

MARKET view

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A player to count on

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»It's very important for us to reach retail investors and make it easy for them to access the BVC.»

Juan Pablo Córdoba,
CEO of Bolsa de Valores de Colombia (BVC)

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PHOTO: GETTY IMAGES

Asian exchanges seeks cooperation

Exchanges in Thailand, Malaysia, Singapore, the Philippines, Indonesia and Vietnam plan to have a linked trading platform. The six exchanges have agreed to establish a joint task force to develop action plans for future development. The goal is to establish a common trading board for cross listings, cross-border trade and increase the attractiveness of Asian markets for foreign investors, although it may be a challenging process.

"If we are able to combine the judicious use of capital alliances with encouraging broader and wider adoption of common technology, that can bring markets closer together faster," says SGX Chief Executive Hsieh Fu Hua.

OMX trading solutions launched

The Saudi Stock Exchange (Tadawul), PLUS Markets Group plc and Zagreb Stock Exchange (ZSE) successfully launched new high capacity trading solutions provided by OMX.

The Saudi Stock Exchange operates one of the largest stock markets in the world and is the single largest stock market in the Middle East region.

London-based PLUS is a recognized investment exchange and one of only five exchanges granted Trade Data Monitor status by the Financial Services Authority in the UK. PLUS covers all London-listed securities, 70 AIM securities that dual trade on PLUS and some 210 PLUS-quoted companies.

ZSE is a leading stock exchange in Southeastern Europe.

Aite predicts rapid MTF adoption in Europe

With most European countries in compliance with the strict requirements of MiFID, which became effective last November, attention is moving to broader market changes, and in particular, the question of which alternative trading systems will garner market share.

Currently, less than 3 percent of European trading volume goes to multilateral trading facilities (MTFs) while almost 70 percent of Europe's annual trade value is accounted for by the LSE, NYSE Euronext and Deutsche Börse, according to Sang Lee, managing partner with Aite Group.

However, as automation of the trade life cycle becomes even more important to comply with MiFID compliance reporting, Aite forecasts rapid growth of European MTFs and dark pools, which sell anonymity, speed, low market impact and low execution fees. Lee predicts that MTFs could account for more than 20 percent of European trade volumes by the end of 2011.

OMX to create global energy derivatives market

OMX is acquiring Nord Pool ASA's clearing and consulting operations and international derivatives products and establishing a business unit for international energy derivatives headquartered in Oslo. This transaction creates a foundation to geographically expand within Nord Pool's core area of power and for enhancing the existing offering. The initial ambition is to build a leading European market for CO2 products. Nord Pool Clearing will be combined with the OMX clearing organization.



PHOTO: ISTOCKPHOTO

NASDAQ, NYSE in Beijing

In December, both NASDAQ and NYSE Euronext opened representative offices in Beijing, with the goal of strengthening their ties to Chinese business and attracting new corporate listings.

Commenting on the opening of NYSE's Beijing office, US Treasury Secretary Henry M. Paulson Jr. said, "As China opens to foreign financial services institutions, China is the big gainer. International expertise coming to do business here provides jobs and training for Chinese professionals, building expertise here that results in more competitive financial markets which spread the benefits of economic growth more broadly among the Chinese people."

NASDAQ CEO Robert Greifeld says that NASDAQ entered China more than 10 years ago, and the establishment of the Beijing representative office symbolizes that NASDAQ's commitment to China has entered a new era.



PHOTO: ISTOCKPHOTO

Exchange consolidation continues

NASDAQ announced in November that it has agreed to acquire the Philadelphia Stock Exchange Inc. a month after acquiring the Boston Stock Exchange. Both deals will give NASDAQ a foothold in the fast-growing options market. In December, the Toronto Stock Exchange made a deal to combine with the Montreal Exchange, marrying Canada's operators of stock and derivatives markets. The new integrated TMX Group will be based in Toronto, though the derivatives exchange will remain in Montreal. Also in December, Eurex completed its acquisition of the International Securities Exchange.

OMX signs new technology deals

OMX announced new technology agreements with Bombay Stock Exchange (BSE), Tokyo Commodity Exchange (TOCOM), Singapore Commodity Exchange (SICOM) and Agora-X, a new US based OTC commodity marketplace.

BSE, India's largest stock exchange, will implement a system from OMX that will serve as their new trading and clearing platform for derivatives and cash securities. For both TOCOM and SICOM, OMX will deliver an integrated trading and clearing system for commodity derivatives. TOCOM is OMX's first customer in Japan.

OMX will provide Agora-X with a complete hardware, software and operations solution to support their new ECN platform, which is scheduled for launch in mid-2008.

MiFID pushes European markets to innovate

The European Commission's Markets in Financial Instruments Directive (MiFID), which went into effect last November, represents a significant change for Europe's capital markets. By blurring the traditional distinction between markets and firms, MiFID has instantaneously introduced more competition to the market and, in the process, caused all market players to question and review their business models.

Initiatives to attract liquidity have already emerged, including Turquoise (which is not yet operational), and Chi-X, while Boat is offering trade publication services. This competition forces the traditional exchanges to innovate, both in terms of the technology platforms they operate and in the

»While the early signs look positive, it is still too soon to declare MiFID a success.«

services they offer to their members. Exchanges have realized that the game has changed, and they need to continuously improve and quickly adapt to ensure that liquidity does not move away to these new venues.

TO DELIVER BEST execution, the focus cannot be strictly on price, but must also include cost, speed, likelihood of execution and settlement, size and nature of the order. New tools are needed to support a deeper level of order parameters and access to key market data. Exchanges need superior technology, excellent pricing and services that will help their members to identify and prove best execution.

Such services include reports for

best execution policy audits, providing detailed information on prices and the cost of trading, and tools for benchmarking equity trades. Exchanges are also expected to deliver always lower latency, improving the ability for members to conduct algorithmic trading.

The impact of MiFID will not be restricted to Europe. Given the new unified approach to capital markets, European exchanges can more easily collaborate with other regions in the world as a group rather than on an individual, country-by-country basis.

For example, a more coherent, global-level discussion can take place between the European Union and the US on areas of mutual interest. The United States Securities and Exchange Commission is discussing with the European Union the possibility of making it easier for EU firms and markets to provide services to investors in the US and vice versa. While the exact form of the potential collaboration between the EU and the US is still unclear, there is talk about mutual recognition, at a high level, of the two market frameworks.

MIFID PREPARES EUROPE'S exchanges very well for globalization, and indeed other countries, including Japan and China, are adopting certain elements of MiFID.

Change is always difficult, and very often only the negative aspects of change are seen initially. Some European markets that have previously been protected by concentration rules may have been concerned. But from an initial fear of MiFID, these markets have generally adapted to the idea and are seeing the possibilities that MiFID brings. The transformation of the exchange industry brings many new opportunities to create marketplaces that can effectively compete across borders. For regulated markets,

multilateral trading facilities and systematic internalizers, this puts high demands on business expertise, regulatory knowledge and an efficient infrastructure.

While the early signs look positive, it is still too soon to declare MiFID a success. The key benchmark will be investor benefit. Are investors getting the best execution? Are they well informed? Do supervisors have the necessary information and resources to monitor the more complex trading environment?

MiFID should be viewed as an ongoing process – the European capital markets will rapidly evolve over the next few years. What is certain is that MiFID will drive continuing innovation, and markets will never be the same again. ■

Ludovic Aigrot,
Head of EU Affairs, OMX
Chairman, MiFID Task Force, Federation
of European Securities Exchanges



PHOTO: AGNES BOEDT

A land of new opportunity

Latin American exchanges adapt global practices to meet the needs of domestic and foreign investors.

BY SHERREE DECOVNY PHOTOS GETTY IMAGES

Latin America has weathered a series of economic crises over the years that have caused the popularity of the region's markets to wax and wane. But for now, Latin America is in vogue. As with other emerging markets, a growing middle class is searching for diversified investment opportunities. The potential for high returns is attracting foreign investors, and local companies are more amenable to raising capital in their own markets instead of abroad. In response, exchanges are bolstering their infrastructure to accommodate the demand.

Economic stability and proximity to the US makes México one of Latin America's premier markets, and Bolsa Mexicana de Valores (BMV) is among the most active equities markets in region. In 1998 BMV created Mercado Mexicano de Derivados (MexDer) as a futures exchange.

"Over the past few years, we've been hearing about how markets such as China and India will have much to offer in the future," says Jorge Alegría, CEO of MexDer. "But México has a lot to offer now."

MexDer's flagship contract is the TIIE, México's short-term inter-bank rate. The TIIE is one of the world's most popular contracts, with more than 250 million contracts traded annually. Mexican banks use the TIIE to manage their interest rate

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Jorge Alegría,
CEO of Mercado
Mexicano de
Derivados

exposure and as a benchmark for corporate loans and mortgages. International players use it to hedge their Mexican bond and peso risk.

MEXDER'S GOALS ARE to become recognized as the reference for the pricing of both exchange traded and OTC derivatives in México, and to increase participation from arbitrageurs, hedge funds and algorithmic traders. To turn this dream into a reality, México has made some radical changes in its tax and regulatory environments. Specifically, foreign investors do not have to pay withholding tax on their holdings, and MexDer is open to remote members.

MexDer's volumes exploded when Timberhill, a leading options trading firm, joined the exchange. The exchange realized it needed to increase its capacity, upgrade its trading engines, reduce latency and improve communications. "We went from 9,000 quotes per day in January 2007 to 350,000 quotes per day at the end of October on just the IPC Price and Quotation Index option," say Alegría. "So with, say, 10 options we could be transmitting millions of quotes per day. We need to be ready to manage that volume of data."

México is advanced, compared with many other Latin American



markets such as Costa Rica. The Bolsa Nacional de Valores (BNV) in Costa Rica is the largest exchange in Central America. About USD 35 billion worth changes hands on the exchange annually. Most trading on the exchange is in tripartite repos and bonds. It is the main source of financing for the Ministry of Finance and the Central bank through public bonds. The market is focused in public bonds (91 percent of trading), and the remainder is issued by state entities such as utilities.

THE EQUITIES MARKET is tiny compared with the bond market. Currently, it is valued at USD 75 million a year, the market capitalization is about USD 2 billion, and some 10 securities are traded regularly.

"Our equity market and other markets in the region, are significantly smaller than they should be," says Matthew Sullivan, director of



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markets and strategy at BNV. "It is something that requires urgent work, given the fact that the markets should be an engine for development."

To build up its equities market, BNV has taken steps to change to a hybrid model with market makers on an automatic execution platform similar to the offerings at OMX, the London Stock Exchange and Deutsche Börse. It has worked with companies to create voluntary codes for investor relations and corporate governance. In addition, the exchange developed its own qualification exams for local brokers.

In February 2008, BNV will launch a new equities market called MAPA, which will be similar to London's PLUS. The exchange is working closely with the local chambers of commerce to educate their members about the opportunity. "MAPA is just the sort of thing the region needs," says Sullivan. "It takes ideas

from outside and adapts them to meet the requirements of the local market."

IN ADDITION TO developing the equities market, BNV is introducing new foreign exchange derivatives and fixed income products. The exchange recently launched an OTC Contract for Difference (CFD) on the country's currency, the Colón. In 2008, BNV will launch a commercial paper product as well as a repo/securities lending market.

Finally, BNV is working to build critical mass through regional alliances. Using the OMX Nordic Exchange as a model, Costa Rica is working with Panamá and El Salvador to establish a regional alliance and attract a larger number of investors and issuers. The Inter-American Development Bank is financing the project, and OMX is providing technical support and helping to develop

»There is a tremendous amount of interest in regional alliances.»

Matthew Sullivan, director of markets and strategy at the Bolsa Nacional de Valores (BNV) in Costa Rica

corporate governance and a regulatory framework.

"There is a tremendous amount of interest in regional alliances," says Sullivan. "An executive at a massive regional company recently commented that he can't come to any of the local markets at the moment because they're too small, but if we put together a regional market, he would want to be our first issuer."

Latin American exchanges are finding innovative ways to survive and thrive in an era of intense competition, consolidation, demutualization and rapidly rising volumes. "We see great potential for market growth throughout Latin America," says Steve Phillips, Latin American account manager at OMX. "The exchanges are actively pursuing new business and operating models that will increase their business and lead them to become more cost-effective and efficient." ■

BVC jockeys for leadership in Latin America

Bolsa de Valores de Colombia wants to position itself as a major market in Latin America catering to both the domestic and international investment community.

BY SHERREE DECOVNY PHOTO HERMINSO RUIZ

Bolsa de Valores de Colombia (BVC) has decided to enter the derivatives marketplace as a way to solidify its position as a major market in Latin America. With strong demands for futures and options, BVC understands that if it doesn't offer these instruments in Colombia, the business would go elsewhere.

At the same time, BVC understands the need to implement systems and trading practices that comply with international standards and have been tested in larger international markets. Most important, the technology platform must serve as a gateway for all types of participants to access the market.

In 2006, the exchange launched a new trading platform for the fixed income market. BVC also acquired an OMX trading platform for equities and derivatives. "This new top-of-the-line technology we have acquired will position BVC as a significant player in the marketplace," says Juan Pablo Córdoba, CEO of BVC. "Both our retail and institutional customers will be able to execute various types of orders securely and efficiently. The technology is scalable so it can meet our needs now and in the future as our volumes increase. In addition it is

flexible, so we can introduce new products and trading models quickly."

A demutualized exchange governed by an independent board and monitored by an independent self-regulatory organization (SRO), BVC is the only exchange in Colombia and has made great strides in developing the country's capital markets.

ACCORDING TO THE World Federation of Exchanges, Colombia's equity trading volume more than doubled from 2004-2005, albeit from a relatively low base. Moreover, the country is ranked fourth in the world in exchange-traded fixed income securities, most of which is government debt.

Around 100 companies are listed on the BVC, but the exchange has succeeded in attracting new issuers. In 2007, BVC listed seven new companies; five of them raised more than USD 3.5 billion from the local market. The recent Ecopetrol IPO raised almost USD 2.5 billion, and the issue attracted 480,000 investors.

BVC is trying actively to increase retail investor participation. "Just a small percentage of the Colombian population participates in our market, and we want to change that," says Córdoba. "It's very important for us



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Juan Pablo Córdoba, CEO of Bolsa de Valores de Colombia (BVC)

to reach retail investors and make it easy for them to access the BVC. We're working with all market participants to reduce transaction costs, not just at the exchange, but throughout the value chain."

TO GROW THE MARKET, BVC's new derivatives market will launch in mid-2008 and will offer futures and options on local interest rates, foreign exchange and stock indexes. Getting the regulation passed and putting a secure legal framework in place was a major effort, but those important steps are now complete. Now an independent central counterparty clearinghouse is being established based on international standards.

BVC is also cooperating with other Latin American exchanges to create regional investment opportunities. Brazil's Bovespa and México's Bolsa Mexicana de Valores have proposed to interconnect their two marketplaces by facilitating cross-border investments. BVC signed up as a third participant and, together with Chile and Perú, these exchanges are trying to facilitate regional investment.

Over the past four years Colombia has attracted international attention due to the many significant and positive changes taking place in the country. The capital market, led by the BVC, has been at the forefront of these efforts. With new technology, new product development, and the introduction of on-exchange derivatives, BVC is poised to become a leading exchange in Latin America. ■

The challenge: Position BVC as a major market in Latin America to attract both domestic and international investors.

The solution: Establish a derivatives market and partner with OMX to create a high-speed, low-latency platform that will meet the needs of the world's most discerning investors.

An easy fix

In the fallout from the subprime crisis, exchanges have an opportunity to inject transparency into the fixed income market.

BY SHEREE DECOVNY ILLUSTRATION MÅNS ADOLFSSON

Investors used to perceive fixed income securities as something to be bought and held in their portfolio until maturity. Now, however, these instruments are actively traded to generate an absolute return just like any other asset class. Moreover, the strong derivatives market allows investors to hedge cash market risk. While the fixed income market is mainly traded over-the-counter (OTC), market dynamics are opening up new opportunities for exchanges.

Some of the growth in the fixed income market is being driven by newly developed countries such as India and China. Economic success in these regions has led to a surplus in personal savings. Lacking a broad range of investment alternatives, people have put their money in fixed income securities.

AS THE DEMAND for fixed income securities has increased, particularly on the long end of the curve, government issuance has decreased in most countries except Japan. Long-term interest rates have fallen to artificially low levels, which has caused yield curves to flatten and sometimes invert. To many analysts, that signals a recession. "That aspect might be self-fulfilling," warns Olof Manner, Senior Vice President for Fixed Income at Öhman Bank in Sweden. "It's a case of which comes first, the chicken or the egg."

In his view, corporate bonds and index-linked products will benefit in a weaker, high-inflation economy. Companies will issue high-yield bonds instead of equity.

Until recently, structured products such as collateralized debt obligations (CDOs) have been among the fastest

»In the future, exchanges can play a key role in creating liquid markets as well as collecting and publishing fixed income trade data.»

growing segments of the market. But the subprime crisis in the US led to an implosion of that market, and it will be some time before CDOs reappear.

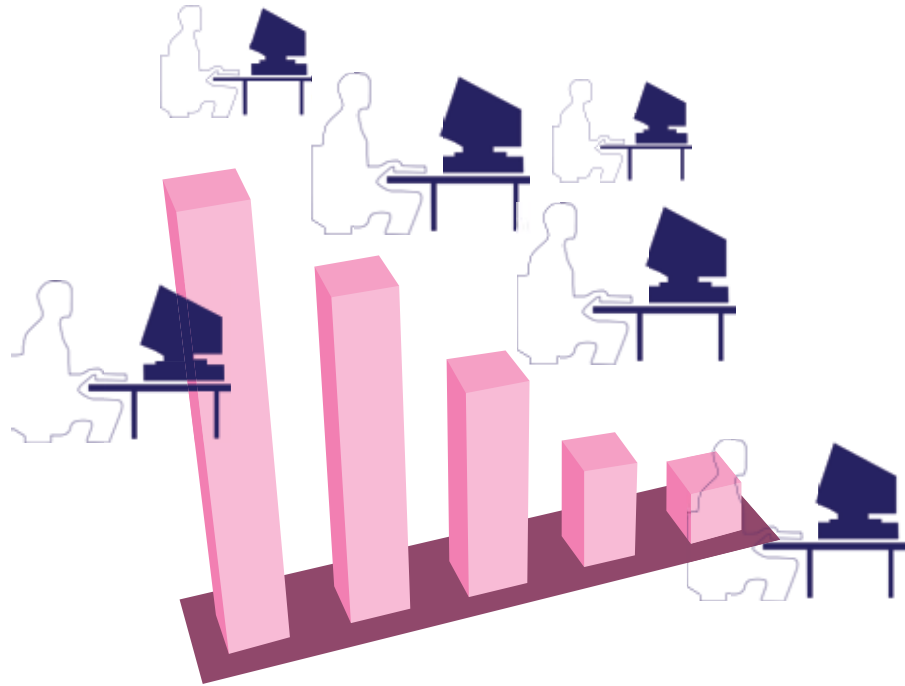
IN THE AFTERMATH of the debacle, regulators are keen to find ways to improve market transparency. Fixed income trades are mainly transacted OTC, so pre-trade transparency is low in most segments. Investors call some dealers to get a price indication and a quote before trading. Post-trade transparency is generally better than in the pre-trade space, but dealers still need a more efficient way to report trades. Some authorities are talking about establishing central counterparty clearing facilities where they do not exist already. This would enable banks to reduce default risk as well as avoid credit crunches.

"In the future, exchanges can play a key role in creating liquid markets as

well as collecting and publishing fixed income trade data," says Erik Thedéen, Head of Fixed Income at OMX. "The upside potential for exchanges is enormous."

The exchange-traded fixed income derivatives market is serving as a proxy for cash bonds, which are in short supply. Fixed income derivatives, along with equities and equity derivatives, are among the most active exchange-traded products. The futures and options contracts on US T-Notes and T-Bonds and German Bunds, Bobls and Schätze are extremely liquid.

Ultimately, the rise in the global demand for fixed income products, lower government issuance and the need for more market transparency bodes well for exchanges. Going forward, they can leverage their success in fixed income to launch new contracts to satisfy the needs of investors looking to fill the gaps in the cash market. ■



Asia-Pacific gears up for algorithmic trading

Exchanges are upgrading their infrastructure to deliver speed, performance, capacity and fast market data dissemination.

BY SHERREE DECOVNY PHOTOS ISTOCKPHOTO & GETTY IMAGES

As algorithmic trading has become mainstream in the US, and is growing fast in Europe, hedge funds and quant traders have crowded these markets and are now looking to apply their models elsewhere. Exchanges in Asia-Pacific are keen to attract these high volume players, and to this end, they are gearing up to become algorithmic trading friendly venues.

Asia-Pacific has lagged the US and Europe because the liquidity pools in the region are scattered and fragmented, and competition between exchanges is less intense. While the Asia-Pacific exchanges are eager to attract algorithmic traders, the challenge lies in understanding their requirements and anticipating the level and extent of their participation.

Algorithms can be divided into

three categories. The first type is an arbitrage approach whereby algorithms are used to take advantage of risk-free arbitrage opportunities in the markets. The second and most common type is the execution algorithm. This is when orders are broken into smaller pieces to minimize the price impact on the market. Often they are designed to seek out liquidity and be routed to the venue that offers best execution. The third type is the statistical algorithm that identifies patterns in the market that will yield investment opportunities.

In the US, execution algorithms are rapidly taking over the use of traditional DMA. Considering the existence of many liquidity pools, smart order routing tools are frequently deployed to obtain best execution. "Hedge funds and proprietary trading desks are continuously seeking new markets

»...we believe this is just a fraction of the amount of algo trading that could come to our marketplace.«

Chew Sutat, Executive Vice President and Head of Development at SGX

in which to apply their arbitrage and statistical algorithms," says Stellan Råberg, Senior Adviser at OMX. "Currently, hedge funds in the US and Europe are fine-tuning their algorithms to work under different circumstances in several markets in Asia-Pacific."

THERE IS EVIDENCE that algorithmic trading has arrived at Singapore Exchange (SGX). Over the past year, trading volumes in SGX's domestic equities contract, the MSCI Singapore Index, grew by 81 percent and the average daily value of transactions in the cash equities market doubled.

"We know there is some algo trading coming through as traders arbitrage the domestic derivatives contract and components in the underlying cash markets," says Chew Sutat, Executive Vice President and Head of Development at SGX. "But based on the increase in the number of inquiries we have received from customers, we believe this is just a fraction of the amount of algo trading that could come to our marketplace."



Singapore Exchange (SGX) and the Australian Securities Exchange (ASX) have taken steps to attract and retain algorithmic trading business by creating a favorable environment for it.

To entice algorithmic traders, SGX is strengthening its position as an Asian gateway by developing a high quality marketplace that provides access to pan-Asian products and listings. It is also introducing a series of algo-friendly features and services to enhance the market microstructure and support these customers. Equity tick sizes and spreads have been reduced, for instance, and proximity hosting services are being introduced. The exchange is considering new order types, facilitating co-location, DMA and high-speed trading access. It is improving its infrastructure to decrease latency and increase throughput. Systems are being put in place to disseminate real-time market data and supply customers with historical data for back testing purposes. Finally,

appropriate fee structures that can bring the benefits of additional liquidity to the entire marketplace from high volume algorithmic trading activities are being assessed.

SGX ACTIVELY MONITORS and upgrades its system capacity to ensure it has headroom above all its previous peaks. Like most exchanges, the latency and throughput of SGX's systems were put to the test during the heavy, volatile trading in the summer of 2007. To this end, the exchange is already in the midst of implementing major infrastructure upgrades. It has a clear technology roadmap to upgrade its data engine, front-end trading capability and bandwidth capacity to ensure throughput and latency can be progressively improved.

“We want to stay ahead of the game and make the marketplace in Singapore more attractive for algorithmic traders,” says Chew. “It’s not something that we can do overnight, but we have a roadmap, we have a plan and we’ve already started to roll out some initiatives to capitalize on this phenomenon.”

Similarly, the Australian Securities Exchange (ASX) has taken steps to attract and retain algorithmic trading business by creating a favorable environment for it. In particular, the exchange changed its pricing model so these customers are charged based on the value of the trades, not the number of trades. The plan worked, and ASX has experienced radical spikes in volume driven by algorithmic trading. In October 2006, its peak number of trades per day was about 200,000. By August 2007, that number climbed to 575,000 trades.

By upgrading its technology, ASX has been able to keep up with the demands of heavy trading and stay ahead of the capacity curve. “As a rule of thumb ASX prefers to have 50 percent headroom above our previous peak and the capability to move to 100 percent within three months, so ASX currently has a major capacity program underway with OMX,” says Jeff Olsson, Group Executive, Technology at ASX. “We’ve also reduced the average latency from 80 milliseconds to 20 milliseconds.”

As hedge funds and quant traders look to deploy their models in Asia-Pacific, exchanges are revising their product offerings and pricing as well as upgrading their infrastructure to deliver speed, performance, capacity and fast market data dissemination. Considering the potential for much higher trading volumes, Asia-Pacific exchanges that stay ahead of the curve stand to reap a significant return on their investment in technology. ■

The challenge: Attract algorithmic traders by upgrading exchange infrastructure to accommodate high-speed, high-volume transactions.

The solution: Leverage OMX technology to reduce latency, increase throughput and capacity as well as improve performance.

Penny wise

All eyes are on the US equity options market as exchanges and market participants evaluate the Penny Pilot. Some view the program as a great success, but there are still significant issues to be worked out.

BY SHERREE DECOVNY ILLUSTRATION MÅNS ADOLFSSON

Broader institutional participation, increased volatility, advancements in technology, remote market making and regulatory changes are driving equity options volumes to ever higher peaks. According to Aite Group, the US equity options market has grown at an annualized rate of 30 percent since 2000. Market volumes in Europe and the Asia-Pacific region have grown at similar rates. This trend has exchanges around the world reevaluating their performance and capacity requirements.

Currently, all eyes are on the US equity options market as the exchanges and market participants come to grips with a program known as the Penny Pilot. Since the beginning of 2007, all six US equities options exchanges have participated in a test to see if pricing in one-cent increments would result in tighter spreads for investors and mitigate or eliminate certain market distortions that lead to inefficiency. At the same time, observers are interested to know the other knock-on

effects of the Penny Pilot on the most competitive equity options market in the world and how the exchanges adapt to them.

THE FIRST PHASE of the pilot included 13 symbols – 10 equity options and three options on exchange traded funds (ETFs) – representing about 17 percent of the entire exchange traded volume of equity and index options. In September 2007, 22 more classes were added, bringing the total to 35, and 28 new names go live in March 2008.

Overall, trading volumes in Penny symbols have increased and spreads have tightened, but that has come at the expense of decreased liquidity as bids and offers are dispersed among more price points. This is a major concern for exchanges and market participants alike. Much of the growth in the equity options market over the past few years can be attributed to participation from institutional investors, for whom liquidity is critical. If these key players cannot execute size on

»If (institutional investors) cannot execute size on the exchanges, they will use the OTC market instead.»

Greg Maynard,
System and
Product Strategy
Officer at the ISE

the exchanges, they will use the OTC market instead.

Another significant effect of the Penny Pilot has been a massive increase in market data, and the rest of the world is watching to see how the exchanges cooperate as an industry to cope with it. Quote traffic in equity options is naturally higher than any other asset class simply because there are so many series. Even though the SEC required all exchanges to institute quote mitigation plans from the beginning, quote volumes have doubled.

THE SIX US OPTIONS exchanges send their best bid offer (BBO) to the Options Price Reporting Authority (OPRA), which merges this information into one feed to send out to the market. OPRA also calculates the national best bid offer (NBBO) and appends this information to the feed. In 1999 the message rate was less than 4,000 messages per second; now it stands at around 258,000 messages per second. Early in 2008 OPRA's capacity will increase to more



SELL

In the Penny Pilot program, all US equities options exchanges participate in a test to see if pricing in one-cent increments would result in tighter spreads for investors.

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than 1 million messages per second, but at the rate quote traffic is growing, those limits will soon be tested.

“Other markets around the world have a minimum price change of 0.01 on equity options. However, they do not have an NBBO system where all quotes are consolidated into one national feed,” says Wayne Arden, Senior Vice President, Americas, at OMX. “The US markets for equities and equity options are extremely competitive because there are multiple exchanges competing simultaneously in one consolidated market tick by tick. Many countries only have one exchange trading equities or equity options, although in Europe MiFID is increasing competition.”

US OPTIONS EXCHANGES generally do not compete primarily based on the instruments they list because basically they all list the same ones. One notable exception is the options on certain index products that are exclusively licensed to the CBOE and, therefore,

are only traded on the CBOE. However, exchanges can gain market share through attractive pricing, combining related instruments into innovative offerings and creating nuances in trading models. They also can compete on speed of quoting, trade execution and liquidity.

The International Securities Exchange (ISE), for instance, has created a new depth of market product that enables investors to see bids and offers that lie underneath the BBO along with the size. The product, the first of its type on equity options in the US, is available on a subscription basis and shows the BBO as well as four levels behind the top of book.

“The exchanges put the top of the book or the best bid offer through OPRA, but some investors want to see the bids and offers that lie underneath the BBO along with the size,” says Greg Maynard, System and Product Strategy

Officer at the ISE. “Algorithmic traders in particular want more data and more frequent updates.”

Although some observers view the Penny Pilot as a great success, there are still significant issues to be worked out. Ultimately, the exchanges want to ensure the industry is doing the right thing for all their customers. An important part of that involves implementing sophisticated tools to ensure that capacity and performance can be maintained. ■

Initiative with benefits

The European Central Bank's Target2-Securities initiative can deliver increased competition and price transparency. But there is still some way to go in this debate.

BY HEATHER MCKENZIE ILLUSTRATION MÅNS ADOLFSSON

The European Central Bank's (ECB's) Target2-Securities (T2S) initiative promises to open up competition in the settling of securities trades conducted in euros, a prospect that not all of the EU's central securities depositories (CSDs) relish.

But eight years after the introduction of the euro, and with the Markets in Financial Instruments Directive (MiFID), which seeks to harmonize Europe's trading environment, up and running, Europe lacks a harmonized post-trade infrastructure.

Thomas Kroon, Vice President OMX, says the introduction of MiFID has put pressure on the post-trade environment. "Clearing and settlement is becoming a hot topic," he says. "T2S raises the question of whether

»Unless the ECB addresses harmonization across Europe, we think the benefits of T2S could be difficult to prove.«

a CSD should be a utility, how much of a utility a CSD should be and whether we should follow the US model of a single, centralized infrastructure."

T2S is based on Target2, a real-time gross settlement system for the euro that settles EUR 1.9 trillion daily. T2S will be a platform for the cross-border and domestic settlement of securities against central bank money. The platform will service Europe's CSDs and will be developed and operated by four national central banks – Deutsche Bundesbank, Banco de Espana, Banque de France and Banca d'Italia. T2S will deliver increased competition and price transparency, according to the ECB, which will drive down costs.

Anders Reveman, an adviser to the European Central Bank, explains that CSDs that are "proactive and start to adapt to T2S early – and possibly also participate in the development process" will benefit the most from T2S.

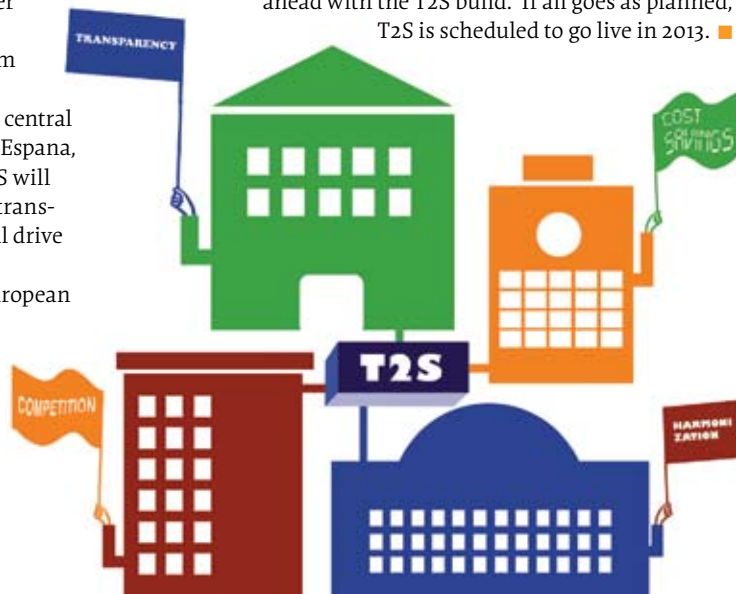
Paul Symons, Head of Public Affairs at Euroclear, says the international CSD is "broadly neutral on the subject

of T2S; we are neither for it nor against it, because at the moment there is not enough information to judge whether it will be good for the European clearing and settlement business or not."

He suggests there is still a question as to who will own and operate T2S. Will it be the national central banks that are supporting the development or will there be a new legal entity created? "This is an important question because if settlement systems are to out-source to T2S, they need to know with whom they are contracting."

THE CONSOLIDATION OF settlement systems on its own won't reduce costs, says Symons. "The real costs in Europe are in the divergent legal and fiscal regimes, which make cross-border custody operations so complex. Unless the ECB addresses harmonization across Europe, we think the benefits of T2S could be difficult to prove. But such harmonization is costly and takes a lot of resources and time – we know this from our experience in the five Euroclear markets, and the ECB is looking at the whole euro zone."

There is still some way to go in the T2S debate. By the end of March 2008 public consultation on the draft user requirements document (a hefty tome of more than 700 pages) will be finished. By June or July 2008, the ECB Governing Council will decide whether or not to go ahead with the T2S build. If all goes as planned, T2S is scheduled to go live in 2013. ■



Market View

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