



RBC Capital Markets

RBC MiFID II Execution Survey

Client Feedback

SEPTEMBER 2017

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CLIENT FEEDBACK SUMMARY

BROKER SELECTION & TCA

78%

of respondents indicated that they will use TCA under MiFID II

65%

will utilize 3rd party solutions

13%

will utilize in-house



60%

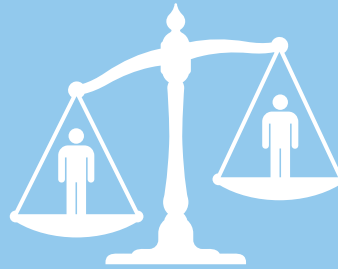
intend to implement a broker execution vote



67%

are preparing for a consolidation of execution counterparty lists, up from **47%** in our first MiFID II survey conducted in Q1 2017

DARK & BLOCK TRADING



22%

expect an increased dependency on dark venues

34%

expect a decreased dependency



48%

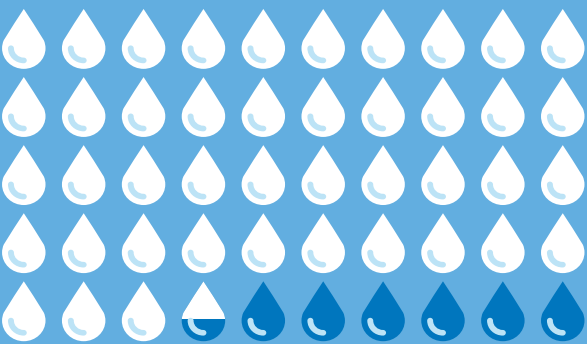
anticipate that MiFID II will result in more block trading flow



32%

are undecided

LIQUIDITY LANDSCAPE



ONLY 13% expect the greater transparency provided by MiFID II to improve market liquidity

Conditional Order types/SIs/ LIT markets are expected to prove the most successful under MiFID II

REGULATION

Anticipated main driver for equity market structure change in Europe over the next 2 years

66%

Regulation

13%

New Venues & Liquidity Fragmentation

10%

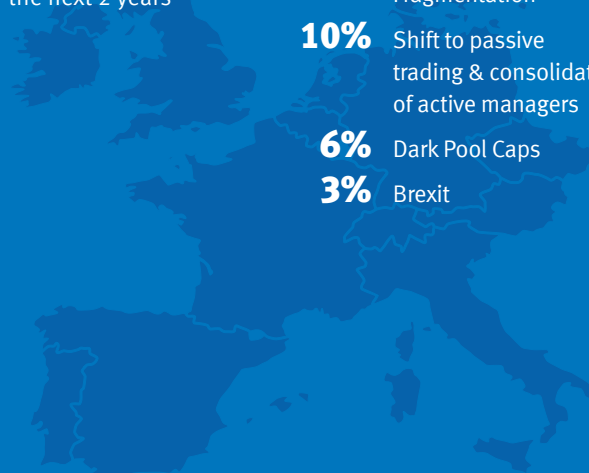
Shift to passive trading & consolidation of active managers

6%

Dark Pool Caps

3%

Brexit



INVESTMENT FIRMS PREPARING FOR SIGNIFICANT CHANGE TO EXECUTION PROCESSES UNDER MIFID II

Following the successful publication of our unbundling & advisory focused client survey in Q1, we once again engaged our client base in Q3 on MiFID II implications, this time with a focus on the impact on execution and market structure. Over 150 buy-side Equity professionals responded to this latest survey¹, which included questions in relation to Transaction Cost Analysis (TCA), best execution, trade reporting and the evolving liquidity landscape.

MiFID II has already started reshaping the market landscape, impacting execution processes and liquidity access. Beginning January 3, 2018, execution venues will be required to submit enhanced reports relating to the quality of execution of transactions which will include a number of execution factors including price, size and speed. Investment firms are also expected to provide transparency on their top five execution venues.

The absence of Broker Crossing Networks (BCNs) is expected to impact the liquidity landscape. Meanwhile, increased regulatory focus on transparency and double volume caps on dark pools will likely force dark liquidity providers to transition to a more LIT market place.

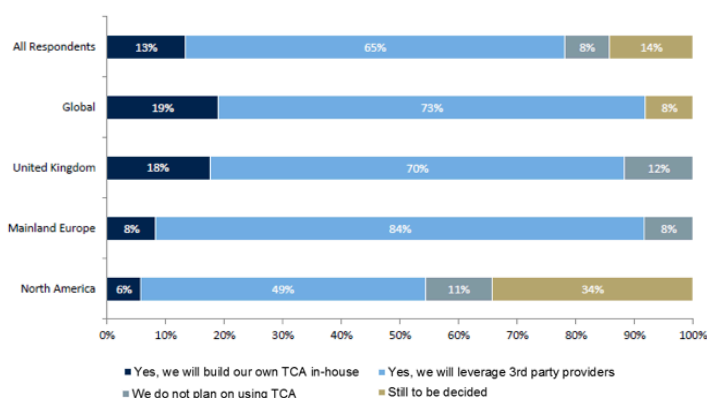
RBC has gathered key information from our client base on how regulatory changes will be translated into practice. As an example, more than two thirds of the respondents expect changes to impact

their execution processes. Meanwhile, 67% of respondents are now planning a consolidation of their broker list, a marked shift since our first MiFID II survey when only 47% expected a consolidation. With January approaching, whilst we are starting to see consensus in a number of topics, a certain degree of uncertainty still exists.

Trade Cost Analysis to Accelerate?

Survey results indicate that most investment firms are expecting changes in a multitude of areas relating to execution. Most notably the increased use of execution quality tools (e.g.

Q: DO YOU EXPECT TO USE TRADE COST ANALYSIS (TCA) UNDER MiFID II ?



Key findings

Change to the status quo...with only 13% of respondents anticipating no alteration to their execution process under MiFID II.

As investment firms look to monitor best execution, **77% said they will increase their usage of Transaction Cost Analysis (TCA)**. UK & Mainland European investment firms are the most likely to increase TCA utilisation given that the majority of their business is likely to be in scope. 65% expect that third party providers will be leveraged to provide TCA solutions. In addition, two thirds of respondents will likely consider the implementation of a broker execution vote in response to the new requirements.

Unsurprisingly, a consolidation of execution counterparties is expected in all regions (67%). Additionally, **40% of respondents expect a shift towards increased electronic trading**. Investment firms are however not expecting to consider outsourcing execution services, with just 3% anticipating they would do so.

There is likely to be an impact on the liquidity landscape, as whilst consensus suggests that more block trading flow (48%) is expected, there is significant indecision on the dependency of dark venues. The lack of Broker Crossing Networks is a concern (53%) and 22% are still undecided on the implications.

There is significant concern (75%) that market fragmentation will be an unwanted consequence of MiFID II regulation and 52% are expecting increased volatility. 58% are also concerned about the inability to access liquidity, with only 18% believing that the market has evolved sufficiently to address this concern.

Regulation is still expected to be the main driver of market structure change in Europe over the next 2 years, with few expecting that Brexit, dark pool caps, new venues or a shift to passive trading will be as disruptive.

¹ Respondents may consist of multiple members of the same firm.

Transaction Cost Analysis) is likely to be a top priority, with 78% of all respondents expecting to use such tools in some capacity. UK & Mainland European investment firms almost unanimously agree that an increase is to be expected under MiFID II.

Whilst investment firms have been debating the value of leveraging third party TCA providers versus implementing more bespoke in-house solutions, our survey indicates a consensus is emerging: 65% of all respondents are likely to opt for a third party solution with just 13% expecting to build in-house.

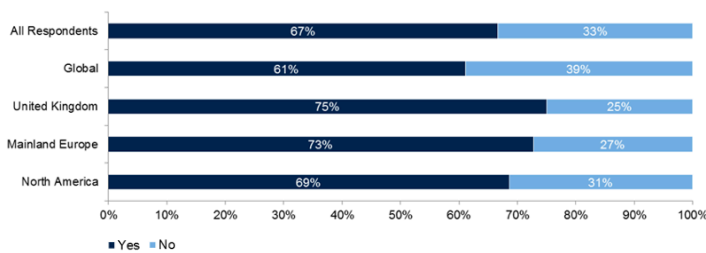
Broker Selection & Electronic Focus

There appears to be a consensus that the best execution regulations are likely to cause a consolidation of execution counterparty lists. North American respondents in particular have adjusted their expectations, with 69% now anticipating a reduction compared to just 36% in the original survey.

The survey also suggests regulation is likely to shift respondents' execution preferences towards electronic trading, possibly due to the increased scrutiny on trade costs. 40% of respondents expect an increased electronic trading bias, and only 14% anticipate a decrease in flow sent to electronic providers.

Investment firms with European exposure, in particular UK & Mainland European respondents, indicate they are also likely to implement an execution broker vote as an additional method of measuring execution performance.

Q: CONSOLIDATION OF EXECUTION COUNTERPARTIES



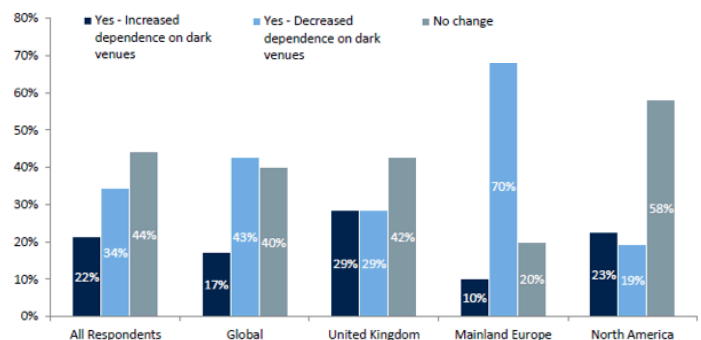
Impact to Dark & Block Trading

The effect of regulation on the amount of flow routed to the dark remains unclear. Whilst almost half of all respondents are anticipating no change, the remaining 56% are split between expectations on increased (22%) and a decreased dark dependency (34%).

Changes to block trading are slightly clearer, with almost half of all respondents indicating that they anticipate increased block trading flow as a result of MiFID II. That said, 32% of respondents indicated that they are undecided on the topic, underscoring that while a consensus is emerging, an element of uncertainty remains surrounding liquidity under MiFID II.

Despite the lack of clarity on liquidity, from a venue & order type perspective, respondents noted Conditional Orders types, Systematic Internalisers and LIT markets are expected to be the most successful under MiFID II, according to the results of the survey.

Q: DO YOU EXPECT THE CHANGING MARKET STRUCTURE AND REGULATION TO IMPACT THE AMOUNT OF FLOW YOU ROUTE TO THE DARK

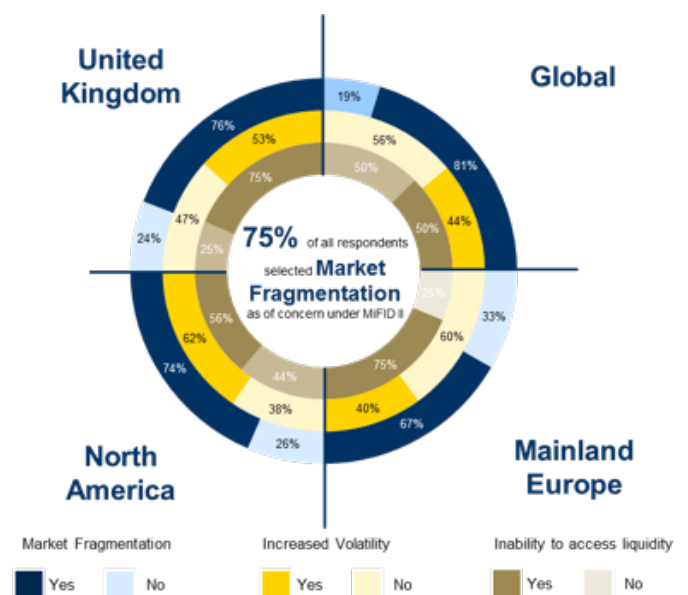


Liquidity & Market Fragmentation a Concern?

Market Fragmentation is of concern globally with 75% of all respondents highlighting it as a potential issue.

Whilst MiFID II is expected to improve transparency, just 13% believe that this will result in improved liquidity.

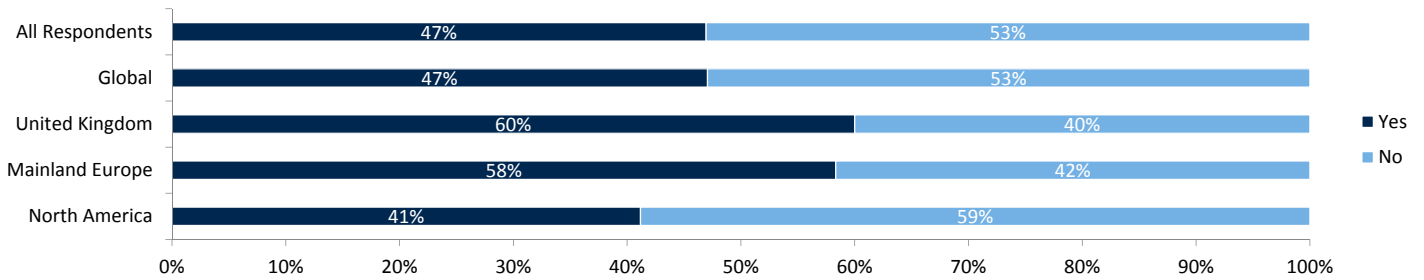
Q: ARE ANY OF THE FOLLOWING OF CONCERN UNDER MIFID II? – MARKET FRAGMENTATION



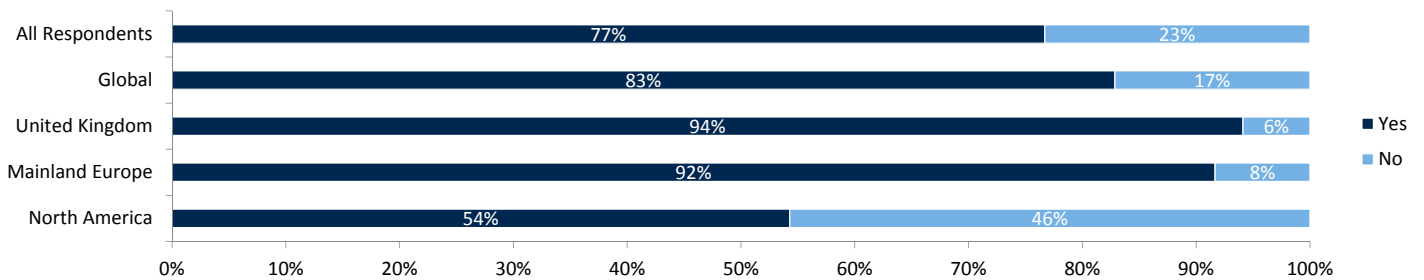
IMPACT OF MIFID II ON TRADE COST ANALYSIS

DO YOU EXPECT THE NEW BEST EXECUTION OBLIGATIONS UNDER MIFID II TO HAVE ANY IMPACT ON YOUR TRADING PRACTICES?

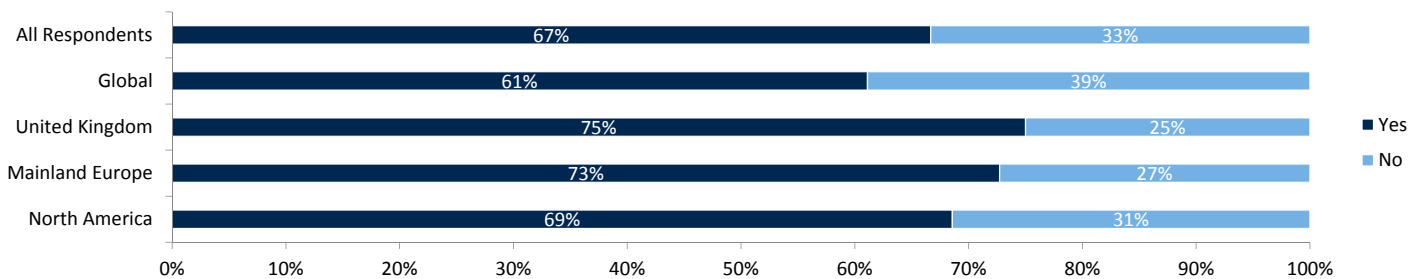
Algo trading practices (e.g. introduction of an algo trading wheel)



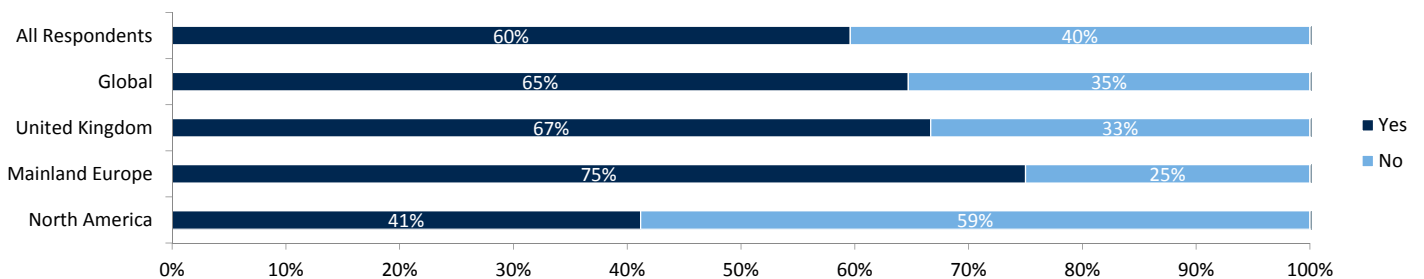
Increased focus on execution quality tools (e.g. Transaction Cost Analysis)



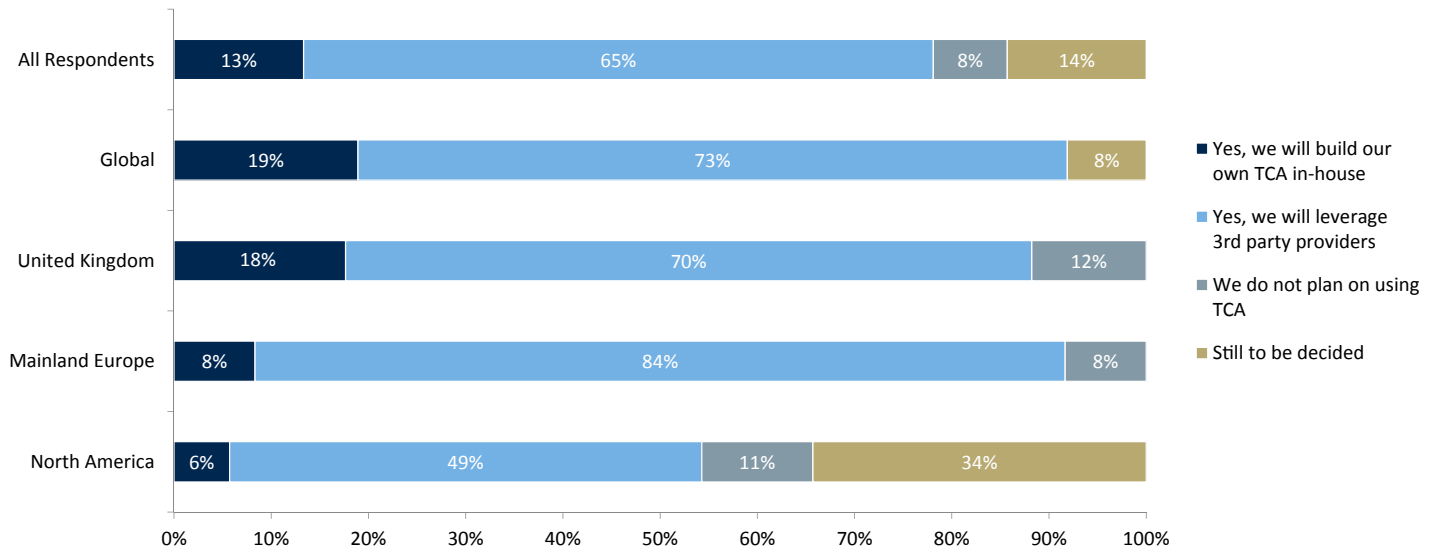
Consolidation of execution counterparties



Implementation of a broker execution vote

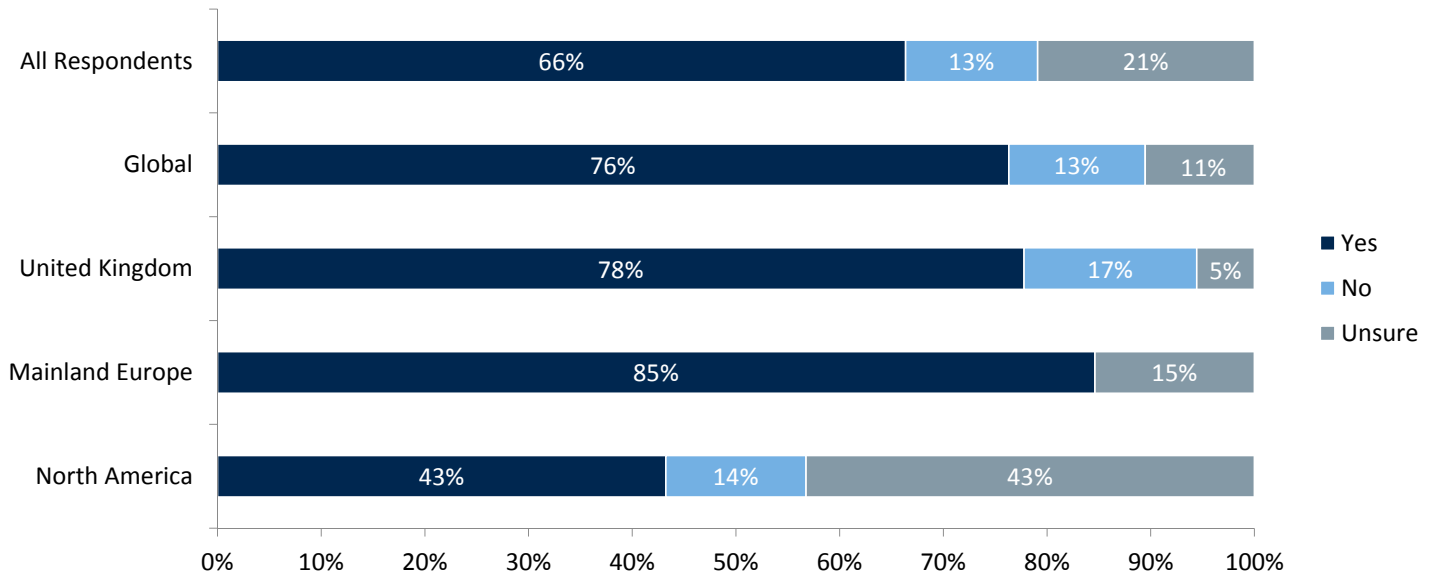


DO YOU EXPECT TO USE TRANSACTION COST ANALYSIS (TCA) UNDER MIFID II?

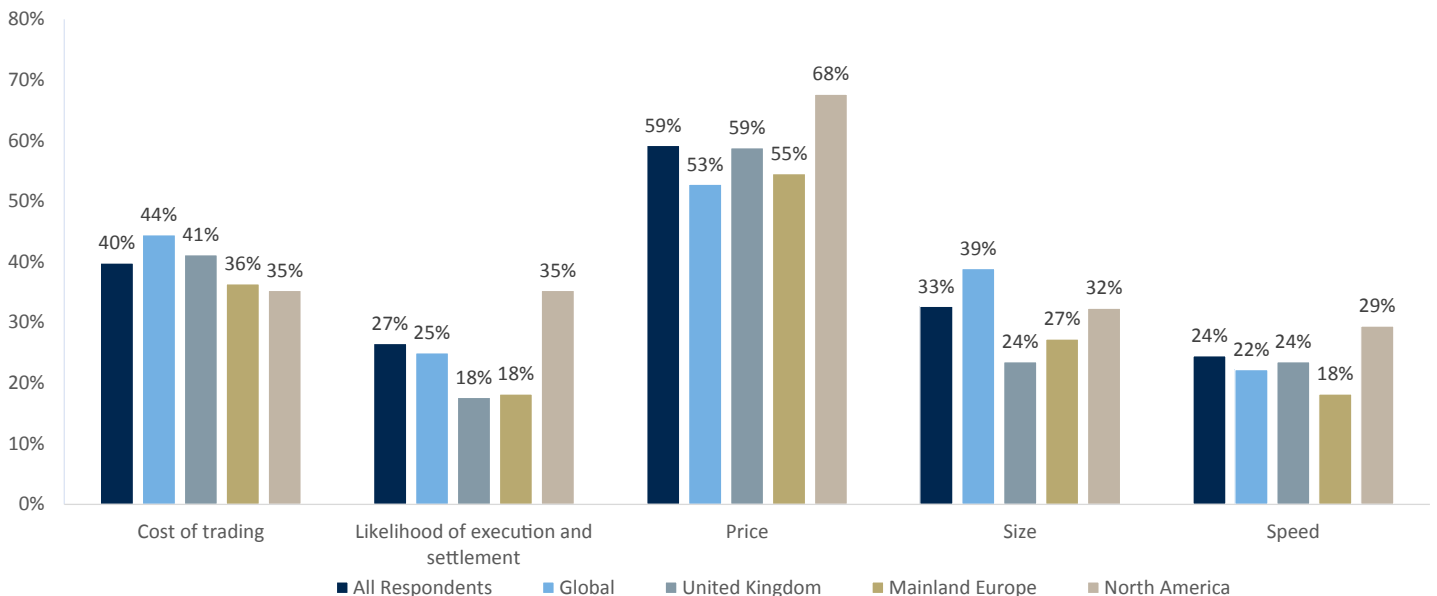


BEST EXECUTION: BROKER SELECTION & ELECTRONIC FOCUS

DO YOU EXPECT THE CHANGES UNDER MIFID II TO IMPACT YOUR EXECUTION PROCESSES?

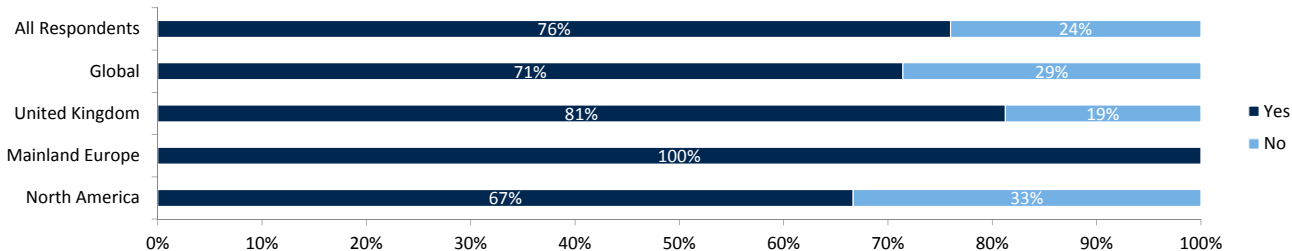


HOW DO YOU CURRENTLY MEASURE BEST EXECUTION?

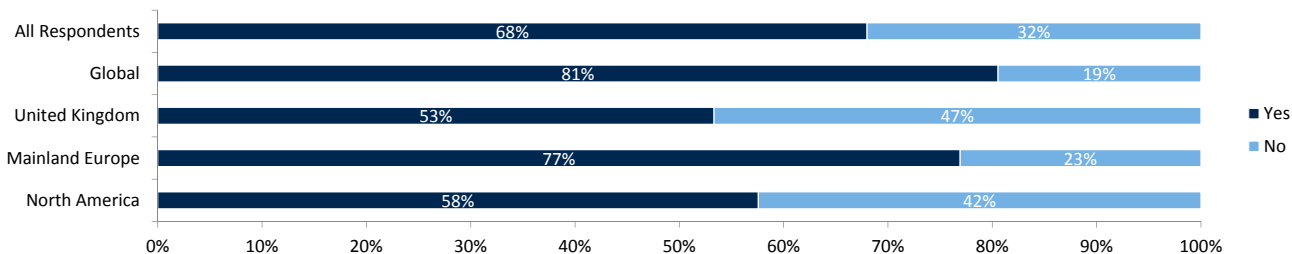


DO YOU EXPECT THAT ANY OF THE BELOW QUALITATIVE VARIABLES WILL FEED INTO YOUR BEST EXECUTION DECISION-MAKING PROCESS?

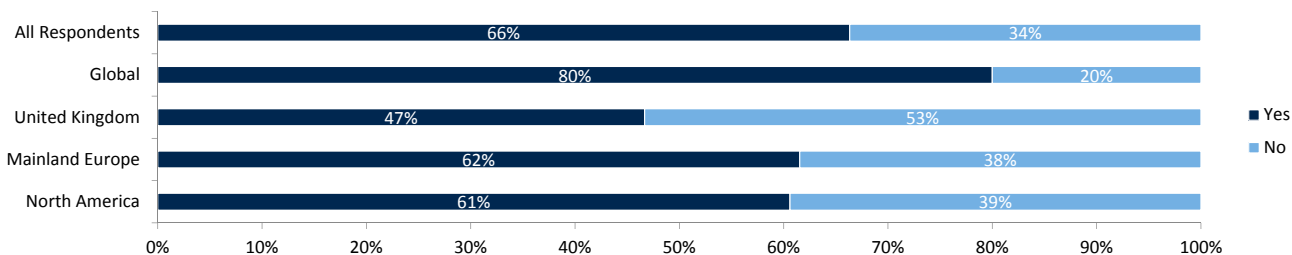
Quality of IOI's



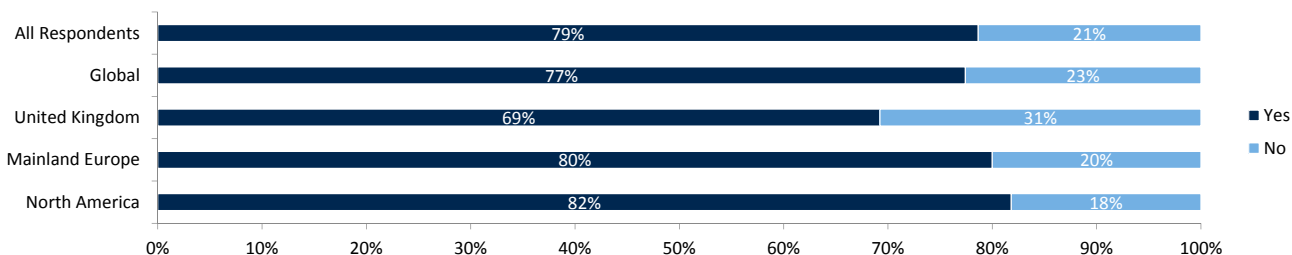
Execution consultancy



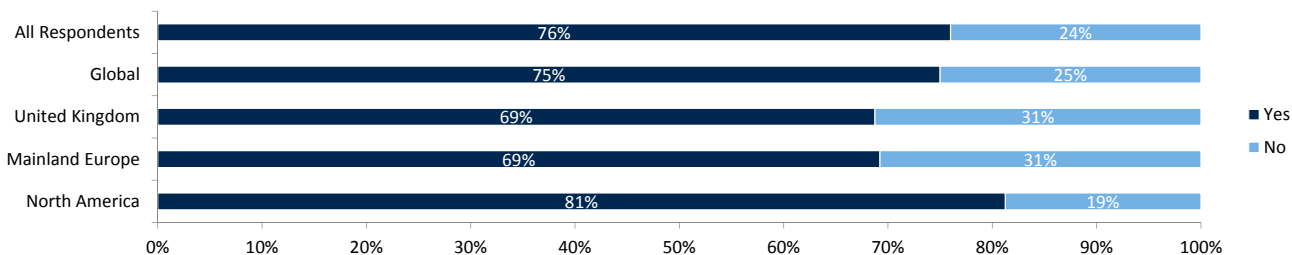
Market structure analysis



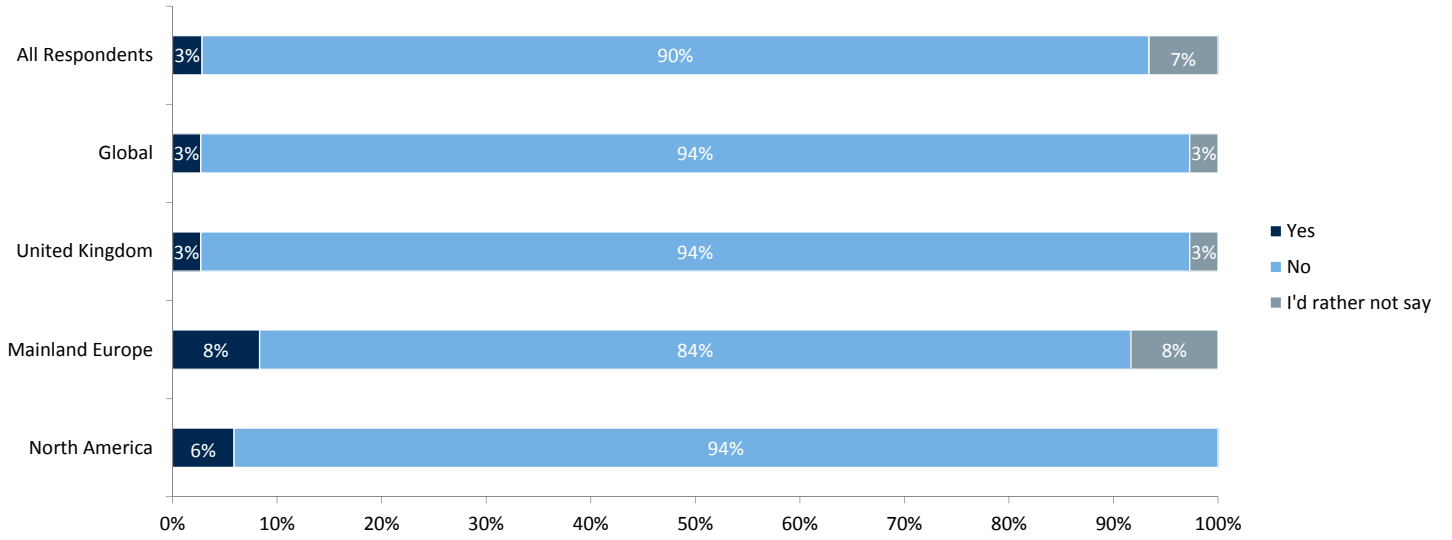
Qualitative variables will be part of our best execution process



Sales trading ideas and market colour

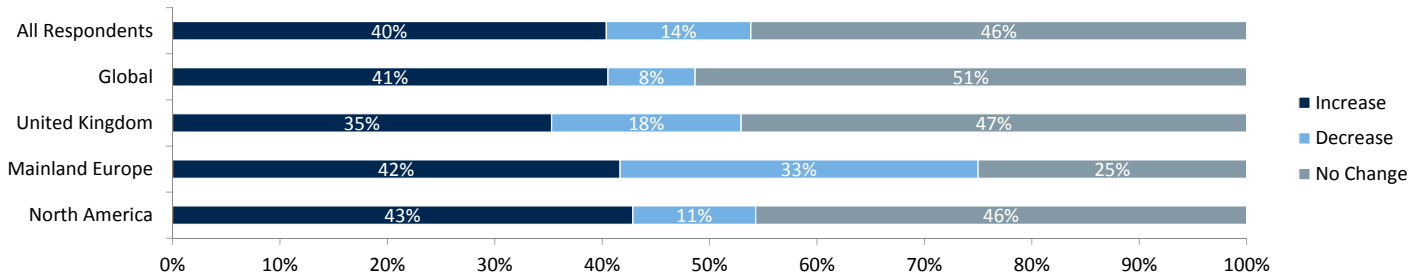


HAS MIFID II PROMPTED YOU TO CONSIDER OUTSOURCING YOUR EXECUTION SERVICES?

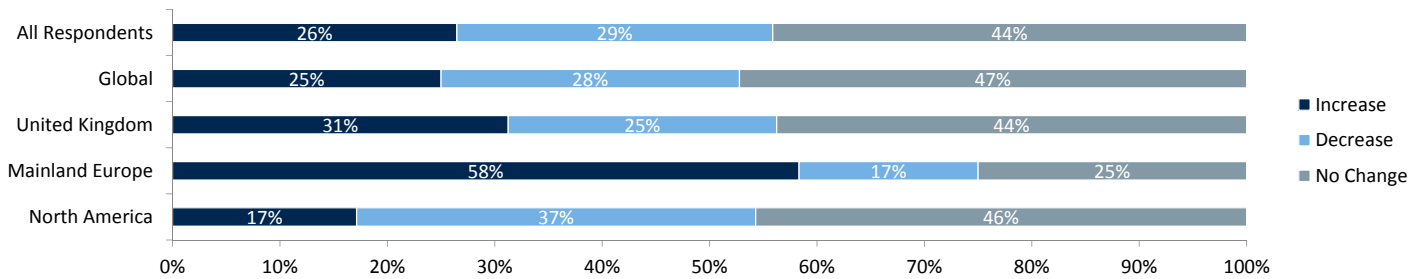


DO YOU EXPECT MIFID II TO CHANGE YOUR EXECUTION BIAS?

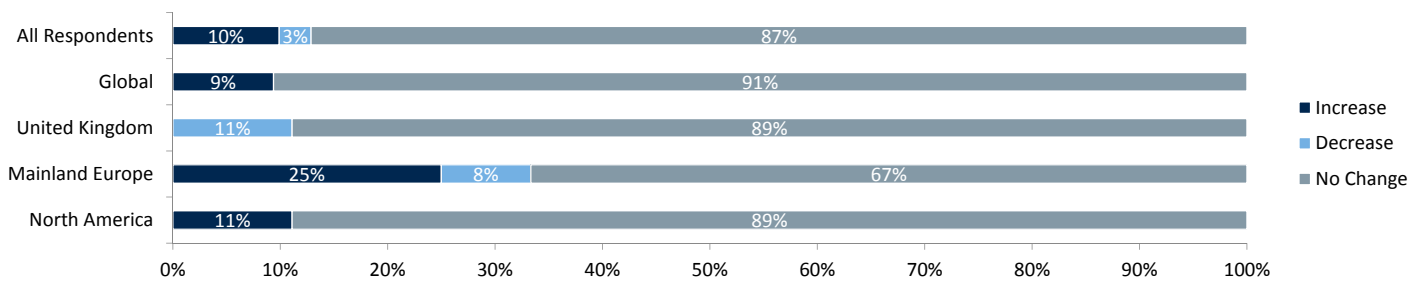
Electronic / e-trading



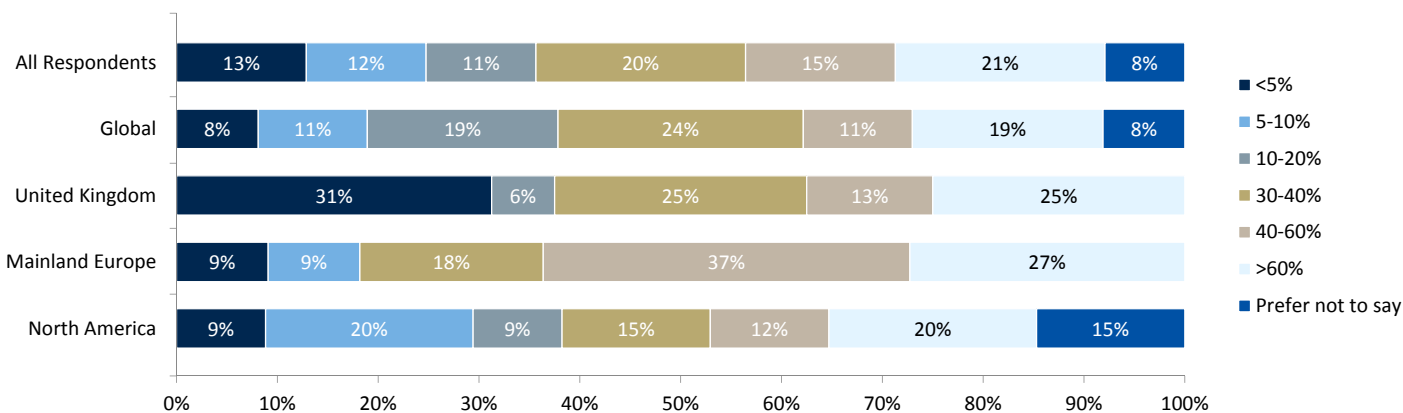
High touch or voice trading



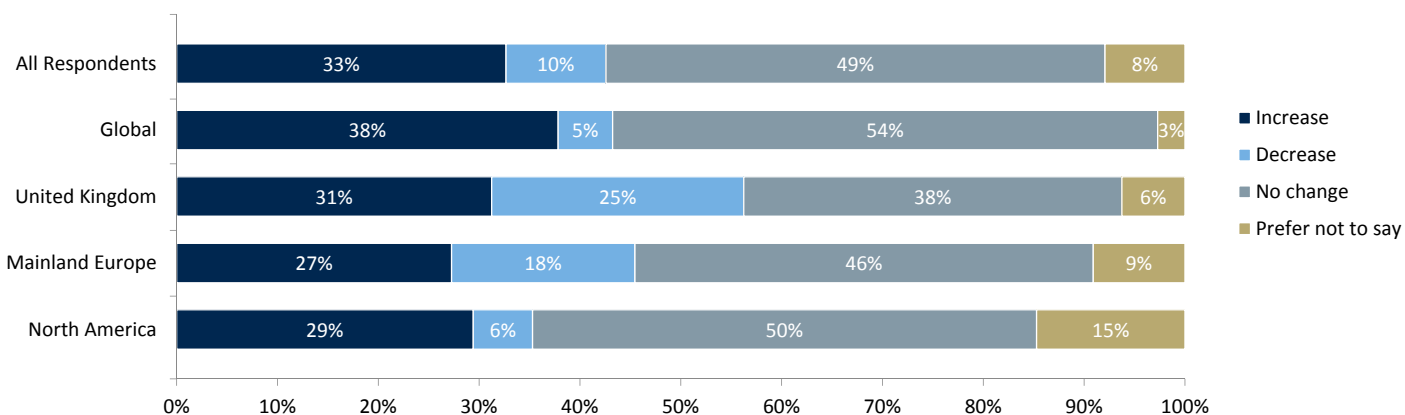
Program trading



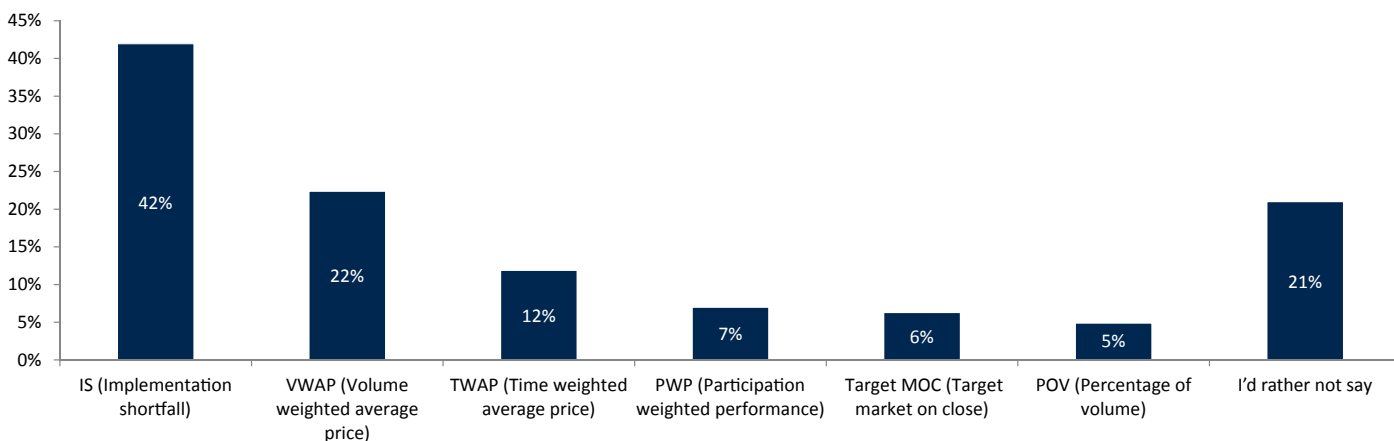
WHAT PERCENTAGE OF YOUR EQUITIES TRADING FLOW IS CURRENTLY EXECUTED ELECTRONICALLY?



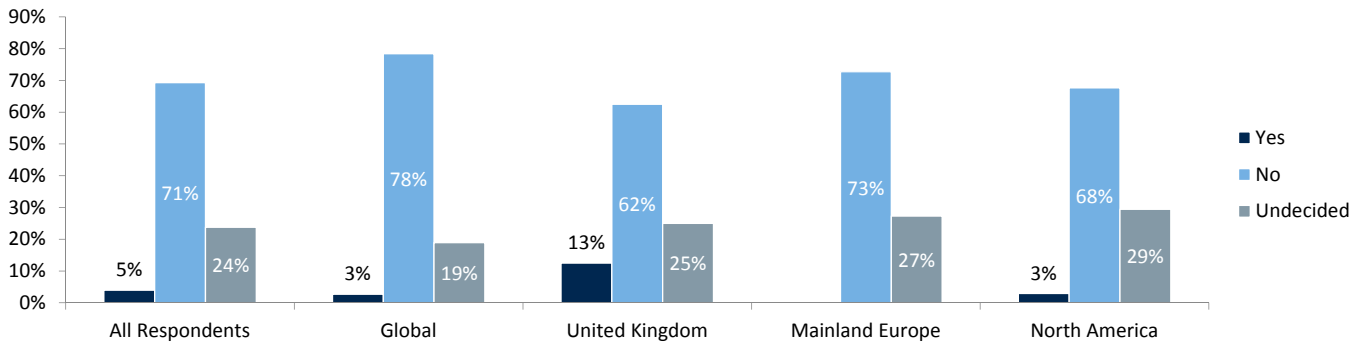
DO YOU EXPECT THIS TO CHANGE POST MIFID II?



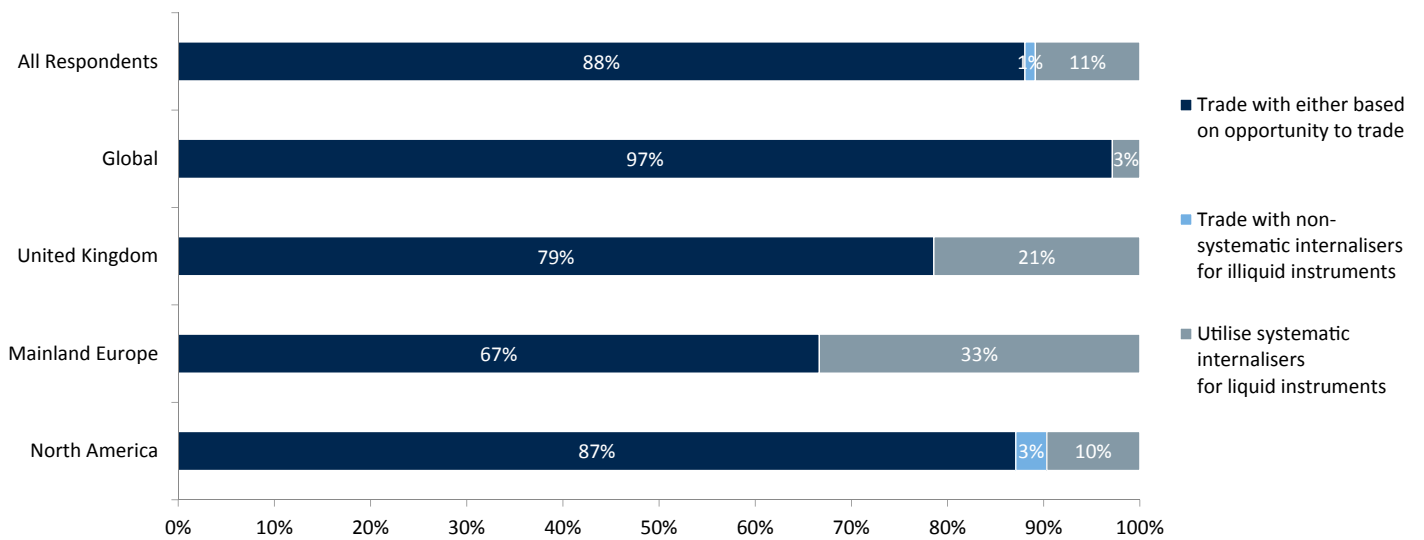
WHAT IS YOUR CURRENT BENCHMARK? (MULTIPLE ANSWERS)



DO YOU EXPECT TO CHANGE YOUR CURRENT BENCHMARK(S) UNDER MIFID II?

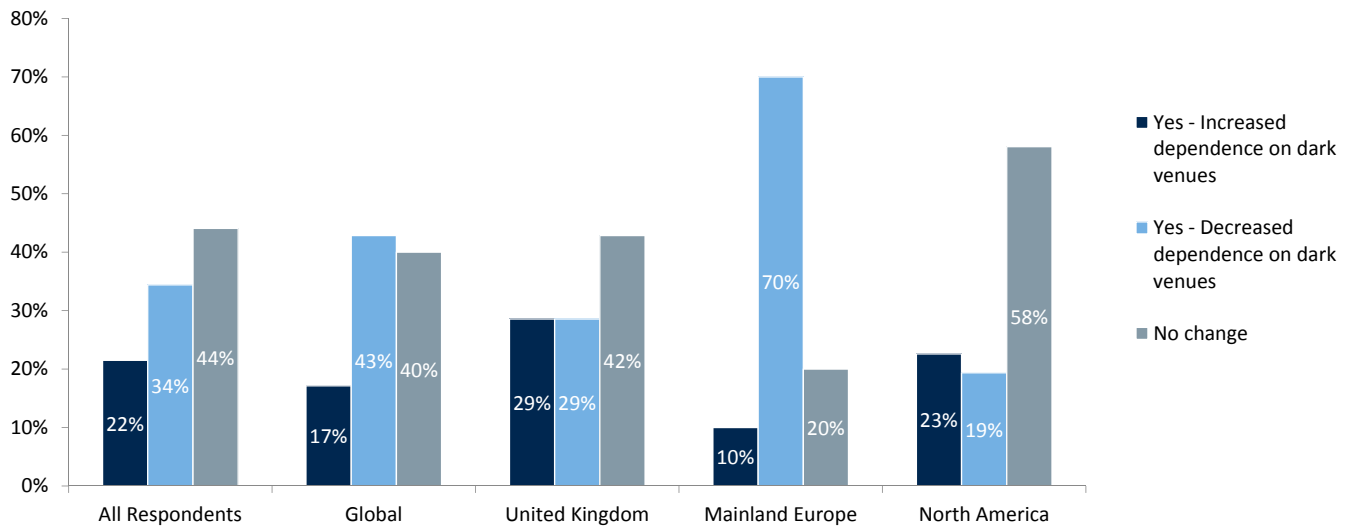


HOW WILL YOU SELECT YOUR EXECUTION COUNTERPARTIES YOU TRADE WITH POST MIFID II?

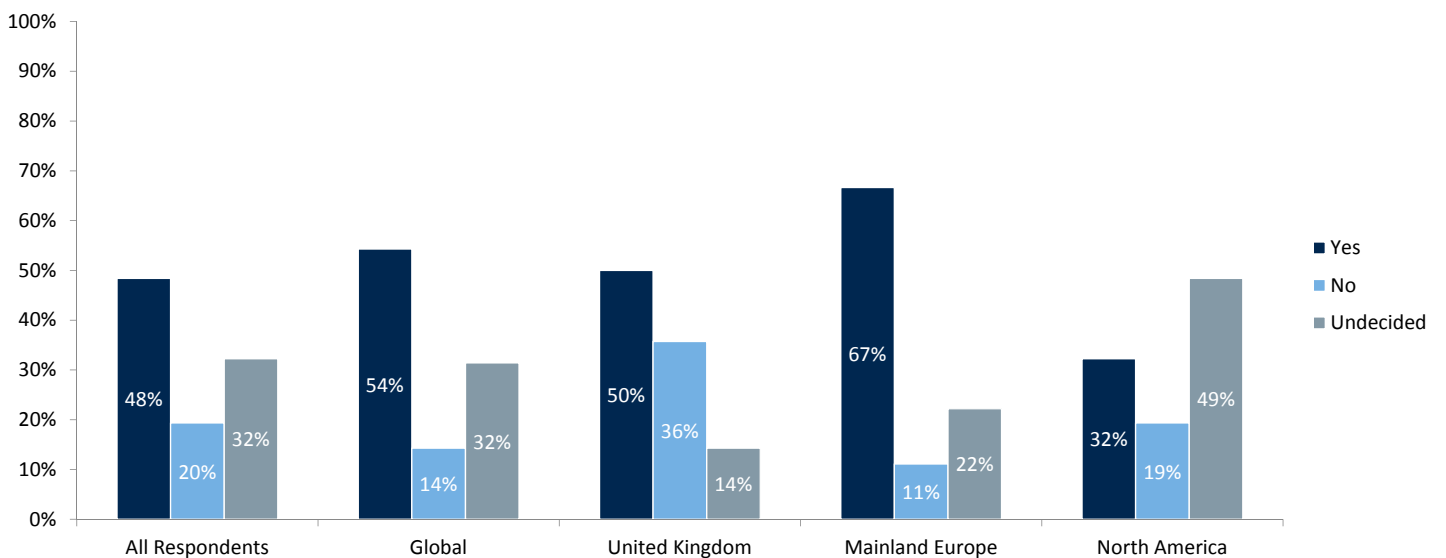


LIQUIDITY LANDSCAPE – IMPACT ON DARK AND BLOCK TRADING

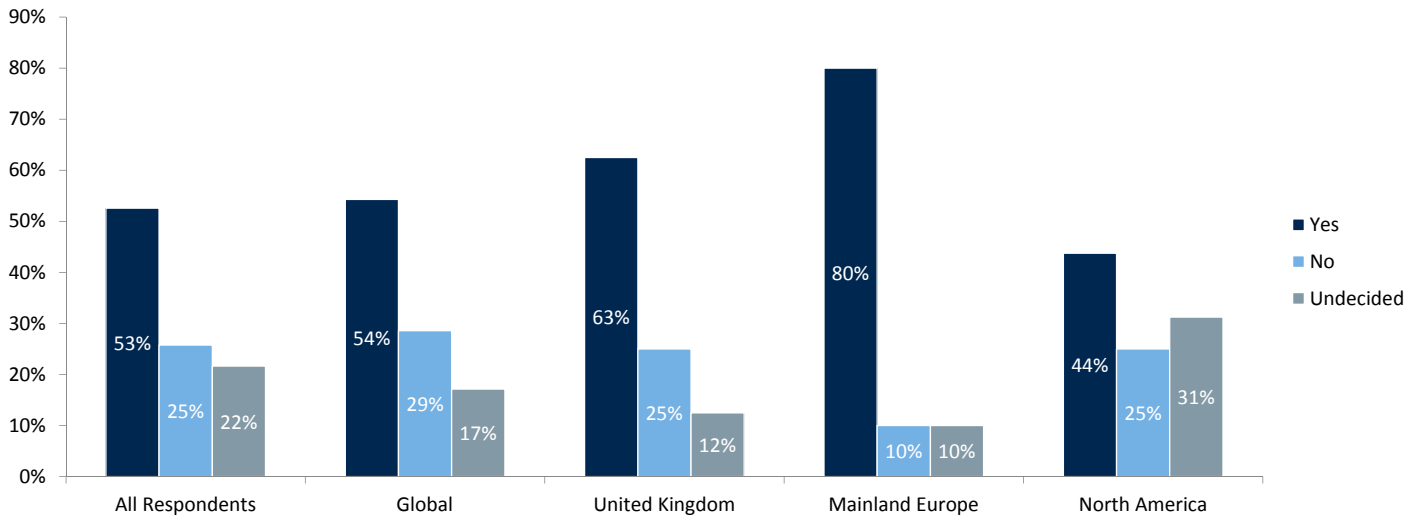
DO YOU EXPECT THE CHANGING MARKET STRUCTURE AND REGULATION TO IMPACT THE AMOUNT OF FLOW YOU ROUTE TO THE DARK?



DO YOU EXPECT TO SEE MORE BLOCK TRADING FLOW UNDER MIFID II?



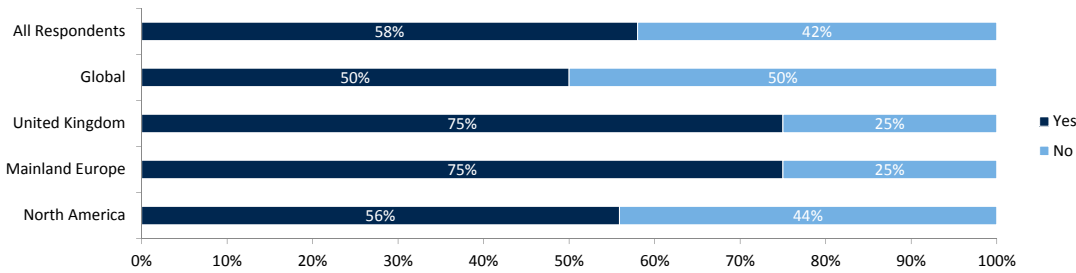
DO YOU EXPECT THE REMOVAL OF BROKER CROSSING NETWORKS UNDER MIFID II TO IMPACT THE WAY YOU ACCESS BLOCK LIQUIDITY?



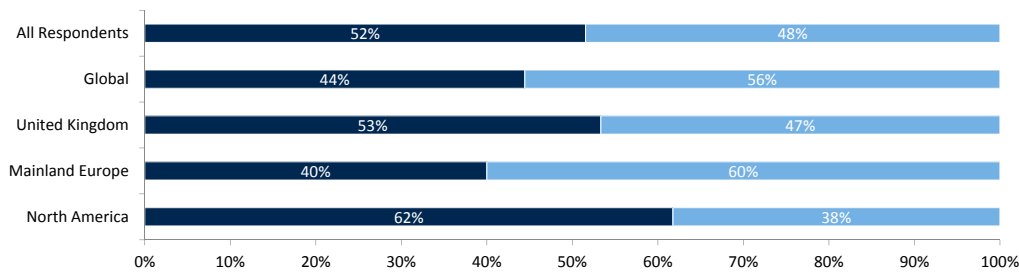
LIQUIDITY – ACCESS TO LIQUIDITY & MARKET FRAGMENTATION CONCERNS

ARE ANY OF THE FOLLOWING OF CONCERN UNDER MIFID II?

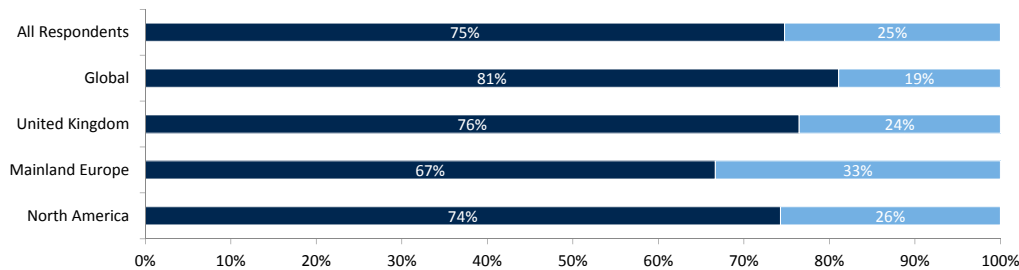
Inability to access liquidity



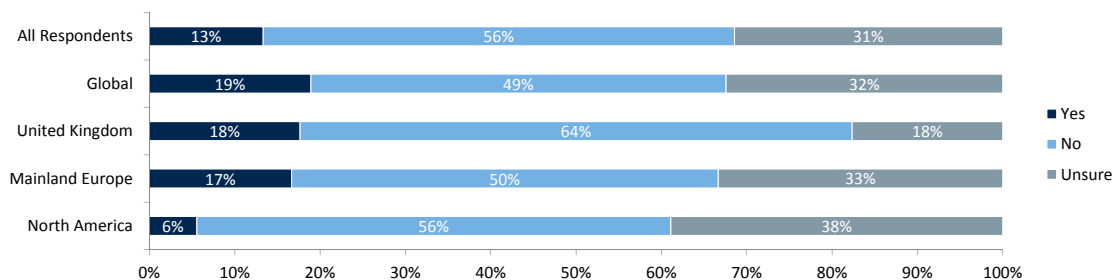
Increased Volatility



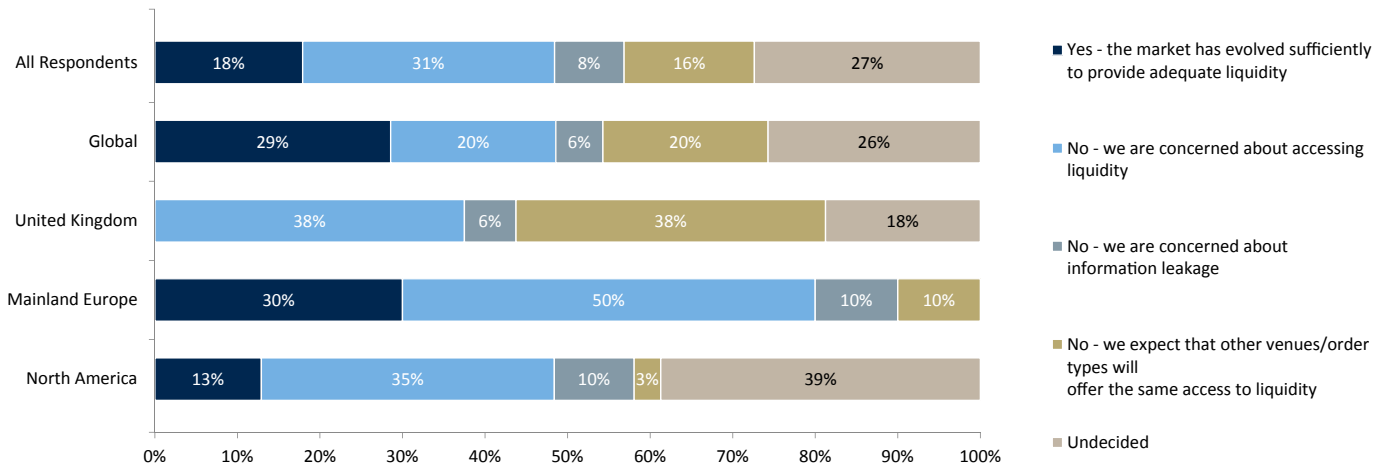
Market fragmentation



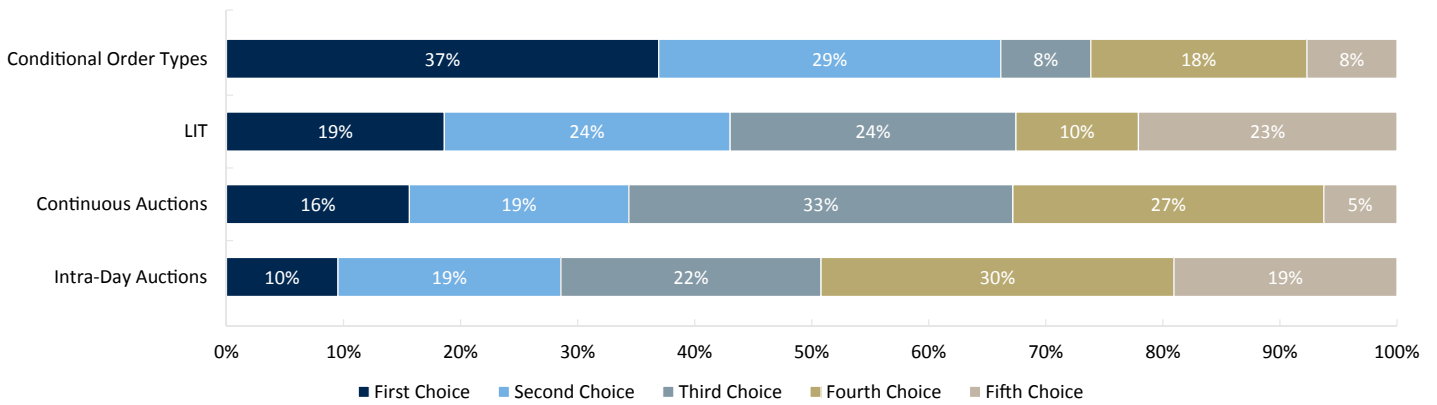
DO YOU EXPECT THAT GREATER TRANSPARENCY UNDER MIFID II WILL HELP IMPROVE LIQUIDITY?



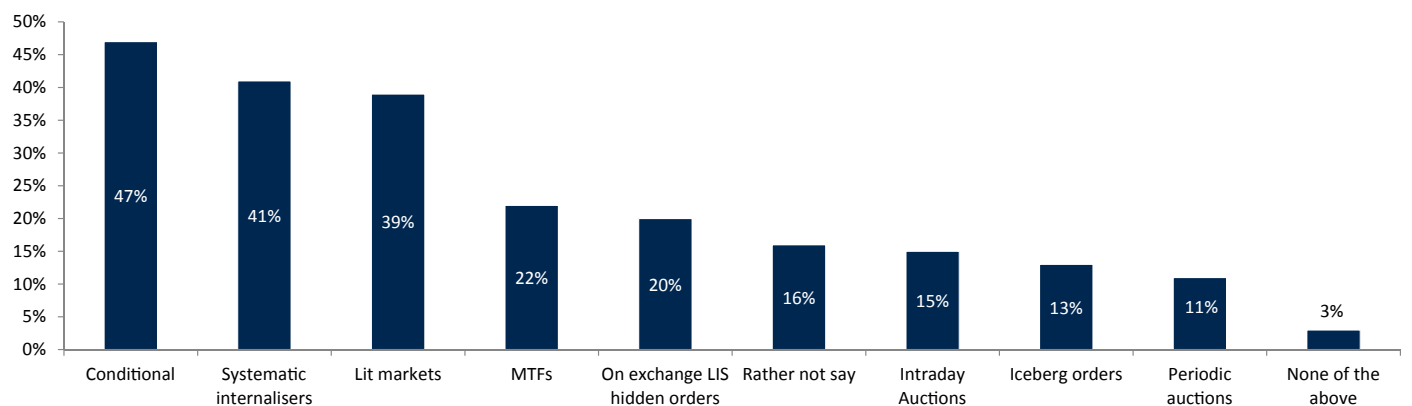
DO YOU EXPECT NEW ORDER TYPES AND VENUES UNDER MIFID II TO PROVIDE AN ADEQUATE SUBSTITUTE IN THE CHANGING MARKET LANDSCAPE?



WHICH OF THE FOLLOWING LARGE IN SCALE (LIS) VENUE AND ORDER TYPES DO YOU EXPECT TO BE THE MOST SUCCESSFUL UNDER MIFID II?

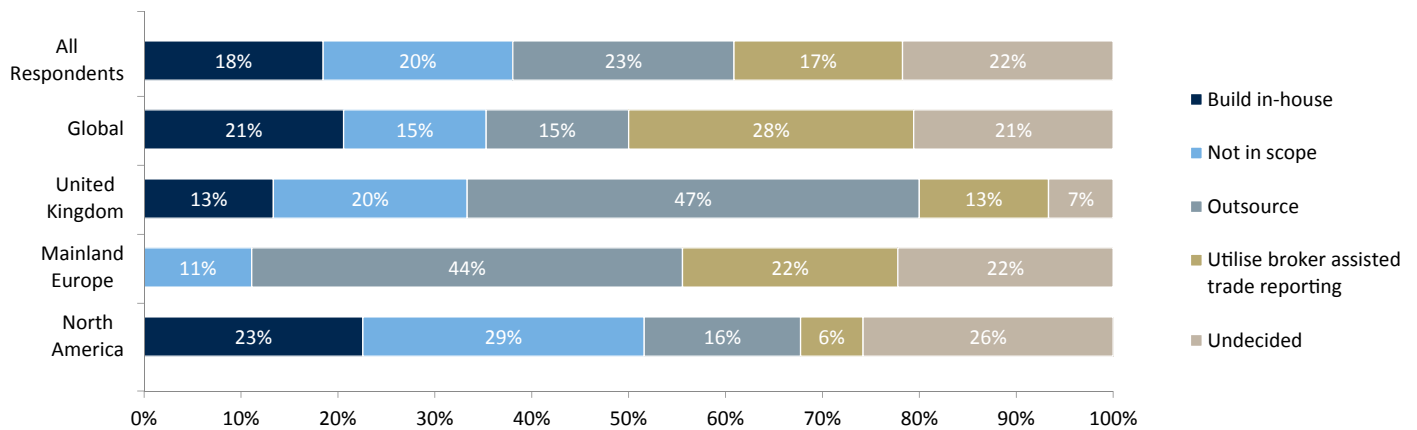


WHICH OF THE FOLLOWING VENUES DO YOU EXPECT TO BE THE MOST SUCCESSFUL UNDER MIFID II?

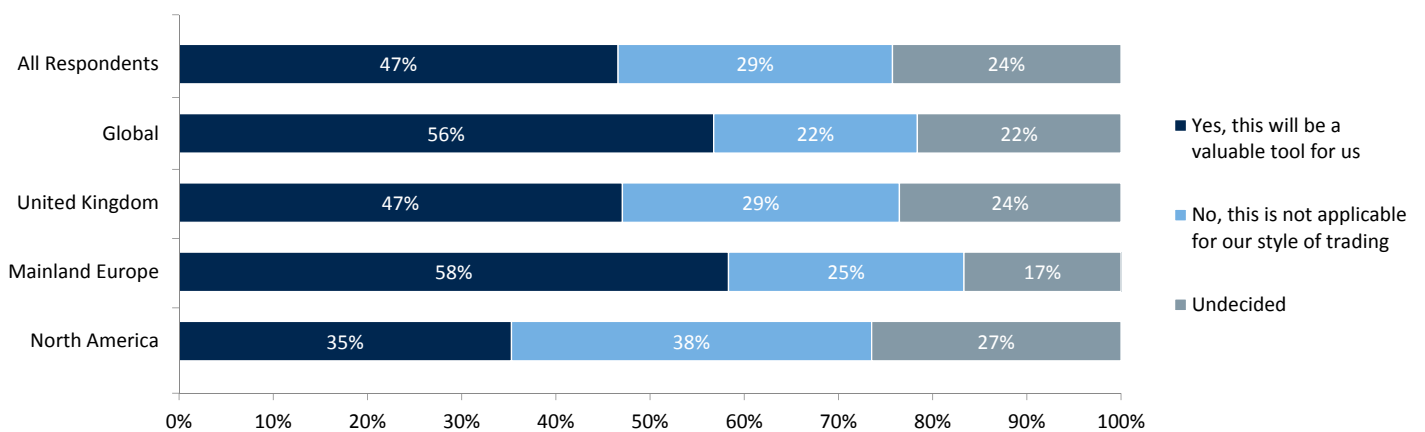


TRADE REPORTING

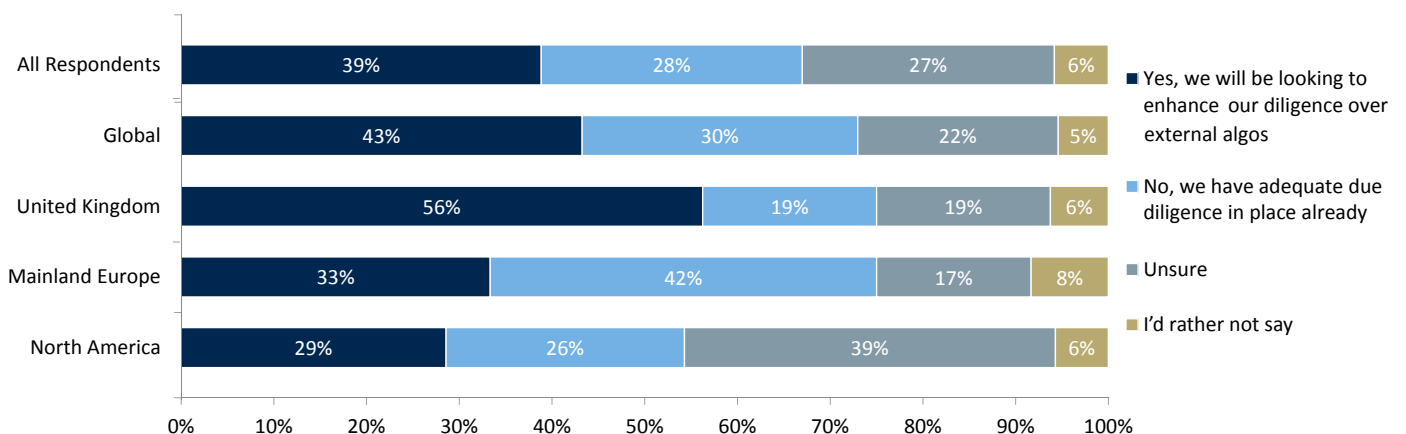
HOW DO YOU INTEND TO MEET YOUR TRADE REPORTING OBLIGATIONS?



WILL YOU USE PRE-TRADE TOOLS TO OPTIMISE YOUR TRADING PERFORMANCE?

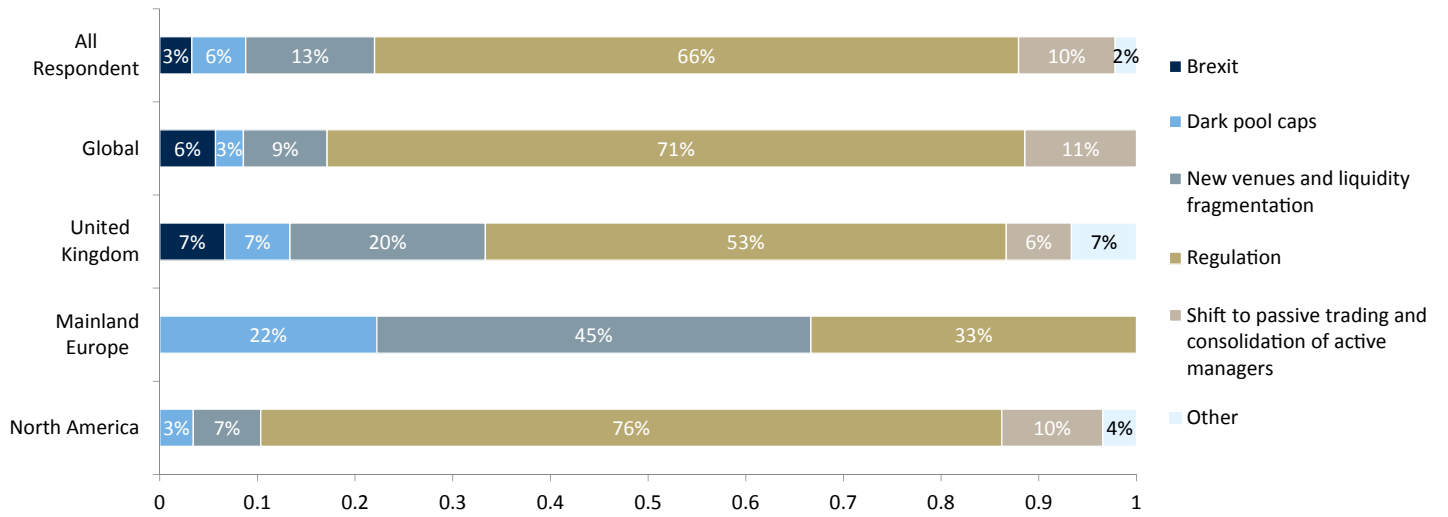


DO YOU EXPECT YOUR DUE DILIGENCE OF ALGO PROVIDERS TO CHANGE UNDER MIFID II?



MARKET STRUCTURE

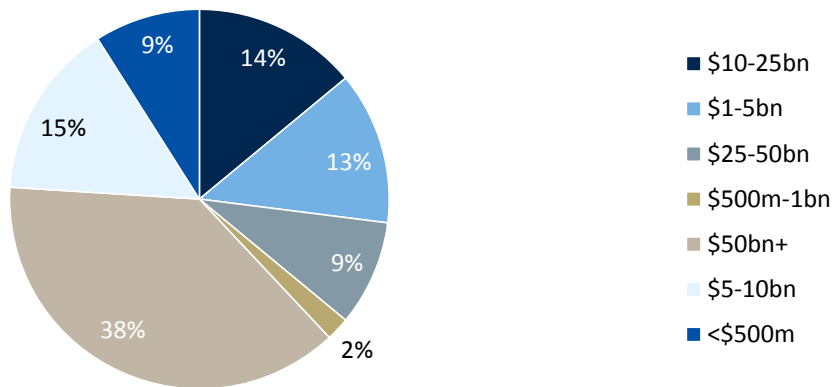
WHAT DO YOU EXPECT WILL BE THE MAIN DRIVER FOR EQUITY MARKET STRUCTURE CHANGE IN EUROPE OVER THE NEXT 2 YEARS?



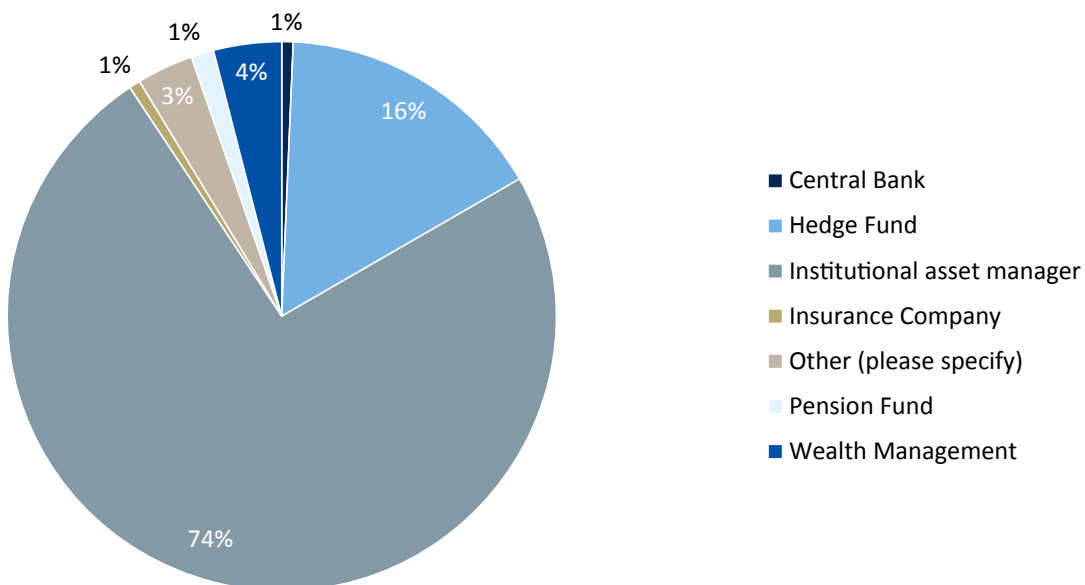
SURVEY RESPONDENT PROFILE

Number of respondents: 156

WHAT IS THE APPROXIMATE VALUE OF YOUR FIRM'S ASSETS UNDER MANAGEMENT (USD AUM)?



WHICH OF THE FOLLOWING BEST DESCRIBES YOUR INSTITUTION?



GLOSSARY

Transaction Cost Analysis (TCA) – A method to measure trading performance against benchmarks by evaluating the prices at which trades are executed.

Broker Crossing Network (BCN) – Broker owned electronic platform that facilitates matching of third-party orders anonymously and uses selected LIT markets reference prices.

Large in Scale (LIS) – An order that is equal to or larger than the minimum size of orders.

Trade Reporting – The real time reporting of trade data.

Benchmarks:

Volume weighted average price (VWAP) – Comparison of the average execution price against historical volume weighted average price.

Implementation shortfall (IS) – Comparison of the average execution price against arrival price.

Time weighted average price (TWAP) – Comparison of the average execution price against time weighted average price.

Target market on close (Target MOC) – Comparison of the average execution price against price at market close.

Percentage of volume (POV) – Comparison of the order participation rate against a specified percentage of volume.

Participation weighted performance (PWP) – Comparison of the average execution price to a specified percentage participation weighted price.



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