

### MONTHLY STATISTICS: DECEMBER 2022

#### SUMMARY

	VALUE TRADED	ADV	% CHANGE OF ADV
<b>Market Share</b>			5.14%
<b>Total Value Traded:</b>	€ 39,431,157,825	€ 1,877,674,182	-18%
<b>Auction on Demand:</b>	€ 782,386,935	€ 37,256,521	49%
<b>Aquis Matching Pool:</b>	€ 3,704,965,901	€ 176,426,948	-15%
<b>Market at Close:</b>	€ 12,374,456,518	€ 589,259,834	-1%
<b>Benchmark Cross:</b>	€ 475,283,922	€ 22,632,568	-41%

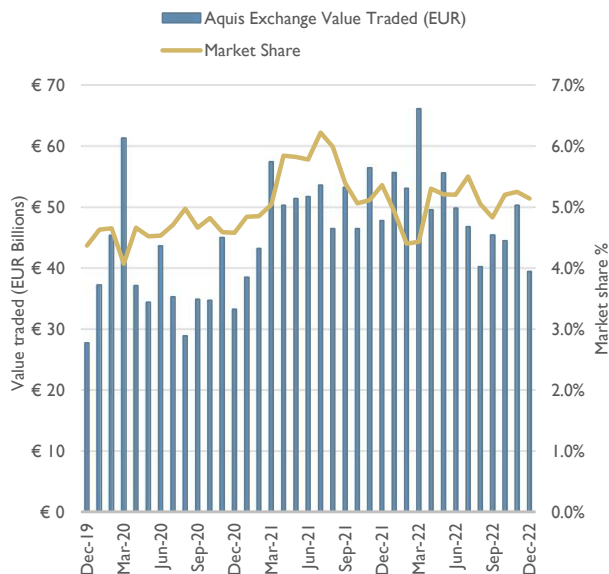
#### MONTHLY TOP STOCKS BY MARKET SHARE

STOCK	UMTF	MARKET SHARE
Ebro Foods S.A	EBROe	13.23%
Catalana Occidente	GCOe	13.12%
Prysmian S.p.A	PRYm	12.54%
Vidrala S.A.	VIDe	12.30%
B&M European Value Retail S.A.	BMEI	11.91%
Euronav NV	EURNb	11.87%
Hera Spa	HERm	11.69%
A2A Spa	A2Am	11.66%
Italgas S.p.A	IGm	11.44%
Interpump Group Spa	IPm	11.34%

#### MONTHLY TOP STOCKS BY VALUE TRADED

STOCK	UMTF	VALUE TRADED	MARKET SHARE
ASML Holding NV	ASMLa	€ 707,681,086	5.55%
Lvmh Moet Hennessy Vuitton SE	MCp	€ 608,252,017	6.68%
TotalEnergies SE	TTEp	€ 592,664,815	5.26%
Roche Holding AG	ROGz	€ 468,424,941	5.06%
Nestle SA	NESNz	€ 455,010,728	4.43%
Novo Nordisk	NOVOBc	€ 404,836,723	10.86%
Sanofi	SANp	€ 382,388,012	6.55%
Astrazeneca plc	AZNI	€ 355,578,669	6.58%
Sap SE	SAPd	€ 349,282,798	5.78%
Shell Plc	SHELL	€ 346,015,425	4.96%
Novartis AG	NOVNz	€ 342,408,664	3.86%
Shell Plc	SHELLa	€ 310,119,143	3.67%
Siemens AG	SIEd	€ 304,370,233	5.02%
Glencore plc	GLENI	€ 300,306,748	5.40%
BP plc	BPI	€ 278,531,261	9.91%

#### VALUE TRADED PER MONTH





#### TRADING BY MARKET

MARKET	VALUE TRADED	MARKET SHARE
London	€ 7,812,597,681	5.49%
Paris	€ 6,525,133,734	5.09%
Frankfurt	€ 6,172,149,669	5.04%
Zurich	€ 4,022,176,116	4.73%
Amsterdam	€ 3,333,348,102	4.66%
Milan	€ 3,074,945,643	5.95%
Stockholm	€ 2,451,529,458	4.86%
Madrid	€ 1,596,889,812	5.17%
Copenhagen	€ 1,469,939,436	5.47%
Helsinki	€ 796,486,467	5.61%
Oslo	€ 735,243,369	4.83%
Brussels	€ 647,167,878	5.51%
Vienna	€ 206,407,866	6.54%
Lisbon	€ 177,643,284	5.27%
Dublin	€ 153,007,071	2.80%

## MONTHLY TOP 5 SECURITIES BY MARKET SHARE PER MARKET

 LONDON TOP STOCKS		
STOCK	UMTF	MARKET SHARE
B&M European Value Retail S.A.	BMEI	11.91%
Ocado Group Plc	OCDOI	9.20%
Kingfisher Plc	KGFI	8.34%
Coca Cola HBC AG	EEEI	8.28%
ConvaTec Group Plc	CTECI	8.23%

 FRANKFURT TOP STOCKS		
STOCK	UMTF	MARKET SHARE
Brenntag AG	BNRd	8.52%
Beiersdorf AG	BEId	7.78%
HeidelbergCement AG	HEId	7.13%
MTU Aero Engines AG	MTXd	6.89%
Delivery Hero AG	DHERd	6.77%

 MILAN TOP STOCKS		
STOCK	UMTF	MARKET SHARE
Prysmian S.p.A	PRYm	12.54%
Hera Spa	HERm	11.69%
A2A Spa	A2Am	11.66%
Italgas S.p.A	IGm	11.44%
Interpump Group Spa	IPm	11.34%


 PARIS TOP STOCKS		
STOCK	UMTF	MARKET SHARE
Bollore.	BOLp	8.96%
Biomerieux	BIMp	6.82%
Lvmh Moet Hennessy Vuitton SE	MCp	6.68%
Sanofi	SANp	6.55%
Dassault Aviation	AMp	6.30%


 AMSTERDAM TOP STOCKS		
STOCK	UMTF	MARKET SHARE
Heineken Holdings	HEIOa	8.92%
Aegon N. V.	AGNa	8.04%
Universal Music Group N.V.	UMGa	7.60%
OCI N.V.	OCla	6.64%
Koninklijke DSM N.V.	DSMa	5.91%

 MADRID TOP STOCKS		
STOCK	UMTF	MARKET SHARE
Ebro Foods S.A	EBROe	13.23%
Catalana Occidente	GCOe	13.12%
Vidrala S.A.	VIDe	12.30%
Mapfre Sociedad Anonima	MAPe	9.14%
Inmobiliaria Colonial Socimi S.A.	COLe	8.64%


 ZURICH TOP STOCKS		
STOCK	UMTF	MARKET SHARE
Straumann Holding AG	STMNz	7.53%
Sonova Holding AG	SOONz	6.14%
ABB Ltd.	ABBNz	5.96%
Sika AG	SIKAz	5.94%
Swisscom AG	SCMNz	5.93%


 OSLO TOP STOCKS		
STOCK	UMTF	MARKET SHARE
SpareBank 1 SR-Bank ASA	SRBNKo	8.53%
Gjensidige Forsikring ASA	GJFo	8.33%
Flex Lng Ltd	FLNGo	7.42%
Leroy Seafood Group	LSGo	6.73%
DNB Bank ASA	DNBo	6.67%


 COPENHAGEN TOP STOCKS		
STOCK	UMTF	MARKET SHARE
Novozymes AS	NZYMBc	7.50%
Chr. Hansen Holding	CHRC	7.01%
Ringkjøbing Landbobank	RILBAc	6.96%
SimCorp	SIMc	6.40%
Royal Unibrew AS	RBREWc	6.02%


 STOCKHOLM TOP STOCKS		
STOCK	UMTF	MARKET SHARE
Svenska Handelsbanken	SHBAs	6.64%
Atlas Copco AB	ATCOAs	6.02%
Essity Aktiebolag (publ)	ESSIBs	5.99%
Hexagon AB	HEXABs	5.68%
Assa Abloy AB	ASSABs	5.60%

 HELSINKI TOP STOCKS		
STOCK	UMTF	MARKET SHARE
Cargotec Corporation	CGCBVh	8.63%
Sanoma Corporation	SAAI Vh	8.13%
Metsa Board Corporation	METS B h	7.27%
Elisa Oyj	ELISA h	6.94%
Outokumpu Oyj	OUTI V h	6.82%

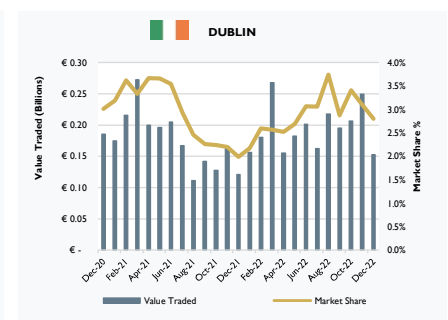
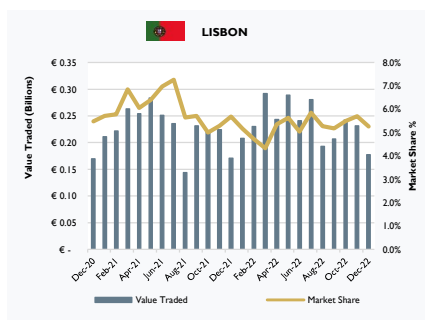
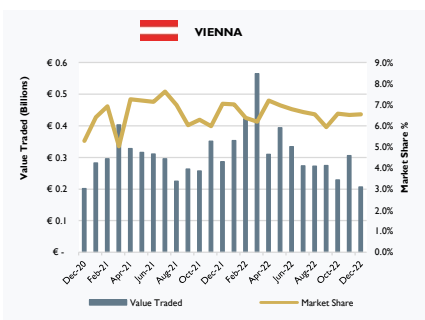
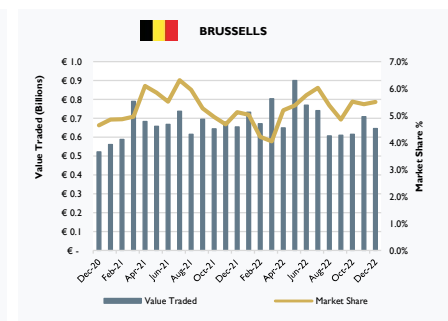
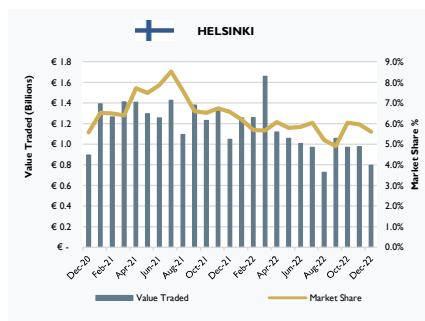
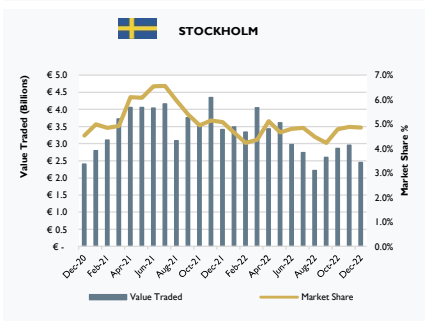
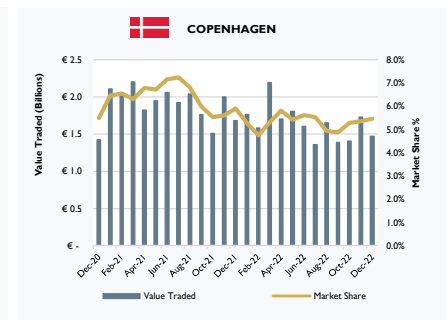
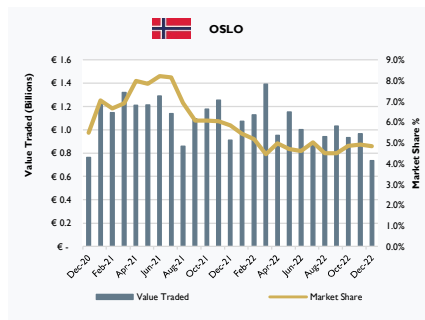
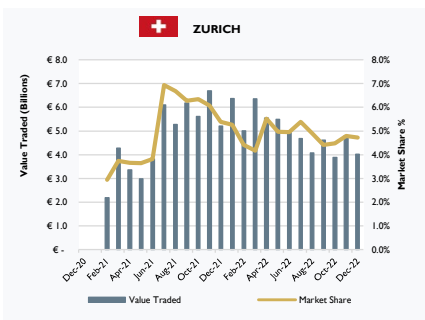
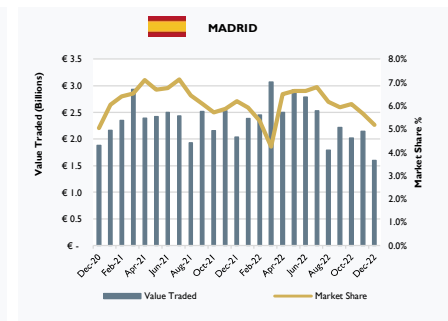
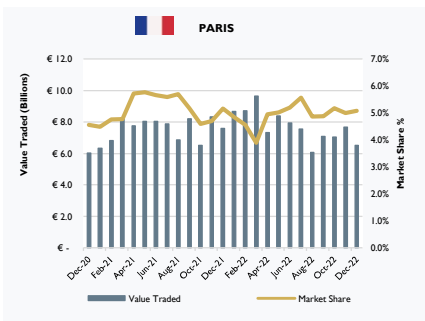
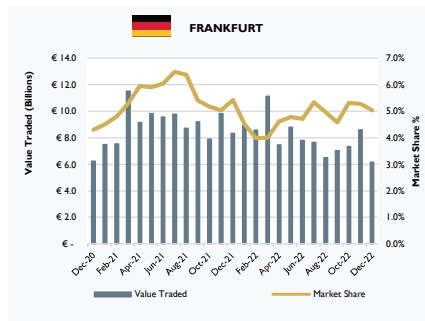
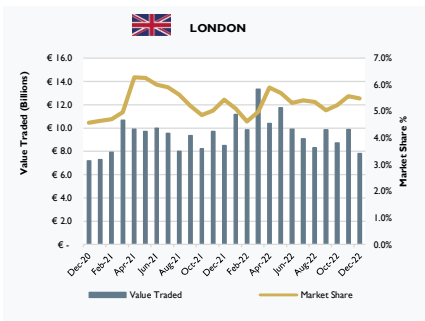
 BRUSSELS TOP STOCKS		
STOCK	UMTF	MARKET SHARE
Euronav NV	EURNb	11.87%
Lotus Bakeries	LOTBb	9.91%
Ackermans & Van Haaren	ACKBb	9.15%
Elia System Operator S.A. N.V.	ELIb	7.65%
Warehousing & Distribution	WDPb	7.46%

 VIENNA TOP STOCKS		
STOCK	UMTF	MARKET SHARE
Palfinger AG	PALv	11.31%
Mayr-Melnhof Karton AG	MMKv	10.64%
Semperit AG Holding	SEMv	10.11%
Uniqi Insurance Group AG	UQAv	9.68%
Vienna Insurance Group	VIGv	9.44%

 LISBON TOP STOCKS		
STOCK	UMTF	MARKET SHARE
Nos SGPS SA.	NOSu	7.33%
Jeronimo Martins - S.G.P.S., S.A.	JMTu	7.32%
Redes Energeticas Nacionais	RENEu	7.10%
CTT Correios De Portugal SA	CTTu	7.04%
EDP Renovaveis S.A.	EDPRu	6.25%

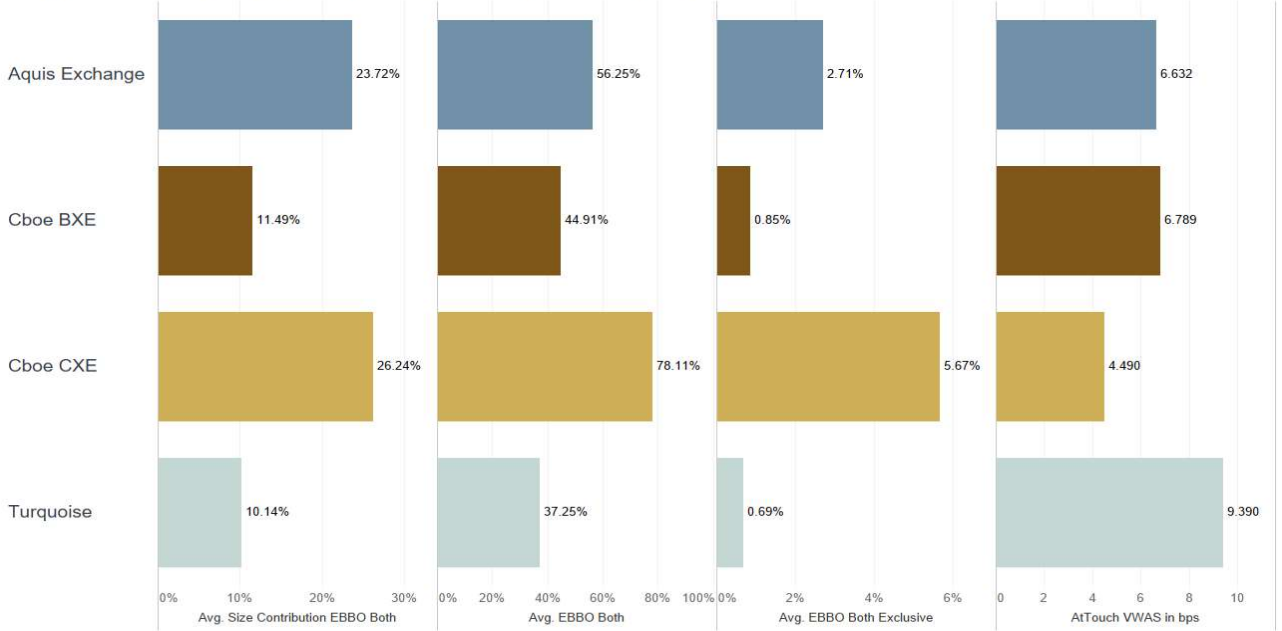
 DUBLIN TOP STOCKS		
STOCK	UMTF	MARKET SHARE
Irish Continental Group Plc	IR5Bi	9.94%
Dalata Hotel Group Plc	DHGt	9.40%
Cairn Homes Plc	C5Hi	7.92%
Irish Residential Properties REIT	IRESi	6.58%
Glenveagh Properties Plc	GVRi	6.57%

## HISTORICAL MARKET SHARE AND VOLUME PER MARKET

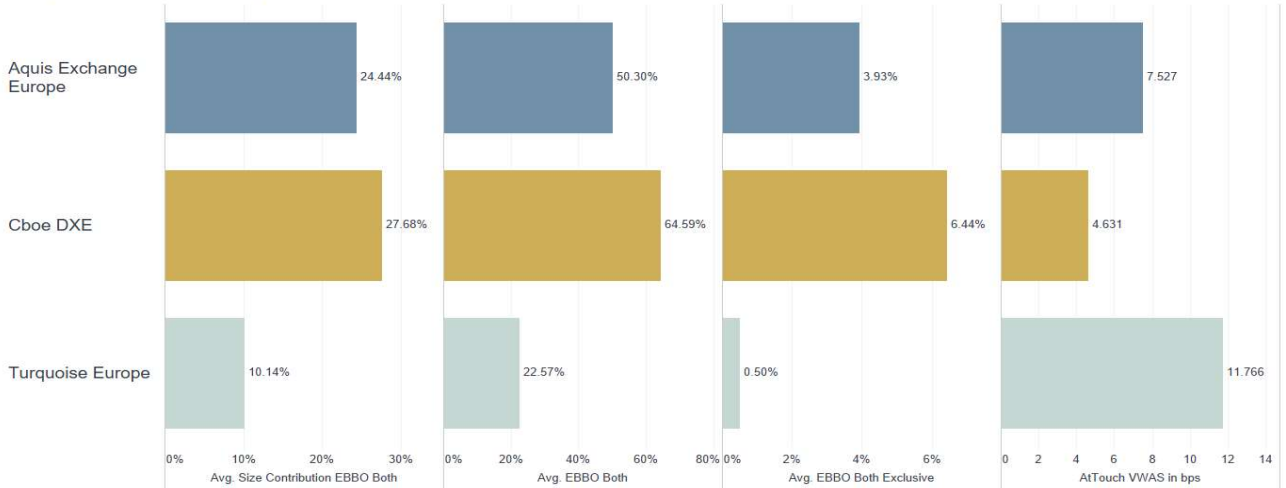


## QUALITY OF AVAILABLE LIQUIDITY PER VENUE

### Average Size Contribution vs Average Liquidity at Touch vs Presence for the UK 100 and Swiss 20



### Average Size Contribution vs Average Liquidity at Touch vs Presence for European Indices



#### Big xyt definitions:

- **Size contribution EBBO both** Ratio between the cumulative bid and ask sizes at a given exchange and the cumulative EBB and EBO sizes (contribution of BO size at a given exchange to overall EBBO size). Bid has to be equal to the EBB and ask equal to the EBO. For daily aggregation the ratio is weighed by time.
- **Presence EBBO Both** % calculates the percentage of time (in millisecond resolution) that particular exchange has both bid and ask not worse than corresponding products/exchanges in the relation to time period that combined bid and ask across all exchanges (EBBO) exists.
- **Presence EBBO Both Exclusive** % calculates the percentage of time period (in millisecond resolution) that a particular exchange has both bid and ask not worse than corresponding products/exchanges and additionally either bid or ask is on the best level. Metric is calculated in the relation to the time period that combined bid and ask across all exchanges (EBBO) exists.
- **Spread at Touch** calculates the observed bid-offer spread of every single quote (BBO). This spread is a relative measure in relation to the mid price expressed in basis points (0.01%).

