

# MARKET INDICATORS



		THREE-MONTH TREND	ONE-MONTH TREND	TWO-WEEK TREND	MARKET SHARE	COVERAGE (80%)*	AUCTION LIQUIDITY*	AVG DAILY NO. of TRADES	Average Trading Size (ATS)	Bid-ASK Spread (VWAS in bp)	% time at BEST BID & OFFER*	% time at BEST BID & OFFER with greatest size*
AEX	EURONEXT	↑	↑	↓	75.6%	40%	7.1	4 631	11 710	5.5	48%	30%
	CHI-X	↑	↓	↑	16.9%	36%		1 794	6 742	5.2	45%	9%
	TURQUOISE	↓	↓	↓	3.3%	48%		424	5 517	9.6	14%	1%
	BATS	↓	→	→	3.1%	22%		407	5 567	6.8	10%	0%
	NASDAQ OMX	→	↓	→	1.2%	44%		170	5 044	9.5	6%	0%
BEL20	EURONEXT	↓	↑	↑	78.7%	36%	9.4	1 901	8 267	7.5	47%	34%
	CHI-X	↑	→	→	15.4%	27%		613	5 022	7.3	23%	4%
	TURQUOISE	→	→	↓	2.6%	33%		122	4 383	17.0	5%	0%
	BATS	→	↓	↓	2.3%	24%		123	3 887	13.3	5%	0%
	NASDAQ OMX	↑	→	→	0.9%	24%		42	4 696	22.5	13%	4%
CAC40	EURONEXT	↓	↑	↑	72.9%	53%	12.0	5 499	11 477	5.0	40%	23%
	CHI-X	↑	↑	↓	18.4%	51%		2 581	6 185	4.6	51%	12%
	TURQUOISE	↓	↓	↓	3.5%	60%		571	5 380	8.7	12%	1%
	BATS	↓	→	↓	3.5%	41%		580	5 164	6.3	12%	1%
	NASDAQ OMX	↑	→	↓	1.7%	54%		280	5 288	10.4	12%	1%
DAX	XETRA	↓	↑	↑	74.0%	51%	6.7	3 368	26 273	6.5	24%	14%
	CHI-X	↑	↓	↓	18.4%	50%		2 947	7 660	4.2	52%	19%
	TURQUOISE	↓	↓	↓	3.2%	55%		606	6 482	8.9	8%	1%
	BATS	→	→	→	3.5%	42%		675	6 276	8.9	13%	1%
	NASDAQ OMX	→	→	→	1.0%	56%		215	5 534		6%	0%
FTSE 100	LSE	↓	↑	↑	61.8%	40%	6.7	2 784	10 583	7.7	58%	24%
	CHI-X	↑	↓	↓	24.1%	39%		2 160	5 325	6.1	65%	14%
	TURQUOISE	↓	↓	↓	4.7%	47%		511	4 416	10.1	27%	1%
	BATS	→	→	↓	7.7%	37%		834	4 397	6.7	38%	1%
	NASDAQ OMX	→	→	→	1.6%	40%		194	3 945	9.0	13%	1%
SLI (30)	SIX	↑	↑	↑	84.7%	34%	8.4	2 559	22 169	9.1	54%	41%
	CHI-X	↓	↓	↓	9.4%	32%		722	8 719	9.9	37%	2%
	TURQUOISE	↓	↓	↓	2.8%	34%		242	7 959	14.7	18%	0%
	BATS	↑	→	→	2.1%	38%		219	6 660		28%	3%
	NASDAQ OMX	→	→	→	1.0%	29%		87	7 804	14.0	20%	3%
EUROSTOXX 50	CHI-X	↑	→	↓	13.0%	60%		2 230	8 388	4.5	43%	11%
	TURQUOISE	↓	→	↓	2.4%	62%		410	7 489	8.8	10%	1%
	BATS	→	→	↓	3.7%	56%		700	7 167	6.2	24%	3%
	NASDAQ OMX	→	→	→	0.7%	61%		158	6 044	14.1	6%	0%

Reference period: 1 December to 31 December 2009

\* Exclusive CA Cheuvreux – TAG

NEW: We have added arrows to show the market share evolution compared to precedent periods: Three months ago, one month ago and past two weeks, in comparison with the previous two weeks (or second half of the month compared to the first half).

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## COMMENTS:

With the end of the year and its half-days of trading, more liquidity technically went to the primary markets than usual. We see two trends: a long-term trend, whereby fragmentation continues and the main markets see a decline in market share; and a short-term trend, **due to witching day (18 December), and to a lesser extent 24 December, the automatic effect of which was a decline in the market share of most MTFs**, with a notable exception being Chi-X on the CAC 40.

Moreover, the coverage indicator is down for almost all segments, showing that **in December trading was concentrated on fewer stocks in each index**.

**2009 Highlights:** This last issue of our Liquidity Indicators for 2009 is an opportunity to look back at the year as a whole. **Chi-X is undoubtedly the winner of 2009**, as it now provides around 25% of lit liquidity on the FTSE 100 stocks. This has been a difficult year for Turquoise and NASDAQ-OMX (for Turquoise because its initial business model, with a flow provided by its founders, was halted, and for NASDAQ-OMX because, despite an offer incorporating attractive features and solid technology, it failed to gain visibility). In contrast, **BATS built an original positioning based on aggressive pricing as an incentive to connect** (NASDAQ-OMX lacked such an approach).

Among the primary markets, **NYSE-Euronext was more resilient than its rivals**, taking advantage of a good presence on the BBO combined with technological improvements. The LSE underperformed, as a paradoxical consequence of most trading facilities moving to London. **This exchange initiated a consolidation phase** (acquiring Turquoise, Baikal, Millennium IT), followed by Euronext's acquisition of Euro Millennium, Citadel's acquisition of Equiduct, and Deutsche Börse's acquisition of TradeGate. However, these moves have not stemmed the arrival of new entrants in the field (like TOM in December). **But the real newcomers in late 2009 were the dark pools and other crossing networks, which we will monitor more closely in the coming months.**

The profile of the witching days and the relatively low trading flow during primary market outages show that **although European liquidity is now fragmented, this was not the case for the price formation process in 2009**. As a result of their rising market share through 2009, high-frequency traders are attracting the attention of trading platforms more than ever. They succeeded in adding noise to pre-trade transparency by using vibrating icebergs and mirror orders. **On the eve of MiFID2, will the interests of high-frequency traders prevail over that of the price formation process?**

**Future Trends:** January 2010 will see the market share of MTFs return to their November levels. As Turquoise and the LSE seemed to be immobilised during the period of their exclusive talks, we will pay attention to their actions in the coming months, in the hope that they will be able to prove the value of their link-up.

## DEFINITIONS:

### Market share

For local main indices, this is the ratio of the venue's turnover over the sum of the turnover of all the four considered venues. For the Eurostoxx 50, it is the ratio of the venue's turnover over the sum of the turnover of all venues trading Eurostoxx 50 components.

### Coverage

This indicator is inspired by the "inequality measure", also called the Pareto principle or the 80:20 rule: when 80% of an activity is concentrated on 20% or less of its players, this activity is clearly not well balanced. The coverage indicator assesses the "20%" part of this rule of thumb for exchanges. The closest to 80% it is, the more the venue offers balanced liquidity from one stock to another.

### Auction liquidity

This is the ratio of the proportion of the turnover traded during auctions by the typical time ratio between the continuous auction phase (generally 8½ hours) and the fixing auctions (usually two 5-minute phases), which is less than 2%. It is only available for primary exchanges. The higher it is, the more turnover one will find during auctions.

### Average daily number of trades

The higher it is, the more chance an investor has to be present when a trade happens. *Contrary to block venues, the granularity of a venue is a must to attract different order flows.*

### Average trading size (ATS)

Mean trading size in euros. This can be considered as the "natural size" of orders on the venue.

### Bid-Ask Spread (Volume Weighted Average Spread)

The average spread when a trade occurs, weighted by the turnover of the trade. It is the bid-ask spread from the liquidity provider's point of view.

### % Time at EBBO at Best Bid and Offer

This is the proportion of the day during which the venue offers a spread equal to the EBBO.

### % Time at EBBO at Best Bid and Offer with Greatest Size

This is the proportion of the day during which the venue offers the greatest sizes at a spread equal to the EBBO.

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