Approaches to Market Surveillance in Emerging Markets

Final Report

EMERGING MARKETS COMMITTEE
OF THE
INTERNATIONAL ORGANIZATION OF SECURITIES COMMISSIONS

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CONTENTS

Chapter 1: Objective and Approach

Background

The Emerging Markets Committee (EMC) approved a mandate to examine the approaches to market surveillance in emerging markets to be conducted by the EMC Working Group on Regulation of Secondary Markets.

This report examines the current approaches adopted by exchanges and/or regulators in conducting surveillance of markets. These include the role of the regulator versus the exchange in conducting the surveillance function, surveillance systems and mechanisms used, the importance of human capital and surveillance skills and supplementary efforts to complement the surveillance function.

This report also examines the current methods used to intervene once market abuse is detected and international cooperation with foreign exchanges and/or regulators on matters involving market surveillance.

It is also the intention of this report to provide emerging market regulators with a greater understanding of the key regulatory issues and challenges affecting market surveillance, and identify critical issues specific to emerging markets that could shape regulatory responses.

Survey Coverage and Responses

A project team[1], led by the Securities Commission Malaysia, gathered information for this report via a survey questionnaire distributed to all IOSCO EMC members.

The survey questionnaire comprised 31 questions which broadly covered the approaches to surveillance/monitoring, surveillance tools and other resources used for surveillance, and international co-operation.

The survey questionnaire was formulated with a view to ascertaining the critical and core issues experienced by emerging markets in relation to their approaches to market surveillance. These include:

- The current approaches - The survey sought to identify the current approaches adopted by the exchanges and/or regulators to monitor and detect adverse situations in their markets. The role of the regulator and/or the exchange in relation to market surveillance was also reviewed.

[1] Project team members comprised regulators from China, Dubai, Brazil, India, Poland, Sri Lanka, South Africa and Thailand.

- Key regulatory issues and challenges - The survey sought to gather information from emerging market regulators on regulatory issues and challenges which may arise when detecting market irregularities.

- Regulatory reforms - The survey sought to identify and highlight perspectives from various emerging market regulators on some of the key initiatives taken in achieving their objective of maintaining a fair and effective trading environment.

Responses were received from 32 jurisdictions[2]. In terms of geographical spread, there were 10 responses from Asia, 10 from Europe, 3 from South America, 5 from Africa and 4 from the Middle East.

A summary of the survey responses was discussed at the EMC meeting in Marrakech in October 2008. At the Working Group meetings in Paris and Marrakech, the group also received feedback from exchanges in developed markets, including Euronext and the London Stock Exchange.

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2 Responses were received from the IOSCO ordinary members from Brazil, Bulgaria, Chile, China, Chinese Taipei, Croatia, Czech Republic, Dubai IFC, Egypt, El Salvador, Hungary, India, Indonesia, Korea, Lithuania, Macedonia, Malaysia, Morocco, Nigeria, Oman, Pakistan, Papua New Guinea, Poland, Romania, Slovenia, South Africa, Sri Lanka, Tanzania, Thailand, Turkey, Tunisia, and United Arab Emirates. Responses from El Salvador and Tunisia were in Spanish and French, respectively.

Chapter 2: Approach of market surveillance in emerging markets

Introduction

The forces of globalisation of markets, technological advancement, integrated trading activities and the increasing pace of market innovation have led to enhanced cross-border distribution of products and movement of market participants. With greater inter-linkages of markets worldwide comes the increasing challenge of detecting possible market misconduct. Corporate scandals[3] seem to be larger in scale and more frequent in recent years. The complexity and inter-relationship of trades are more difficult to detect and identify. Rogue traders seem to have a better understanding of internal processes within sophisticated risk management systems. Therefore regulators globally have had to strengthen their surveillance, supervision and co-operative efforts to ensure they stay ahead of the game.

This chapter focuses on a broad overview of the approaches of market surveillance in emerging markets, and aims to provide a better understanding of the current surveillance landscape in emerging markets.

2.1 Objective of Market Surveillance

Market integrity is a core regulatory objective of securities regulators, and is critical for the well-functioning of any capital market. Having a transparent set of trading rules which are effectively enforced where parties have access to the same amount of information contemporaneously is critical in any market. The integrity of the market is maintained through a combination of surveillance, inspection, investigation and enforcement of relevant laws and rules.

Market surveillance, in particular, plays a significant role in anticipating the potential vulnerabilities to a capital market. It is seen as a pre-emptive measure aimed at detecting and deterring potential market abuse and avoiding disruptions to the market from anomalous trading activity, including market and price manipulation, insider trading, market rigging and front running.

2.2 Responsibility for conducting market surveillance

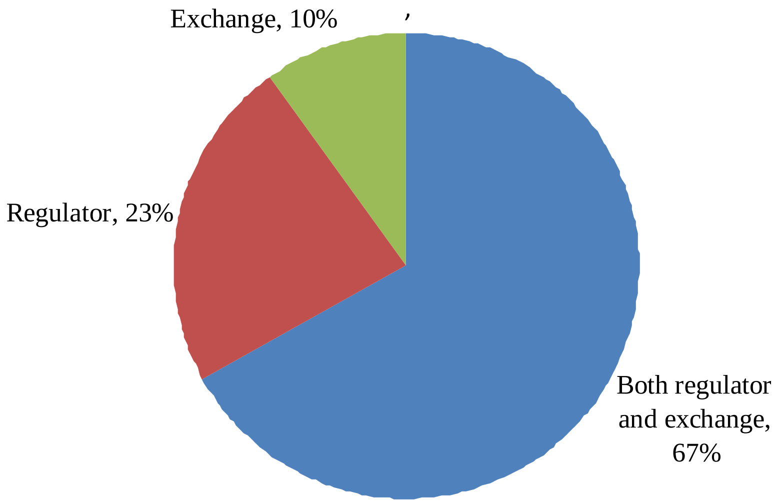
The survey shows that market surveillance is either conducted by the regulator, the exchange or both the regulator and the exchange in parallel. In some instances, the surveillance function is outsourced to an independent Self-Regulatory Organisation (SRO), with the regulator and the exchange focusing on other regulatory functions and market development initiatives. This however, we note, is less prevalent in

[3] Some market manipulation cases include Metallgesellschaft, Barings, Sumitomo, and Enron, and Société Générale.

emerging market jurisdictions where SROs tend to be at a nascent stage of development.

The survey findings show that in two-thirds of emerging market respondents, market surveillance is conducted by both the regulator and the exchange over the equity market. In jurisdictions where this occurs, the regulator exercises both an oversight role over the exchange's conduct of surveillance functions to ensure it performs its functions effectively and conducts parallel monitoring in tandem with the exchange.

Primary role of surveillance in emerging market survey respondents



The findings further indicate that surveillance units at the regulator and the exchange tend to focus on different aspects of monitoring the market. The regulator conducts market surveillance largely to detect breaches of the law, while the exchange's emphasis is on breaches of its rules and regulations. However, where suspected breaches of the law have been detected, the exchange tends to refer these cases to the regulator for further action.

Where parallel monitoring is conducted by both the regulator and the exchange, the survey findings show that the regulator typically conducts surveillance the next trading day[4], while the exchange conducts surveillance on a real-time basis. The latter includes monitoring price and volume movements in the market, broker positions, risk management and settlement processes.

The survey shows there is close coordination and information-sharing mechanisms in place between the regulator and exchange. Many emerging market exchanges report to the regulator on a daily basis, including where there are observations on limit-down

4 For example, Poland, India, Thailand and Indonesia.

counters, unusual movement in trading or where enforcement action has been taken. In emerging markets such as India where there are 19 exchanges in the country, in order to promote effective and interaction between the regulator and these exchanges on surveillance, an Inter-Exchange Market Surveillance Group was established. The group, headed by the Securities and Exchange Board of India (SEBI) discusses the implementation of weekly caps, daily price bands, as well as deliberates on market trends and other related issues. Similarly in Pakistan, an Inter Exchange Surveillance Committee (IESC) was established with representatives from three stock exchanges in the country, together with the Securities Exchange Commission of Pakistan for effective coordination of surveillance activities.

As highlighted earlier, there are instances where the surveillance function is outsourced to an SRO, but this is less common in emerging markets as compared to the more developed markets. Where surveillance is outsourced to an SRO, the regulators exercise proper oversight arrangements over the SRO to ensure fair and orderly markets.

The Toronto Stock Exchange and TSX Venture Exchange outsourced market surveillance to an SRO recognised by the OSC, the Investment Industry Regulatory Organization of Canada (IIROC), which monitors all trading on both exchanges. The IIROC uses real-time surveillance systems to ensure that transactions are done in compliance with market integrity rules. With a third party handling both surveillance and participant discipline, TSX Markets' professionals focus more on providing exceptional trading products and service to domestic and international participants. In the US, two SROs, namely NYSE Regulation[5] and the Financial Industry Regulatory Authority (FINRA[6]) have entered into agreement with ten[7] U.S. exchanges to strengthen investor protection by consolidating the surveillance, investigation and enforcement of insider trading in securities. The agreement allows NYSE Regulation and FINRA to implement across markets their state of the art insider trading surveillance and investigation programs for all listed securities in the US. As a result,

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5 NYSE Regulation, Inc. is a not-for-profit corporation dedicated to strengthening market integrity and investor protection. NYSE Regulation is a subsidiary of NYSE Euronext with a board of directors that is comprised of a majority of directors unaffiliated with any other NYSE board. As a result, NYSE Regulation is independent in its decision-making. The organization consists of three divisions: Market Surveillance, Enforcement and Risk, and Listed Company Compliance. NYSE Regulation protects investors by enforcing marketplace rules and federal securities laws.

6 FINRA, the Financial Industry Regulatory Authority, is the largest non-governmental regulator for all securities firms doing business in the United States. Created in 2007 through the consolidation of NASD and NYSE Member Regulation, FINRA is dedicated to investor protection and market integrity through effective and efficient regulation and complementary compliance and technology-based services.

7 American Stock Exchange, Boston Stock Exchange, CBOE Stock Exchange, Chicago Stock Exchange, International Securities Exchange, NASDAQ Stock Market, National Stock Exchange, New York Stock Exchange, NYSE Arca, Philadelphia Stock Exchange.

potential insider traders, regardless of where they trade in the US, will be more readily identified in this new, more unified structure.

2.3 Surveillance systems and mechanisms

With millions of trades transmitted electronically every minute, surveillance mechanisms to detect any irregularities must also be equally developed. Survey responses show that emerging market regulators and authorities rely on a combination of systems from relatively simple tools often built and maintained in-house by the internal information technology department to more sophisticated real-time market surveillance systems developed by third-party vendors. These tools can be written to spot trading patterns that are difficult to detect manually.

One of the common features of surveillance systems used by emerging markets are automated surveillance tools that analyse trading patterns and are installed with a comprehensive alerts management system. These tools are able to track the positions of alleged large readers, and detect market manipulation, front-running, fraud and trade practice violations.

The majority of respondents in the survey agree that real-time alerts allow the identification and detection of unusual trading activities at a very early stage. The common parameters used by emerging market regulators and exchanges include abnormal price and volume movements, concentration of trading, large open interest, front running, insider trading, wash trades and synchronised trades. These alerts are triggered when trading activities exceed parameters that have been defined by authorities. On a broader aspect, other considerations taken on board by regulators include the types of industry, the price range of counters and the types of products traded. For example, the trading of bonds is considered to be less volatile than exchange traded funds and warrants.

To avoid the proliferation of alert triggers, survey results show that alert parameters are established to cater for the respective markets it is intended to surveill. While surveillance systems may be purchased from several different vendors, what appears to be critical is the internal customisation of the alert parameters by the regulator or the exchange themselves.

Survey results indicate that authorities also rely significantly on market intelligence and information provided by market participants, the media, the internet and complaints from the public as a source of information and to supplement its analysis. For example, information of a company facing insolvency will not surface in an alert system, and it is information sourced from third parties and pieced together that will often build up a case for further investigation.

Survey results show that a significant proportion of emerging market regulators are looking towards enhancing their surveillance capabilities and re-engineering their surveillance systems, for example to find relationships among suspected trading accounts, to provide real-time alerts and graphical analysis, and to be able to more easily aggregate and manipulate large trading data. In Poland, the Market Surveillance Application (ANG) is expected to be modernised and sophisticated new alerts will be introduced. Investors will also be given individual identification numbers which will improve fraud detection. Turkey and South Africa have ongoing projects to improve inter-market surveillance systems on derivatives exchanges, Brazil is receiving funding from the Inter-American Development Bank to implement a more effective market surveillance system while South Africa is upgrading its equities surveillance system to a more modern platform and is introducing enhanced surveillance functionalities for its derivatives markets. In the Czech Republic, the Czech National Bank is looking at developing a new computer system for market surveillance. The new system will be able to store data on orders prior to it being traded on the market.

2.4 Supplementary efforts

In order for surveillance to be effective, survey results show that an important feature is to have in place a database or repository of information. The information contained in the database may include background information of the listed entity, its shareholders and directors, historical trading pattern and relevant news. Information contained in the database will help analyse potential irregularities in the market and facilitate the linking of the trades to possible market abusers. However in some cases, a number of regulators heavily depend on financial institutions and brokers to provide investors' personal information, which takes approximately 3 to 5 days to retrieve.

In India, SEBI has an Integrated Market Surveillance System (IMSS) which has an online data repository with the capacity to capture market transactions and reference data from a variety of sources such as stock exchanges, clearing houses, depositories and others for the securities and derivatives market. The data generated through the IMSS assists SEBI in analysing relevant market behaviour and various scenarios. In Chile, the SVS's surveillance system provides real-time information about securities broker-dealers executing transactions on its own account or on behalf of a client. In order to identify the end-client, the SVS calls on the broker-dealer for information.

2.5 Human capital and surveillance skills

Emerging market regulators and exchanges recognise the limitations posed by surveillance systems, irrespective of how advanced the system is. Further detailed and comprehensive analysis is often required to assess a combination of information to identify a potential abuse that may not be obvious from information generated by a surveillance system.

Authorities are dependent on the skills and expertise of staff conducting market surveillance. Survey results show that in-depth analysis and inquiries are required by surveillance analysts to determine if the irregularity warrants a basis for referral for further investigation by the enforcement units at the regulator.

While emerging market regulators have not identified specific skills sets required of surveillance staff, survey results highlight that the common skills that regulators and exchanges seek in surveillance analysts include data mining and analytical skills and the ability to understand the mechanics of the electronic trading environment, i.e. trade flow and processes and to analyse and evaluate surveillance technology programs and procedures. In addition, maintaining a good contact of networks with the industry in order to draw leads of potential market abuse and facilitate the understanding of market trends and market behaviour is a critical aspect to supplement surveillance efforts.

2.6 Interventions and enforcement

Survey results show that surveillance units at the regulator and the exchange typically focus their efforts on monitoring of the market. Where there are cases of possible violations of securities laws, these are subsequently referred to the investigation and enforcement units of the regulator.

In Malaysia, the exchange maintains a close watch of any unusual movements through the daily monitoring of market activity. Should it detect unusual market activity, the exchange will contact the listed entity concerned to explain the unusual movements, and this is often followed up by a formal letter requesting the company to explain the unusual price and/or volume movements of its counter. Should the share price continue to remain volatile, the exchange will initiate a market alert by issuing a media release or posting an alert on its website. The exchange may also initiate an *Unusual Market Activity* query to the listed entity in question. These are seen as pre-emptive measures to keep the market informed and to warn investors to be cautious in investing in the company.

Survey responses show that regulators also see the benefits of adopting a *soft* enforcement approach via a caution letter to the listed entity in question or seeking clarification from its compliance officer or management through phone call or letter as more effective and preventative compared to the more formal enforcement actions. However, responses show that in cases of repeated activity or serious breach of the laws, more stringent action is taken.

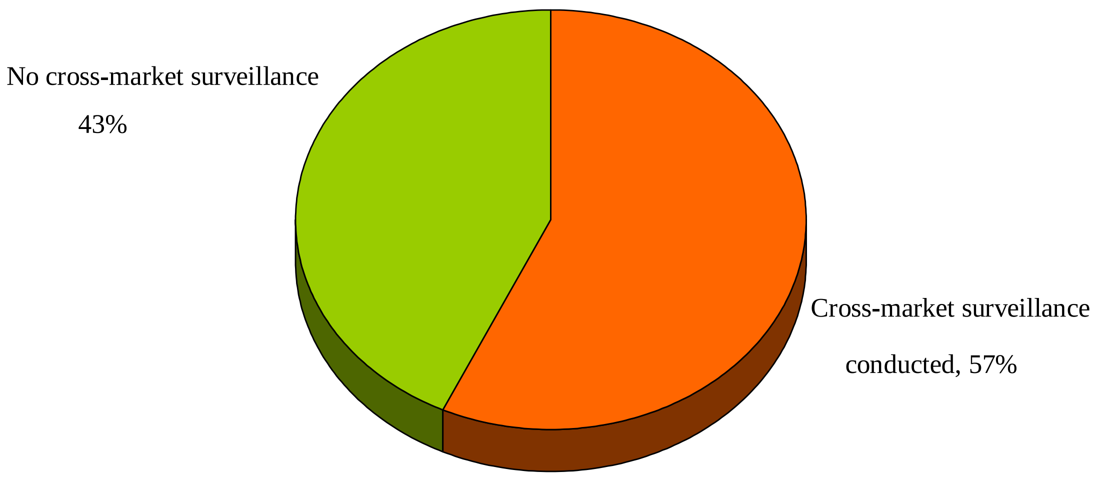
In the case of addressing market instability, survey results reflect that emerging market regulators have powers to intervene and impose designation of the stock or suspend trading. Most emerging markets also have circuit breakers for automatic suspension of trading following steep and rapid decline in share prices. Indicators that are continuously monitored include irregular or sharp movements of the index, sharp decreases or increases in financing commitments and continuous breach of exposure and/or margin limits by brokers. For example in China, under Article 180 of its Securities Laws, when investigating market manipulation or insider trading, the China Securities Regulatory Commission can restrict trading for up to 15 trading days. However, when the cases are complex, trading will be restricted will be extended for a further 15 days.

2.7 Inter-market surveillance

Inter-market surveillance can be described as securities cross-listed in multiple markets, financial instruments (e.g. for options, warrants and futures) traded in one market with the underlying equities in another market or cross-market activities that occur across several markets in different jurisdictions. Inter-market surveillance can also be described as surveillance between two product exchanges, namely securities and derivatives exchanges. With the increasing globalisation of financial markets, derivatives contracts are increasingly cross-listed on exchanges, with round the clock trading. It is noted that 80% of survey respondents have a derivatives market in their jurisdictions whilst some have a commodities exchange as well.

Survey results show that 57% of survey respondents conduct inter-market surveillance. Unlike for securities exchanges where both the regulator and exchange conduct parallel monitoring, for the derivatives exchange, the regulator tends to take a more oversight role whilst primary surveillance in the derivatives market lies with the exchange.

Percentage of jurisdictions that conduct cross-market surveillance



In jurisdictions where there is an active derivatives market, for e.g. Korea, cross-market surveillance is conducted extensively. In 2005, the Market Oversight Commission (MOC) of the Korea Stock Exchange (KRX) launched a cross-market surveillance system to detect unfair trading activities across cash and futures market easier, faster and more accurately. The system was designed to monitor the stocks on the Korean Stock Exchange and Kosdaq. Its purpose was to weed out unfair trading activities such as price manipulation linking stocks, and futures and options. KRX also uses a cross-market monitoring database that identifies if a trader operates in both stock and futures markets.

In Malaysia, the exchange's equity and derivatives surveillance units conduct regular monthly investigations of possible domestic inter-market abuses by checking on possible unusual pattern of price and volume movement against identities of market participants. This is conducted by performing on-line monitoring of trading activities in respect of the underlying and its respective derivatives products. Information on any unusual trading activities and price movements are shared between both markets and analysed to determine if there are any manipulative activities.

2.8 Cooperation and information-sharing arrangements

Given the increasingly volatile nature of the global capital market, it is vital for regulators and/or exchanges to share information on surveillance activities as well enhance cooperation and coordinate market oversight through formal arrangements.

In relation to sharing of information to facilitate market oversight, IOSCO's Technical Committee Report on *Multi-Jurisdictional Information Sharing for Market Oversight*[8] recommended the types of information that could be shared among regulators, on a bilateral or multilateral basis, include participants joining or leaving the market, transaction information (e.g. for details of a traders' position, large positions, related OTC and cash positions, and trading by an issuers' significant shareholders and officers), specific trading limits (for example, price and position limits and any related changes) and reports of abusive practices and illegal behaviour, including insider trading activity involving remote market participants.

The IOSCO Technical Committee Report on *Commodity Futures Markets*[9] also highlighted the importance of developing information-sharing arrangements in commodity futures markets. These arrangements will facilitate the understanding of the roles of speculative and commercial activity in commodity futures markets, provide a better understanding of price formation on these markets, and detect manipulative or other abusive trading by market participants.

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8 April 2007

9 March 2009

Virtually all survey respondents indicated that they have entered into cooperative arrangements with other authorities to share information for the purposes of securing compliance with their respective laws whether through bilateral or multilateral agreements. These arrangements however tend to be broad-based in nature and typically cover information-sharing primarily for the purposes of enforcement, and may not be specific enough to address issues relating to market surveillance. Irrespective of whether there are formal MOUs or informal arrangements in place, survey respondents highlighted that additional types of information that would be useful for authorities to share include beneficial account ownership, information on shareholders, regulatory actions imposed, records of blacklisted investors/intermediaries, and information of suspicious trading of shares dually listed on several markets.

An example of a surveillance-specific agreement that has been entered into by regulators is the MOU entered into between the US Commodities and Futures Trading Commission and the Financial Services Authority, UK in 2006 on the exchange of information in relation to routine surveillance of US and UK derivatives exchanges. The MOU highlights information to be shared between both regulators including terms and conditions of each derivative contract or instrument, details of an exchange's market regulations such as position limits, reporting obligations and price limits, details of delivery rules and procedures or cash settlement provisions, general details about market information collected and analysed and other details of trading information.

Survey results show that exchanges have themselves entered into information-sharing arrangements, be it bilaterally, or through multilateral arrangements such as the Intermarket Surveillance Group (ISG). The ISG, created in 1981, is a committee consisting of exchanges around the world that provides a framework for the sharing of information and the coordination of regulatory efforts among exchanges trading securities and related products to address potential inter-market manipulations and trading abuses. It is noted however that only three out of the thirty emerging market respondents are signatories to the ISG[10].

Aside from information-sharing in respect of surveillance activities, cooperation among regulators and exchanges may also extend to the sharing of information on surveillance technologies and techniques, as well as emerging trends, practices and challenges relating to surveillance issues. Enhanced engagement among regulators and exchanges on these areas is likely to result in improved surveillance efforts.

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10 Dubai Mercantile Exchange, Korea Exchange, National Stock Exchange of India.

Chapter 3: Regulatory issues affecting market surveillance

Emerging markets are attracting a greater diversity of players, including high-leveraged investors, and investments in emerging markets are often form part of sophisticated cross-market or cross asset strategies. According to statistics, emerging market companies make up 3.8 per cent of the Financial Times' list of the 500 largest global traded companies (FT500) and 4.6 per cent of the Dow Jones Global Index of 2,500 companies. Research also indicates that the market capitalization of emerging market countries has more than doubled over the past decade, growing from less than US$2 trillion in 1995 and exceeded US$5 trillion in 2006, making up 12 percent of world market capitalisation.

However, the increased competition and activity in cross-border transactions, the advent of new products and development of market infrastructure together with the frequency and magnitude of financial turbulence have made it increasingly challenging for emerging market regulators to conduct market surveillance. Emerging market regulators and/or exchanges are finding the need to be more vigilant against potential market abuse and increasing exposure to global market risk. It is important therefore for emerging market regulators and exchanges to have the appropriate skills, technological capabilities and regulatory arrangements to conduct effective internal and cross-border surveillance of their markets.

This chapter identifies key issues and challenges affecting market surveillance in emerging markets that could shape regulatory responses. It also intends to provide regulators with a greater understanding of surveillance approaches to detect adverse situations in markets and to pursue appropriate preventive actions to avoid disruption to markets.

3.1 Changing landscape of surveillance

Over the years, there has been a significant rise in the trading activity and volume in many emerging markets given the increasing opportunities that these markets present. Many of these markets have therefore moved from a relatively illiquid to a more liquid trading environment.

The increase in the sophistication and complexity of financial markets has also led to investors facing a vast array of increasingly complex financial instruments. The move towards fully automated electronic trading and the introduction of direct market access and other forms of trading technology has significantly changed the trading environment in which markets operate. The widespread use of the internet has further increased the speed at which information is widely disseminated, thus enhancing the potential for market abuse. The internet has also been used as a means to disclose non-public information, which can undermine investors' confidence in the integrity of the market.

There has also been a notable increase in the frequency and complexity of techniques used by perpetrators. Market abusers have become increasingly more sophisticated and innovative in their methods of manipulating the market. For example, to conceal order flow, perpetrators typically use foreign nominee corporations and layer their transactions to conceal the identity of beneficial owners of the trades, including routing their trades through foreign dealers and foreign fund managers. In market manipulation cases, the number of accounts used and the number of trades have also increased considerably making detection and investigation more laborious and resource-intensive.

Another challenge that has been cited in emerging markets is increasingly, given the high day trading and inherent volatility of markets, there are instances where market manipulators collaborate with experienced traders to devise trading strategies that are in essence manipulation of the market, but are disguised as speculative trading strategies.

It is imperative therefore, that emerging market regulators keep pace with the developing trends in markets, and be prepared to adapt its regulatory tools to prevent and detect market abuse in response to challenging market conditions.

Given the changing landscape of capital markets, adjustments are also required to augment the processes and skills to ensure surveillance functions are carried out effectively and credibly. It may no longer be appropriate to conduct selective surveillance focusing on limited parameters such as price and volume movements, and which are essentially reactive in design. A pro-active surveillance approach and the application of dynamic criteria and parameters reflective of prevailing market conditions are now required to effectively detect market transgressions. For example, authorities should continuously review and enhance their alert criteria and parameters to suit their markets in order to provide for early detection of market misconduct.

It is therefore critical for emerging market regulators and exchanges to re-examine their approaches towards the oversight of markets to assess whether the objective of ensuring a fair and orderly market is being achieved through existing surveillance approaches, including the tools and mechanisms, personnel and processes relied upon. This includes ensuring that the primary responsibility and accountability of market surveillance is communicated clearly to the market, especially in circumstances where parallel monitoring is conducted by the regulator and the exchange.

The review is also important to ensure that regulators are not operating under a legacy system, but are adapting their surveillance frameworks to cater to the changing landscape of capital markets, particularly in response to the global financial turbulence which began in 2008. It appears from the IOSCO EMC Chairman's Task Force Report on *the Impact and Responses of the Emerging Markets to the Financial*

Crisis[11] that emerging market regulators are placing greater emphasis on enhancing their regulatory approach and capacity, particularly in the area of surveillance. A significant number of emerging market jurisdictions have intensified market surveillance efforts in anticipation of a rise in market misconduct where surveillance is seen as a pre-emptive measure to ensure conduct standards in the market are complied with.

3.2 Making a case for market misconduct

While market surveillance may lead to the detection of suspicious trading patterns through lead ups or spikes in the price and/or volume of securities, regulators typically face evidential difficulties in building a case of market and/or price manipulation and insider trading for onward referral to the enforcement units for investigation.

One of the challenges in combating market abuse is establishing, all the different elements of the offence to the necessary degree. In this regard, it is observed from the survey responses that in obtaining evidence of suspected misconduct, many emerging market regulators face difficulties in identifying the beneficial ownership status of accounts, which is critical in determining whether market manipulation or insider trading has occurred. For example, in a wash sale, a manipulator who is often both the buyer and the seller of securities in the same transaction, will seek to conceal his involvement in the trades with a view to attracting other investors to purchase the security given the apparent interest in the counter.

The lack of transparency in *omnibus accounts*, especially at the individual investor level, can potentially hide an individual account's activity and create a number of regulatory obstacles. Thus, it is important for regulators to have sufficient levels of transparency in the market and look towards having beneficial ownership rules that allow for regulators to identify individuals or entities that beneficially own or control the accounts in question.

Direct evidence of market misconduct is typically rare, and inferences are often required to be drawn from the circumstances surrounding the misconduct, as well as supplementary information such as trading behaviour and activity of investors, profile of the dealers, disclosures made by listed companies and their related companies as well as information sources from the internet, media and research reports. Information obtained from brokers may also be useful to affirm the manipulative intent of the suspect. More often than not, the brokerage firm will be aware of the intention behind the client's instructions. Certain emerging market jurisdictions have found that enhancing the brokers' gate-keeping role is an effective tool in deterring the occurrence of manipulative conduct.

[11] September 2009

In order to piece together relevant information to mount a case for enforcement purposes, surveillance is often also supplemented by interviews of market participants and on-site inspections of brokers to listen to recordings of telephone conversations or to obtain electronic communications relating to client orders following movements detected through on-line surveillance. Information contained in account opening forms, order and confirmation slips, time and sales quotations, written authorisations from clients, account statements, internal notes or discussions and telephone records can provide important evidence of links between the broker and the insiders and/or manipulators and help establish the facts surrounding the case. Regulators should also impose an obligation on licensed market intermediaries to proactively report suspected wrongdoing or unusual activity to the exchange or regulator and to have in place stringent Know Your Client requirements.

Information contained in the regulator or exchange's database may also facilitate analysis required in proving a market misconduct case. A comprehensive and updated database or repository of information of listed entities, its shareholders and directors etc facilitates the regulator and/or the exchange's review of patterns of market activity and can connect the trades to possible market abusers.

Emerging market regulators have strengthened their rules on record-keeping, including incorporating it as part of their inspection programme over market intermediaries. The findings of the survey indicate that the levels of robustness of record-keeping however differ amongst the emerging market respondents, and it is critical for regulators to require intermediaries to maintain records for a minimum period of time to ensure that relevant information is accessible as these can affect the surveillance and enforcement capabilities of regulators.

Further, regulators' and exchanges' efforts in developing an intelligence network of contacts and having frequent engagement and interaction with participants in the industry are likely to provide a valuable source of leads about potential market abuse. Information about suspected wrongdoing or unusual activity from market participants, employees, investors can be a key source of regulatory intelligence. Additionally, complaints from the public and whistleblowers also serve as important sources of information which can help regulators and exchanges supplement their surveillance efforts. Individuals with material information about potentially illegal and/or unethical activity should be encouraged to come forward, and each tip or complaint should be properly evaluated and reviewed by the authorities. Given that market rumours and false or misleading information may appear on chat rooms and blogs, it is equally important that market surveillance departments monitor these fora to take such information into account in analysing unusual movement of markets.

3.3 Striking the balance

3.3.1 Skills vs. technology

Emerging market authorities have made significant investments in surveillance systems to monitor markets for potential abuse and to analyse trading data, reconstruct trading activity and detect potential aberrations in patterns of conduct. Some of these systems are also able trawl internet bulletin boards searching for chatter on stocks.

While appropriate investment in technological capabilities is critical to facilitate effective internal and cross-border surveillance of markets, the systems employed are to a large extent not a primary determinant of the quality of surveillance being conducted. Further, a key issue to be considered by emerging market authorities is the high cost of ownership, maintenance and customisation of these surveillance systems and technology. There seems also to be a limited selection of market surveillance systems that are supplied by third-party vendors, thus narrowing the number of options available to regulators and exchanges.

Significant emphasis should also be placed on the development of requisite technical capacity and competency. The survey responses indicate that this is an area of growing concern among emerging market regulators where it is recognised that there is a skills gap in staff capacity conducting the surveillance function. The importance of having a comprehensive market surveillance programme with sufficient resources and analytical capabilities was also highlighted in the recent *IOSCO Technical Committee Report on Commodity Futures Market*[12].

Regulators and exchanges should therefore consider expending its resources to employ and retain qualified surveillance analysts, and to train and equip them with relevant technical and analytical skills, including the ability to understand behaviour of markets, collate and analyse transactions and price movements and to project risk patterns in the market. In this regard, emerging market authorities may consider the prospect of employing retired or ex-traders, whose experience and expertise may enhance the authorities' surveillance function.

Depending on the manner in which surveillance functions are structured within an organisation, the skill sets required of surveillance staff will include the ability to understand the trading and market environment, as well as having data-mining and technical analytical skills to conduct subsequent detailed analysis. Surveillance analysts may also be required to provide expert evidence in court to support the case for market misconduct.

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12 March 2009

3.3.2 Market integrity vs. market liquidity

A key challenge faced by regulators and exchanges in conducting market surveillance is balancing the intervention approaches as a consequence of surveillance efforts, including prohibiting deliberate market manipulative activity while allowing genuine speculative and commercial activity that fuels the liquidity of markets to take place. This is particularly relevant in emerging markets which are relatively small and illiquid.

In instances where regulators take pre-emptive and precautionary proactive steps, and intervene where there is a run-up in the price of certain securities, this has been viewed by the market as curbing genuine speculative activity. For example, interventions such as suspension of trading have had a negative impact in *spooking* the market and dampening the trading activity of investors in the securities in question. In contrast, where regulators have been cautious or slow to react to a potential market abuse, they have been severely criticised for their delay in taking appropriate and preventative action. Often the challenge regulators face in distinguishing between the two activities is determining the intention of the perpetrator, including whether there is intent to induce other investors to purchase or sell securities or to influence the price of the securities.

Responses from the survey questionnaire also indicate that regulators appreciate the benefits of adopting a *soft* enforcement approach which may be in the form of a caution letter, or clarification through a phone call/letter, as more effective and preventative compared to formal, prescribed enforcement procedures. Speaking to the dealer involved in the transaction also serves as a useful way of obtaining the dealer’s version of events at an early stage and ensuring that cases with plausible explanations can be resolved more speedily. However, emerging market survey respondents do concur that in cases of repeated activities and/or serious breaches, more stringent actions are necessary.

3.4 Inter-market surveillance

A significant feature of the capital market landscape is the increase in inter-market activity where securities are cross-listed in multiple markets, and the impact of the trading of financial instruments such as options, warrants and futures in one market on the underlying equities in another market.

It is noted however that where emerging market jurisdictions operate a derivatives market, the regulatory capacity in conducting surveillance over the derivatives markets tends to be relatively weak compared to surveillance over the equities market. A possible explanation is that emerging market regulators may be less at ease with conducting surveillance over the derivatives market, and tend to leave this aspect of surveillance to the exchange.

Market surveillance must employ a greater analytical dimension that may often be lacking in international capital markets, particularly in emerging markets, coupled with high standards of control compliance, in order to strengthen investor confidence, integrity and protection of markets. In particular, regulators should endeavour to understand the transmission mechanisms and inter-linkages between markets, in particular the inter-connectivity between the equities and the derivatives markets, and to understand better the fundamentals driving the market. It was highlighted in the *IOSCO Technical Committee Report on Investigating and Prosecuting Market Manipulation* [13] that with the growth of derivative products, there may be an increased incentive to manipulate the price of securities to affect the price of the derivative contract or other products.

There is also a need for authorities to pay particular attention to irregular or manipulative activities that occur across several markets in different jurisdictions. For example, the price of securities or derivatives may be manipulated in one market with the intention to affect their price or the price of underlying assets in another jurisdiction. Without effective information-sharing and co-operation arrangements in place, authorities will face difficulties in detecting such irregular trading activity as they would only be privy to a limited portion of the activity.

3.5 Impact of demutualisation on surveillance

Globalisation of markets and rapid advances in technology continue to alter the landscape of the global marketplace, particularly, in the exchange industry, where the competitive landscape and structures are changing equally rapidly. The trend of exchanges towards demutualisation where exchanges transform from member-owned into for-profit entities raises many implications and has been a source of substantial discussion. Compared to developed markets, the pace of exchange demutualisation in emerging market jurisdictions has been relatively slower[14].

Exchanges have traditionally been accorded the role of a frontline regulator of the capital market, including conducting surveillance and performing varying degrees of supervisory and regulatory functions over their members and listed companies. With the demutualisation and listing of a growing number of emerging market exchanges, the debate typically arises as to whether these exchanges are able to continue to discharge this role, including its ability to conduct surveillance functions effectively

[13] May 2000

[14] As at the point of the report, exchange demutualization has been completed in only 11 jurisdictions out of a total of 30 emerging market survey respondents.

and credibly given the exchange's for-profit and commercial focus. The debate centres on whether a demutualised and listed exchange with profit-orientation will provide sufficient resources to conduct surveillance, particularly given that this regulatory function is perceived as a *cost-centre*. A for-profit exchange may be viewed as less willing to allocate enough resources to undertake its market surveillance role.

On the contrary, it has been argued that demutualised and listed exchanges may be equally diligent in conducting their surveillance role as a prospective issuer will be more attracted to exchanges that set high governance and transparency standards, including where the exchange demonstrates high standards of surveillance over the marketplace. Investors are more likely to trade on an exchange if they are confident that they can do so without being defrauded or without other investors having an unfair advantage. It is arguable that it is in the exchange's commercial interests to maintain adequate resources for its surveillance function to achieve a fair and orderly market as an exchange's brand is intrinsically linked to the integrity of the market.

There are indeed significant advantages to having a market operator conduct the surveillance function. An exchange has the advantage of being able to monitor the market's trading activity closely, and intervene speedily.

The challenge for regulators is to ensure that the demutualised exchange in its jurisdiction is able to balance both its commercial interests with its regulatory responsibilities, including its surveillance obligations. One of the ways in which the regulator ensures that potential market irregularities are effectively detected is by conducting surveillance in parallel with the exchange. The survey findings show that two-thirds of emerging market respondents conduct surveillance in tandem with the exchange. While it was highlighted in the earlier chapter that the focus of surveillance and the systems and mechanisms relied upon by the regulator and the exchange tend to be different, it raises the question whether there is a lack of confidence on the part of regulators on their exchanges' ability to effectively monitor the market.

On other occasions, surveillance responsibilities have been transferred from the exchange to the regulator as means of streamlining certain roles and functions. In Australia, real-time surveillance of trading activities by the Australian Stock Exchange (ASX) is anticipated to be taken over by the Australian Securities and Investment Commission (ASIC) by 2010[15]. This move is expected to bring ASIC closer to the market, giving it greater accessibility and flexibility to review emerging trends more swiftly.

[15] ASX would still be responsible for supervising entities listed on their exchange.

In many instances where the exchange is demutualised, the regulator exercises a strong oversight role over the exchange's conduct of surveillance functions to ensure it performs its functions effectively. It does so through the review of surveillance and investigation reports produced by the exchange and inspecting the exchange's processes, policies and systems to ensure that the exchange is able to discharge its functions effectively.

Chapter 4: Conclusion

The report highlights the need for regulators to re-examine the current approaches to market surveillance in emerging markets, and to review whether the existing approaches are effective in detecting and deterring potential market abuse, given the context of the current market environment and the sweeping changes occurring in financial markets globally. This requires an examination of the fundamentals of the surveillance program, and the existing instruments and systems in support of surveillance, including having the appropriate tools, skills and capacity, and coordination and cooperation mechanisms between relevant authorities to enhance the surveillance capabilities.

While the issues and challenges faced by emerging markets tend to be generally similar in nature irrespective of whether the surveillance function is conducted by the regulator and/or the exchange, the report aims to highlight common themes and identify key regulatory considerations for emerging markets.

The conclusions and implications that can be drawn from the findings of the survey on the approaches to market surveillance in emerging markets can briefly be summarised as follows:

- The primary responsibility and accountability of market surveillance must be clearly communicated to the market, particularly in cases where there is parallel monitoring between the regulator and the exchange. Where surveillance is outsourced to an SRO, the regulators must ensure that the SRO has adequate skills and capacity to carry out the functions, and that proper oversight arrangements are in place to ensure fair and orderly markets.

- Adequate and effective market surveillance is an essential and fundamental element in creating confidence in the marketplace. It is critical for emerging market regulators and exchanges to keep pace with developing trends in markets, and be prepared to adapt its regulatory tools to prevent and detect market abuse in response to challenging market conditions. A pro-active surveillance approach and the application of dynamic criteria and parameters reflective of prevailing market conditions are therefore required to effectively detect market transgressions.

- Irrespective of whether market surveillance function is conducted by the regulator and/or the exchange, similar issues and challenges are faced emerging market authorities in relation to surveillance. These include difficulties in identifying end-clients or beneficial owners (particularly when the transactions involve foreign intermediaries, offshore companies and nominee accounts), multiple layers of bank transactions and collaboration of corporate insiders with market manipulators.

- While appropriate investment in technological capabilities and systems is critical to facilitate effective internal and cross-border surveillance of markets, the systems employed are to a large extent not a primary determinant of the quality of surveillance being conducted. The limited choice of available systems and the high ownership and maintenance costs of these systems are factors that may potentially influence emerging market authorities in developing their surveillance programmes.

- Significant emphasis should also be placed on the development of regulatory capacity and competency in the area of surveillance. Regulators and exchanges should focus on building appropriate technical capacity and capabilities to effectively identify and analyse potential aberrations in the market place and react accordingly.

- Given the increase in inter-market activity, emerging market authorities ought to enhance and strengthen market surveillance efforts on derivatives markets, and also focus its efforts on activities that occur across several markets in different jurisdictions. Regulators should therefore understand with greater clarity the transmission mechanisms and inter-linkages between markets and the fundamentals driving the market.

- Emerging market regulators and exchanges should enter into surveillance-specific arrangements with domestic and international regulators to enhance its surveillance capabilities. This would cover information relating to trading in securities and related derivatives and other derivative contracts, regulatory actions imposed, beneficial account ownership, information on shareholders, records of blacklisted investors/intermediaries, and information of suspicious trading of shares dually listed on several markets. Authorities should also share information on market surveillance techniques and approaches.

Globalisation of financial markets reinforces the need for surveillance approaches to stay abreast with global changes in order to meet the challenges posed. Regulators must be able to respond quickly to market crises that have systemic implications. Further, regulators need to remain effective supervisors in a global marketplace where no single regulator necessarily possesses all the requisite information to regulate the market.

References

Amanda Sherwood, 1997, “The Impact of Electronic Trading on Regulatory Surveillance”

Bursa Malaysia 2008 Regulatory Market Report

Carole Comerton-Forde and James Rydge, 2004. “Market Integrity and Surveillance Effort”

Doron Ezickson, Kate Learoyd & Prajakt Samant, “Commodities Trading & the UK Market Abuse Regime: Following the US Lead?”, Commodities Now, June 2007

Douglas Cumming and Sofia Johan, 2008, “Global Market Surveillance”

Ellis Ferran, 2008, “Capital Market Competitiveness and Enforcement”

James Rydge and Carole Comerton-Forde, 2004, ‘‘The Importance of Market Integrity – An Analysis of ASX Self-Regulation”

Jeffrey Lucy, Market demutualisation and privatisation: The Australian experience, an address by Jeffrey Lucy to IOSCO at the IOSCO 2004 Annual Conference in Amman

Kishore Kunal and Shashi Mathews, 2007, “A Comparative Analysis of Securities Markets of Select Emerging Markets”

International Monetary Fund and World Bank 2007, “Collaring Market Villains”, *The Banker*

Investment Industry Regulatory Organization of Canada (IIROC) Strategic Plan, December 2008

IOSCO Emerging Markets Committee Report, 2005, “Cross-Border Activities of Market Intermediaries in Emerging Markets”

IOSCO Technical Committee Report, 2007, “Multi-jurisdictional Information Sharing for Market Oversight”

IOSCO Technical Committee Report, 1998, “Guidance on Information Sharing”

IOSCO Technical Committee Report, 2000, “Investigating and Prosecuting Market Manipulation”

IOSCO Technical Committee Report 2005, “Strengthening Capital Markets Against Financial Fraud”.

IOSCO Technical Committee Report, 1999, ”Supervisory Framework for Markets”.

IOSCO Technical Committee Consultation Report, 2006, “Regualtory Issues Arising from Exchange Evolution”

IOSCO Technical Committee Report, 2009, “Task Force on Commodity Futures Markets”

IOSCO Technical Committee Report, 1998, “The Application of the Tokyo Communiqué to Exchange-Traded Financial Derivatives Contracts (Tokyo Communiqué) “.

Michael J Aitken and James H Berry, 1991, “Market Surveillance at the Australian Stock Exchange: An Overview”.

Memorandum of Understanding between the United States Commodity Futures Trading Commission and United Kingdom Financial Services Authority 2006, Concerning Consultation, Cooperation and the Exchange of Information Related to Market Oversight

Michael J. Watson, “The Regulation of Capital Markets – Market Manipulation and Insider Trading”.

New Zealand Ministry of Economic Development, 2005, “What is Meant by Market Manipulation and Should It be Regulated?”

Peter Clay and Daniel Cohen, 2002, “Do We Need Global Market Surveillance?”

Tharman Shanmugaratnam, “Regulating the capital markets: making market discipline work”, BIS Review 14/2001

UK FSA Market Watch, Newsletter 2008, “Market Conduct and Transaction Reporting Issues Issue 26”

Michael Aitken and Andreas Furche, “Brokers – the key to market integrity in a global place?” *The World Exchange Handbook*