

## **Surveillance props market efficiency**

**Exchange  
surveillance**

**FEAS Market  
Surveillance Task  
Force: a dream to be  
lived**

**Market surveillance -  
an evolving task**

**Related Party  
Transactions (RPTs)  
in Arab Capital  
Markets**

**Country Focus:  
Croatia**

# Your gateway to the markets of tomorrow...

The Federation of Euro-Asian Stock Exchanges (FEAS) was established with its headquarters in Istanbul on 16 May 1995 with 12 founding members, and it has grown to 34 members 17 affiliates in 31 countries as a not-for-profit organization. Membership in the Federation is open to exchanges in Europe and Asia as affiliate membership is available for post trade institutions and dealer associations in the same region. FEAS Organizational Structure is formed by General Assembly, Executive Board, Working Committee and the FEAS Secretariat.

The mission of FEAS is to help create fair, efficient and transparent market environments among FEAS members and in their operating regions. FEAS aims to minimize barriers to trade through the adoption of best practices for listing, trading and settlement. Federation also supports promoting linkages among members for cross-border trading.

## MEMBERS

- Abu Dhabi Securities Exchange
- Amman Stock Exchange
- Bahrain Bourse
- Baku Interbank Currency Exchange
- Baku Stock Exchange
- Banja Luka Stock Exchange
- Belarusian Currency and Stock Exchange
- Belgrade Stock Exchange
- Borsa Istanbul
- Bucharest Stock Exchange
- Bulgarian Stock Exchange
- Damascus Securities Exchange
- Egyptian Exchange
- Eurasian Trade System Commodity Exchange (ETS)
- Georgian Stock Exchange
- Iran Fara Bourse
- Iran Mercantile Exchange
- Iraq Stock Exchange
- Karachi Stock Exchange
- Kazakhstan Stock Exchange
- Kyrgyz Stock Exchange
- Lahore Stock Exchange
- Macedonian Stock Exchange
- Moldova Stock Exchange
- Mongolian Stock Exchange
- Montenegro Stock Exchange
- Muscat Securities Market
- NASDAQ OMX Armenia
- Palestine Exchange
- Sarajevo Stock Exchange
- Tehran Stock Exchange
- Tirana Stock Exchange
- "Toshkent" Republican Stock Exchange
- Zagreb Stock Exchange

## AFFILIATE MEMBERS

- African Securities Exchanges Association (ASEA)
- Association of Certified Capital Market Professionals (ACCMP)
- Association of Futures Markets (AFM)
- Central Securities Depository of Iran
- Macedonian Central Securities Depository
- Merkezi Kayıt Kuruluşu
- Misr for Clearing, Settlement & Central Depository
- MSM Brokers Association, Oman
- National Depository Center of Azerbaijan
- Securities and Exchange Brokers Association of Iran (SEBA)
- Securities Depository Center (SDC) of Jordan
- Takasbank - Istanbul Settlement and Custody Bank
- Tehran Securities Exchange Technology Management Company (TSETMC)
- The Association of Capital Market Intermediary Institutions of Turkey (TSPAKB)
- Arab Federation of Exchanges (AFE)
- Swiss Futures and Options Association (SFOA)
- The South Asian Federation of Exchanges (SAFE)

# In this issue...

- 3 FEAS Perspective**  
Mustafa Baltacı, FEAS Secretary General Message
- 4 Exchange surveillance**  
Hüda Serova, Chief Auditor, Borsa Istanbul
- 7 FEAS Market Surveillance Task Force: a dream to be lived**  
Mohammad A. Abu Baker, Head of Surveillance and Members Affairs Section,  
Palestine Exchange; Leader of Surveillance Task Force, FEAS
- 9 Market surveillance – an evolving task**  
Ivo Stankov, Senior Expert, Bulgarian Stock Exchange
- 14 Related Party Transactions (RPTs) in Arab Capital Markets**  
Jalil Tarif, Secretary General, Union of Arab Securities Authorities
- 17 The fundamentals and evolution of market surveillance**  
Tony Sio, Head of Sales, Market Surveillance Asia, NASDAQ OMX
- 20 Country Focus: Croatia**
- 24 FEAS Region Statistics**



## FEDERATION OF EURO-ASIAN STOCK EXCHANGES (FEAS)

Borsa Istanbul Building, Emirgan 34467 Istanbul, Turkey  
Tel: (90 212) 298 2160  
Mobile: (90) 530 035 6905  
Fax: (90 212) 298 2209  
E-mail: [secretariat@feas.org](mailto:secretariat@feas.org)  
Web address: [www.feas.org](http://www.feas.org)

### Contacts

Mr. Mustafa Baltacı, Secretary General  
Ms. Ege Adalioglu, Deputy Secretary General  
Ms. Aydan Bal, Office Coordinator

The best gift for an investor:  
**A new idea.**



When navigating today's markets, you need an investment partner with fresh insights. If you are looking for fantastic investment opportunities, we have a proven record of generating great new ideas for our clients. Invest in Turkey with us and discover how our innovative approach can help you!

**\* FINANS ASSET MANAGEMENT**

[www.finansassetmanagement.com](http://www.finansassetmanagement.com)

**\* FINANS INVEST**

[www.finansinvest.com](http://www.finansinvest.com)

# FEAS Perspective



**Mustafa Baltacı**  
FEAS Secretary General

Dear Friends,

We would like to present the 2014 winter issue of Inter FEAS magazine with a theme of Exchange Surveillance that has been one of the most frequently monitored aspects in the capital markets lately.

Driven by advances in technology, changes in regulatory and competition policy, and the evolution of exchanges from mutual to publicly traded, for-profit entities, the consolidation of exchange markets and establishment of alternative trading venues are in place. Continuous shift from plain vanilla products to more sophisticated ones is also pressuring exchanges and regulators to deploy commensurate tools that are usually costly. Under the circumstances, risk assessment and market monitoring should be diligently brought under the spotlight. At the end of the day, surveillance is of significant

Surveillance is of significant prominence to protect investors and maintain confidence in the market mechanisms. And this role should be fairly split by the regulators and market operators.

prominence to protect investors and maintain confidence in the market mechanisms. And this role should be fairly split by the regulators and market operators.

In this issue, we will find varying aspects of the exchange surveillance that is perceived and implemented differently in jurisdictions.

Accordingly;

- Hüda Serova from Borsa Istanbul contributed with an article on market surveillance in Turkish experience.
- Mohammad A. Abu Baker from Palestine Exchange discussed the subject on different arenas.
- Ivo Stankov from Bulgaria Stock Exchange tackled the surveillance in line with the EU regulations.
- Jalil Tharif from the Union of Arab Securities Authorities wrote on related party transactions in Arab Capital markets.
- And last but not least Tony Sio, from NASDAQ OMX contributed with an article on the fundamentals and evolution of market surveillance.

Our sponsors deserve an account of appreciation hereby. Finans Asset Management and Is Investment have added value for making this publication possible. Our website has a contributor section at [www.feas.org](http://www.feas.org) which presents advertorial pieces of the sponsors.

Allow us to thank again for your support and interest as we hope you will find the Winter 2014 issue of the Inter FEAS Magazine enjoyable.

Sincerely,

Mustafa Baltacı  
Secretary General

# Exchange surveillance



**Hüda Serova**  
Chief Auditor,  
Borsa Istanbul

## Market Surveillance

Market surveillance includes monitoring and surveillance of the orders and trades by using continuous control algorithms of surveillance system in order to detect market abuse, insider trading, front running and other misconducts which damage orderly and fair market operations, in compliance with our exchange regulations and other relevant legislative framework. Suspicious activities are reported to Capital Markets Board of Turkey (CMB)

and upon the request of CMB, a detailed investigation is conducted in collaboration with CMB.

## Market Monitoring and Surveillance

There are five main sources initiating market monitoring and surveillance activities:

- Signals and alerts that are generated according to predefined parameters by the Surveillance System,
- Notifications, complaints and applications regarding market abuses sent to Borsa Istanbul, or news that appear in the media,
- Examination requests by the CEO and the Chief Audit Executive of Borsa İstanbul,
- Temporary stock specific trade suspensions triggered by Automated Circuit Break System (ACBS),
- Signals generated by Investor Based Measures System (IBMS).

## Completed and Ongoing Projects Regarding Market Surveillance

### Stock Specific Circuit Breaker System

The system was launched at the beginning of 2011. The main aim is to protect the investors by giving them on-time information about abnormal market movements.

In case of occurrence of abnormal price and volume movements for a stock, the system;

- Stops trading on any relevant stock series for 15 minutes at first, and if the unusual activity persists, it leads to a gross settlement period for 15 days on the trades of that certain stock,
- Simultaneously announces the suspension and measures through Public Disclosure Platform (PDP).

## Main Market Surveillance Strategy

### Fighting against **all types of** market abuses

(Crimes in Capital Market Law, orders & trades damaging transparent, fair, and stable functioning of the markets, front running, other irregularities)

### Fighting against market abuses **at all levels**

(at market, stock, intermediary institution, listed company and investor levels)

### Establishing the legal, administrative and technical infrastructure

(up to date legislation, technology, collaboration and communication, adequate and skilled administrative capacity)

## How IBMS works...

	SANCTION	CONDITIONS	DURATION
<b>1st Step</b>	Informing the investor in writing	In case of any repetition of min. 3 times within any 90 days	-
<b>2nd Step</b>	Announcement of the Investors' ID or the Title of Legal Entity in PDP	As the 1st Step is reached, at any repetition of min. 3 times within any 90 days	-
<b>3rd Step</b>	Gross settlement Requirement for the Related Investor	After 2nd step is reached at any repetition of min. 3 times within any 30 days	15 days
<b>4th Step</b>	Pre-Deposit Requirement for the Related Investor	After 3rd step is reached at any repetition of min. 3 times within any 30 days	30 days
<b>5th Step</b>	Temporary Order Rejection (Boycott)	After 4th step is reached, at any repetition of min. 3 times within any 30 days	45 days of boycotting then 30 days gross settlement

### Investor Based Measures System

In order to discourage the orders and trades that hinder the market to operate in an open, orderly and fair fashion, a system called Investor Based Measures System was put into use in 2012. With the exclusion of orders and trades of exchange traded funds and warrants, it will be applied to any equity trading on the Stock Market and the Emerging Companies Market.

The activities will be considered against this circular such as

- Wash Trades - the trades that make no change in the ownership of the security - namely cases where the buyer and the seller parties of transaction are the same investor,
- Buying or selling in small lot sizes while there is no reason to split the orders in order to create false continuous market activity.

The circular imposes 5 successive sanction packages against the investors that engage in those activities. All the orders and trades are monitored by certain algorithms by use of Investor Based Measures System.

### **Front Running Attempt**

A new module has been developed and taken into acceptance tests to detect front running attempts. The system harmonizes the data gathered from Turkish Capital Markets Association and the Capital Market Licensing and Training Agency of Turkey. At first stage, the system will monitor the equity trades and in the future it will also cover all other capital market instruments traded on Borsa İstanbul. The software development for detecting suspicious trading regarding front running is completed. It is planned to take into operation very soon, as the acceptance tests are concluded.

### **Renewal of Surveillance Technology**

The project for the renewal of Borsa İstanbul's surveillance technology is initiated within the scope of Strategic Partnership Agreement between Borsa İstanbul and NASDAQ OMX, which clearly states that the prospective surveillance technology will be SMARTS for Borsa İstanbul. As decided in the Agreement, the technology renovation of trading, clearing, risk management and surveillance systems will be accomplished as a two-tier project: at first phase focusing on equities and at the second phase on the remaining market activities.

In order to make proper assessment of the capabilities and features of the SMARTS in order to comply with our needs and requirements, focus workgroups are formed to make legal and technical studies, composed of some exchange personnel and NASDAQ OMX counterparts. A detailed analysis and development phase has started in 2014, to realize necessary software developments and customizations, in parallel with the adaptation of trading and clearing systems of NASDAQ OMX to our markets.

### **Surveillance of Futures and Options**

The products that have been previously traded on Turkish Derivatives Exchange at İzmir, have started to be traded on the Futures and Options Market of Borsa İstanbul upon the completion of the merger of those companies. The scope of the surveillance as well is widened to cover the trades on those instruments accordingly.

### **Membership in Intermarket Surveillance Group (ISG)**

As foreign investors are showing profound interest in trading in Borsa İstanbul and the mutual interaction between Turkish and global markets are increasing tremendously, our exchange has joined the Intermarket Surveillance Group (ISG) in 2012. It is a group of the world's most recognized exchanges collaborating and sharing information with each other for surveillance purposes as the markets are integrated globally.

Violation attempts are decreasing significantly due to Removal of Restrictions on Order Cancellation and Fee Charging Mechanism on Cancellations, Automated Circuit Break System, Investor Based Measures System that discourages market abusive trading patterns.

# FEAS Market Surveillance Task Force: a dream to be lived



**Mohammad A. Abu Baker**

Head of Surveillance and Members Affairs Section, Palestine Exchange  
Leader of Surveillance Task Force, FEAS

be able to cooperate and develop. And then, only then, the basis of art, science and civilization could be founded. That's exactly what market surveillance professionals in FEAS community are trying to achieve; to start defining the surveillance language; dictionary of terms so we can move forward toward development and cooperation. For this reason, the Surveillance Task Force was created!

As an example, let's pick one term from the dictionary of surveillance, Manipulation. It's a loosely defined term in finance literature, but what about this definition: It's an intentional

definition of certain abusive behaviors, the parameters to have for them, and the algorithms we develop for our surveillance solutions. It will decide the benchmark between normal and abnormal. One definition has all this effect on the later stages of surveillance. It's an interesting discussion to have and it brings lots of joy to our minds.

The irony in the surveillance profession is that despite the fact that it is very critical for the capital raising process of our markets, it's not fully addressed in universities' curriculum; professionals, who work in surveillance, rarely hold a certificate in surveillance, or to be more accurate, there is no such certificate up until now. There is some research and studies, but that's it! I once attended SMARTS conference for surveillance where someone said: "When a new member joins our surveillance staff I tell him that we are always learning from our job, yet if we fail, we'll know that from the newspapers the next day". All the professionals in surveillance realize how hard it is to look for related documentation to gain knowledge to perform their task, but processes can be set up to create, maintain and obtain the needed information.

In May 2013, during FEAS spring meeting in Sarajevo, the idea of having a surveillance task force was proposed. The idea was born from the challenges we face in this critical field. We believe as a FEAS community, that together we can put the basis

In May 2013, during FEAS spring meeting in Sarajevo, the idea of having a surveillance task force was proposed. The task force was approved in December 2014 during the FEAS fall meeting in Muscat.

Market Surveillance protects everyone and speaks in different languages. Language! A very common word we use. It almost doesn't need to be defined, yet a very interesting one! It represents the essence of how Humans communicate with each other. And it's one of the mirrors in which we can see how we, as humans, developed throughout history. But Before going forward let's take a step backward! Language would never exist if there were no communities. In other words, each community needs to have its own language to be able to efficiently communicate and share ideas, to

intervention with the free hand of market. This definition concentrates on the intention, but do we need to concentrate on it from a surveillance perspective?! Are there other definitions? Some say yes, others say no and that's exactly the kind of discussion we are intending to have in our task force. If you wonder what difference it makes to consider the intention or not, believe me it makes a huge difference. Adopting this definition will affect our perspective on how we see manipulation; how surveillance would be conducted; and what is it we want to protect our investors from. It will affect our

In Palestine, both Palestine Exchange “PEX” and the regulator, represented by the Palestine Capital Market Authority “PCMA”, take part in the surveillance process.

of a market surveillance framework in which professionals in this field can raise questions and get answers to those questions starting from the basic definitions of surveillance related terms to answers regarding related mechanisms and technologies. The task force was approved in December 2014 during the FEAS fall meeting in Muscat. It consists of the Palestine Exchange as a leader, Bulgaria Stock Exchange, Amman Stock Exchange, and Muscat Stock Exchange as members.

When the project is done, there will be a technical guideline which will cover all fields of interest to surveillance professionals; Regulations, Abusive Behavior, Technology, Professional competence, and Stakeholders, and there will be a forum that allows FEAS market surveillance professionals to communicate efficiently and consult each other regarding both the development of these guidelines and any cases they face on a daily basis. By having this framework, we will have the fundamentals we need to develop the surveillance profession among the FEAS community through the common language we share.

### Market Surveillance in Palestine Exchange

In Palestine, both Palestine Exchange “PEX” and the regulator, represented by the Palestine Capital Market Authority “PCMA”, take part in the surveillance process. In 2009, a comprehensive development plan took place to adopt a new approach in surveillance to better protect our investors; we focused on enhancing the surveillance visibility over trading activities, adopting state of the art technology and putting in place efficient procedures to maintain efficient communication among surveillance professionals at PEX and PCMA.

The new approach has two levels of surveillance, Micro level and Macro level. Micro level is a per-incident level, where each suspected abusive behavior is analyzed separately and thoroughly, while Macro level is market level surveillance which focuses on defining the market characteristics based on the type of micro level incidents, it allow us to detect where to focus in our continual development of our mechanisms and approaches.

In terms of technology, SMARTSonline is considered the main surveillance solution, besides having supporting in-house developed programs that allow us to put as many pieces as possible to the overall visibility for trading activities. The biggest challenge in determining the right technological solution is in adopting the right technology which helps us to reduce the blind spots to a minimum! It's a never ending challenge which I'll talk about in detail later in a separate article.

PEX and PCMA use SMARTSonline as the official communication tool, we share the same platform, we share the same analytical tools. We see the trading session through the same eyes! This allows us to take decisions at the right time. It worth mentioning that one of the levels of the micro level is client level surveillance; we have access to detect the actual buyers and sellers, and people who are considered Insiders according to our laws and regulations are monitored closely on order and trade levels. This increases our visibility and reduces the blind spots.

Since 2009, PEX and PCMA are working together in harmony to provide the maximum protection to investors in the Palestine capital market through maintaining a continual development process of their mechanisms, having efficient regulation, and utilizing technology to the max.

# Market surveillance – an evolving task

After the 2008 market crash and its impact on the global world economy, regulators all over the world realise that investor confidence in financial markets is lost and in order to restore it, proactive measures must be taken to prevent market distortions, that can be prevented or deal with such, that may only be identified post factum.

Globalisation of trade inevitably leads to serious competition between markets for new listings and liquidity and subsequent reduction in their trading commissions and listing fees, and often this decrease is associated with a reduction of costs of the market operator. The question that arises thereof is whether the decrease leads to lowering the supervision criteria of the regulated market or trading system.

The regulated markets organisers, no matter spot or derivative, have a huge interest in restoring the confidence in market mechanisms, which could lead to the return of retail investors. Not surprisingly, the exchanges also endeavour to reduce the potential for market manipulation and insider trading. Moreover, the withdrawal of customers from the market was so drastic that investment firms themselves realised the need for a change of mind-set and of their attitude to market manipulation.

Fragmentation of markets, national and international cross-listings of issues hampered supervision even further. The situation became more and more complicated for national regulators, when they had to supervise trade in an internationally cross-listed instrument. The Markets in Financial Instruments Directive (MiFID) extended the mandate of regulators within the European Union, but cross-border supervision is far more difficult than national.

The amendments to the existing legislation, its development and the inclusion of new mechanisms and methods of trade and market behaviour formation (such as high frequency trading) are just some of the manifestations of change in thinking in terms of market surveillance. Much of the focus is on preliminary supervision before placing an order and executing a trade, because it is in the pre-trading stage, when many of the manipulations, which bring a bad reputation to the market and the relevant market participant, can be avoided.

Banks and investment intermediaries, which are the entry point to the market, are changing their attitude towards trade supervision, because they realise that confidence in the markets in financial instruments begins with and is mainly a result of their actions. Therefore the two most important steps in improving surveillance by market participants are 1) the identification of suspicious behaviour by customers and 2) prevention of employees of the company from carrying out activities which may constitute a market manipulation.

Proper performance of internal control duties is essential to build confidence in the intermediaries and hence - in the market.

## Internal control by the investment intermediaries

Internal control within the intermediary is always essential to prevent non-market behaviour by both customers and employees. In many cases, however, this function is entrusted to a person, who combines several job positions and responsibilities. That is why work on internal



**Ivo Stankov**  
Senior Expert,  
Bulgarian Stock Exchange

control is sometimes performed superficially and purely formal, and usually consists of paperwork about supervision and inspections, which had not been performed and conclusions in the said paperwork that no violations occurred. Therefore proper performance of internal control duties is essential to build confidence in the intermediaries and hence - in the market. The role of internal control and compliance officers will surely grow in the future. New employees would be hired; some of them would have technical education and would

be able to use the latest technology in their line of work. We have a huge computational power, even in desktop computers. If correctly configured, software can monitor for suspicious activity by customers or even the employees of the intermediary without requiring any effort from the internal control/compliance department. There are many variations of such software, but the key factor is the

Employees of the intermediary may not know each individual client, but software, based on pre-set client risk profile or the past actions of the customer, could identify a sudden change in his behaviour.

proper adjustment of the criteria for suspicious behaviour of market participants and the capability of such software to alert an employee should any suspicious transaction occur. Numerous examples of insider trading are listed on the website of the US Securities regulator SEC<sup>1</sup>, including recent events from 2014, proving that even the best legislation, broad supervision authority and even criminalisation of market manipulation do not guarantee elimination of the problem. Sometimes orders, placed by a person or people who possess inside information, can be identified even upon submission. Therefore, the internal rules of intermediaries should be clear, unambiguous and should contain readable signs to identify suspicious transactions. And of course, they should be put into practice and applied to every customer order.

The introduction of electronic remote trading systems (ERTS) and the possibility to reach foreign markets increase the possibility for a suspicious transaction to go unnoticed by the broker or by a surveillance officer. Therefore, most systems have the option to request broker approval of certain transactions: a) transactions that exceed pre-set value thresholds, b) transactions where the price differs drastically from the average price of an instrument, or c) transactions, which deviate from the current behaviour of market participants. With proper adjustment, the prior approval of orders could

be a powerful tool to prevent market manipulation. Employees of the intermediary may not know each individual client, but software, based on pre-set client risk profile or the past actions of the customer, could identify a sudden change in his behaviour and direct brokers or surveillance officers to a more detailed examination, thus revealing a possible market manipulation.

### Investment intermediary employees with their own agenda<sup>2</sup>

In a constantly growing market where profits were guaranteed and the only uncertainty was their amount, the behaviour of employees of the intermediary, who benefited taking away a part of the clients' profits, made risky or unprofitable operations with client assets entrusted to their management or took risk on behalf of the intermediary itself, could have easily gone unnoticed. If a portfolio is profitable, the amount of the management fee could be bloated with several transactions without much financial results; if a client wanted to buy shares at a fixed price, the broker could easily buy those same shares for their own account or on behalf of the intermediary and then sell them to the customer at a higher price - after all, the very next day the price would increase and the customer would not even notice. Fortunately (in our case), the Bulgarian market offers no derivative instruments, otherwise losses could be huge for an

investment firm or bank, whose broker had decided to take recklessly high risk in pursuit of profit.

Regardless of financial performance, front-running, wash trades and any similar action by the employees of investment intermediaries contribute to the bad reputation of the market participant (the employing company) and the market as a whole. Strict internal rules for personal transactions by the employees and rigorous control could reduce such behaviour to a minimum. It is unrealistic to expect such transactions to be prohibited by the internal rules as the resistance of employees could lead to new ways of trading through third parties, and that would be even more difficult to trace. Regulatory practice shows that such actions by employees of the intermediary are no exception, but are seldom noticed and sanctioned by the investment firm itself, and even more rarely - reported to the market regulator for the person concerned to be taken action against.

### Market behaviour complexity leads to even more difficult surveillance

Market participants have a growing set of tools to use while trading. Besides the built-in tools, ERTS offer application programming interface (API), through which customers can develop their own applications for the implementation of complex market strategies. Work of the supervision department is further complicated by the possibility of the same financial instrument to be traded on more than one trading venue. It is highly probable that certain behaviour, constituting market manipulation, could be carried out on more than one

<sup>1</sup> <http://www.sec.gov/spotlight/insidertrading/cases.shtml>

<sup>2</sup> Usually this topic is considered a part of the Conduct Risk for the intermediaries. I believe it needs special attention.

traded venue. As none of the (at least) two regulators in whose jurisdiction trades execute, have a complete picture of the manipulator's activity, the true purpose of the perpetrator might be concealed and the unveiling of his actions - obstructed.

Supervision of the aforementioned situation is certainly not in the powers of regulated markets, which are mostly self-regulating organisations, monitoring the participants admitted to trading for non-market behaviour.

As for the national supervisory authorities, the MiFID introduced to the EU countries a mechanism for aggregating data from all trade - the Transaction Reporting Exchange Mechanism (TREM). Trading data, summarised by the TREM, allows investigation of investor behaviour, which exceeds the boundaries of a particular market or a Member State and constitutes market manipulation on multimarket or supranational level. MiFID II has yet to be transposed into each Member State's national legislation, but the Directive and Regulation (EU) 600/2014 are expected to strengthen supervision at a transnational level. They would allow regulators to closely monitor trading in a financial instrument no matter the venues it is traded on, as long as they are within any of the Member States. Of course, all the data collected must be processed and analysed, and this requires appropriate software. The surveillance software, having the necessary settings, thresholds and templates set, should be able to generate alerts for suspicious market behaviour, which in turn should be processed by an officer of the global or national supervisory authority.

The MiFID introduced to the EU countries a mechanism for aggregating data from all trade - the Transaction Reporting Exchange Mechanism (TREM).

Of course, it is possible, in the case of a small number of instruments or several markets within a single jurisdiction, an exchange of trade data agreement to be reached between trading venues, aiming at improving the supervision process. There is currently no evidence of such cooperation in the EU, but it is entirely possible, under certain circumstances for several regulated markets and/or Multilateral Trading Facilities (MTF) to unite their efforts in order to enhance transparency, reduce opportunities for market manipulation, thus increasing the reputation of the markets in financial instruments<sup>3</sup>.

Moreover, MiFID II introduces the concept of Organised Trading Facility (OTF), which has a pretty broad definition and aims to cover forms of trading venues created by the use of new (probably future) technologies. They will further expand the scope of the Directive, but it is arguable if this would enhance supervision over trading venues in financial instruments or would fragment the markets under supervision even more. On the other hand, MiFID II will require cooperation between regulated markets and MTFs which trade the same instruments to facilitate supervision and avoid manipulations carried out on more than one market. Such cooperation, even within one country, could be a step in the right direction to reduce market distortions and improve supervision.

### The part of Regulated Market Organisers/Markets in financial instruments in pre-trade supervision

There are many mechanisms by which the regulated market, through its rules and regulations, could perform preliminary pre-trade surveillance and screen out those orders, which could constitute an attempt to manipulate the market, insider trading, front-running, etc. That brings us back to the level of knowledge of the manipulative practices and setting them as criteria in an automated surveillance system for the market. It is imperative to adapt the criteria to the specifics of the relevant trading venue, in order to minimise the false positives and not to miss real ones.

Opening auctions, intraday auctions and closing auctions are also a mechanism to support the market itself to "regulate" the price of an instrument, and hence - to find variations in prices. The authority of the market to suspend trading in the presence of a suspected market manipulation or insider trading is an appropriate measure. Often the trading systems themselves include a mechanism to interrupt trade in a non-intrusive manner, e.g. conducting an intraday auction to establish a new equilibrium price, upon occurrence of a specified event or the fulfilment of a certain pre-set criteria.

<sup>3</sup> There is one such example presented below

### Cross-border and multimarket surveillance. Derivatives and underlying entities surveillance.

With increasing number of instruments, traded on more than one trading venue, the importance of complex surveillance that covers transactions on all of those venues is increasing, too. To a large extent cross-border supervision depends on national regulators and cooperation between them. Within the European Union the foundations are embedded in MiFID and are further developed in MiFID II. The particular mechanisms

could be prevented if the supervision is based on comprehensive information from all trading venues for a particular instrument.

Intermarket Surveillance Group (ISG), which was founded as a union of self-regulatory organizations, operates in the United States of America since the early eighties<sup>4</sup>. Its purpose is 1) the coordination and development of programs and procedures to identify possible fraudulent and manipulative activities across markets; and 2) information sharing.<sup>5</sup> Strengthening the role of ISG and appreciation of its importance came when SEC required

Besides the huge trading of financial instruments database, seven permanent subgroups operate with the ISG, one of them called Surveillance practices<sup>7</sup>. Furthermore, in addition to the data exchange, which could lead to preventing and detecting market manipulation, group members share supervision experience and develop their own surveillance based on the achievements of all other members. The ISG is a great example for cross-border cooperation between regulated markets. Maybe organisations like ISG are the future of cross-border cross-platform surveillance.

Over time, the increasing number of cross-listed financial instruments and the higher fragmentation of trade between venues required a change in approach.

remain yet to be implemented, but certainly we will see the strengthening of cross-border and multimarket supervision in the future. With the emergence of a number of strategies that take advantage of the temporary differences in the price of an instrument, thinking in terms of supervision should also be changed. Sometimes, in the absence of opportunities for geographic, national, etc. arbitrage due to the more sophisticated mechanisms of trade, more rapid disclosure and dissemination of inside information and increasing transparency by public companies, market participants are tempted to take action in order to create a difference in the prices of different trading venues. These actions

all self-regulatory organizations to become members of the ISG. Over time, the increasing number of cross-listed financial instruments and the higher fragmentation of trade between venues required a change in approach. Therefore in 1990, the organizational structure of ISG changed to allow membership of stock exchanges and futures markets based in other countries. As at early September 2014 ISG members number 52<sup>6</sup>, among them markets like Borsa Italiana, Chicago Board Options Exchange, Chicago Mercantile Exchange, Eurex Frankfurt, Euronext Amsterdam, Frankfurt Stock Exchange, London Stock Exchange, many of the NASDAQ OMX markets, CBOE Futures Exchange, etc.

The way regulators perceive the trade of underlying entities and derivatives based on them would also change. While more complex financial instruments enter the markets, traders increasingly try to influence both the underlying entity and its derivatives. Thus manipulations become more complex and difficult to detect, because they cover different types of instruments with their own mechanisms of trade and different price formation. Sometimes price formation involves entities, which are outside the markets in financial instruments, such as market interest rates, commodity prices, etc. As difficult as it may sound, the regulators will need to focus on all these aspects at once, because the not too distant past has shown that even LIBOR (on which derivatives, amounting to over USD 350 billion are based) can be manipulated<sup>8</sup>.

<sup>4</sup> <http://www.world-exchanges.org/insight/views/international-cooperation-amongst-market-operators-does-exist>

<sup>5</sup> <https://www.isgportal.org/isgPortal/public/home.htm>

<sup>6</sup> <https://www.isgportal.org/isgPortal/public/members.htm>

<sup>7</sup> <https://www.isgportal.org/isgPortal/public/overview.htm>

<sup>8</sup> [http://en.wikipedia.org/wiki/Libor\\_scandal](http://en.wikipedia.org/wiki/Libor_scandal)

Regulated markets and multilateral trading facilities would have to actively exchange information on cross-listed instruments.

### Future of supervision

Supervision and compliance officers within all market stakeholders and regulators will face many challenges. A new regulatory framework, both at national and European level is drawn to tackle the crisis, which brought down the confidence in the financial markets six years ago. Surveillance should begin within the investment intermediaries, which accept and submit orders, as a first line of defence against market abuse and insider trading. The intermediaries should strengthen their internal control units, in order to minimise the possibility of misconduct by their own employees. The software they use to detect suspicious transactions should evolve to cover the gap between broker and client, created by remote trading. Thus customer behaviour would be monitored and analysed by software, without the need of human intervention, creation of pre-set investor profile, risk-assessment of the investor, etc. Supervision officers would only receive reports on suspicious transactions based on certain behaviour or change in behaviour of the investor.

Regulated markets should also unite for the sake of supervision to deal with market fragmentation, especially when it comes to trading an instrument on several venues in one country. Regulated markets and multilateral trading facilities would

have to actively exchange information on cross-listed instruments. Thus, each surveillance department would receive comprehensive information on trade in each instrument and be able to see if a member has taken certain actions in one of the venues, then – taken advantage of the consequences in another. Since supervision departments of US trading systems have access to consolidated data, such practices there can be easily detected and investigated<sup>9</sup>.

If we continue to zoom out from the individual market, the role of national and supranational regulatory supervisory authorities increases. A mechanism for aggregating data for trade in financial instruments already exists in the EU Member States. Data is aggregated by the European Securities and Markets Authority and may be accessed by regulators from the Member States. MiFID II is expected to strengthen cooperation between the latter and facilitate supervision by connecting it not only to a certain trading venue, but all trade in a particular instrument in all Member States. Moreover, improvements in the directive are expected to lead to exchange of trading data in real time, not on a daily or weekly basis, thus making preventive supervision even more effective, which should be the goal of any supervisory body all over the world.

### Sources:

- <https://www.isgportal.org/>
- <http://www.world-exchanges.org/insight/views/international-cooperation-amongst-market-operators-does-exist>
- [http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:JOL\\_2014\\_173\\_R\\_0005&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:JOL_2014_173_R_0005&from=EN)
- [http://www.nasdaqomx.com/digitalAssets/80/80277\\_preventingmarketabuse.pdf](http://www.nasdaqomx.com/digitalAssets/80/80277_preventingmarketabuse.pdf)
- <http://www.securitiestechologymonitor.com/blogs/eliminating-stock-market-manipulation-30324-1.html>
- <http://www.sec.gov/>
- [http://www.bafin.de/EN/Homepage/homepage\\_node.html](http://www.bafin.de/EN/Homepage/homepage_node.html)
- [http://www.accenture.com/us-en/blogs/regulatory\\_insights\\_blog/archive/2013/06/28/trade-surveillance.aspx](http://www.accenture.com/us-en/blogs/regulatory_insights_blog/archive/2013/06/28/trade-surveillance.aspx)

<sup>9</sup> Preventing market abuse: Can market surveillance really improve amidst fragmentation and low-cost competition? - Annika von Haartman, Head of Surveillance at NASDAQ OMX Nordics

# Related Party Transactions (RPTs) in Arab Capital Markets



**Jalil Tarif**  
Secretary General,  
Union of Arab Securities Authorities

## RPTs in Arab Capital Markets

This article is based on the results of the survey, which was conducted by the Secretariat General of the Union of Arab Securities Authorities (UASA) and the Organization for Economic Cooperation and Development (OECD), whereby the Arab Securities Authorities member of the UASA were requested to fill a questionnaire to identify the experiences of Arab Capital Markets in the oversight over transactions with related parties. Within this context, all the 15 UASA member authorities answered the questionnaire.

The results of the questionnaire were studied and analyzed by the UASA Secretariat General and the OECD in order to reach a deeper understanding of the issue of control over related party transactions and the operational practices of the Arab Capital Markets in the regard.

Generally speaking, the results of the survey showed the important and vital role played by the Arab Securities Authorities in the area of control over transactions with related parties. This is apparent through the procedures applied in the Arab capital markets in

area of disclosure of transactions with related parties, control procedures and enforcement procedures applied by the Arab Securities Authorities to reduce the impact of related party transactions that are inconsistent with the legislations in force.

The study came up with a set of recommendations based on the results of the survey conducted in this regard. The adoption of these recommendations will contribute to the enhancement of oversight efforts in the face of adverse effects resulting from related parties that are inconsistent with the legislations in force, thereby enhancing the efficiency of the financial markets and improving their attractiveness to local and foreign investments.

## Related Party Transactions Concept

The relations between related parties are a familiar form in business activities. For example, enterprises usually conduct some of their activities through subsidiaries, joint ventures, or associated companies. In such case, the enterprise is likely to influence the financial and operational decisions of the investee through control, joint control, or significant influence. The related-party transactions may affect the financial position, and business results of the reporting enterprise, as related parties may enter into transactions where non-related parties may not want to be involved. For example, an enterprise sells goods at cost to the holding company and does not allow such transactions with other clients. In addition, transactions between related parties may not be made at the same value like other transactions with non-related parties.

The business results and the financial position of an enterprise may be affected by the relationship with related parties, even if transactions

with such parties do not occur. The mere presence of the relationship may be sufficient to affect the transactions of the reporting enterprise with other parties. For example, an affiliated company may terminate their relationships with another entity when the holding company acquires an affiliated or sister company which operates in the same activity. Meanwhile, a party may be prevented from doing a particular business due to the presence of a significant impact thereon from another party. For instance, a holding company may give instructions to an affiliate not to undertake research and development activities. For these reasons, the knowledge of existing relationships and transactions with related parties and outstanding balances may affect the evaluation of an enterprise's activity by the users of the financial statements, including the evaluation of the risks and opportunities facing the enterprise.

The International Accounting Standards set the general framework of the concept of related party transactions as well as the nature of information to be disclosed.

## Main Conclusions

The main conclusions of the RPTs in the Arab Capital Markets study are summarized as the following:

1. Majority of related party transactions in the Arab capital markets are related to board members, directors, or among companies in the same group. The legislations and regulations applicable does not require related party transactions to be material. 12 Arab Authorities indicated that such condition is not applicable. Other countries, however, such as Jordan, Iraq and Palestine, apply this condition. In accordance with the applicable corporate governance guide, the Jordan Securities

The results of the survey showed the important and vital role played by the Arab Securities Authorities in the area of control over transactions with related parties.

Commission stipulates the value of the transactions should be JD 50,000 or more, while in Iraq this depends on the amount and relative materiality. In Palestine, transactions must be significant whereby any key assets of the company are disposed of.

2. The primary method to protect shareholders from related party transactions, which are in contrary to the legislations and in conflict with the interests of shareholders, is based on reviewing such transactions by the Audit Committee (or other committees emanating from the Board of Directors) or through the shareholders' approval on such transactions in the General Assembly meeting of the company. Eleven members of the UASA require the approval of the shareholders on such transactions.

3. Internal and external audits play significant role in the control over related party transactions. Results showed that in 12 member states of the UASA, the external auditor of a company is responsible for reviewing related party transactions before presenting same to the General Assembly meeting.

4. There is a significant and effective role for the Arab Securities Authorities in enforcing the duties of boards of directors. It is evident that in 13 Arab countries, the Securities Authorities have a role to play in enforcing the duties of the Board of Directors, in addition to enforcing the duties of the Board through special executive procedures and through market and shareholder mechanisms or the General Assembly meetings of the company.

5. The oversight and legal frameworks in eight Arab countries encourage the reporting of immoral and illegal actions. Applicable legislations in seven other Arab countries do not include any reference to this issue as the case in Jordan, Algeria, Saudi Arabia, Syria, Palestine, Morocco and Libya.

6. Practices and the general legislative framework governing the Arab capital markets allow for the regulators to take a set of actions to deal with violations in respect of related party transactions. It is evident that the focus in enforcement procedures is through direct measures by the Securities Authorities or through a lawsuit initiated by the shareholders. 13 member states of UASA use both approaches mentioned above. Other countries resort to class actions or derivative suits.

7. Financial fines are imposed to address violations in related party transactions as the case in 12 Arab countries. Other sanctions imposed include administrative sanctions and the cancellation of the relevant transaction. On the other hand, other countries including Morocco, Oman, Kuwait, Egypt and Iraq, impose criminal actions. Other actions that may be take include prosecution before the courts as the case in Jordan and Iraq.

### Main recommendations

The main policy recommendations as the following:

1. Regulators should consider broadening the legal definition of "related parties" to capture relevant

transactions that present a risk of potential abuse. The definition should be sufficiently harmonized in different bodies of law and regulations such as company and securities law, listing rules and accounting standards. Consistency in the national definition of a "related party", including that contained in the corporate governance code, should be sought.

2. Regulators should urge companies and their boards to develop and make public a policy to monitor related party transactions (either standalone or as part of a broader policy on conflicts of interest) that should be subject to an effective system of checks and balances. This policy should be disclosed to shareholders and should make clear which RPTs are prohibited and accepted, as well as the circumstances in which they can be considered as acceptable.

3. Regulators might wish to consider prohibiting certain types of transactions that do not generate value for companies and tend to create situations of abuse of company assets such as loans to executives and board members. The legal and regulatory framework should clearly specify which, if any, related party transactions are prohibited and which transactions require explicit approval of the relevant oversight entity such as the securities regulator.

4. Regulators should review existing shareholder and board approval processes to ensure that they take into consideration the ownership context of MENA listed companies, notably the presence of concentrated ownership and company groups. Special consideration should be given to whether RPT approval processes involving controlling shareholders can be effective and what mechanisms need to be introduced to limit the risk of tunneling.

5. Regulators may wish to introduce additional mechanisms to ensure controlling shareholders may not approve illegitimate RPTs detrimental to the interests of minority shareholders. Regulators may consider giving special rights to disinterested minority shareholders to review and approve RPTs (i.e. majority of the minority) in order to further limit the risk of minority shareholder expropriation. If this regulatory option is adopted, the regulator must be able to clearly identify interested and disinterested shareholders.

6. The timing of shareholder approvals of RPTs should be reviewed since experience demonstrates that ex-ante, as opposed to ex-post, approvals are most effective. Where shareholders are responsible for approving RPTs, they should have the right to request independent valuations or further information on proposed transactions allowing them to judge their fairness and potential impact on company affairs.

7. In jurisdictions that rely on board approvals of RPTs, the role of independent directors should be enhanced and they should have the ability to request advice from independent experts. An important precondition for this recommendation to be practically useful is the introduction of adequate criteria for appointment of independent directors, including limits on board terms and the number of consecutive board memberships a director may have.

8. The definition of director duties should be clear and should facilitate both private and public enforcement action where warranted. The legal and regulatory framework should explicitly define director duties in the context of company groups. Directors should owe a duty of care and loyalty to all shareholders.

9. The regulatory framework should be reviewed with a view to include provisions addressing the materiality of RPTs, including the adoption of thresholds for disclosure and approval by shareholders or boards. In addition to materiality thresholds, regulators might wish to consider differentiating between recurrent and non-recurrent transactions in order to focus on those that might represent the highest economic impact and hence risk to companies.

10. Enforcement entities should have access to relevant and timely information on related parties. Policymakers should facilitate enforcement efforts, giving relevant entities the necessary legal powers and capacity to effectively enforce rules against illegitimate RPTs or assist shareholders wishing to engage in private enforcement. Further consideration might also be given to the type of penalties that can be issued by the relevant enforcement entities and their ability to support private enforcement efforts where appropriate.

11. In jurisdictions where the external auditor plays an important role in the oversight and disclosure on RPTs, it is especially important to assure that the auditors are sufficiently independent and qualified to deliver an opinion to the board or shareholders. The legal responsibilities of auditors should be clearly outlined in the regulatory framework. Limitations on consulting services that auditors may provide to firms to which they also provide assurance services and limits of audit terms, as adopted worldwide, are useful in this regard.

12. The legal and regulatory framework should ensure that legal action, including through courts and alternative dispute resolution, does not prevent minority

shareholders from seeking legal redress quickly and cost-effectively. Considering the minimal level of RPT related investigations and prosecutions reported in the region, it is recommended that the capacity of securities regulators and courts to identify, analyze and prosecute illegitimate RPTs should be further enhanced.

13. Related party transactions should be disclosed to the market in a way that facilitates informed decision making by shareholders and stakeholders. Material related party transactions should in particular be disclosed in the quarterly or annual reports of companies, including the terms on which they were concluded as well as the approval processes which they were subject to. Existing electronic disclosure platforms developed by MENA stock exchanges and securities authorities could be a useful mechanism for facilitating continuous disclosure.

14. Finally, regulators may decide that a simplified regime should apply to smaller capitalized or non-listed companies. Some flexibility in the RPT regime may be maintained by setting minimum approval and disclosure requirements by law and allowing companies to define the specific modalities which suit their individual situation over and above such minimum requirements. Public disclosure of these modalities is crucial to ensure that all shareholders and potential investors are aware of company policies for dealing with conflicts of interest generally and RPTs specifically.

# The fundamentals and evolution of market surveillance

Recent dramatic changes in technology, regulation and global economics have revolutionized the securities markets.

Most exchanges want to expand their offerings as well as attract volume and liquidity to their markets. At the same time, institutional and retail participants are more likely to place their assets in a marketplace that is run in a fair and orderly manner. Fair markets are free from manipulative and deceptive behavior, with clear rules that are enforced fully and without bias. Orderly markets are those which are reliable, without unreasonable price fluctuations or errors. Without these characteristics both investors and listed companies will stay away, starving the exchange from both directions. To this end, an effective surveillance program must play a key role in every exchange's strategy for the future.

Recent dramatic changes in technology, regulation and global economics have revolutionized the securities markets. Dynamic exchanges have adapted quickly and launched new products and services to meet new customer demands. But to remain successful, exchanges must also ensure that their surveillance program keeps pace with change. The minimum requirements include a full consolidated audit trail and real-time, automated and cross-product/cross-market monitoring.

Two decades ago, surveillance was a manual process. Exchanges would do spot checks for irregularities. Occasionally, a participant would tip off the exchange that someone was engaging in manipulative behavior, and that would lead to an investigation. Often an exchange official could get a feeling that something unusual was occurring in the market just from walking around the trading floor. As the market evolved and became increasingly electronic, the surveillance officer's job moved into the digital realm. Exchanges began to do reporting-based surveillance: they would run sets of report scripts against their trading data to identify different types of activities.

Over time, however, both the markets and the reports became much more complex. By the late 1990s and 2000s, electronic and algorithmic trading became the norm, opening the market to new entrants that implemented an array of strategies. Order sizes decreased and volume increased, so there was far more market data to analyze. Perhaps even more significant, trading became much faster, and orders could be executed in sub-millisecond time frames.



**Tony Sio**

Head of Sales, Market Surveillance Asia,  
NASDAQ OMX

Nowadays exchanges cannot wait until the end of the day or the week to analyze trading activity. They need to be alerted instantly when a market event occurs. A failure to take action could unleash extreme volatility, spread contagion to other markets, cause huge losses and erode investor confidence. A prime example is the Knight Capital case, in which the company lost about USD 170,000 per second over the course of 45 minutes. FEAS exchanges should also take note of some of the lessons from the U.S. flash crash.

Modern surveillance technology uses data mining and pattern recognition techniques to monitor the markets. First, it combs through large amounts of historical data and builds a profile of normal, day-to-day behavior. Then it captures trading activity in every product listed on the exchange in real time, and compares it with

the norm to detect certain types of events. As such, anomalies can be uncovered quickly, and exchanges can immediately make a decision to launch a preliminary investigation or even halt the market.

Historically, exchanges' surveillance operations have focused on market integrity and market orderliness separately. Rule breaches as well as unlawful and dishonest conduct relate

To stay ahead, modern exchanges must profile market participants in real time down to the most granular level of activity so they know their customers, what they trade, what is normal and what is not. They can set alerts for unusual events as well as monitor and identify unexpected changes per-instrument, per-participant or across the full market. To illustrate, a sudden change in a trader's order-to-cancel ratio to a

Meanwhile, there is much to learn from exchanges in more developed markets. Many have mastered cross-product surveillance, but cross-market surveillance remains a major challenge. Globalization and fragmentation allow market participants to seek opportunities in multiple assets and geographies, and take advantage of differences in structure, pricing, latency, hours and order types. The same security may be traded on multiple venues, but each venue only has responsibility for surveillance of its own marketplace. No one has overall responsibility for surveillance across all related instruments, and no one has a complete view of the transactions across all venues. NASDAQ is working with many of these markets to help resolve these challenges.

Storing and handling data is a struggle, and that has implications for surveillance. In the last few years, data volumes have grown from about 10 million messages per day in some markets to more than 250 million as more orders are being entered and cancelled. NASDAQ's system can handle billions of order book events added to the database daily, and in some installations has over 20 years of data. A decade ago, when exchanges got an alert, they would look at the order book at specific points in time and a few seconds either side of that. Nowadays, a few seconds either side of an alert, they are probably covering about 20,000 events in a single instrument.

As exchanges grow and their markets develop and mature, they must adapt their surveillance program accordingly.

to market integrity; errors, system stability and market activity relate to market orderliness. The ability to reconstruct every aspect of the market at any point in time, and at the very lowest level of granularity, is the foundation for monitoring both areas. Trade and top-of-book data is not sufficient to accurately understand modern surveillance issues. As such, regulators are devoting more attention to order level manipulation, and they have made examples of some firms. Notably, the Trillium, Swift Trade, and Panther Energy Trading cases together triggered over USD 6.5 billion in fines.

level that is highly out of sync with the market could signal market manipulation. A strong correlation between broker-dealers' proprietary trades and clients' trades could indicate front-running. A sudden price movement in particular a company's shares in the absence of a news release could signal insider trading.

### Further Evolution and Continuous Learning

As exchanges grow and their markets develop and mature, they must adapt their surveillance program accordingly. Cross-product surveillance is becoming increasingly important as exchanges expand their offerings. Those that list multiple asset classes should have the capability to monitor the correlations between them for signs of market abuse. For example, a participant may try to manipulate the price of a particular stock in order to make a profit on an options contract on that stock. Alternatively the manipulator may be profiting through convertible bonds, OTC contracts, or other linked products.

Trade data is important, but to accurately understand market behavior, systems also need to take in many other types of external information including news, economic data such as interest rate changes, and even weather forecasts. At this level, it is not just a question of storing the information correctly, but having the appropriate tools that connect the huge amount of disparate events to allow an analyst to automatically detect, visualize and understand market activity.

In the past few years NASDAQ has invested in upgrading our systems to meet these challenges, both in our own markets and those of our technology clients. We have created new surveillance-specific data models, visualization tools and complex algorithms to detect abhorrent behaviors. However, we recognize it is not just about technology: we have also reviewed our surveillance practices and processes.

In conclusion, exchanges need an effective surveillance program in place to ensure market integrity, maintain investor confidence and grow the business. The program should comprise strong rules and regulations, education and training as well as technology capable of generating real-time alerts across multiple asset classes. As the market develops and matures, the surveillance program also must evolve to accommodate various players, different trading strategies and ever increasing volumes of data.

## Best practices

**Rules and enforcement.** Ensure market participants understand the market rules and penalties for infringement. Moreover, be prepared to enforce them.

**Data and technology.** Build a surveillance program on top of a centralized data repository containing a consolidated audit trail of all events that occur in the market. Reconstruction of historical activity is essential.

**Real-time vs. post-trade surveillance.** Monitor events that could lead to market intervention in real time. For example, a significant price movement in a company's shares could indicate material news has been released or has leaked out. It also could be the result of a fat finger error or a malfunctioning algorithm. In such cases, the stock must be halted to level the playing field. Further, ensure participants know under what circumstances the exchange will halt trading and when trading will resume. Other monitoring may be done more effectively post trade once the trader's intent is clear.

**Understand manipulation and know your customers.** Monitor for a range of manipulative behaviors including front running, layering, spoofing, bait and switch, and insider trading. Some factors that need to be considered include the size of the firm, whether they are regulated in their own right or exchange members, and whether they use brokers for their executions. Understanding their trading model is not enough. Exchanges need to understand how they are going to trade, their appetite for risk and their internal controls.

## Country Focus: Croatia

# FEAS Annual Meetings

will be hosted by Zagreb Stock Exchange this year on  
November 19-20



## About Croatia

Croatia is a Central European and Mediterranean country, bordering Slovenia in the west, Hungary in the north, Serbia in the east and Bosnia and Herzegovina in the south; the country also has a long maritime border with Italy in the Adriatic Sea. Croatia has an unusual shape (similar to a croissant) that is unlike any other country in the world.

Croatia covers a land area of 56,691 square kilometers and has a population of about 4.29 million people (2011 census). Almost 90% of the population is Croat (the majority of whom are Roman Catholics), but there are also Serbian, Bosnian, Hungarian and Italian minorities. The main population centers are Zagreb, the capital (with a population of just under 800,000), Osijek in the northeast (population: 107,000), and the ports of Rijeka (population:

128,000) on the northern part of the coastline, and Split (population: 178,000) towards the south. Other well-known towns include Dubrovnik, Makarska, Porec, Rovinj, Opatija, Zadar and Sibenik.

Croatia has an amazing 5,835 km of coastline, 4,057 km of which belongs to islands, cliffs and reefs. There are 1,185 islands in the Adriatic, but only about 50 are populated.

## Croatia – Economic Context

Croatia entered the European Union (EU) on July 1, 2013 as the 28th member state. The government has been striving to raise Croatia's competitiveness to compete in the

large EU market and maximize the opportunities that membership brings, especially the absorption of a large amount of EU Structural Funds.

Before the global financial crisis of 2008-09, the Croatian economy grew at a healthy 4-5% annually, incomes doubled, and economic and social opportunities dramatically improved. The prolonged crisis is testing this progress, as well as Croatia's aspirations, as the country is now entering its sixth year of recession, having lost over 12 % of its output.

Gross Domestic Product (GDP) is estimated to fall by 0.5% in 2014. There is more optimism about the prospect for growth in 2015, with exports projected to pick up in the

Croatia entered the European Union (EU) on July 1, 2013 as the 28th member state.

## Country Focus: Croatia

Eurozone and private investments expected to increase. The privatization of large state-owned enterprises (SOEs) and the availability of EU funds (in net terms about 2% of GDP per year) should also help growth prospects in the medium term. The structural reforms that the Government has launched for labor, pension, and social benefits - as well as areas in the investment climate - could help stimulate job creation, productivity, and social cohesion. However, the outlook for the short term in Croatia remains difficult.

Unemployment rose to 17% at the end of 2013 and youth unemployment, at over 40%, remains one of the highest in Europe. The private sector has been bearing the brunt of the crisis with most jobs lost in manufacturing, construction, and trade. Public debt is estimated to have risen above 64% of GDP in 2013 and external debt will likely be close to 103% of GDP.

Before the recession, poverty was below 10% and mainly affected those without a job for more than three years and low-skilled workers but the protracted recession has led to an increase, and the poverty rate now stands at 18%. Today, due to the



Croatia spends 7.8% of its GDP on health, among the highest for new EU members.

prolonged recession, the profile of the poor is changing, with normally economically active, better educated and younger people living in urban areas falling into poverty.

The Croatian economy is less competitive than its peers. From

2007 to 2013, Croatia's private sector share of GDP remained at 70% - lower than its EU peers. To achieve private sector-led growth and faster EU convergence, actions are needed to liberalize the labor market, jump-start enterprise restructuring and the kind of new business creation and old firm exits required for the economy to reorient itself toward one reliant on knowledge, innovation, and transit-related services to maximize its geo-economic advantage as Europe's transport hub.

Croatia spends 7.8% of its GDP on health, among the highest for new EU members. Like most other European countries, Croatia is expecting profound changes in its population structure over the next 50 years, as the elderly population grows and the need for health services and long-term care services rise. A challenge is to provide better health services and improve efficiency while reducing public spending on health.



## Country Focus: Croatia

Substantial reforms and improvements have been made in the Croatian education sector, but advances have been slow in improving the efficiency and the quality of higher education to better respond to the needs of the labor market. While more children and youth are enrolling in school programs (60% at the pre-school level, near universal enrollment at the primary level, and 88% at the secondary level), Croatia's enrollment levels remain below the EU and the Organization of European Cooperation and Development (OECD).

Croatia has the geopolitical advantage of being situated along three pan-European transport corridors linking the EU and South East Europe and the Croatian authorities have invested heavily in developing this transport network. Prior to its accession to the EU, Croatia launched major reforms for the railway sector, in compliance with EU directives. However, the sector still, faces numerous institutional and organizational issues and challenges. Croatia's accession to the EU provides unique opportunities for the country to modernize its key international corridors through the use of EU Structural Funds, and to open up the railway sector to increased investment, market competitiveness, and efficiency.

Croatia remains an ecological treasure in Europe, with 47% of its land and 39% of its sea designated as specially protected areas and areas of conservation. Croatia boasts 19 National and Nature Parks, with some such as the Plitvice Lakes National Park - designated as United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage sites. Croatia's natural beauty draws in millions of tourists each year, with tourism revenues representing around 15% of the country's GDP.



Croatia's accession to the EU provides unique opportunities for the country to modernize its key international corridors through the use of EU Structural Funds.

Preservation of the environment is high on the development agenda and has been a requirement for European Union membership.

With EU membership, Croatia became party to the 2020 Climate and Energy Package, a set of binding legislation that aims to ensure that the EU meets its ambitious climate and energy targets for 2020. Croatia is doing well on greenhouse gas emissions (GHG). Today these emissions are smaller compared to the baseline of 1990 - amounting to less than 0.1 percent of global emissions. On the other hand, Croatia needs to put more effort into scaling-up renewable energy resource (RER) and energy-efficiency (EE) programs to alleviate energy security concerns and improve access to reliable and affordable energy imports. (Source: World Bank, [www.worldbank.org](http://www.worldbank.org))

### Interesting facts about Croatia

- Nikola Tesla, the inventor of the modern alternating current (AC) electricity supply system was born in Croatia. (He refused the Nobel Prize because of animosity towards Edison, with whom she was supposed to share it.)
- The White House was built using stones from Croatia's island Brac, as well as Parliament House in Vienna and Budapest.
- Neckties come from Croatia – during the Thirty Years' War (1618–1648) Croatian mercenaries from the Croatian Military Frontier in French service were wearing their traditional small, knotted neckerchiefs, and aroused the interest of the Parisians. Due to the slight difference between the Croatian word for Croats, Hrvati, and the French word, Croates, the garment gained the name cravat (cravate in French).

## Country Focus: Croatia

- The most preserved Roman amphitheater is located in Pula and is the only one in the world with all three rows completely preserved.
- Dalmatian dog (seen in the movie 101 Dalmatians) got the name after Dalmatia, a south coastal region in Croatia.
- The ballpoint pen was invented in 1906 by Slavoljub Eduard Penkala, a naturalized Croatian engineer and inventor. He built a pen-and-pencil factory that was one of the biggest in the world at the time, selling in around 70 countries. This company, now called TOZ Penkala, still exists today. He also invented the thermos flask, the rotating toothbrush, and eighty other inventions.
- In 1981 a group of scientists from the research institute of the Pliva pharmaceutical company synthesized and patented azithromycin, a new type of wide-spectrum antibiotic which could stay in the body for long periods.
- The naval officer and inventor Ivan Blaz Lupis built a prototype of an explosive weapon which could be used to attack enemy ships in 1861. A factory in Rijeka developed his invention and was the first in the world to begin mass production of torpedoes which were completely like those used today.
- The polymath, inventor, philosopher and lexicographer Faust Vrancic was the first person to stretch fabric over a wooden frame to make a parachute, with which he made a jump in Venice in 1617. He described it in detail, along with 56 more inventions, in his work New Machines, and called the parachute Homo volans (Flying Man).

Croatia remains an ecological treasure in Europe, with 47% of its land and 39% of its sea designated as specially protected areas and areas of conservation.



- Croatia is a country with no significant skiing tradition. However, the most successful skier in the history of winter Olympic Games is the Croatian skier Janica Kostelic - she won four Olympic golden and two silver medals.
- The smallest town in the world according to Guinness World records is Hum in the central part of Istria. It has only 23 inhabitants.

# FEAS Region Statistics

## Domestic Market Capitalization (USD million)

Exchange	2014							
	January	February	March	April	May	June	July	August
Abu Dhabi Securities Exchange	118,128	124,383	123,409	125,653	132,125	115,329	126,124	126,068
Amman Stock Exchange	27,462	26,791	26,711	26,775	27,015	26,445	26,538	25,820
Bahrain Bourse B.S.C	19,183	20,334	20,100	21,518	22,000	21,522	22,207	22,304
Baku Stock Exchange	29	29	29	29	29	29	-	-
Banja Luka Stock Exchange	2,366	2,385	2,327	-	2,284	2,328	2,328	2,376
Belgrade Stock Exchange	2,360	2,456	2,395	2,487	2,498	2,379	2,385	2,400
Borsa Istanbul	199,310	204,893	226,342	244,875	263,337	258,556	267,280	256,965
Bucharest Stock Exchange	23,585	23,759	23,276	23,946	23,967	25,055	25,611	-
Bulgarian Stock Exchange	7,257	7,732	7,858	8,177	8,007	7,323	7,018	6,998
Damascus Securities Exchange	817	802	801	795	796	861	870	-
Egyptian Exchange	65,187	70,762	67,663	68,485	66,864	67,044	70,322	73,523
Georgian Stock Exchange	931	953	905	942	958	1,155	1,095	1,049
Iran Fara Bourse	27,420	25,516	26,641	26,569	24,960	21,096	23,277	23,042
Iraq Stock Exchange	9,612	9,633	9,759	9,965	10,134	8,181	7,911	8,679
Kazakhstan Stock Exchange	26,919	24,108	23,660	24,361	23,160	24,129	26,641	27,365
Kyrgyz Stock Exchange	170	161	168	183	241	242	182	181
Lahore Stock Exchange	60,000	57,332	63,548	67,148	68,148	68,540	69,228	63,568
Macedonian Stock Exchange	-	2,165	2,078	1,976	1,978	1,949	1,918	1,924
Montenegro Stock Exchange	2,602	2,704	2,707	2,762	2,605	2,623	2,646	2,770
Muscat Securities Market	37,701	37,779	36,916	36,715	37,611	38,746	39,423	40,017
NASDAQ OMX Armenia	49	173	166	146	236	238	239	-
Palestine Exchange	3,534	3,496	3,342	3,196	3,223	3,120	3,145	3,227
Tehran Stock Exchange	163,467	157,614	150,902	148,238	142,312	130,854	130,513	125,961
Tirana Stock Exchange	-	-	-	-	-	-	-	-
Zagreb Stock Exchange	20,727	21,487	20,969	20,864	21,109	22,318	22,206	22,584
<b>Total</b>	<b>818,818</b>	<b>827,447</b>	<b>842,669</b>	<b>865,806</b>	<b>885,599</b>	<b>850,062</b>	<b>879,106</b>	<b>836,821</b>

## Value of share trading (USD million)

Exchange	2014							
	January	February	March	April	May	June	July	August
Abu Dhabi Securities Exchange	6,241.0	4,619.6	3,340.0	6,186.0	4,827.8	3,451.8	2,133.5	1,177.6
Amman Stock Exchange	4,363.9	316.5	287.1	286.1	196.5	258.7	144.6	172.4
Bahrain Bourse B.S.C	75.8	84.7	85.1	120.9	134.5	40.1	17.5	34.6
Baku Stock Exchange	136.3	133.9	21.5	595.9	31.6	16.1	-	-
Banja Luka Stock Exchange	3.1	3.0	0.9	-	0.7	0.7	0.7	0.0
Belgrade Stock Exchange	53.2	8.9	11.1	15.4	9.4	5.9	19.9	7.8
Borsa Istanbul	34,532.7	25,762.3	27,135.9	33,930.0	33,574.2	33,542.5	29,628.1	33,697.6
Bucharest Stock Exchange	153.4	124.1	123.7	105.1	155.8	132.1	206.9	-
Bulgarian Stock Exchange	122.2	51.2	32.4	21.0	26.4	41.0	12.8	6.9
Damascus Securities Exchange	0.4	0.5	0.5	0.5	0.3	1.0	1.0	-
Egyptian Exchange	2,078.0	2,616.3	3,454.9	2,117.7	2,550.1	2,160.3	1,317.9	2,270.8
Georgian Stock Exchange	1.2	1.2	1.1	1.2	1.2	1.4	1.3	1.3
Iran Fara Bourse	719.1	363.1	971.0	629.0	1,011.0	1,105.0	242.0	240.0
Iraq Stock Exchange	22.9	79.0	103.8	59.2	30.9	121.8	69.2	93.3
Kazakhstan Stock Exchange	24.8	22.4	17.3	16.2	10.6	18.2	28.5	19.6
Kyrgyz Stock Exchange	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0
Lahore Stock Exchange	7.8	6.5	7.2	10.7	6.5	9.0	3.4	3.3
Macedonian Stock Exchange	-	3.7	5.2	2.8	5.3	4.3	1.6	1.6
Moldovan Stock Exchange	0.1	0.2	3.6	14.0	1.0	3.0	1.4	0.1
Montenegro Stock Exchange	7.2	5.1	61.7	2.6	2.5	4.5	2.7	4.9
Muscat Securities Market	817.9	550.4	421.9	639.8	376.2	543.9	321.9	337.2
NASDAQ OMX Armenia	0.0	7.2	0.0	0.0	64.8	0.1	0.1	-
Palestine Exchange	60.8	54.0	51.4	17.3	14.4	25.6	7.2	15.9
Sarajevo Stock Exchange	1.8	2.6	4.5	7.3	8.5	-	-	-
Tehran Stock Exchange	2,715.0	1,435.0	1,847.0	1,403.0	1,446.0	877.0	1,167.0	1,095.0
Tirana Stock Exchange	-	-	-	-	-	-	-	-
Zagreb Stock Exchange	46.6	46.3	46.1	55.3	55.5	44.4	39.0	29.5
<b>Total</b>	<b>52,185.1</b>	<b>36,297.7</b>	<b>38,034.9</b>	<b>46,237.1</b>	<b>44,541.5</b>	<b>42,408.3</b>	<b>35,368.2</b>	<b>39,209.3</b>

## Number of listed companies

Exchange	2014							
	January	February	March	April	May	June	July	August
Abu Dhabi Securities Exchange	65	65	65	65	65	65	65	65
Amman Stock Exchange	239	237	239	237	237	237	237	237
Bahrain Bourse B.S.C	47	47	47	47	47	47	47	47
Banja Luka Stock Exchange	672	663	651	0	650	647	647	643
Belgrade Stock Exchange	8	8	8	8	8	8	8	8
Borsa Istanbul	263	263	263	260	260	260	260	255
Bucharest Stock Exchange	82	82	83	83	83	83	84	0
Bulgarian Stock Exchange	379	377	376	376	378	376	375	374
Damascus Securities Exchange	22	22	22	22	22	23	23	0
Egyptian Exchange	236	236	237	237	237	239	240	239
Georgian Stock Exchange	3	3	3	3	3	3	3	3
Iran Fara Bourse	1	1	5	2	256	259	124	121
Iraq Stock Exchange	68	70	71	72	73	71	61	67
Kazakhstan Stock Exchange	81	80	80	79	78	80	78	77
Kyrgyz Stock Exchange	20	20	20	20	20	21	21	21
Lahore Stock Exchange	433	433	433	433	434	432	432	432
Macedonian Stock Exchange	0	116	116	116	116	116	116	116
Moldovan Stock Exchange	9	9	9	9	9	9	9	9
Montenegro Stock Exchange	62	63	64	64	64	67	67	67
Muscat Securities Market	115	116	116	116	116	118	118	118
NASDAQ OMX Armenia	15	16	16	16	16	16	16	0
Palestine Exchange	49	49	49	49	49	49	49	49
Sarajevo Stock Exchange	0	0	0	0	0	0	0	0
Tehran Stock Exchange	315	316	317	317	319	320	320	314
Tirana Stock Exchange	0	0	0	0	0	0	0	0
Zagreb Stock Exchange	384	196	200	198	200	199	198	197
<b>Total</b>	<b>3,568</b>	<b>3,488</b>	<b>3,490</b>	<b>2,829</b>	<b>3,740</b>	<b>3,745</b>	<b>3,598</b>	<b>3,459</b>

**VISIT THE FEAS WEBSITE**



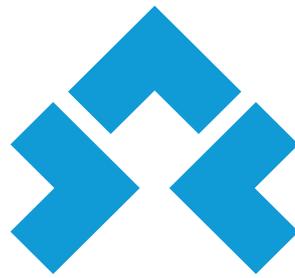
- Trading statistics
- Company data
- Price information
- Ratios
- and much, much more...

**[www.feas.org](http://www.feas.org)**

Subscribe to FEAS RSS Feed at  
[www.feas.org/feed/index.aspx](http://www.feas.org/feed/index.aspx)  
for the latest news

**FEAS**

FEDERATION OF EURO-ASIAN  
STOCK EXCHANGES



# Turnkey Capital Markets

IS Investment is the only investment institution in Turkey,  
offering fast, reliable and effective access to capital markets anywhere in the world.



Contact >>

For Turkish Fixed Income Markets

Serkan Aran

saran@isinvestment.com

serkan@bloomberg.net

+90 212 350 23 24

İlkay Dalkılıç

idalkilic@isinvestment.com

ilkay@bloomberg.net

+90 212 350 23 14

[www.isinvestment.com](http://www.isinvestment.com)

**İŞ INVESTMENT** 

| BROKERAGE & TRADING | RESEARCH | CORPORATE FINANCE | INVESTMENT ADVISORY | ASSET MANAGEMENT |

A subsidiary of İşbank

TÜRKİYE  BANKASI