks."

Administering trading halts and circuit breakers

Apart from market abuse, operational issues also constitute a challenge to surveillance departments in the multi-market environment. If a primary market suspects an information leakage they may respond to high volatility in a single share by calling a trading halt in the share and issuing a query to the listed company. This enables the market to take in any potential new information from the listed company in an orderly manner and any market information asymmetry is remedied. However, from time to time alternative trading venues disregard the halt issued by the primary market and continue trading in the said share on their venues. Apart from putting their participants at risk they also give their participants unfair access to trading before the primary market resumes trading in the share.

Most European trading venues have voluntarily adopted circuit breakers to reduce market volatility and to promote investor protection. However, since the circuit breakers are not standardized nor coordinated on an European level, trading venues that trade the same share simultaneously may have differing trigger levels for their circuit breakers. This means in practice that while the circuit breaker has been triggered in a share on the primary market it does not necessarily mean it has been triggered on the alternative trading venues.

Conclusion

The alignment of the European markets has promoted innovation and efficiency. The competition for order flow is fierce. Apart from decreasing their transaction fees and offering innovative service offerings, trading venues have been forced to look over their costs to keep up with the competition. Regulators have been worried that the cost cutting would result in a race to the bottom as regards the regulatory duties of the trading venues. In other words, that the trading venues would only do the minimum to fulfill, or even neglect, their duty to monitor their respective markets in order to cut costs.

This would naturally be detrimental to investor confidence. Without proper surveillance and enforcement, investor confidence would surely decline and markets would suffer. And this would be bad for business. Surely there are a few trading venues that keep their surveillance activities on low heat. However, more and more trading venues see the benefit of proper surveillance for their business. Market participants are increasingly risk averse and want to be associated with a well reputed trading venue. In other words, high quality market surveillance is good for business.

Needless to say the surveillance fragmentation issue is one that needs to be addressed. The whole market would benefit from a European regulatory framework that calls for collaboration between regulated exchanges and other venues that trade their shares, as well as the exchange of confidential information.

MiFID II is evaluating regulatory measures to strengthen market surveillance on a European level. Consultation papers on MiFID II suggest that operators of regulated markets and MTFs that trade the same financial instruments should be required to cooperate and exchange information to better detect market abuse or misconduct across different trading venues. Venues would have to inform each other and the regulators when certain conditions arise. Such information exchange would include a decision to suspend or remove a financial instrument from trading, a system disruption such as the triggering of a circuit breaker, and disorderly trading conditions or conduct that may involve market abuse.[11]

However, the cooperation and exchange of information between trading venues would only solve part of the problem. Nobody would still have a consolidated view of the order book and the trading in a share on a real time basis. In the absence of a European FINRA, an ideal route would be to allow the primary market of the share to take responsibility for the surveillance of all trading in that share. The alternative trading venues would effectively outsource their surveillance tasks to the primary market. The outsourcing of surveillance tasks is not new for the European market and the technology is available. What is needed is the will and the framework to implement it. Only when this surveillance structure is in place can we efficiently and proactively prevent market abuse and manipulation in order to create a transparent and fair European securities market.

NASDAQ OMX Nordic's Market Surveillance Function

The primary goal of the Market Surveillance function within the Nordic Stock Exchange is to maintain and enhance public confidence in the securities market. The Stock Exchange monitors around 800 listed companies and 300 trading members. Infringements of Stock Exchange regulations can be forwarded to the Stock Exchange Disciplinary Committee for rulings on possible sanctions. Suspected cases of market abuse are reported to the authorities.

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[11] Also, MiFID II proposes a third type of category of trading venue, the so called Organised Trading Facility (OTF). The introduction of the OTF would bring broker crossing networks and other interdealer broker systems into the scope of MiFID. The OTF has been defined very broadly as "any system in which third party buying and selling interests meet" to capture future technological developments. It is not sure if this would actually strengthen market surveillance or if it only would add to the fragmentation of the market.

The Surveillance function is divided into Issuer Surveillance and Trading Surveillance.

Issuer Surveillance

The listing process

Issuer Surveillance is responsible for the rigorous scrutiny of companies prior to an initial public offering. It is also responsible for the listing process for other financial instruments.

Information monitoring

Issuer Surveillance monitors that listed companies fulfil their information obligations to the market. Normally, the companies are to announce information that may affect share prices in a press release as soon as possible.

Monitoring of generally accepted principles in the securities market, including the Corporate Governance Code

Issuer Surveillance is responsible for monitoring that listed companies adhere to generally accepted principles in the securities market. This includes monitoring that companies apply the Corporate Governance Code.

Trading Surveillance

Trading Surveillance contributes to the maintenance of fair, efficient and well organised trading.
Trading Surveillance monitors trading by using sophisticated market surveillance technology that generates alarms in response to certain predetermined conditions or values. The system registers pricing and turnover and identifies deviant trading patterns. Against the background of business intelligence, where the information issued by companies is in particular focus, Trading Surveillance checks all alarms and commences investigations when it suspects infringements of Stock Exchange regulations or the Market Abuse Penal Act.

Trading Surveillance is able to correct trading data, annul transactions and stop trading of individual shares.

Market Surveillance engages in regular dialogue with the listed companies and trading members. It also provides training and advice to companies and members.