Fidessa FragINSIGHT

Analysing the global trading landscape

July 2011

Fidessa
Trade/Invest/Inform

Welcome to FragINSIGHT in which we aim to provide you with analysis and insight into the constantly evolving global equity markets.

Publication of our initial report elicited a great deal of positive feedback and enthusiasm for more and so we have decided to launch FragINSIGHT as a regular publication and to make it available to a wider audience.

Our thanks to those of you who gave us your feedback on the first issue, and for the many useful suggestions you made, which we hope to incorporate into future reports.

Regulatory changes and technological innovation have completely reshaped the equity trading landscape, breaking up the monopolies of the primary exchanges and introducing a dazzling array of alternative trading venues competing for liquidity.

Over the past three years, Fidessa has been committed to providing business intelligence tools that help market participants of all types make sense of the fragmented trading landscape.

In particular, the Fidessa Fragmentation Index (FFI) provides a simple, unbiased measure of how different stocks/indices are fragmenting across primary markets and alternative venues, measuring competition between lit venues. (See the Appendix for a full explanation of how the FFI is calculated).

Inside this issue:

Notes:

Our analysis is based on weekly figures.

Monthly figures are derived by aggregating weekly figures. Weeks that are split across two months are attributed to the month to which the majority of the trading days belong.

For June 2011, figures from the week ending 03/06/2011 to the week ending 01/07/2011 are used.

Europe refers to the following indices: AEX, BEL 20, CAC 40, DAX, FTSE 100, FTSE 250, FTSE MIB, IBEX, ISEQ, OMX C20, OMX H25, OMX S30, OSLO OBX, PSI 20, SMI.

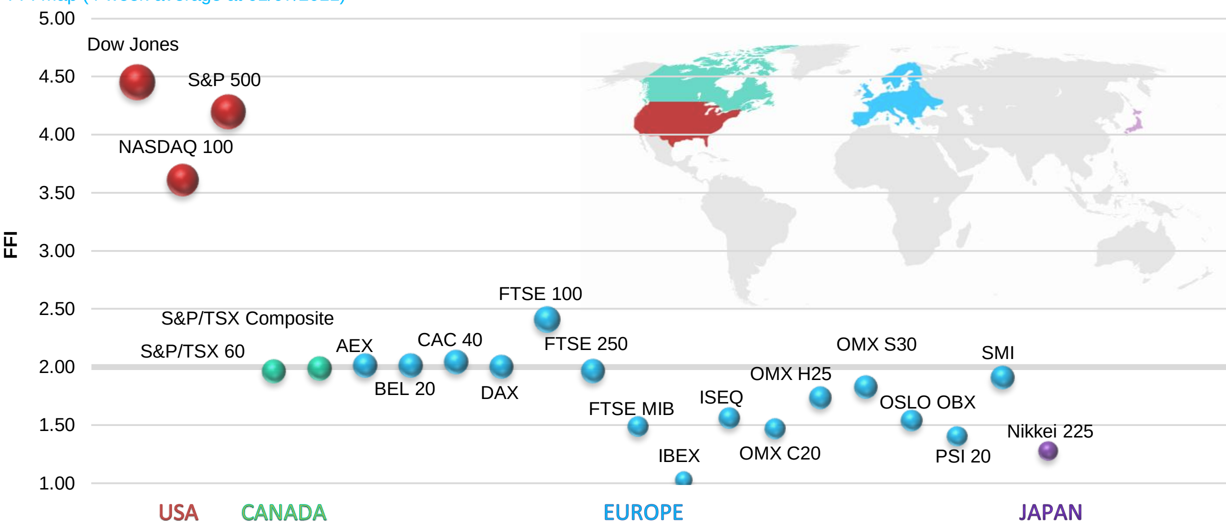
Figures at 01/07/2011.

All figures are in Euros unless otherwise stated.

Fidessa Fragmentation Index (FFI): a global perspective

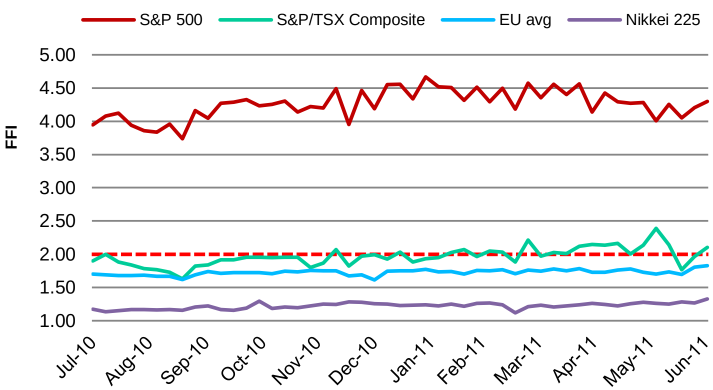
Global fragmentation at a glance

FFI map (4-week average at 01/07/2011)



How is global fragmentation evolving?

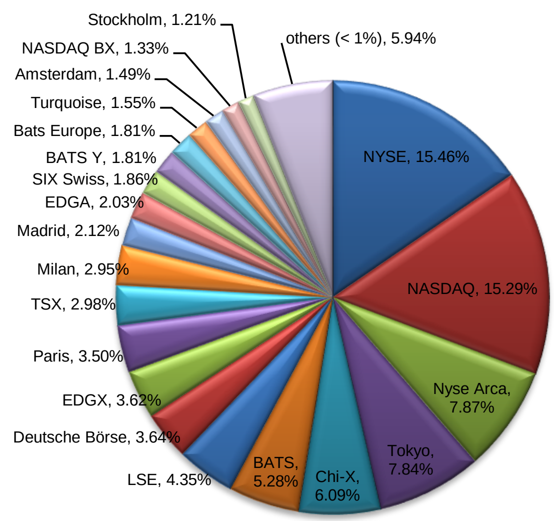
Weekly FFI, evolution over time



Where are stocks traded?

Lit value breakdown, June 2011

(EU indices, S&P 500, S&P/TSX Composite, Nikkei 225)



- US indices are the most fragmented with FFI values that are around double those of other indices/regions
- Across Europe there are differences between individual markets with FTSE 100 and IBEX 35 being the most and the least fragmented respectively although, on average, the FFI value remains below 2
- Japan has the lowest FFI of the regions shown, indicating a higher concentration of trading activity on the primary market (Tokyo Stock Exchange)
- Percentage changes from the previous non-overlapping 4-week period:

Dow Jones	-3.10%
NASDAQ 100	-2.30%
S&P 500	-2.68%
S&P/TSX 60	-6.93%
S&P/TSX Composite	-5.53%
AEX	1.85%
BEL 20	1.86%
CAC 40	4.55%
DAX	11.46%
FTSE 100	-1.43%
FTSE 250	-4.45%
FTSE MIB	4.67%
IBEX	0.36%
ISEQ	-1.03%
OMX C20	1.85%
OMX H25	-7.77%
OMX S30	-4.08%
OSLO OBX	6.32%
PSI 20	5.52%
SMI	-0.97%
Nikkei 225	2.67%

- Looking at all major EU indices plus one each for the US (S&P 500), Canada (S&P/TSX Composite) and Japan (Nikkei 225), we ranked lit venues according to their traded values. More than 50% of the value traded across these indices during the period is attributed to US-based venues and Japan's TSE.

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FOCUS: Different players, different strategies – why?

Value % **by row** (June 2011), Europe - domestic trading only

	AEX	BEL 20	CAC 40	DAX	FTSE 100	FTSE 250	FTSE MIB	IBEX	ISEQ	OMX C20	OMX H25	OMX S30	OSLO OBX	PSI 20	SMI
Amsterdam	88.81%		11.19%												
Bats Europe	5.78%	1.83%	15.06%	17.37%	28.83%	2.85%	9.32%	0.09%		0.89%	2.29%	4.27%	1.60%	0.32%	9.52%
Brussels		100.00%													
Burgundy										0.51%	7.89%	90.08%	1.53%		
Chi-X	8.22%	1.97%	17.87%	19.95%	28.02%	2.66%	6.53%	0.51%	0.02%	0.60%	1.70%	3.82%	0.80%	0.17%	7.16%
Copenhagen										100.00%					
Deutsche Börse				100.00%											
Dublin									100.00%						
Equiduct	3.24%	5.65%	70.56%	2.40%	11.95%	6.10%								0.10%	
Helsinki											100.00%				
LSE					85.63%	13.77%			0.60%						
Madrid	0.08%		0.08%	0.00%			0.00%	99.84%							
Milan	0.00%	0.00%	0.25%	0.11%			99.53%	0.01%			0.10%				
Nyse Arca				6.54%	64.57%	8.52%	3.10%	0.00%		0.87%	1.03%	4.66%	0.14%		10.56%
Oslo													100.00%		
Paris	2.40%	3.02%	94.58%												
SIX Swiss															100.00%
Stockholm												96.88%	3.12%		
Turquoise	6.25%	2.25%	18.93%	15.04%	30.31%	3.17%	5.09%	0.01%	0.11%	0.62%	2.02%	3.15%	1.31%	0.37%	11.37%
Xetra International	9.17%	2.55%	27.75%				59.98%				0.55%				
TOM MTF	84.63%	1.20%	14.17%												
Lisbon														100.00%	

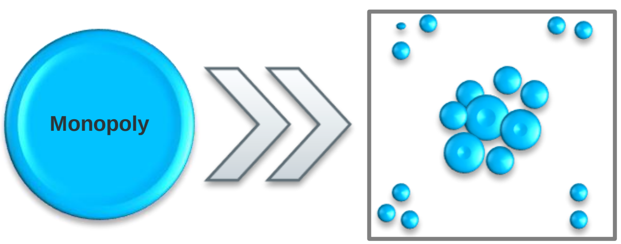
The evidence

The chart on the left (which should be read by row) illustrates the way in which the different European venues distribute their trading activity across the main indices.

It confirms the assertion we made in our previous report that competition between primary exchanges is, in fact, quite limited. The primary exchanges tend to focus a large proportion of their trading activity on their respective national indices and any competition between them is limited to sub-markets that belong to the same group, indicating that we're still a long way from achieving a truly pan-European trading landscape.

The MTFs seem to adopt different strategies in order to compete: a pan-European approach for the early entrants (Chi-X, Bats Europe and Turquoise) and a niche-focused approach for those venues that entered the market more recently (Burgundy, Equiduct and TOM MTF).

It's all about timing!



The early entrants to the post-MiFID market offered valuable alternatives to the incumbent exchanges, particularly in terms of trading fees and execution speed. At the same time, they introduced an extrinsic motivation for potential customers by offering rebates to liquidity providers according to their innovative maker-taker models. This winning combination enabled them to break the monopoly of the primary exchanges and build the critical mass they needed in order to benefit from the network externalities typically associated with this type of business.

Network externalities, also known as demand-side economies of scale, imply that the value of the service offered increases as the number of users increases – in other words, the willingness of market participants to connect to a specific venue increases in line with the number of participants already connected to it.

Thus, competition intensified in the centre of the market with later entrants being forced to seek a competitive advantage and attract customers by focusing on a niche, where competition was less intense.

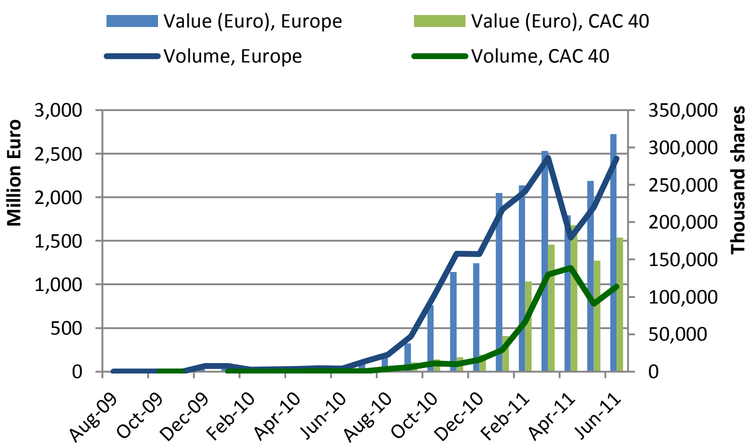
FOCUS: Different players, different strategies – why?

Is a niche enough?

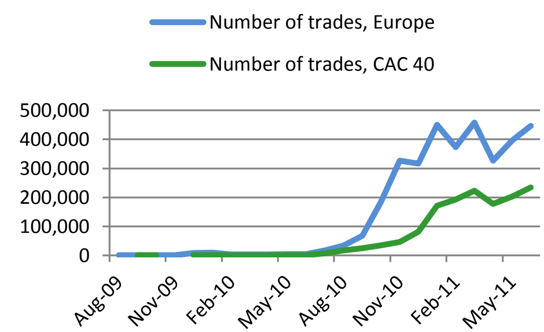
The success of the first pan-European MTFs is beyond dispute given that their combined market share now accounts for more than 25% of European equity trading. Less has been said, however, about how those venues that took a niche approach have fared.

Equiduct presents a particularly interesting example, experiencing an exponential increase in trading following the introduction of a price promotion in July 2010. Whilst the market share for Equiduct remains very low at the European level, and still below 2% (around 1.59%) for CAC 40, for some large cap stocks - Alcatel Lucent (ALU.PA), for example - the venue has achieved a share of more than 8% over the same period.

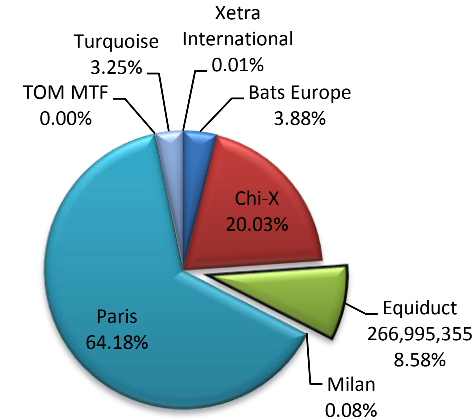
Equiduct trading activity, value and volume



Equiduct trading activity, number of trades



Lit value breakdown, ALU.PA (June 2011)



In the case of Equiduct, the niche approach is two-fold: first, in terms of the stocks traded and second, in respect of the type of order flow it is trying to attract. More than 70% of its trading activity is in CAC 40 constituents and its trading services are aimed primarily at attracting retail order flow.

Given the relatively small proportion of total activity attributed to retail trading compared with wholesale flow, Equiduct's success is all the more evident.

If, in the course of the MiFID II review, the regulators pay due attention to standardising and improving data quality (thereby reinforcing the concept of best execution) Equiduct is particularly well placed to benefit further from the resulting restoration of confidence among retail investors.

FEATURE: Clearing a path to true interoperability in Europe

Unlike their counterparts in the US, participants in the European markets are tied to the clearing services of their chosen venue of execution.

In order to succeed in the European securities market, clearing service providers are dependent upon their ability to establish relationships with the successful venues. Within this framework, there is little or no incentive for them to improve their services or lower their fees. This could very well be the final barrier the market needs to overcome in its quest for a true pan-European trading environment and shake itself free of the steady state that it has been locked into since the beginning of 2011.

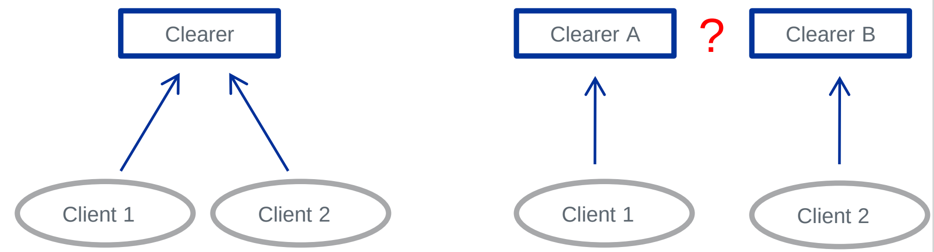
Whilst the US market is served by a sole provider of clearing services (the DTCC), the solution for Europe appears to lie in achieving [interoperability in clearing](#).

Not all market participants are heading in the same direction, however. Whilst some are pushing hard for interoperability, a number of primary exchanges ([Madrid, for example](#)) continue to rely upon their vertical silos in an attempt to exploit the lock-in effect and preserve their market shares. The regulators are only now beginning to support some of the initiatives aimed at changing the status quo.

Bats Europe is a pioneer in this field, announcing on the 20th May its intention to implement (by the end of July) the broadest interoperability program proposed to date. This will provide its members with a choice of three different clearing facilities - LCH.Clearnet, SIX x-clear and Euro CCP - in addition to the default, EMCF. This initiative will be extended to Chi-X members if its acquisition completes.

Perhaps learning from the experience of the MTFs, the Euro CCP is attempting to secure its own position, announcing a new fee schedule with free equity clearing for those executing a high number of transactions.

With interoperability two counterparties may have different clearers. Clearers need to protect themselves not only against the default of their clients but also from the default of other clearers.



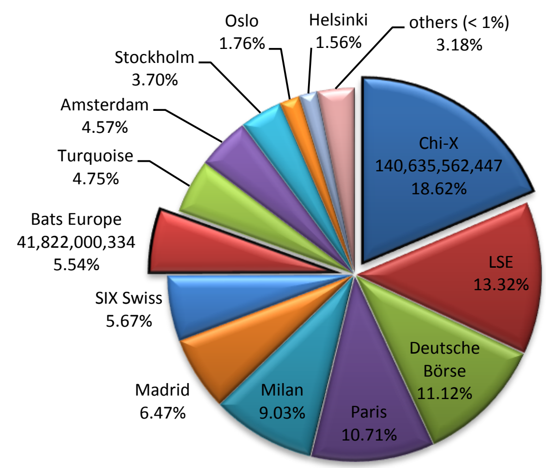
To mandate or not to mandate – that is the question!

For now, the issue is still in the hands of the single market operators. The regulators, whilst fully accepting the limitations of the current system, remain concerned about the increase in systemic risk that will result from the introduction of any new initiative in this area.

If interoperability is not mandated, only those venues with a pan-European approach will embrace such initiatives. It's no accident that the first interoperability program is being launched by one of the three main MTFs. After all, why should those currently operating within the safety of their vertical silos open their doors to competitors?

Only time will tell what impact the Bats project will have on the European trading landscape, given that Bats Europe and Chi-X had a combined market share of more than 24% in June 2011 with a turnover exceeding €180 billion.

Lit value breakdown, Europe (June 2011)



APPENDIX: How is the FFI calculated?

$$FFI = \frac{1}{\sum_{i=1}^{N}[s_i^2]}$$

With:

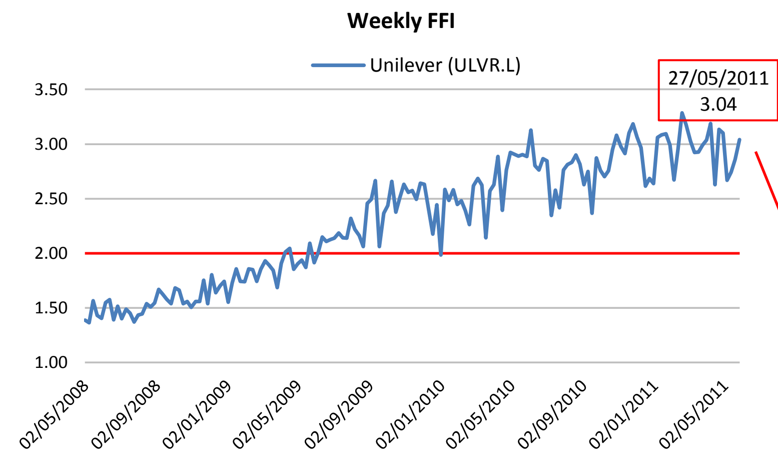
S_i being the market share of the venue *i*
and
N being the total number of venues trading the stock

Average number of equivalent venues you should visit in order to achieve best execution when completing an order.

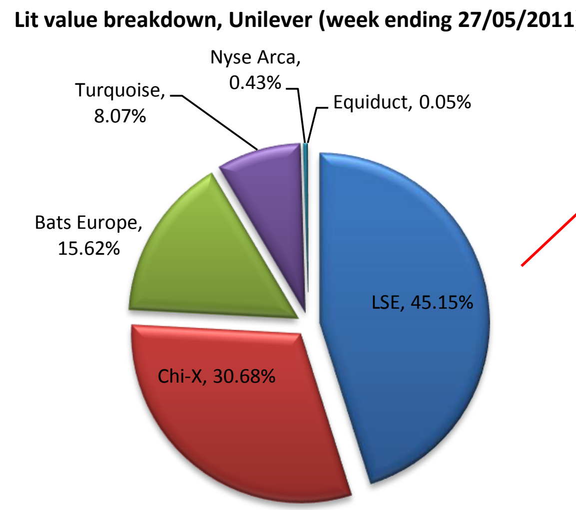
- More weight to venues with the largest market share
- Range from 1 to N

Once a stock's FFI exceeds 2, liquidity in that stock has fragmented to the extent that it no longer "belongs" to its originating venue.

Note: only LIT, DOMESTIC trading is considered.
Lit trading refers to transactions executed on-book and domestic trading is the portion of trades executed in domestic currency (GBP for the Unilever stock listed on the LSE, ULVR.L).



$$FFI = \frac{1}{0.45152 + 0.30682 + 0.15622 + 0.08072 + 0.00432 + 0.00052} = 3.04$$



We hope you have enjoyed this issue of FragINSIGHT.

Our award-winning Fragulator® and Tradalyzer tools, the full FFI database and regular blogs can be found on our Fragmentation website.

Join our LinkedIn group.

Irene Galbani
Lead Analyst, Fidessa

Do you want to know more?
Are you interested in a specific topic?

Submit your questions to the team at
fragmentation@fidessa.com