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Can Asia's financial markets continue to grow without AEV's

*How Interaction and Co-operation Between Exchanges
And Alternative Exchange Venues Can Improve Capital
Markets For Everyone*

Seoul – 10th November 2009

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Regulate To Encourage Competition

“New legislation will transform the landscape for the trading of securities and introduce much needed competition and efficiency”

- Charlie McCreevy. European Commissioner in charge of internal markets and services



Incumbents Response To Change

“The test for MiFID will be whether competition will increase liquidity and efficiency. The risk is that the benefits of competition for investors will be lost to the increase in fragmentation.

Wider spreads and an **increase in the cost of trading** and the **cost of market data** would undermine the whole aim of MiFID....”

Source: Financial News quoting LSE CEO Clara Furse speaking at FESE Conference June 2007



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Regulated Competition Works

"We think MiFID has increased competition, has increased trading volume and financial information flow... It has integrated the European securities market,"

EU Internal Market Commissioner, Charlie McCreevy, said.

- From Reuters - 31 October 2008



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Does Asia need Alternative Execution Venue's?

- Investors are now seeking alternative ways to connect to multiple trading engines, in some cases using a wide variety of order management systems leading to rise in demand for;
 - The rise in the need to effectively bridge platforms and markets for global price discovery and risk management purposes
 - Drive towards standardized connectivity to venues and counterparties across the region.
 - Fragmented exchanges mainly operate within markets with relatively restricted international access, standardization is still a problem
 - A Pan Asian clearing and settlement infrastructure is needed, which will lead to a more efficient market with lower costs
 - AEV's can help to increase market efficiency, offering secure alternative trading venues by adding;
 - Liquidity, New trade types, Volume discovery, Price improvement, Exchange and Vendor neutral



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Lets start by stating the obvious!

- No Asian market currently has the full regulatory infrastructure needed to allow AEV's to operate the same models as Europe (or US ECN)
 - Nationalistic fears (like Europe) could/will delay deregulation and competition
 - Asia will not have a MiFID type pan-Asian regulatory change for all markets for some time
 - Therefore, AEV's have to work with regulators and exchanges in each market in every market – 'hopefully following Australia lead'
 - Leveraging the European experience to work with regulators and exchanges may be a good starting point
-



Asian Exchange Landscape

- Most Asian Exchanges operate vertical silos
 - Control trading, clearing and settlement
 - Normally with a regulatory monopoly
- Most Asian Exchanges 'in-source' technology
 - Main suppliers NASDAQ/OMX or NYSE/AMS
 - NASDAQ and NYSE keeping 'best' technology for themselves
 - NASDAQ and NYSE want global consolidation
- Most Asian Exchanges throttle/limit trading volumes
 - Limit broker input to a few orders per second
 - Significant charges for gateway upgrades
- Competition would significantly increase trading in Asia



What are the Regional ATS Regulations

- Some markets have the concept of broker/dealers registering as an ATS
 - Trades then reported to local stock exchange
 - 'Locked into' existing infrastructure and cost base
 - Which can possibly suit crossing networks such as Korea Cross, Liquidnet, Posit etc
 - And some internalisation engines or broker operated Dark Pools
- Some markets have 'all or none' exchange regulations
 - If you become an exchange, you have to do listings and everything
- No post trade competition and no regional netting
- European MiFID model for MTFs largely sensible
 - Limit orders must be displayed in CLOB; price taking can be dark
 - Best execution obligations on brokers and clients



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Co-ompetition

Can the existing exchanges and new venue operators work together with regulators to grow a bigger, better market



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Can Regulators and AEV's Work Together?

- ✗ Joint discussion and market supervision is possible
- ✗ Some AAEV operators have spent huge amounts on technology to manage existing and future regulation
- ✗ Local regulators can benefit from this technology and save large spends on development or third party solutions by working with companies like Chi-X on technology designed specifically for hybrid markets
- ✗ Regulators unlikely to get same return on investment in 'do it yourself technology' making it almost impossible to secure investment
- ✗ Local Regulation can be used as the basis for managing local regulation and local members – private client brokers etc
- ✗ Technology is easily adapted or purpose built to be Interoperable , linking multiple trading platforms and clearing services to deliver best solution for market
- ✗ Some AEV's such as Chi-X are willing to share and provide technology solutions to Exchanges and Regulators – such as a Smart Order Router and market data management so that all market participants, including retail, can access the best price



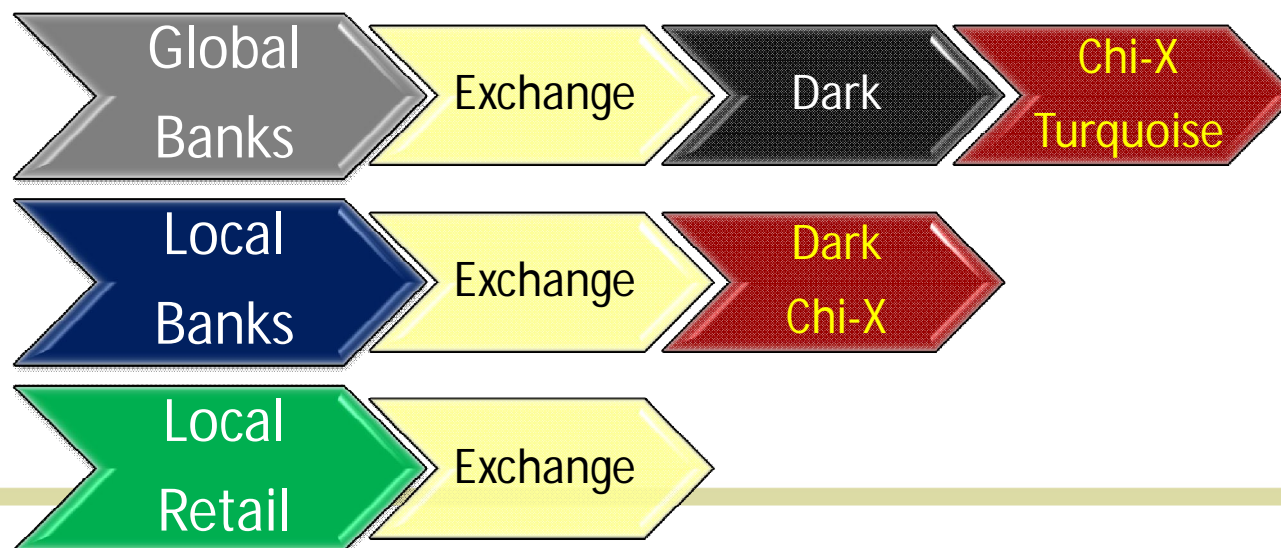
Can Exchanges and AEV's Work Together?

- Some exchanges are spending huge amounts to try to compete on technology rather than price
- Local exchanges can spare huge technology spends by working with Chi-X for hybrid market
- Unlikely to get same return on investment in 'do it yourself technology' – even before cutting prices which will be inevitable
- Local exchange manage membership for most local members – private client brokers etc
- Interoperable trading platforms and clearing services will deliver best solution for market
- **Some AEV's such as Chi-X are willing to provide technology solutions to Exchanges** – such as a Smart Order Router and market data management so that all market participants, including retail, can access the best price



Not Everybody Benefits From AEV's

- The first to connect to AEV's are the big global banks with technology and budgets
- Medium sized banks rely on vendors – vendor solutions have been poor and expensive
- Small/Retail can't connect – so not best execution compliant – likely to be forced to 'outsource'





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Global Exchange Trends

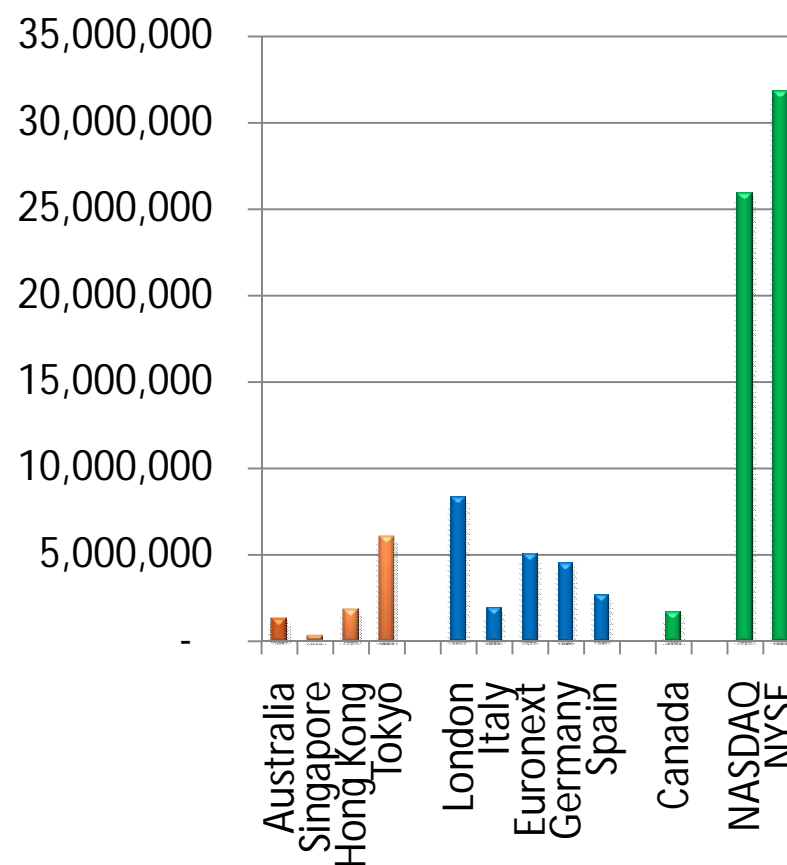
How do the regions/markets stack up against each other?



Asia is small (but catching up fast) by annual turnover

- In Asia, Singapore trades 25% of Australia's daily volume,
- Hong Kong trades nearly 50% more than Australia and Tokyo 5x more than Australia
- LSE/Italy trade 50% more than Tokyo; Germany and Euronext trade 10-15% less
- NYSE and NASDAQ each trade over 3-4 times the volume of Japan

Global Market Turnover
Annual US\$m





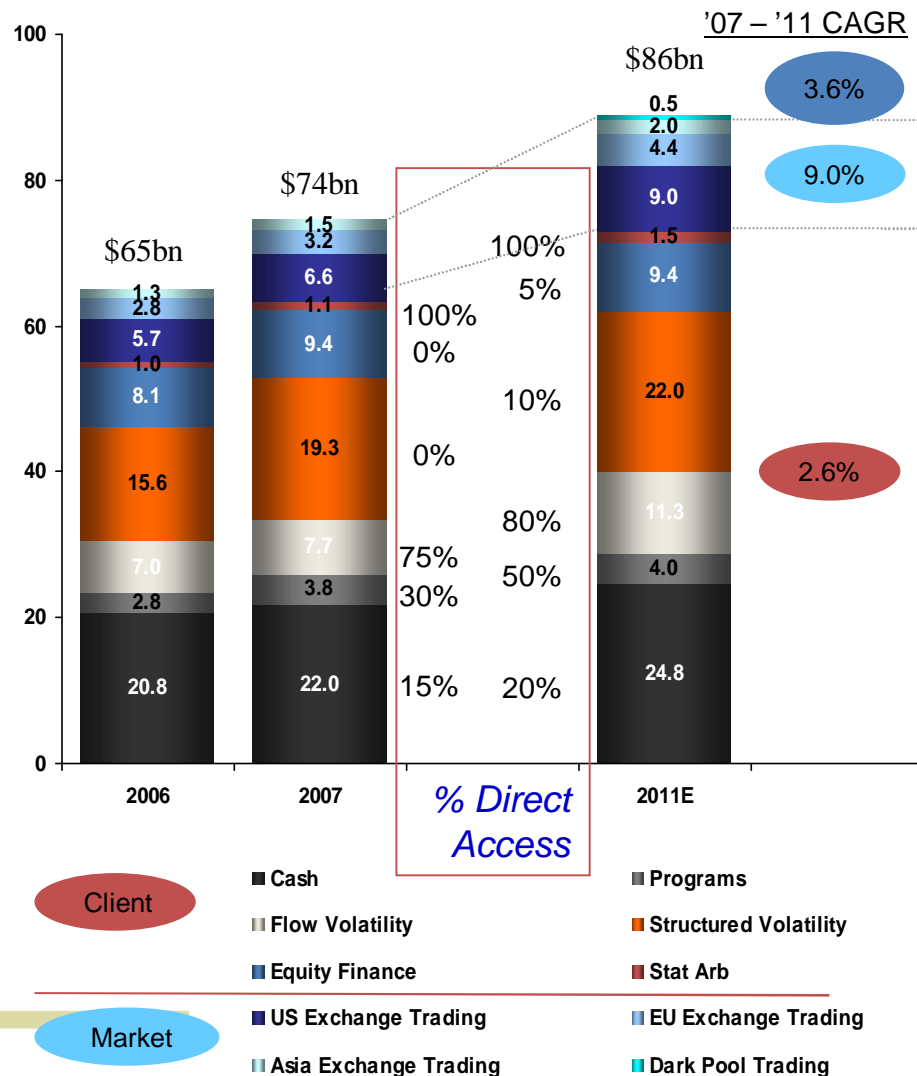
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Electronic Trading: Market Sizing and Forecast

Global Equities Trading Fee Pool (\$bn)



Key Market Trends

- Electronic trading represents the fastest growing execution product global equities
- Total direct access electronic clients' wallet estimated to grow from \$11bn in '07 to \$20bn in 2011
 - 2007: Direct access client wallet of \$11bn was 18% of the potential fee pool
 - 2011: Direct access estimated to grow to \$20bn, 27% of potential fee pool
- Total global exchange fee pool estimated to grow to \$16bn by 2011 – 62% total growth from 2006
- Crossing Networks, ECNs, Dark Pools and Algorithmic execution channels are the fastest growing part of the fee pool
- Electronic Traded Structured Products and Dark Pools represent the “last frontier” for electronic direct access wallet



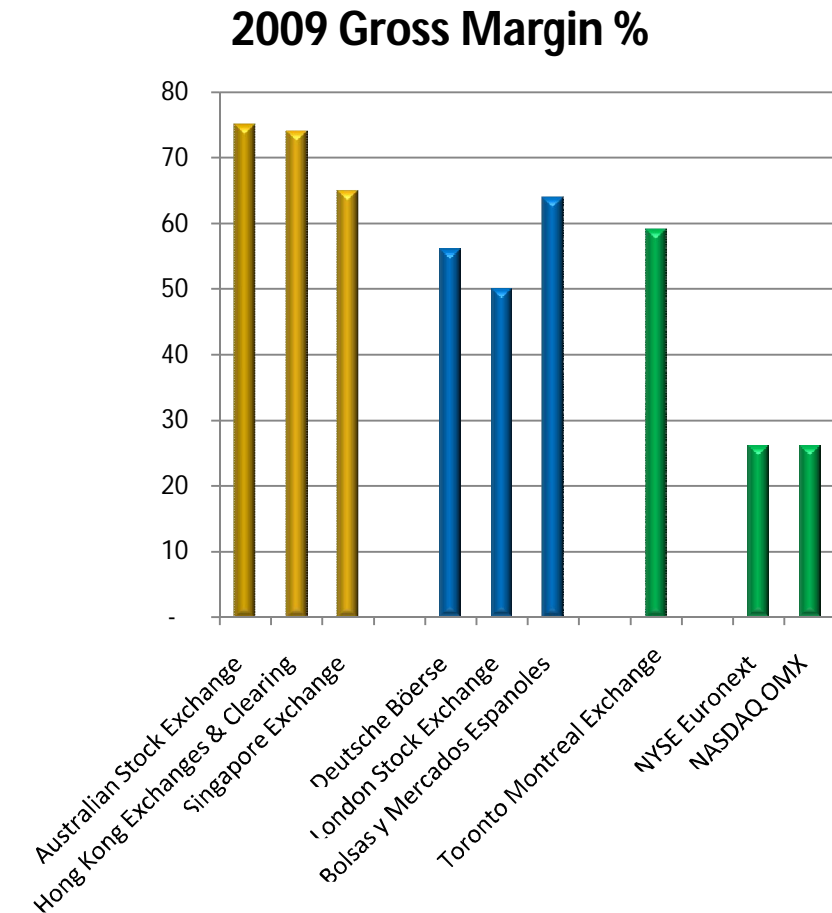
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Traditionally margins, rather than volumes have drive exchange values!

- Broadly speaking, the markets with the greatest regulatory protection of their monopoly have the largest margins
- Vertical silo models also increase margins:
 - Monopoly control of cash equities and derivatives plus clearing and settlement drives margins higher
- The 'monopoly rent' excess margins are a transfer of wealth from users to exchange shareholders



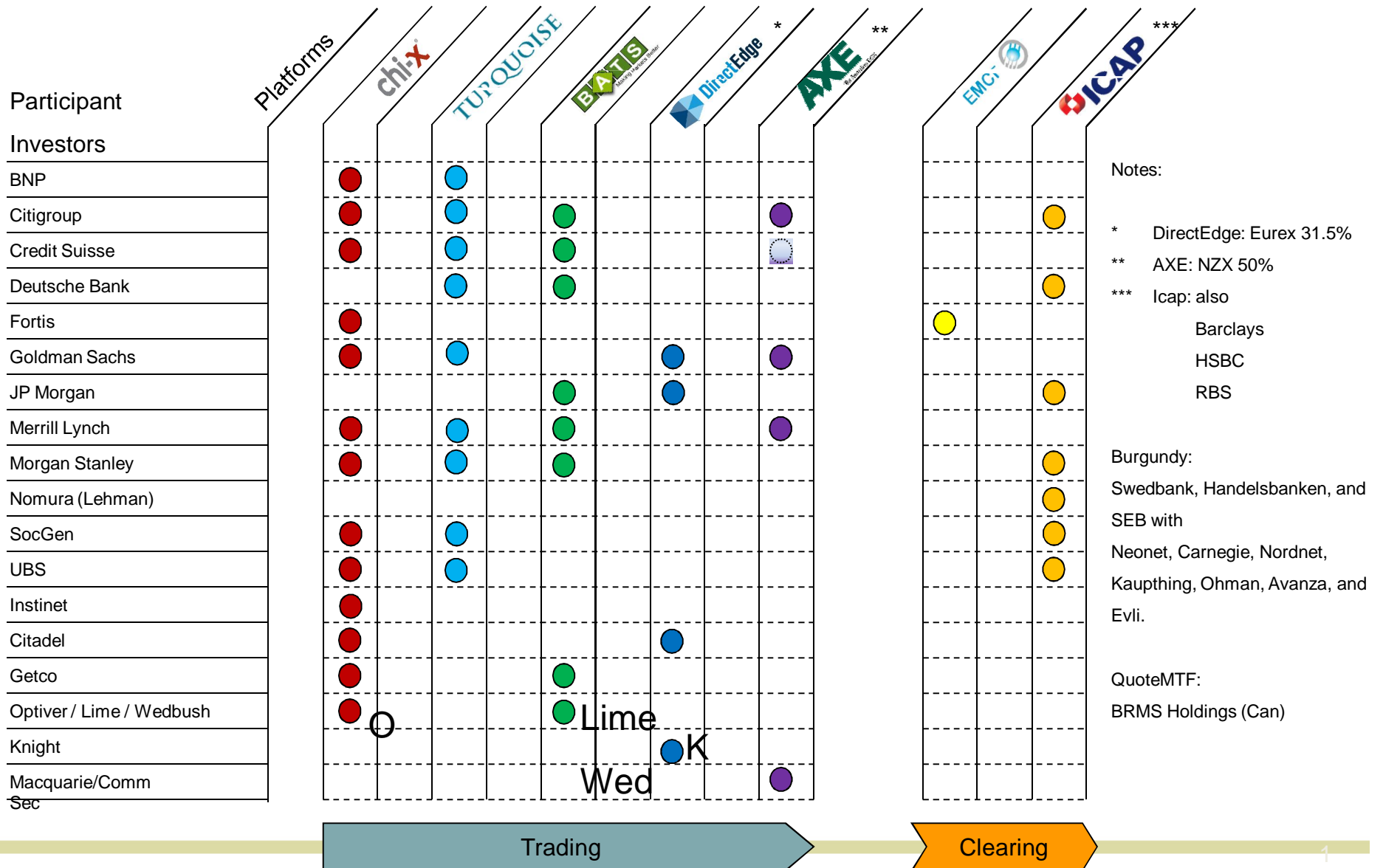
Source: Financial Technologies Partners – May 2009



Asian Exchange Ranking – 4th

- Based on recent volumes, Chi-X would be the 4th largest Asian Exchange – just behind Korea and ahead of Hong Kong

Asian Exchanges	Rank	Average Daily Consideration (USD)
Tokyo SE	1	\$20,145,136,612
Shanghai SE	2	\$9,699,330,545
Korea Exchange	3	\$5,956,047,505
Chi-X	4	\$5,906,365,730
Hong Kong Exchanges	5	\$5,450,256,083
Australian SE	6	\$5,205,565,359
Shenzhen SE	7	\$5,048,523,304
Taiwan SE Corp.	8	\$3,121,246,093
National Stock Exchange India	9	\$3,029,894,442
Bombay SE	10	\$1,272,018,476
Singapore Exchange	11	\$878,541,476
Osaka SE	12	\$825,373,482
Indonesia SE	13	\$427,324,637
The Stock Exchange of Thailand	14	\$338,893,802
Bursa Malaysia	15	\$283,096,968
Jasdaq	16	\$126,097,451
New Zealand Exchange	17	\$82,537,684
Philippine SE	18	\$81,445,274
Colombo SE	19	\$5,488,459





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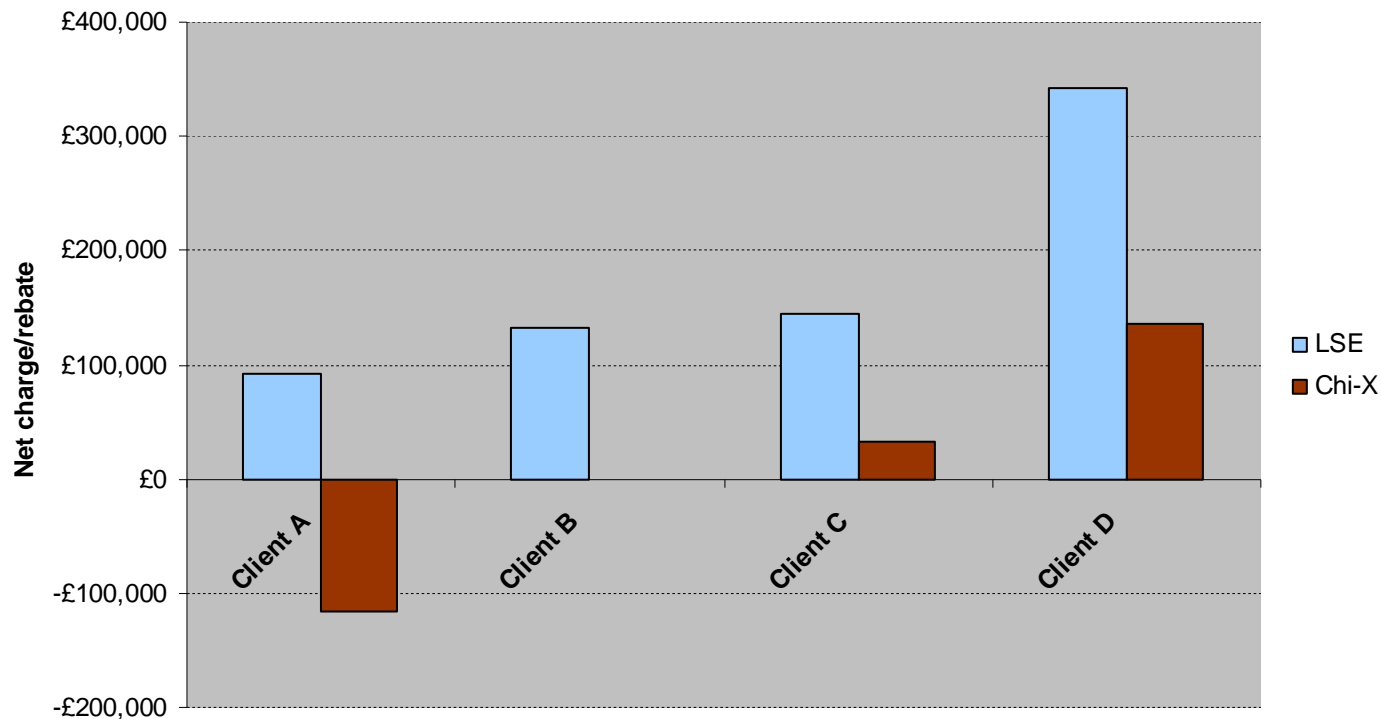
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Saving Costs Very Important In These Times

So what impact have
Alternative Execution Venues had on Costs
Continued reduction is going to become
more important for all:



LSE Cuts Prices = More Trades



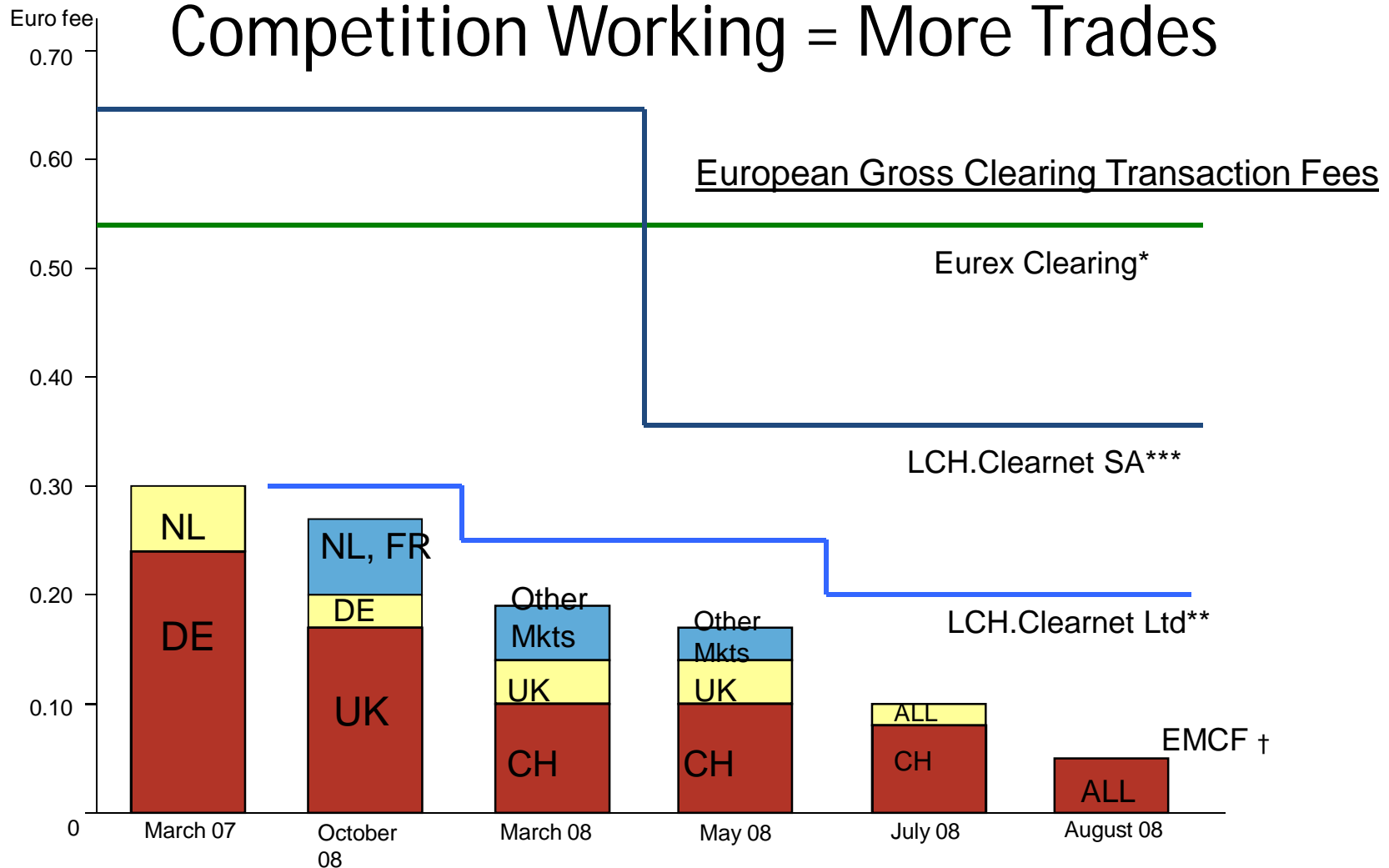
NB. Chi-X rebate of £663 to Client B does not show as the charge of £132,913 by the LSE is far higher

	Chi-X Percentage Cheaper than LSE
Client A	226.25%
Client B	100.50%
Client C	77.84%
Client D	60.07%

Client A	Liquidity Provider
Client B	Investment Bank
Client C	Investment Bank
Client D	Hedge Fund



Competition Working = More Trades



* Including CREST netting fees. Average of volume bandings, excludes any MTF offering.

** Eurex charge includes 0.015% Ad Valorem fee. Max per order charge reduced during this period. Excludes volume discounts

*** LCH Clearnet, average fee calculation across bandings, including banding charge and ad valorem

† EMCF removed the ad valorem charge from the German market in March 2008



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Competition Has Driven Clearing Fees Down >80%

- Alternative clearing venues started in Europe 50% below incumbents and has introduced several fee cuts in 2007, 2008 and 2009
- All clearing fees are stated in Euros

Market	Initial fees	1 October 2007	1 March 2008	1 May 2008	1 July 2008	1 August 2008	Per Trade	Per Order	% Reduction
							14 April 2009	1 June 2009	
Netherlands	0.30	0.28	0.19	0.14	0.10	0.05	0.05	0.07	-83.3%
Germany	0.25+0.07 5 bp	0.20+0.07 5 bp	0.19	0.14	0.10	0.05	0.05	0.07	-80.0%
UK	0.18	0.17	0.15	0.12	0.10	0.05	0.03	0.05	-83.3%
France	-	0.28	0.19	0.14	0.10	0.05	0.05	0.07	-82.1%
Switzerland	-	-	0.10	0.08	0.08	0.05	0.05	0.07	-50.0%
Scandinavia	-	-	0.19	0.14	0.10	0.05	0.05	0.07	-73.7%
Rest of Europe	-	-	-	-	-	-	0.05	0.07	-
Internal / Self	-	-	-	-	-	0.03	0.03	0.05 / 0.07	-

X EMCF now offers participants a per trade or per order user choice fee tariff

X Interoperability now introduced to give customers choice of CCP



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Lower Trading Fees = More Trades

Trading Venue	Trading Costs (bps)*
Chi-X Europe Ltd	0.05
Turquoise	0.10
Euronext Amsterdam	0.40
London Stock Exchange	0.43
Deutsche Börse Xetra	0.58
Euronext Paris	0.65
SWX Europe	0.71
OMX Helsinki	0.78
OMX Stockholm	1.07

* based on a passive/aggressive execution ratio of 50:50.

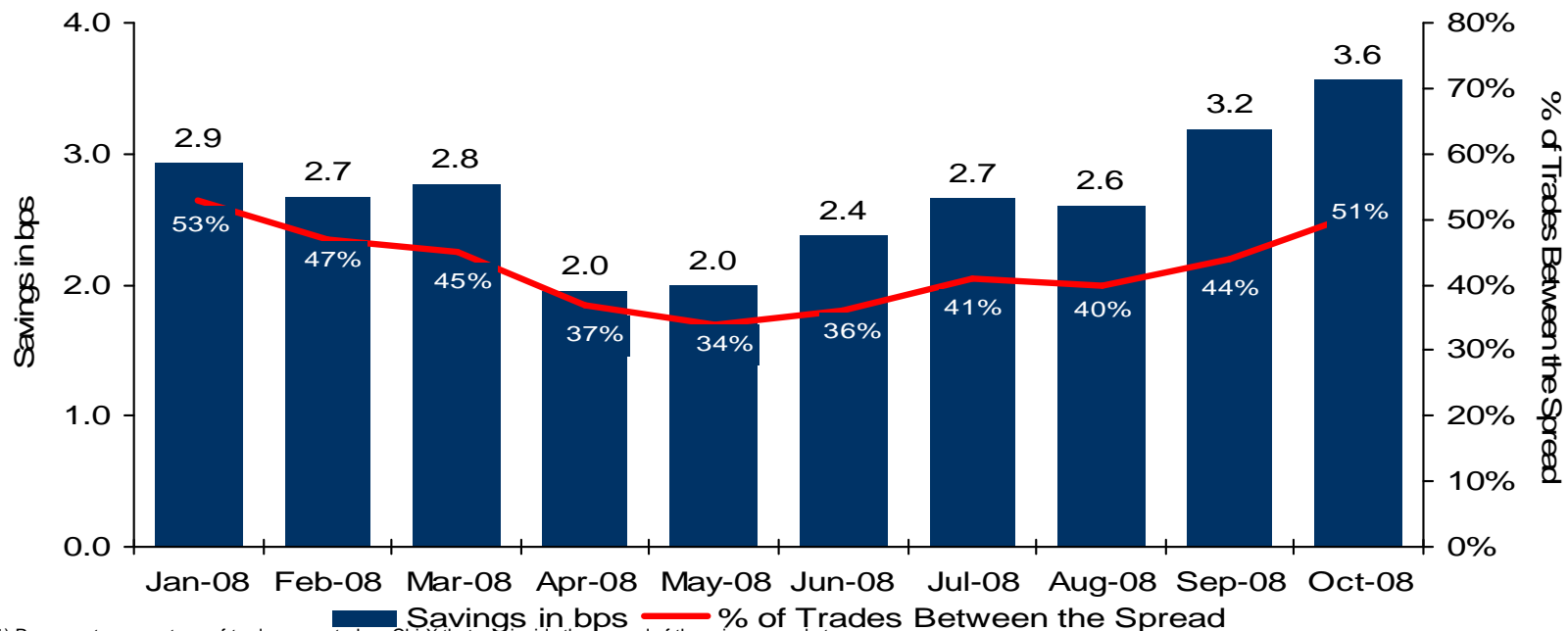
Source: Statistics based on average daily DMA trades, volume and consideration, supplied by Chi-X trading participants



Lower Costs = Tighter Spreads = More Trades

- ✗ Average basis points improvements in October were 3.56 bps
- ✗ Average daily savings in October were over € 1.3 million
- ✗ Total price improvement savings for the month were € 32 million

Execution Savings on Chi-X



(1) Represents percentage of trades executed on Chi-X that are inside the spread of the primary market



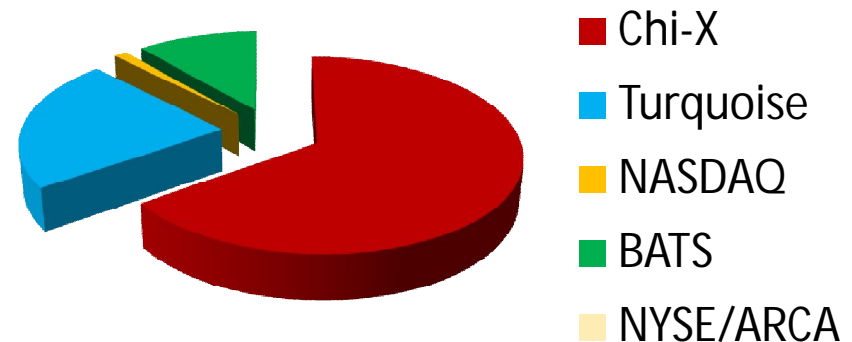
MTFs Now 30% of FTSE 100

- In May 2009 the combined market share of Lit MTFs in Europe pushed through 30% of the order book trades on the FTSE 100 Index stocks
 - More than 20% of DAX 30, AEX 25 and CAC 40
 - 23.4% of FTSE 250 – showing growing liquidity in second liners
- Can this get to 50%?
 - It should be there now if Best Execution was enforced
 - Probable within 12-18 months

6th May 2009

MTF	London		Netherlands	Germany	France
	FTSE 100	FTSE 250	AEX 25	DAX 30	CAC 40
Chi-X	20.7%	14.6%	16.8%	15.4%	15.8%
Turquoise	7.1%	6.6%	2.5%	1.8%	2.6%
NASDAQ	0.4%	0.3%	0.5%	0.8%	0.9%
BATS	3.6%	1.9%	3.3%	3.4%	2.9%
NYSE/ARCA	0.0%	0.0%	0.0%	0.0%	0.0%
TOTAL	31.8%	23.4%	23.1%	21.5%	22.2%

FTSE 100 MTF Market Share Split





Incumbents Now Agree Competition Is Good

- ✓ The LSE rallied 4.1 per cent to 753p after HSBC played down competition concerns following a meeting with new chief finance officer of the LSE Doug Webb.
- ✓ Whilst its main rival Chi-X had taken about 15 per cent of UK equity volumes, there has been little effect on LSE's market share, Mr Webb said.
- ✓ He argued that the new platform had stimulated trades that did not previously exist, or had been done off-exchange.
 - Financial Times – 30 August 2008



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Basis Points Savings on MTF's in Europe

Month	% of trade better than the spread	Price Improvement (BPS)
Sep 2009	38%	2.01
Aug 2009	40%	2.27
July 2009	40%	2.44
June 2009	39%	2.40
May 2009	37%	2.38
Apr 2009	37%	2.42
Mar 2009	36%	2.64
Feb 2009	38%	2.83
Jan 2009	40%	2.88
Dec 2008	42%	3.59
Nov 2008	43%	3.53
Oct 2008	51%	3.56
Sep 2008	44%	3.19



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Price Improvement Savings on Chi-X Europe

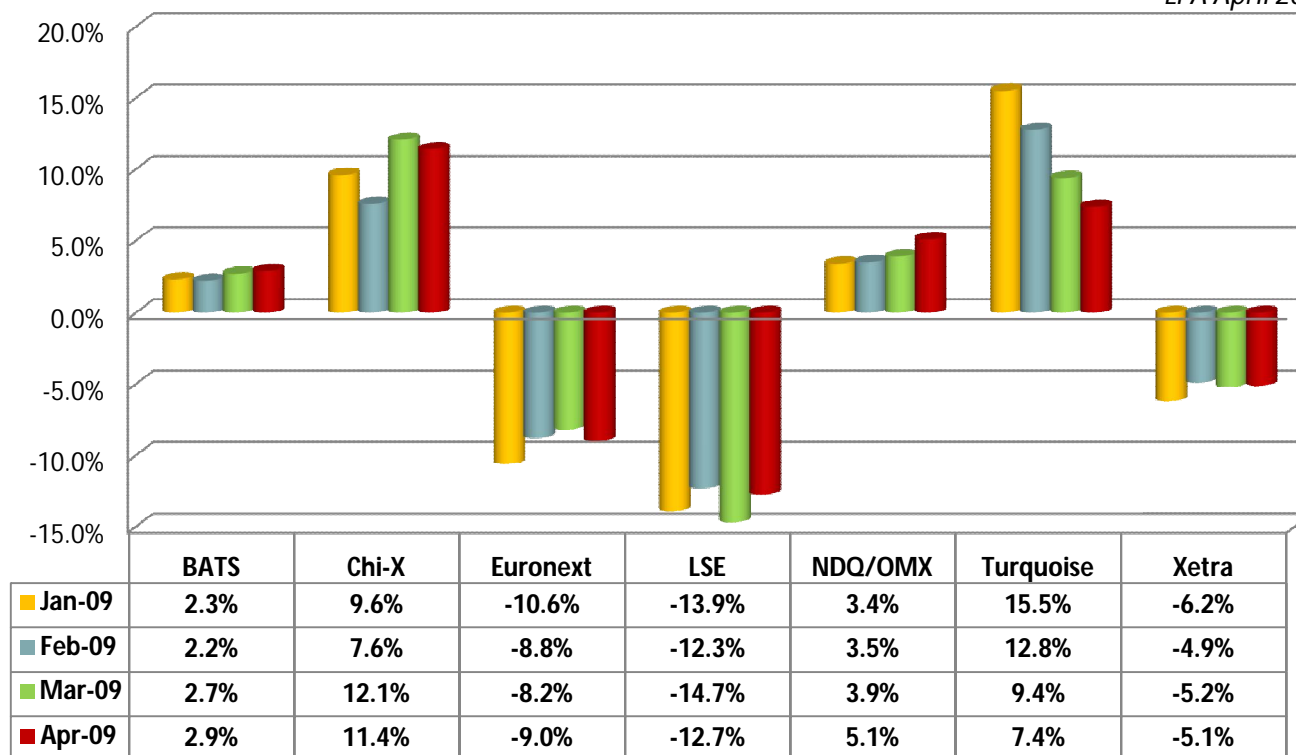
Month	Average Daily Savings (EUR)	Monthly Total Savings [Improvement Consideration] (EUR)
Aug 2008	1,041,530	21,872,128
Sep 2008	1,111,669	24,456,708
Oct 2008	1,395,201	32,089,618
Nov 2008	822,815	16,456,295
Dec 2008	495,037	9,900,745
Jan 2009	463,697	9,737,638
Feb 2009	478,160	9,563,207
Mar 2009	523,264	11,511,818
Apr 2009	662,224	12,582,251
May 2009	605,136	12,707,866
Jun 2009	637,676	14,028,883
Jul 2009	569,772	13,104,745
Aug 2009	618,212	12,364,250
Sep 2009	594,959	13,089,098



Best Execution policies can drive market share

Potential Market Share Change With Best Execution Routing

Source: Equiduct Orange
LFA April 2009



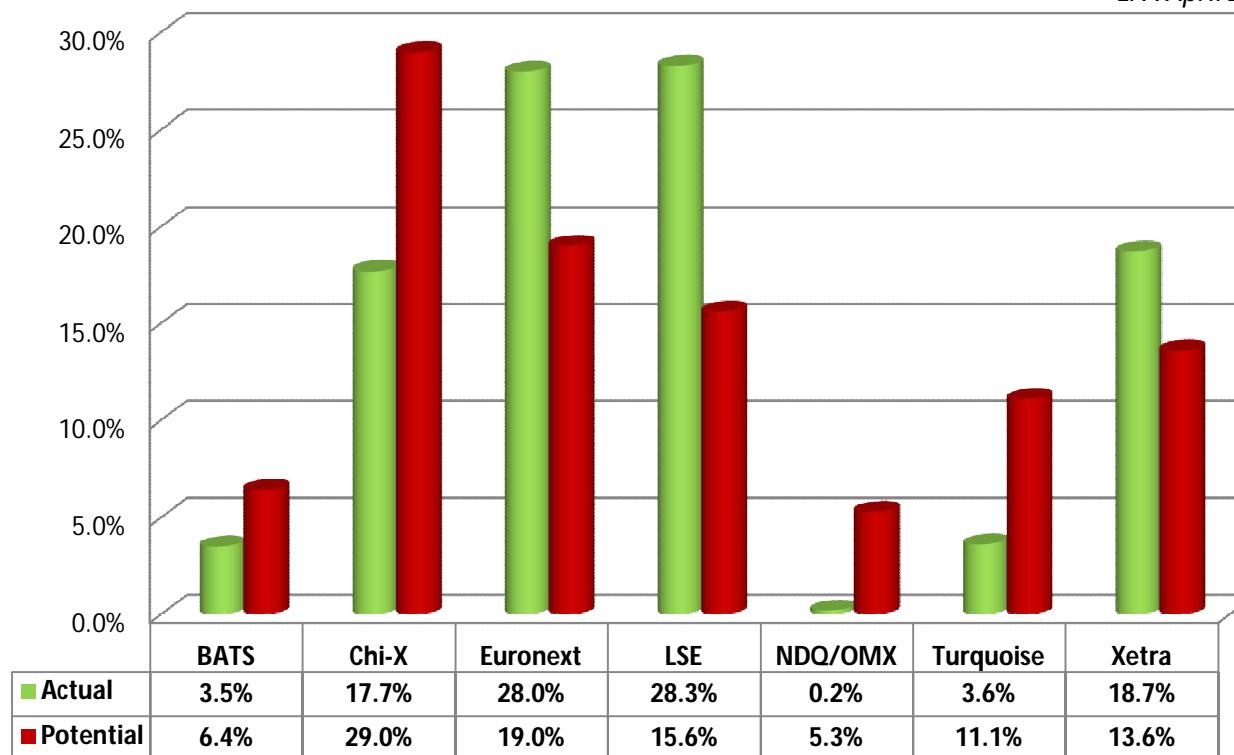
- In Europe, MiFID gives brokers/traders considerable leeway in implementing best execution. As a result, the incumbents have held onto market share



Under Best Execution MTF's could be bigger than most exchanges

Pan-European Market Share Under Best Execution Routing - April 2009

Source: Equiduct Orange
LFA April 2009



- If a pan-European best execution policy was 'enforced' MTF market share would move from 25% to 51.8%; exchanges drop from 75% to 48.2%



Client Choice – Visible or Dark or Both

- Many AEV's and Broker Dealers are implementing parallel books; both a dark and visible book, how do we regulate for these changes?
 - Minimum quantity orders in a single book impacts performance
- Parallel books will allow AEV's to operate both a market for speed and market for size in an optimized fashion
 - The dark book will help facilitate the execution of larger blocks as well as help minimize market impact for client driven algorithmic flow
 - Hidden pegged orders will continue to be supported to allow mid point matching and traded price improvement
- AEV's can allow other dark books to link to it – dark aggregation



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Best Execution Policies and Market Structure

Alternative Execution Venues will only be successful if they deliver cheaper, faster and smarter services than the incumbents, work with regulators and the market to bring changes that meet the needs of the markets today and tomorrow whilst protecting the needs of the investor and the structure and the integrity of the market.....



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