Global Equities

European Equity Trading 2014: Part 2

Low Touch Domination Takes Off

Rebecca Healey | V12:011 | February 2014 | www.tabbgroup.com

Vision

European equity trading continues its dramatic metamorphosis. Ninety-six per cent of participants anticipate a continuation or increase in their use of algorithms this year, compared to only 16% in 2005. Algorithms are no longer for the nerds on the trading floor – they are main stream right across Europe - but their growing usage is creating increased friction in the ecosystem. With the looming European pensions crisis now focusing regulatory attention on the buy side as well as the sell side, the anticipated radical impact on overall commissions and the longer term negative prognosis for the industry is undeniable. The low touch proportion of the commission wallet is nearing parity with sales trading for the first time.

Sparse resources are forcing brokers to restrict services to the most profitable clients. But as the brokers become more selective, liquidity is pooling in ever more exclusive clubs. The concentration of products and services are spiraling the European industry inward to a standardised offering - with larger cap names being traded by larger asset managers via standardised algorithms, ironically creating an increased concentration of risk and forcing the buy side towards automation via majority rule - whether they are willing participants or not. The industrialisation of equity trading is upon us.

However in parallel, macroeconomics are also undergoing change and this throws up new challenges for market participants. The gridlock the industry previously faced in Europe from the wider economic crisis and uncertainty over the future of regulation is easing. The MiFID II framework has now been delivered and we are moving into the next stage of equity markets evolution. Savers concerned with the low-interest environment are taking tentative steps back towards developed Europe once more. Appetite for alpha in Europe is back.

Passive funds have dominated of late which has suited the vanilla algorithms, but the return of the stock picker is no longer a neat fit for the industrialised trading model. Trading small and mid-cap names is becoming both too expensive and time-consuming for the majority to access sales trading; yet standardised algorithms can deliver sub-optimal performance. This will force innovation in the mix of products and services as the buy side have to become less dependent on twenty-year-old relationships and embrace greater automation and autonomy.

A resource depleted buy side now has the choice – compete with the quants, partner or outsource. This was the first year where BlackRock's "Aladdin" was mentioned in the OMS/EMS space – a project which was deemed by some to be unworkable initially is now proving to be the blueprint for a future buy side. This challenge to the status quo of the European equity trading industry will be revolutionary in the extent of its impact.

The silo'ed approach of bulge brackets may be their undoing. While under the auspices of best execution many on the buy side still require the ability to go to a specialist. As dealing desk lines blur and consolidation increases to cover multi-asset class functionality, the need to remain relevant will ensure commissions pool where they will have maximum impact. This in turn will change what the sell side needs to offer, what the buy side elects to pay for and whether independent vendors will in fact become the conduit between the future buy and sell sides.

One area where this transition is already evident is with TCA. No longer vanilla, this is now independently verified real-time execution analysis from multiple sources. Broker TCA will remain unable to deliver a truly holistic view unless the buy side are prepared to lead them into their inner sanctum. Some are, and already garnering improved results from alpha modelling and optimisation of order routing as a result; whereas others are choosing to partner with new vendors as the fiduciary responsibility to demonstrate true best execution takes hold. As the results continue to influence the execution process, bulge bracket success in algorithms linked solely to research capabilities may be in for a rude awakening. Likewise liquidity aggregators may be viewed in a different light as participants become better informed as to the benefits of limiting information leakage versus a potential decline in the speed of execution.

As automation in the execution space permeates across the asset classes and into additional products and services, low touch will no longer reflect merely a dumbing down of execution but a wider quantitative adaptation of technology encompassing short term alpha within the investment decision. While technological leaders will continue to remain at the forefront, it will be the shift to technology by the moderate majority which will deliver the greatest radical change throughout the industry. Hold on to your seats, low touch domination is set to take off.

Low Touch Top 10 for 2014

1. Fifty-nine per cent of buy side participants average daily turnover in 2013 was routed to low touch channels with 96% anticipating their usage of low touch to continue in 2014.

2. Fifty-five per cent of participants expect to increase algorithm usage in 2014.

3. The proportion of commission wallet directed to algorithms rose to 36% in 2013. Low touch execution channels now account for 42% of commissions paid in Europe.

4. The bulge bracket dominance in electronic trading is being challenged with ITG reaching fourth position for the first time.

5. Sixty-one per cent of participants now select their algorithm according to the strategy rather than the underlying broker.

6. Dark activity equates to 10% of equity turnover and continues to drive an increase in algorithm usage as participants opt for liquidity-seeking strategies (LSA) providing access to dark pools or aggregators.

7. Thirty-eight per cent of participants choose not to access dark pool aggregators but for the 62% who do, 53% hold brokers accountable for the performance rather than the aggregator.

8. As participants become more autonomous in their selection process, 91% of participants now use TCA and a third use TCA to direct commission payments.

9. Only 43% anticipate IT spend will increase in 2014 despite the recognition that technology could help cope with a raft of challenges.

10. Forty-three per cent are looking to start trading fixed income electronically in 2014, 37% FX and 29% derivatives.

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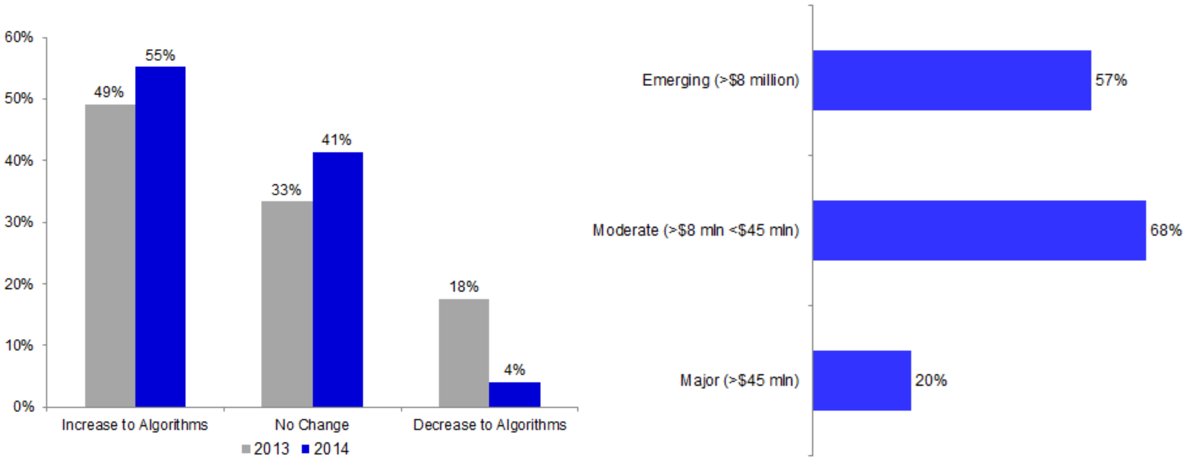
Algos for All

The encroachment of algorithms continues unabated with almost half of the participants increasing their usage of algorithms in 2013 and 55% intending to increase in 2014 (see exhibit 1). Frustrated at being excluded from high touch products and services, moderate commission payers in particular envisage an increase in usage of algorithms in the coming year (see exhibit 2), extending the range of users from solely the quantitative high ADV funds to all participants regardless of trading activity or geographic location.

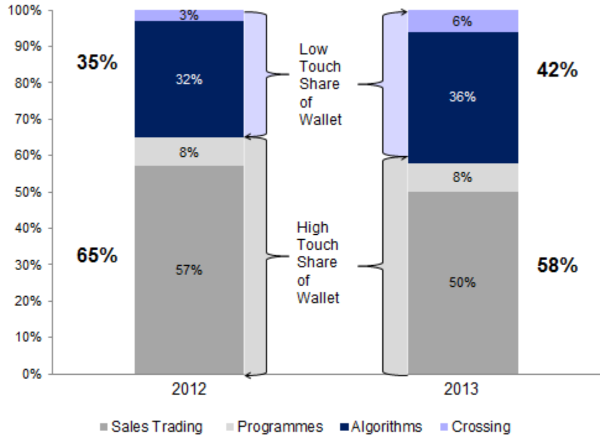
Exhibits 1 and 2
Planned Increase in Algorithm Usage 2013/14 / Breakdown by Commissions Payable



Source: TABB Group

While low touch dominance in average daily turnover is nothing new, it is the gradual encroachment in terms of the proportion of the wallet being paid to low touch channels which will have greater impact on the industry overall. In 2013 low touch channels received over 40% of the wallet for the first time (see exhibit 3) and will continue to push for parity with sales trading in 2014.

Exhibit 3
Breakdown of Commissions Paid per Channel



Source: TABB Group

Given the wider challenges the industry faces in terms of payment for non-execution services this will require an adaptation of both the type, quantity and manner of services consumed. Brokers will need to adjust their low touch offerings, whether this will be via people or product. The idea that algorithms are just for dumb order flow has been relegated to the history books. The ranks of industry leaders who have embraced technological change are swelling with an influx of the middle majority who appreciate they too need to rely

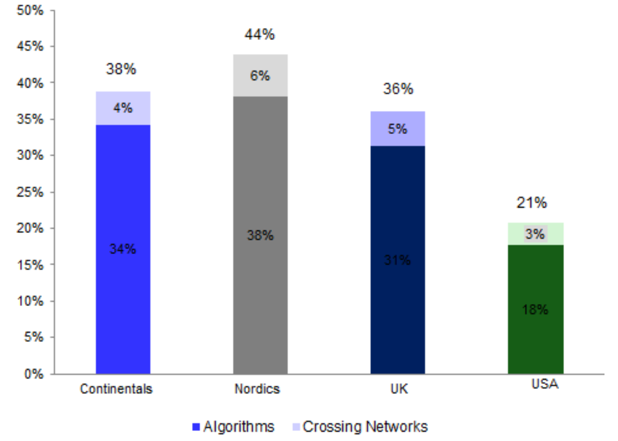
"We have just 5% now going High Touch as its small and mid-cap names – the other 95% - that's all now low touch."
(Medium sized Continental Asset Manager)

on greater technology, analysis and improved trading processes in order to survive in the new environment. This not only includes the use of algorithms but a greater use of electronic processes, from OMS/EMS consolidation to drive greater efficiencies throughout the investment process, to increased usage of TCA data and analysis. This will only intensify as automation encroaches across the asset classes.

"We will use algos more intensively in 2014: that is a deliberate strategy shift for us"
(Medium-sized Continental Asset Manager)

Tale of Two Cities

Exhibit 4
Anticipated Algorithm Usage in 2014 by Geography (Not Weighted)



The automation process begins with the use of algorithmic execution strategies, which for the first time, are now making greater inroads in Continental and Nordic accounts. Many UK participants believe algorithm usage has peaked, however European participants are almost unanimous in their belief that their proportion of low touch execution will only increase (see exhibit 4). From our sample set the US funds also had a lower proportion routed electronically although the time difference could also be a factor here.

"All algos have their uses: its like, which car is best? If I'm going in the Bush, I want a four-by-four. If I'm going on a track, I want a sports car. I can't actually tell you which car is the best. I can tell you the car I'd like to use for different things I'm doing."
(Medium-sized UK Asset Manager)

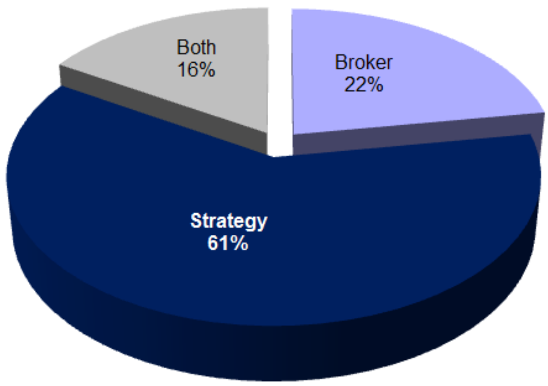
The wide variety of liquidity profiles of stocks, markets and venues across Europe still influences the extent to which buy side execution selection is successful; mid and small-cap names in particular still have limited success executing via algorithms. Those funds that choose to maintain investments in small and mid cap names therefore have a strong incentive to access high touch services. This will be under further scrutiny as algorithmic development focusses enhancements in this area.

"When you move down the liquidity curve you notice who has actually done the work properly. It stands out like a sore thumb - those who have versus those who haven't"
(Small UK Asset Manager)

Bush Or Track

Despite initial claims that algorithms were commoditised and there was little to choose from, European buy side knowledge of algorithms is continually increasing; 61% now select according to strategy rather than the underlying broker (see exhibit 5).

Exhibit 5
Algorithm Selection – Strategy or Broker



Source: TABB Group

"Algo selection still depends on what my fund manager is looking to do. As the market gets more bullish we expect to ratchet up our use of more aggressive strategies"
(Small Nordic Asset Manager)

More participants in 2014 are taking algorithm selection to the extreme, where strategies are selected for auto-routers according to different metrics, routinely monitored, analysed, and then moved up or down the relegation zone according to performance. Participants acknowledge that this is still dependent on a trade-by-trade basis ie where the stock has been active and who is attracting liquidity. These factors will change according to wider market conditions and where the stock is on the liquidity curve. As algorithm users become more sophisticated this will continue to push brokers to develop not just more customised strategies but strategies suitable for trading all stocks whatever their market cap or geography.

Other participants prefer to steer away from customised algorithms due to challenges when comparing like with like; the inability to monitor individual child orders across different broker algorithms hinders progress. These firms prefer to focus in on the ability to know which strategies reduce market impact.

"My top broker has to know exactly what my flow looks like, how they can help me achieve our goals – that's how they can differeniate themselves, not through any standardised offering"
(Large Nordic Asset Manager)

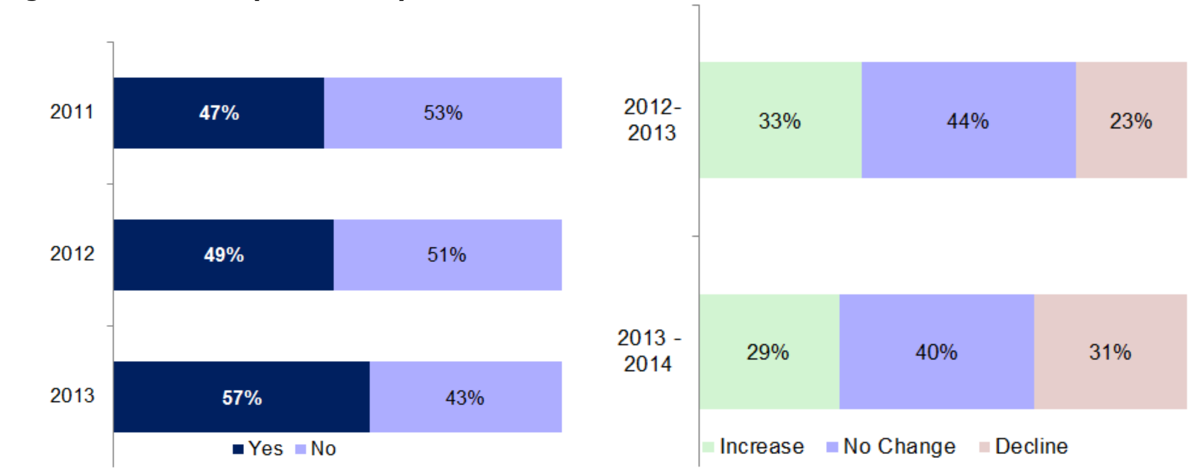
Novice users of algorithms from 2012 have found strategies in 2013 that successfully fit their execution profiles, beginning to opt for implementation shortfall algorithms rather than VWAP. It is not so much the 'best' algorithm but the strategy that most suits the current execution profile. While passive execution strategies dominate, then standard algorithms will suffice; as investment strategies alter, execution methods will need to adapt accordingly, which is likely to alter the leader board still further.

Yet for some, the selection process still rests with the portfolio manager: routing order flow through vanilla algorithms as a method of research payment. As the level of unbundling increases, the more dealing desks will be able to independently select the execution method available regardless of broker or venue. With regulatory scrutiny firmly fixed on investor protection and the delivery of best execution, all participants in Europe will eventually be affected.

The Ability to Differentiate

As buy side firms continue to reduce the number of providers, there is a tendency to stick with what you know; 57% use the same number-one provider as in 2012 (see exhibit 6 and 7).

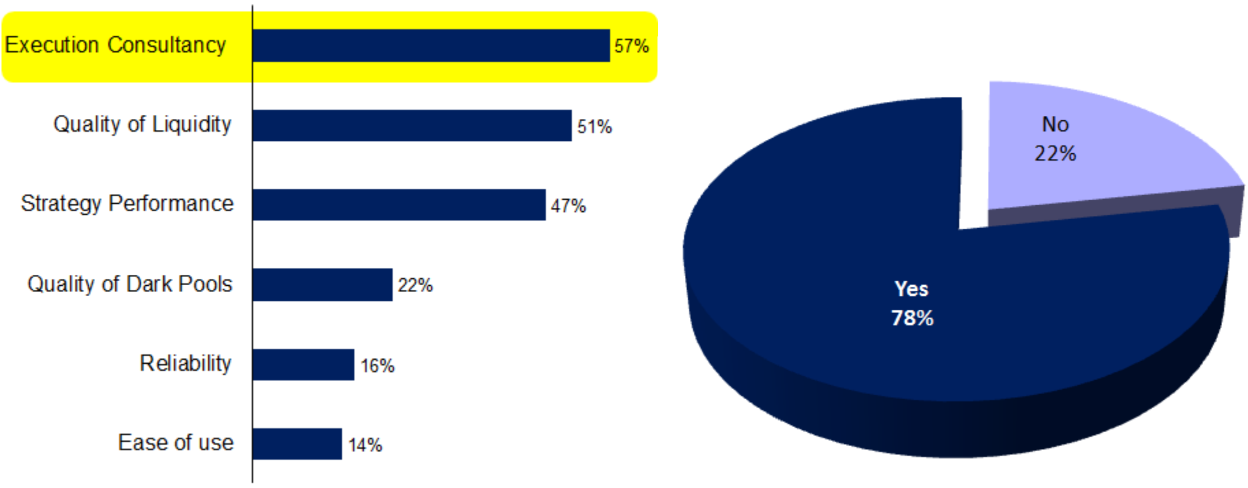
Exhibits 6 and 7
Is Your Top Algorithm Provider the Same as Last Year (2011–2013) / Change in the Number of Algorithm Providers (2012–2014)



Source: TABB Group

Though algorithms are commoditised, providers still have to meet minimum standards and there is still room to win new business: where the majority of participants feel the sell side is still able to differentiate is in the provision of execution consultancy. Fifty-seven per cent of participants perceive this as the key factor in algorithmic selection in 2013 and 78% of participants see it as adding value to their business (see exhibits 8 and 9).

Exhibits 8 and 9
How Can Providers Differentiate? / Does Execution Consultancy Add Value to Your Business?



Source: TABB Group

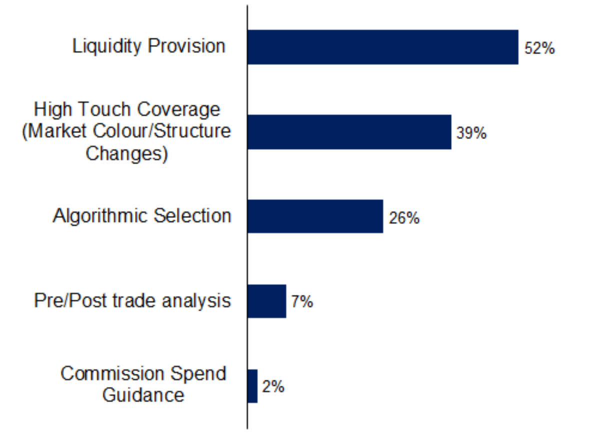
The High Touch in Low Touch

Consultancy, quality of liquidity and strategy performance are the key differentiators. Education, knowledge and advice surrounding the selection of strategies and feedback on the performance of orders to alpha enhancement continue to be highlighted as the main differentiators in a world of presupposed mediocrity (see exhibit 10).

"Those who are willing to edcuate us in our development will benefit, but I don't need them to tell me if the ECB is going to cut rates"
(Large European Asset Manager)

Effort spent on education - how algorithms work, how traders should use them, adapting available liquidity patterns and added intelligence – is highly valued in the current era of liquidity dearth. One participant described this as "life-time trading consultancy" - in other words, those that truly understand how the European market operates and can leverage electronic methods to achieve their goals. For example, having a market-on-close target that needs to start early or be calibrated by 50% because it is month end and there is an extension of liquidity or conversely a squeeze; or monitoring a Volume Weighted Average Price (VWAP) algo that is unlikely to complete due to erroneous market activity – essentially what a traditional broker once did to ensure execution. The buy side may want autonomy but they also still need to know the broker has their back.

Exhibit 10
What Service Does Execution Consultancy Provide



Source: TABB Group

Despite regulatory expertise being different from the traditional execution process, those who can provide intelligence around the rapid regulatory changes in the European automated space gained an edge.

"I need an algo with a brain it's then down to the activity of the low touch desk and their interaction with the different liquidity pools. The quality of the liquidity matters"
(Large European Asset Manager)

Change at the Top

Changes are finally beginning to impact the status quo. The bulge bracket prowess in electronic trading is now being challenged. ITG reached fourth position as the top algorithmic provider by frequency of mention for the first time in 2013 with UBS, Morgan Stanley and Credit Suisse continuing to battle it out for top algorithmic provider (see exhibit 11).

Exhibit 11: Top 3 Algorithm Brokers by Number of Mentions, 2012-2013

	2013	Rank	2012	Rank	Annual Change Adjusted*
UBS	56%	1	59%	1	-3%
Credit Suisse	43%	2	55%	2	-10%
Morgan Stanley	37%	3	45%	3	-4%
ITG	30%	4	16%	4	14%
JP Morgan	24%	5	11%	6	11%
BofA Merrill	22%	6	25%	5	-4%
Goldman Sachs	17%	7	16%	7	2%
Deutsche Bank	15%	8	25%	8	-13%
Citi	15%	8	9%	7	6%
Instinet	11%	9	18%	8	-7%
Sanford Bernstein	9%	10	16%	9	-7%
RBC	9%	10	0%	10	6%
Liquidnet	9%	10	9%	9	0%
Barclays	7%	11	7%	10	1%
Redburn	4%	12	2%	11	2%
Kepler Cheuvreux	2%	13	2%		-1%
Convergex	2%	13	0%	12	2%
BNP Exane	2%	13	0%	12	2%

* Annual change is adjusted for sample turnover Arrow indicates change in rank

Source: TABB Group

Only three firms had 10% market share or more across both asset managers and hedge funds – UBS, Credit Suisse and Morgan Stanley. ITG's increase is heavily weighted towards long only activity in algorithms as access to multiple pools of liquidity is a main priority. ITG benefited here from access to a larger pool of liquidity via their dark aggregator. The ability to look for natural liquidity from multiple pools of liquidity was continually highlighted as a reason to route an order to an algorithm instead of a sales trader. However as participants become better informed through increased usage of trading cost analysis (TCA), it will be interesting to see whether agency aggregators increase market share or whether bulge brackets are able to convince the buy side as to the benefits of limiting information leakage versus a potential decline in the speed of execution.

Regional Differences

UBS held the number one position but only in Continental Europe and the UK, – highlighting the variance in execution strategies still required in different European countries. Credit Suisse was the dominant provider in the Nordic region by a high majority and ITG made the number one slot in the US for those routing European order flow remotely (see exhibit 12).

Exhibit 12: Top 3 Algorithm Brokers, Mentions by Geography

Continental Europe	40		Nordics	19		UK	94		US	16	
UBS	7	18%	Credit Suisse	5	26%	UBS	19	18%	ITG	3	19%
Credit Suisse	5	13%	UBS	3	16%	Credit Suisse	12	13%	Goldman Sachs	2	13%
JP Morgan	5	13%	JP Morgan	2	11%	Morgan Stanley	12	13%	Morgan Stanley	2	13%
Morgan Stanley	5	13%	Deutsche Bank	2	11%	ITG	10	13%	BofA Merrill	1	6%
BofA Merrill	3	8%	BofA Merrill	1	5%	BofA Merrill	7	8%	Convergex	1	6%
Barclays	2	5%	ITG	1	5%	JP Morgan	6	5%	Liquidnet	1	6%
Deutsche Bank	2	5%	Citi	1	5%	Citi	5	5%	Citi	1	6%
Goldman Sachs	2	5%	Goldman Sachs	1	5%	Liquidnet	4	5%	Credit Suisse	1	6%
ITG	2	5%	Morgan Stanley	1	5%	Goldman Sachs	4	5%	Instinet/Nomura	1	6%
Sanford Bernstein	2	5%	Instinet/Nomura	1	5%	RBC	4	5%	RBC	1	6%
BNP Exane	1	3%	Sanford Bernstein	1	5%	Instinet/Nomura	3	3%	UBS	1	6%
Citi	1	3%				Deutsche Bank	3	3%	Deutsche Bank	1	6%
Instinet/Nomura	1	3%				Barclays	2	3%			
Kepler Cheuvreux	1	3%				Sanford Bernstein	2	3%			
Redburn	1	3%				Redburn	1	3%			

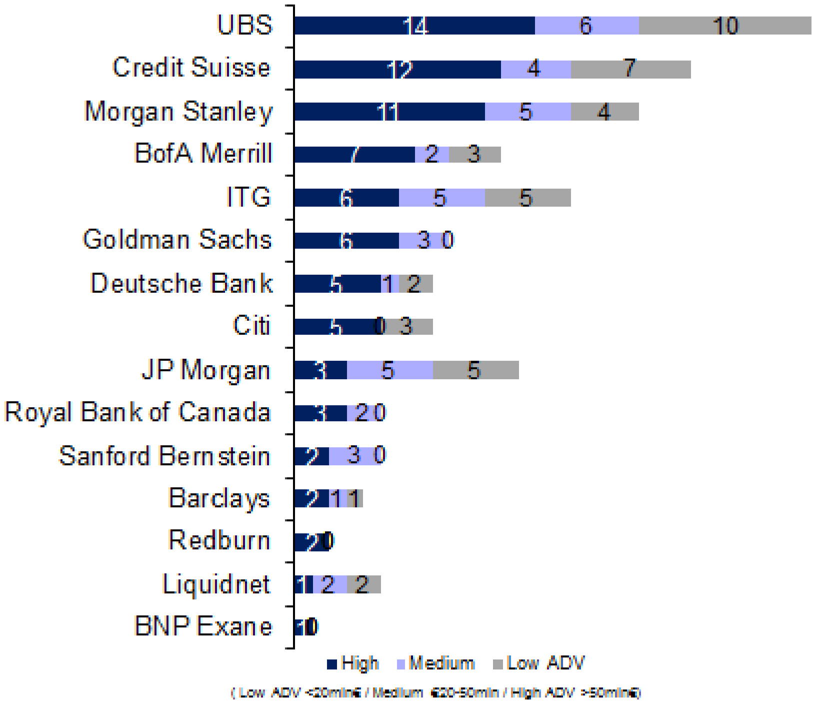
Source: TABB Group

"We trade across PT and algos and the ability to settle on a single ticket still seems to be an impediment for certain brokers – and we need to make things as simple as possible"
(Large US Asset Manager)

The focus on operational efficiency remains front and centre for buy side participants, with reliability and straight-through processing to settlement being highlighted as key factors in the choice of algorithmic providers. As liquidity becomes further fragmented, the ability to access a single source to multiple pools of liquidity is a compelling argument for a depleted buy side dealing desk. Several participants commented on the ease of access agency traders offered in comparison to the bulge brackets – single settlement, flexibility and more personalised back office offerings. However in new areas, such as the ability to incorporate individual asset managers risk constraints and compliance requirements, Credit Suisse and UBS were both highlighted.

The top three were dominant again when looking at those firms with high ADV – only UBS, Credit Suisse and Morgan Stanley had over 10 mentions in the high ADV category (see exhibit 13).

Exhibit 13: Top 3 Algorithm Brokers, Mentions by ADV



Source: TABB Group

But it is Morgan Stanley and Credit Suisse who dominate pole position among the major commission payers, with 19% and 17% of the wallet respectively, with BofA Merrill and UBS receiving only 14% each from a total of 13 algorithm providers mentioned (see exhibit 14).

Exhibit 14: Top 3 Algorithm Brokers, Mentions by Commission Size

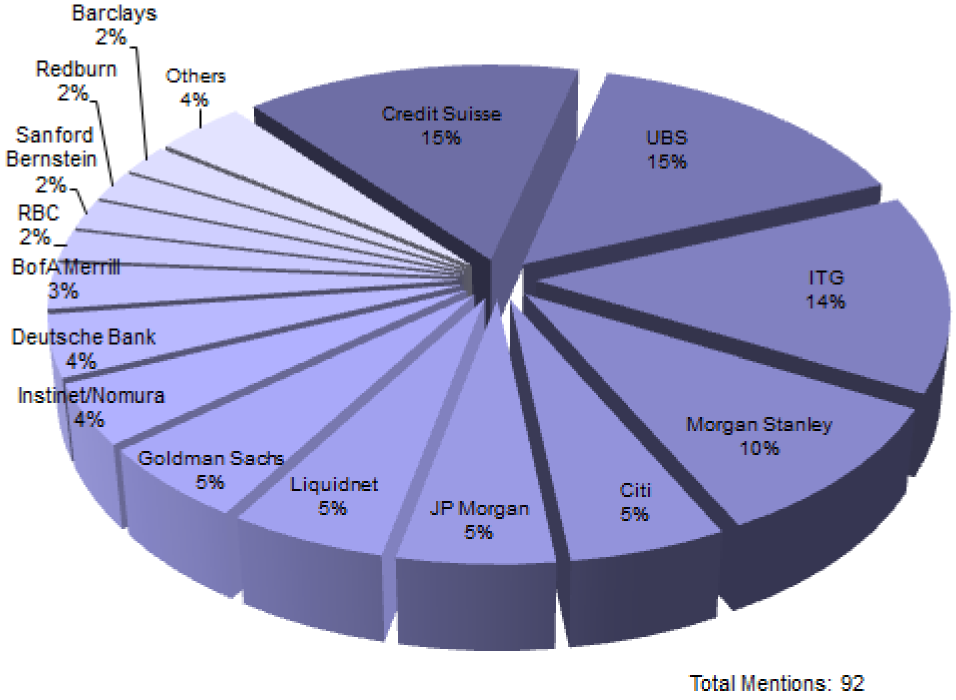
	Major		Moderate		Emerging	
Top 3 Algo Provider	% Mentions	Rank	% Mentions	Rank	% Mentions	Rank
UBS	14%	=3	21%	1	17%	1
Credit Suisse	17%	2	12%	3	14%	2
Morgan Stanley	19%	1	13%	2	6%	=5
ITG	3%	=6	10%	4	12%	3
JP Morgan	--	--	9%	5	11%	4
BofA Merrill	14%	=3	6%	6	5%	=6
Goldman Sachs	8%	4	4%	=7	5%	=6
Deutsche Bank	6%	=5	4%	=7	5%	=6
Citi	6%	=5	3%	=8	6%	=5
Instinet/Nomura	--	--	3%	=8	6%	=5
Sanford Bernstein	3%	=6	4%	=7	2%	=8
RBC	3%	=6	4%	=7	2%	=8
Barclays	3%	=6	1%	=14	1%	=7
Liquidnet	--	--	3%	=8	5%	=6
Barclays	3%	=6	1%	=9	3%	=7
Redburn	3%	=6	1%	=9	--	--
Kepler Cheuvreux	--	--	--	--	2%	=8
Convergex	--	--	--	--	2%	=8
BNP Exane	3%	=6	--	--	--	--

Source: TABB Group

Ones to Watch in 2014

Of those participants who indicated their intention to start trading more flow via algorithms in 2014, the clear winners were Credit Suisse, ITG, UBS and Morgan Stanley(see exhibit 15). When looking at major commission payers only, Credit Suisse received the highest proportion at 33%.

Exhibit 15: Top 3 Algorithm Brokers, Mentions for Participants Increasing Algorithm Flow in 2014



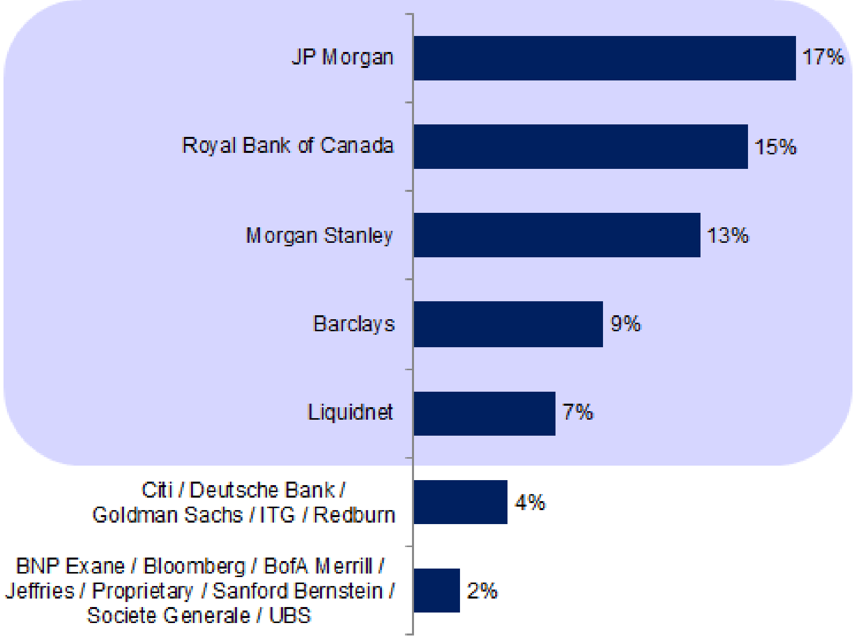
Source: TABB Group

"Do I value regulatory knowledge, absolutely. Does it make me chose their algos? No it doesn't, but it definitely keeps them in the game"
(Large US Hedge Fund)

Of those moving up the broker list for highly rated low-touch coverage, two main reasons were highlighted in particular. First, BofA Merrill, Citi and Goldman Sachs were singled out for their ability to provide high-touch coverage in a low-touch environment. Several firms were mentioned for greater levels of service, particularly around market structure issues – Morgan Stanley came up strongly here, as well as ITG. Credit Suisse and Morgan Stanley were both highlighted for their assistance in commission restructuring as a result of the recent FCA investigations. Although these additional services may not currently direct commission flow, participants highlighted the value they placed on expertise in these complex areas. As buy side execution desks become more autonomous in selecting execution partners, additional peripheral services will develop in importance.

Finally, late-mover advantage has benefited JP Morgan and Royal Bank of Canada (see exhibit 16). New entrants have a distinct advantage of not being hampered by legacy technologies, which are starting to deliver significant improvements to market share.

Exhibit 16
Algorithm Providers to Watch in 2014



Source: TABB Group

Interestingly, Morgan Stanley was still number three on the list of ones to watch for 2014, indicating it still remains a provider that garners renewed interest despite being one of the dominant top three.

Quality over Quantity

"Broker X is not necessarily out. It's just fallen down in the ranking, because they seem to connect to any venue out there that would attract flow, without questioning the type of flow that's available"
(Medium-sized UK Asset Manager)

Finally, those offering added liquidity-seeking algorithms – such as Barclays's Hydra, Kepler Cheuvreux's BLINK, Deutsche Bank's Stealth and SuperX, Sanford Bernstein's Ice Ninja, Société Générale's Alpha Y and RBC Capital Market's THOR – were all highlighted, as were Redburn and ITG for their aggregators. The ability to simultaneously sweep all European venues, regardless of whether lit or dark, internal or external, and at varying levels of aggressiveness, is highly valued in the constant hunt for liquidity.

As participants become increasingly educated in electronic trading, the ability to access maximum liquidity but limit the level of toxicity is becoming more prevalent. Liquidnet, Royal Bank of Canada, Société Générale and Barclays were highlighted for this functionality – they all have different methods to achieve this which illustrates the level of innovation that still exists within the electronic space.

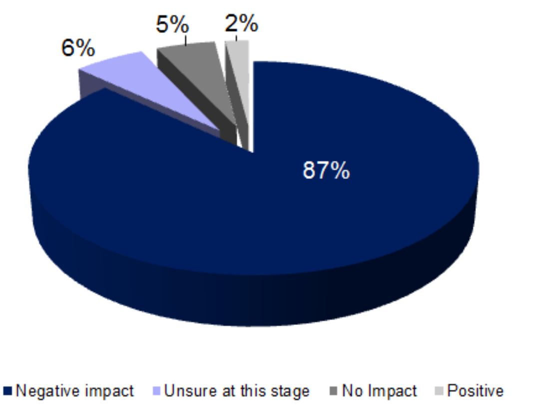
Dark to Darker in 2014

> "The top providers move around a little bit, but our selection is now based on what liquidity is in the dark pools as opposed to the algos"
> (Large UK Asset Manager)

With electronic trading now inextricably linked with dark activity, the area where we are guaranteed innovation in Europe will be the ability to access dark liquidity in the future.

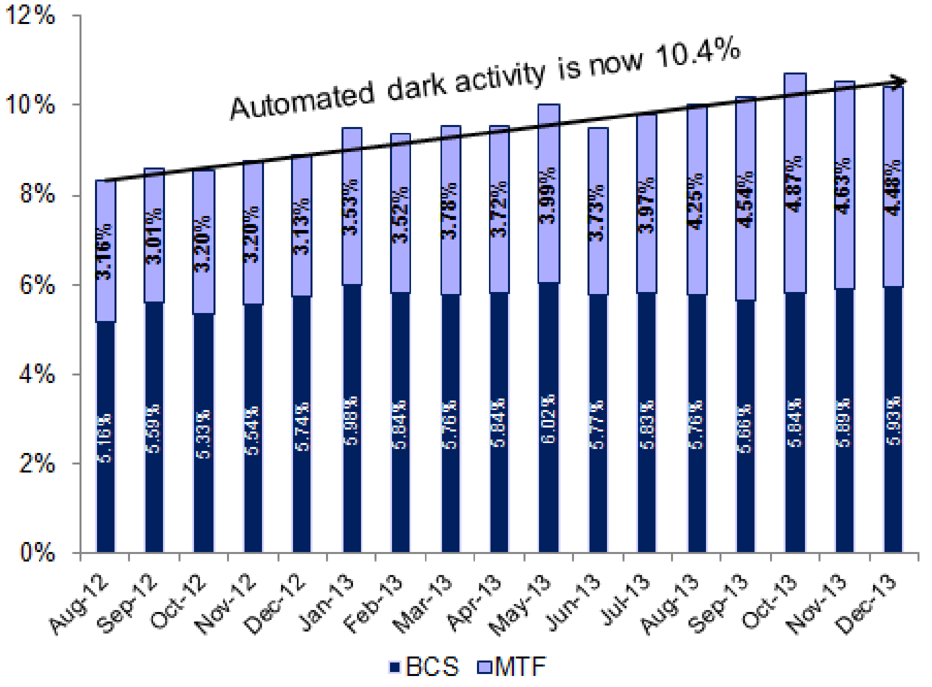
MiFID II proposals intend to close broker dark pools in their current form through the introduction of a volume cap; 87% of respondents believe this would have a negative impact on their ability to trade in Europe (see exhibit 17). There is a real risk that increased regulation on dark pools will in fact push dark trading into further obscurity as brokers chose to exercise the use of Systematic Internalisers when Broker Crossing Systems become defunct. Those who claim that overall volume caps will make little difference may have failed to appreciate that the current proposals will affect not only the reference price waiver but also the negotiated trade waiver (for liquid shares only, the calibration of which is yet to be determined).

Exhibit 17
Impact on European Equity Trading Post MiFID Regulation of Dark Pools



Source: TABB Group

Exhibit 18
Proportion of Order Flow Executed in the Dark



Source: TABB Group

“Our algo use is very heavily skewed towards dark when we try to find liquidity”
(Large UK Asset Manager)

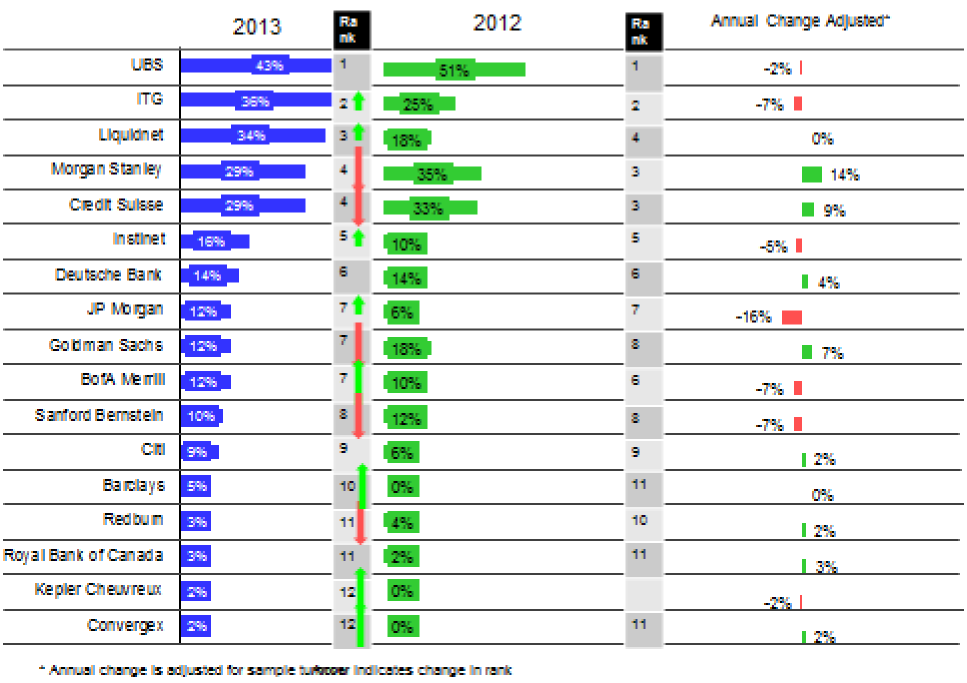
Dark Still Matters

As methods of trading and investment have altered, the rise of passive index trading has diminished the number of natural blocks available. In addition, the ability to execute using risk pricing has diminished in light of the capital constraints banks now face. As a result, institutional activity in dark trading has continued to increase as high touch activity has declined (see exhibit 18). For many on the buy side routing a low touch order by default means trading a portion, if not all of the order, in the dark. The continued requirement for accessing passive quality liquidity will ensure the latest regulation will not be the death of the dark, OTC trading will simply shift into a new form.

Winners in the Dark

Whereas sending a portion to a broker pool to establish market activity was once a prerequisite, buy side traders are becoming increasingly selective, even acknowledging that certain broker dark pools are diminishing in quality. The preference for a buy side trader will always be to trade on a non-conflicted venue in the first instance but it is a trade-off against speed of execution. Few now have the opportunity to wait indefinitely for the requisite match, hence the continued use of broker venues and now aggregators. Nevertheless, there is clear evidence that where the buy side feels most comfortable is still where the majority of the order flow is routed. As such UBS, Morgan Stanley and Credit Suisse still remain the top beneficiaries of continued broker dark pool usage. The top three have been joined by ITG and Liquidnet, representing a

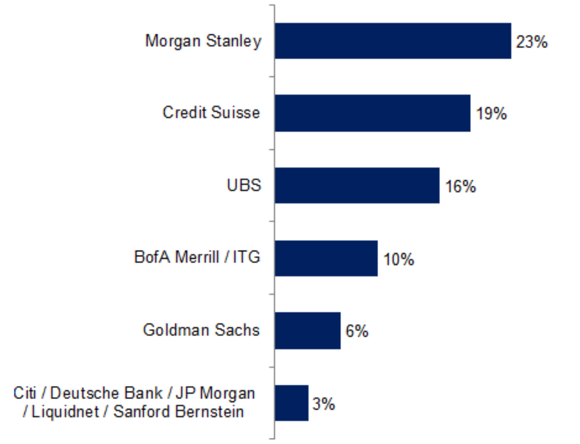
Exhibit 19
Top 3 Dark Pool Providers (by Frequency of Mention 2013 vs 2012)



Source: TABB Group

significant increase in year-on-year market share compared with 2012 (see exhibit 19). As with the top algorithm providers, Morgan Stanley and Credit Suisse are top of the leader board when looking at major commission payers only, receiving 23% and 19% of the wallet from a total of 13 dark pool providers mentioned (see exhibit 20).

Exhibit 20
Top Dark Pool Provider for Major Commission Payers Only (2013)



Source: TABB Group

Regional Dark

Likewise, as with the top algorithm providers, UBS is the number one provider for Continental Europe and the UK, Credit Suisse leads in the Nordic region and ITG in the US (see exhibit 21). In fact the top four positions for US participants were agency only, illustrating the preference for the non-conflicted model in the US versus a greater acceptance of current broker dark pools in Europe.

Exhibit 21
Top 3 Dark Pool Providers, Mentions by Region 2013

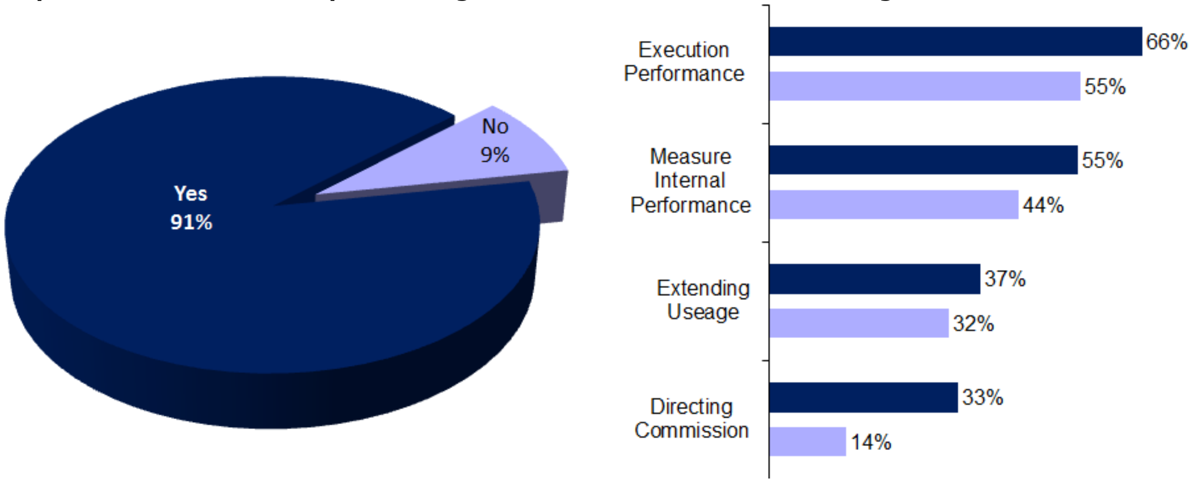
Continental Europe	41		Nordics	17		UK	87		US	13	
UBS	6	15%	Credit Suisse	4	24%	UBS	17	20%	ITG	3	23%
ITG	5	12%	Deutsche Bank	2	12%	Liquidnet	13	15%	Instinet/Nomura	2	15%
Liquidnet	5	12%	Morgan Stanley	2	12%	ITG	12	14%	Liquidnet	2	15%
Credit Suisse	4	10%	UBS	2	12%	Morgan Stanley	11	13%	Convergex	1	8%
JP Morgan	4	10%	BofA Merrill	1	6%	Credit Suisse	9	10%	Citi	1	8%
Instinet/Nomura	3	7%	Citi	1	6%	BofA Merrill	4	5%	Deutsche Bank	1	8%
Morgan Stanley	3	7%	Goldman Sachs	1	6%	Deutsche Bank	4	5%	Goldman Sachs	1	8%
BofA Merrill	2	5%	Instinet/Nomura	1	6%	Goldman Sachs	3	3%	Morgan Stanley	1	8%
Goldman Sachs	2	5%	ITG	1	6%	Instinet/Nomura	3	3%	Royal Bank of Canada	1	8%
Sanford Bernstein	2	5%	JP Morgan	1	6%	Sanford Bernstein	3	3%			
Barclays	1	2%	Sanford Bernstein	1	6%	Barclays	2	2%			
Citi	1	2%				Citi	2	2%			
Deutsche Bank	1	2%				JP Morgan	2	2%			
Kepler Cheuvreux	1	2%				Royal Bank of Canada	1	1%			
Redburn	1	2%				Redburn	1	1%			

Source: TABB Group

Next Generation TCA

Fill analysis is set to become increasingly complex. TCA is no longer the exclusive domain of quant funds and even mainstream asset managers are now monitoring performance to establish whether the practice of liquidity provision is distorting performance and impacting best execution; a third are now using this to direct commissions (see exhibit 22 and 23).

Exhibits 22 and 23
Proportion of Market Participants Using TCA 2013/Breakdown of TCA Usage



Source: TABB Group

“We are trading equities, bonds, foreign-exchange and listed futures on one single desk and all of these asset classes are now converging with equities in terms of post-trade analysis”
(Large UK Hedge Fund)

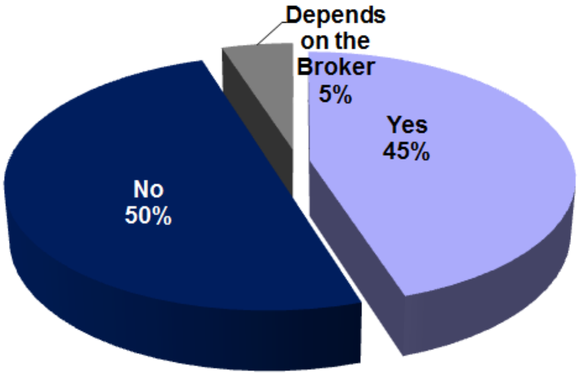
While analysis of broker algorithmic performance and underlying venue analysis remains important, 2014 will herald the continued growth of internal measurement of performance. The acknowledgement of the influence the buy side desk can deliver in enhanced performance is beginning to change internal behaviours, such as recognising the importance of internal short-term alpha in the investment strategy rather than measuring against the standard benchmarks of VWAP or implementation shortfall. It also serves to highlight internal deficiencies and eradicate unnecessary behaviours, such as unnecessary slippage, which often occurs not at the broker or the internal dealing desk, but by the portfolio manager delaying placing the order. Compliance and risk teams are also turning to TCA to monitor erroneous trade performance.

Full ownership of the execution process will enable the buy side to implement significant organisational changes to their firms' internal processes as TCA comes of age, particularly as automation of trading moves across the asset classes.

MAD for TCA

The Markets Abuse Directive (MAD) focusing on successful prevention of market abuse by any participant will also fuel the requirement for effective TCA.

Exhibit 24
Do Brokers Sufficiently Protect You For Market Manipulation?



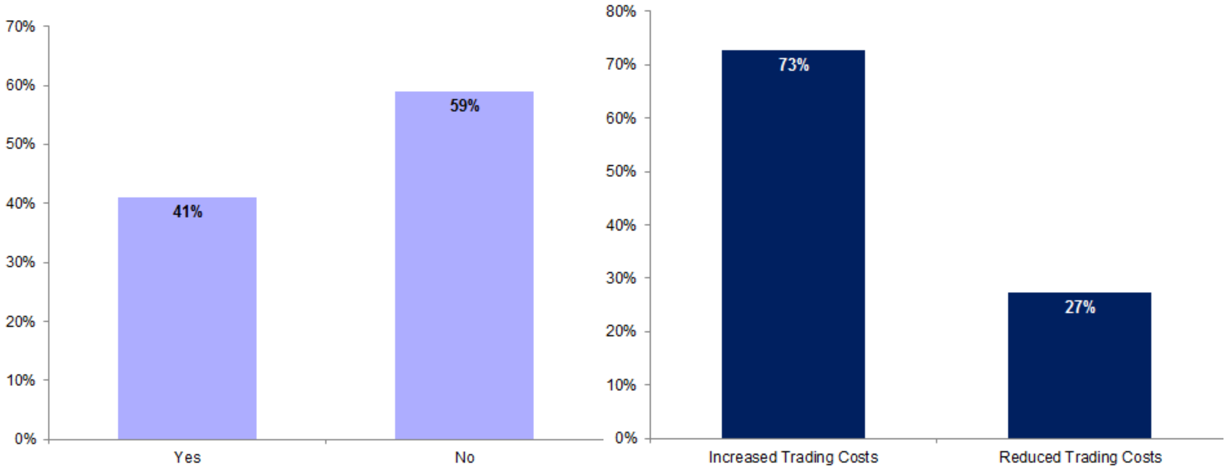
Source: TABB Group

"More and more we have to manage risk, manage surveillance – whatever the issue we now have to manage it internally, rather than rely on our broker"
(Large Continental Asset Manager)

More participants spoke of the internal burden both in terms of execution and regulation in relation to protection from potential market manipulation (see exhibit 24). While many acknowledged that their brokers protected them far more efficiently than they could do alone, there was a division between those who felt it was the individual trader or firms responsibility, those who felt there was a dual role of responsibility with the brokers acting on the buy side's behalf, and those who felt greater scrutiny should be placed externally, even down to the underlying exchanges.

The growing necessity to meet not only fiduciary responsibilities but understand where risk and true cost of trading lies at any given time will continue to fuel the appetite for multi-dimensional and interactive TCA. Although overall concerns over market fragmentation may be easing, there is widespread acknowledgement that there is an increase in cost to trade as a result of the fragmentation (see exhibits 25 and 26).

Exhibits 25 and 26
Is Market Fragmentation Still A Concern? / Is Increased Fragmentation Increasing Trading Costs?



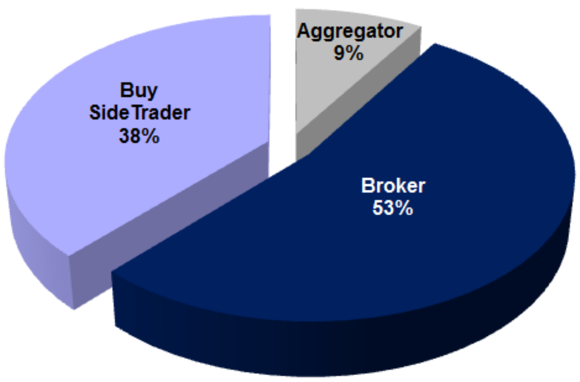
Source: TABB Group

Disclosure in the Dark

It is clear that there is still significant discrepancy among the industry in terms of understanding where the responsibility of best execution lies when trading with a dark pool aggregator (see exhibit 27). However as market participants are increasingly able to piece together a more detailed picture as to the toxicity of both activity and venue, fund performance will ultimately benefit. Previous poor analysis of some dark pools has now been attributed to incorrect usage of a particular pool, rather than the venue itself. Buy side traders are using Transaction Cost Analysis (TCA) to understand their own performance, as well as monitoring the performance of the underlying broker, venue and now aggregator.

"We're now able to work with an independent provider which enables us to prove what we have always suspected has happened in the dark"
(Medium-sized UK Asset Manager)

Exhibit 27
Proportion of Responsibility for Best Execution When Using Dark Aggregators



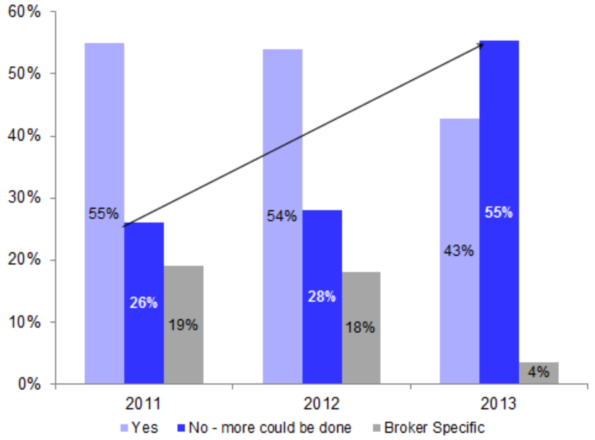
Source: TABB Group

The majority of participants believe their routing demands are currently being met by European brokers, with 85% having confidence in their sell side to execute their flow in the dark. Yet cost of trading still in the main focuses on explicit costs of execution. As the cost of trading is scrutinised, implicit costs now need to be considered – and this is where we are likely to see further changes in dark pool activity. Simplification of market structure will ensure clarity of the rules and should include standardisation of client facilitation of order flow, restrictive onward routing and the minimal number of order types.
And greater simplification will finally divorce fact from fiction.

"We don't pay much attention to broker TCA – they'll never have the full picture of our order. It's merely a diluted set of numbers"
(Large UK Hedge Fund)

But as buy side firms invest in greater analytic technology, the requirement for improved data grows. Transparency may be improving but there is inconsistency in TAG codes and data that requires sufficient cleaning before any meaningful conclusions can be drawn (see exhibit 28).

Exhibit 28
Buy Side Requirement for Sell Side Disclosure in the Dark



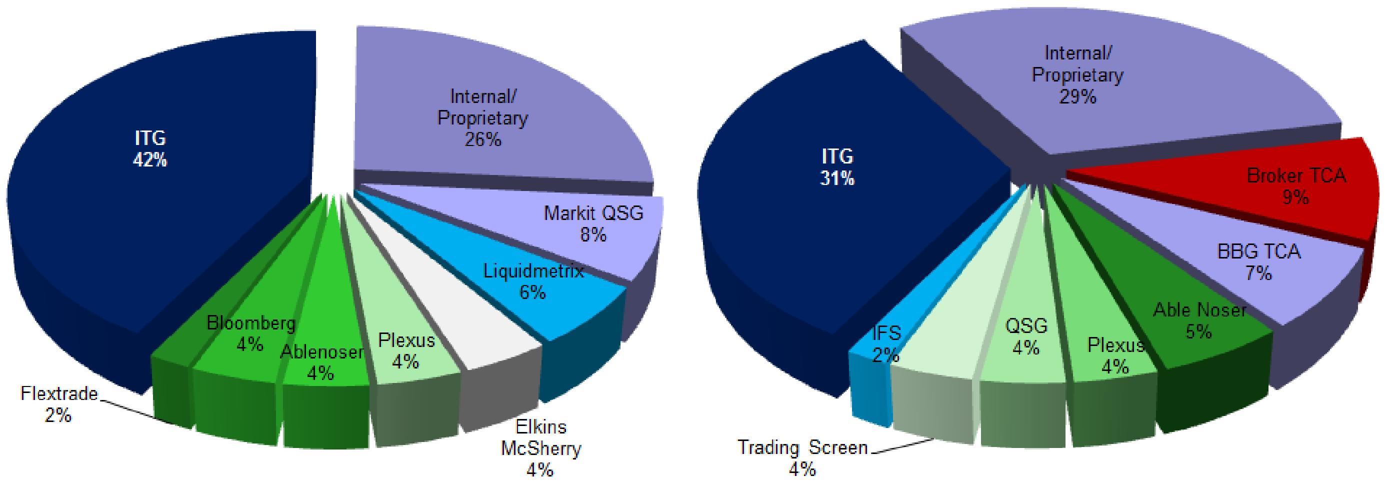
Source: TABB Group

Financial Information eXchange (FIX) protocol recently published recommended guidelines for TCA in Equities, illustrating the industry's willingness to address the challenges currently faced by market participants to determine the cost of trading at any stage of the investment cycle. There are currently multiple practices and standards which obfuscate performance levels – which is detrimental not only to the buy side but also the sell side. As TCA becomes further entrenched in the execution process, suspicions about behaviours by brokers or venues can now be investigated. The growth of independent TCA providers and the development of TCA capabilities will dictate the future winners in dark market share.

Measuring the Winners

Currently ITG retains its position as the industry leader; however, the continued use of proprietary systems alongside the main provider shows the increase in monitoring of even the TCA statistics: TCA now monitors TCA. New entrants such as LiquidMetrix (Intelligent Financial Systems) and Markit illustrate the continued demand for independent providers over use of broker products, which in the main have disappeared from use (see exhibit 29 and 30). In line with the growth of outsourcing within the industry, third party products are gaining in popularity versus the investment required to build proprietary products.

Exhibits 29 and 30
TCA Providers by Frequency of Mention 2013 vs 2012



Source: TABB Group

Access and ease of use were highlighted as potential pitfalls that remain for new entrants. However, as TCA usage expands, there is continued acknowledgement that the results are only as good as the field data that is entered. Comparing broker to broker when they have only received one section of the order at a different time can skew results. Unless the volume of order flow can provide sufficient data points to find any statistical significance, the results can at best provide merely meaningless noise, and at worst, deliver false conclusions.

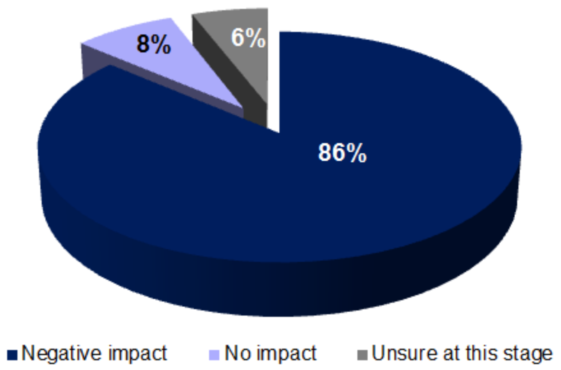
Technology and Regulation

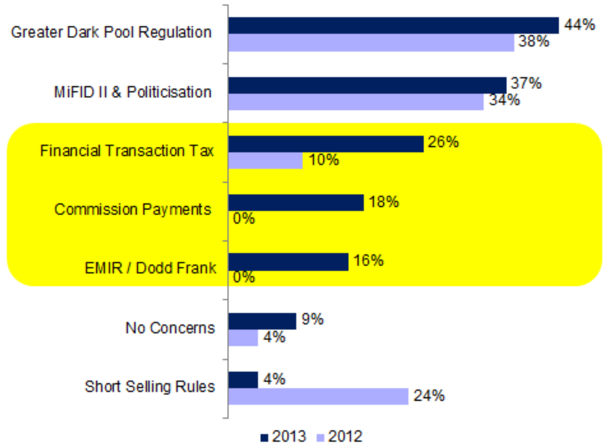
> “I need traders that are comfortable with technology and who know how to use the data dynamically. Traders will either adapt, learn, or they will move on”
> (Large US Asset Manager)

With an increasingly complex current market structure, less intermediation in the execution process, new technology and the never-ending search for opportunities, the buy side is changing its approach to broker relationships. Technology is no longer simply a source of operational efficiency; it is now an integral and valuable part of the entire investment process from proactive alpha generation to efficient risk management.

The continuing raft of regulations remains front and centre for the industry, with 86% of participants now concerned about the impact of further regulation on order flows – up from 75% in 2012. Multiple new issues, from volume caps on dark pool trading to the revival of the European financial transaction tax (FTT), are emerging with greater frequency to the bafflement of market participants (see exhibits 31 and 32).

Exhibits 31 and 32
Impact of Regulation on Trading in 2014 / Top European Regulatory Concerns





Source: TABB Group

> “We will spend less on our overall IT budget. It's just the proportion for the regulatory issue which is increasing”
> (Large Continental Asset Manager)

Issues that were not even on the agenda – such as the proposed volume cap on dark pools and short selling bans – are being introduced at such speed that the industry is looking to technology to compensate for the new challenges. Firms are shrinking head count and reallocating costs to other areas to create efficiencies in operations, settlements, risk and compliance, in order to meet the latest regulatory demands. Adoption of automation and technology enable effective monitoring for risk, which requires data to be actively analysed in real-time rather than at T+1. The skill set of a buy side trader is being forced to expand – the extent to which they embrace technology the greater their control over performance, both individually and at a firm level.

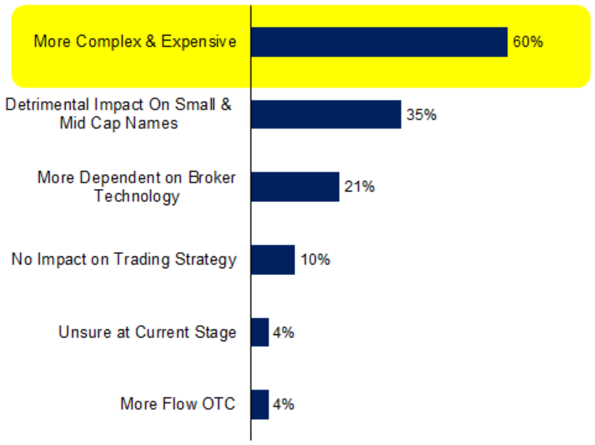
Whereas the industry has focused to date on shifting the sell side trader skill set onto the buy side, 2014 will see the industry begin to recognise that buy side traders’ requirements to go above and beyond mere replication. The breadth and depth of products and

"Whether it's short selling disclosure or what the FCA is doing now with corporate access. All of these things can be game changers for us from a business perspective and therefore cannot be ignored."
(Large UK Hedge Fund)

countries means that without broker support, a buy side trader will have to resort to greater use of technology in order to maintain performance at a time when reality is biting. While many firms are increasing access to and usage of technology, there are those who have to work with what is available, pushing them to leverage specific relationships on the sell side and using their technology and quants.

The European financial services industry has felt under siege at times from regulation over recent years, yet there will be no let up. The FTT has re-emerged as a new concern, while the volume cap, Market Abuse Directive, Market Abuse Regulation and European Market Infrastructure Regulation are contributing to the complexity. There are now even concerns regarding the US Dodd-Frank entering the fray. The results of these regulations will undoubtedly increase the complexity and overall cost of execution (see exhibit 33).

Exhibit 33
How will the Impact of Increased Regulation on Trading Manifest?



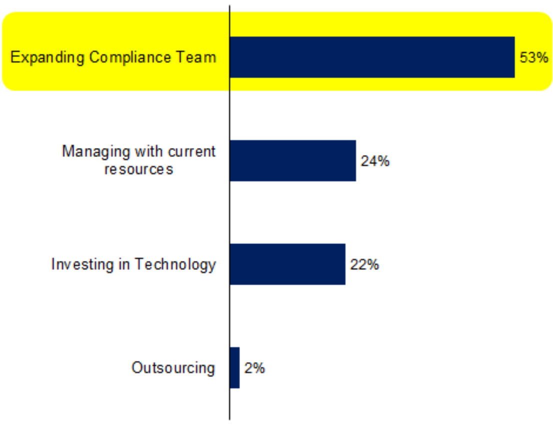
Source: TABB Group

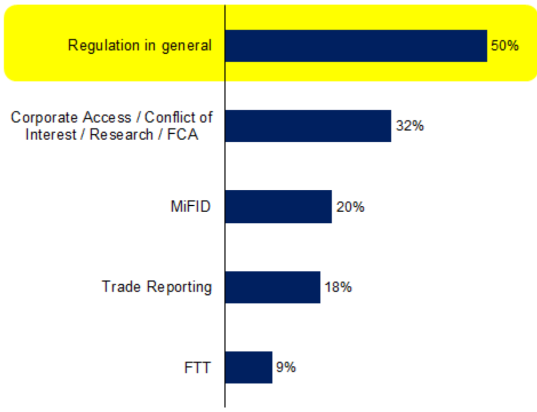
"We'd rather outsource the compliance side of things to a team of specialists. We need to focus on picking stocks, trading effectively, and managing our clients' money."
(Medium sized UK Asset Manager)

Endeavouring to meet compliance is no longer enough from a fiduciary perspective. Ensuring that firms are compliant amid increasing regulation is forcing buy side participants to invest in compliance – at this stage in people rather than technology – presumably given their current lack of concentration on regulation (see exhibits 34 and 35). Participants still remain in a state of flux waiting for regulation to bed down before allocating resources strategically; it appears to be more of an ever increasing list that participants allocate scarce resources as the issue lands on their desk.

While FCA concerns regarding corporate access are high priority, shifts in local European legislation – whether the French or Italian FTT, or German property fund laws with enforced holding periods – are impacting half of the asset managers across Europe, forcing a review of both compliance and investment strategy.

Exhibits 34 and 35
How Are Firms Responding to Increased Regulation / Top Areas of Regulatory Focus

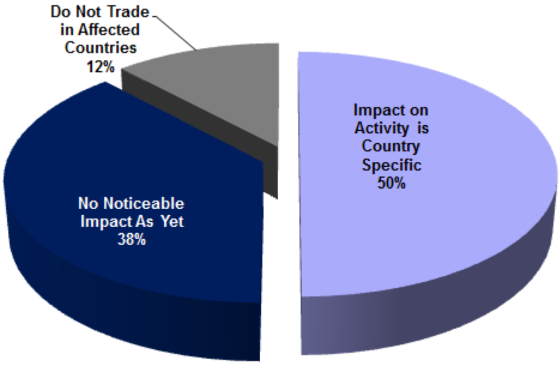


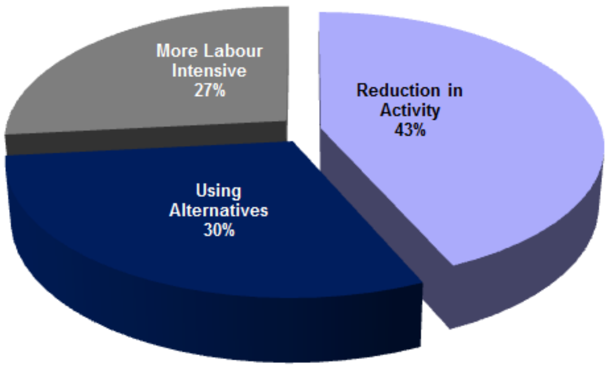


Source: TABB Group

Nearly 40% of participants felt there was no noticeable change in activity but of the remaining 62%, 12% of participants do not trade in the affected countries, highlighting both the disparate nature of European trading as well as the potential difficulties if the FTT becomes Pan European (see exhibit 36). Of those choosing to alter their trading behaviour either by accessing alternative products or reducing activity, nearly one third are continuing business as usual but accepting the additional workload in the process (see exhibit 37).

Exhibits 36 and 37
How Are Firms Responding to Impact of Regulation





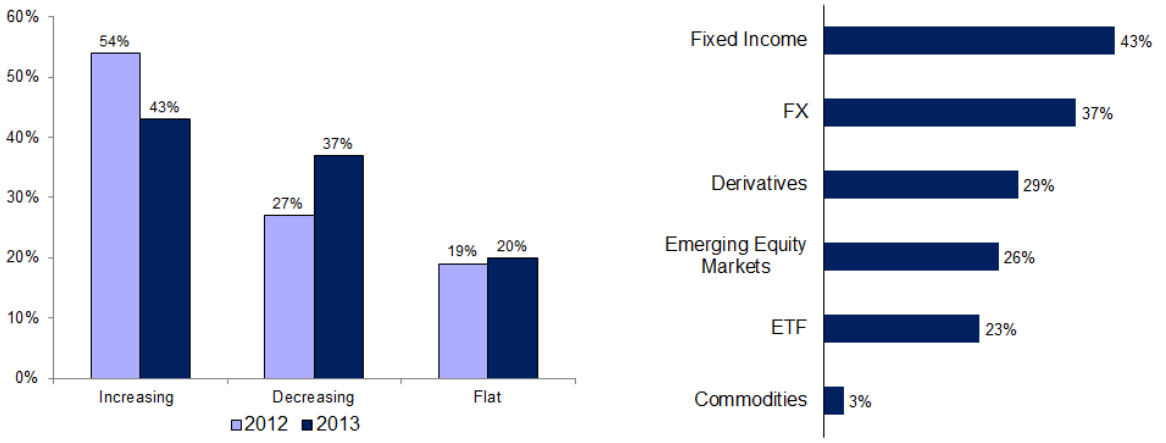
Source: TABB Group

It will be in these areas where we can expect to see the greatest level of technological investment going forward as firms choose to outsource their compliance and back office functions due to the complexity and lack of resources internally, as well as the desire to focus on core competency.

However the economic reality means that only 43% of participants anticipate that their IT spend will increase next year, with the majority having to reallocate scarce resources in tandem with the need to start trading other asset classes electronically (see exhibit 38). Forty three percent are looking to start trading fixed income electronically in 2014, 37% FX and 29% derivatives (see exhibit 39), all of which will require a significant shift in the technology required for execution given the complexity of fixed-income products versus single stock execution.

Exhibits 38 and 39

IT Spend Indicators for 2014 / New Products to be Traded Electronically over the Next 12 Months



Source: TABB Group

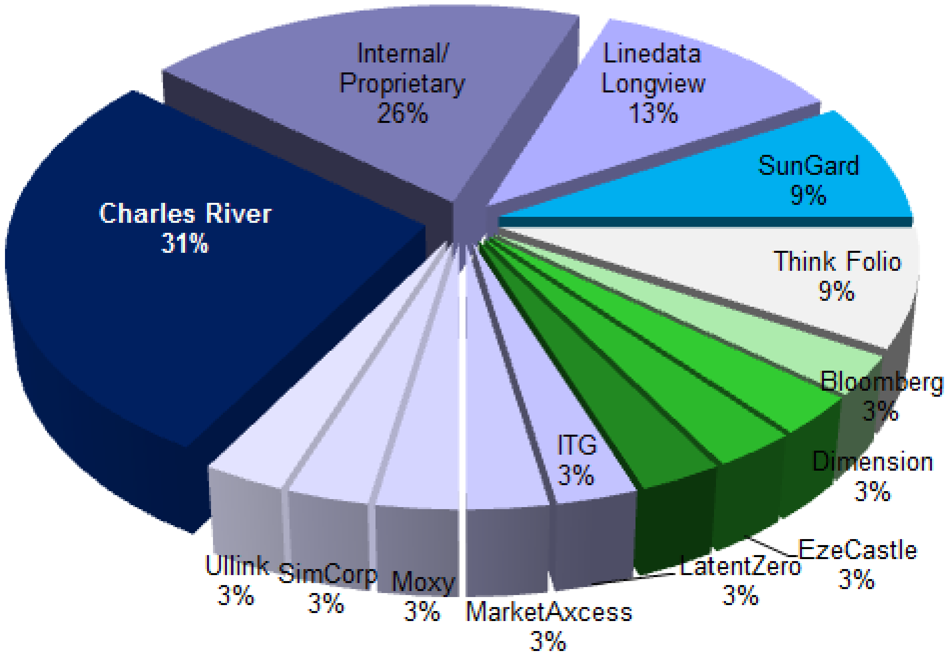
Trading Platforms

As a result, many participants' automation of additional asset classes requires investment to incorporate existing portfolio management systems into front-office execution systems. The additional calculations around trading fixed-income products, the impact on collateral, margin risk and analysis require an overhaul of current order management systems (OMS) and execution management systems (EMS), which will ultimately also benefit equity execution, intensifying the shift from end execution to active portfolio management.

"We now have to balance our tech spend across all asset classes – equities, bonds, FX and derivatives."
(Large UK Asset Manager)

The current dependency on market makers in the fixed-income space may also elevate concerns with the loss of broker crossing systems for equity trading, forcing innovation to help buy side trading navigate between on-exchange and over-the-counter more efficiently, regardless of asset class.

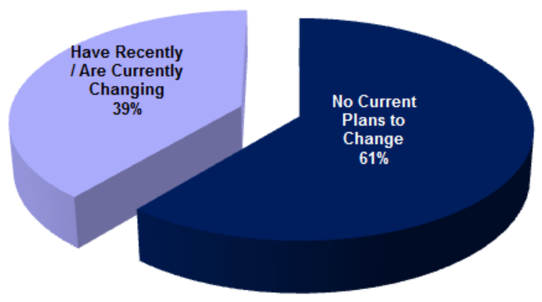
Exhibit 40
OMS Providers by Frequency of Mentions 2013



Source: TABB Group

Whereas EMS played the key role of an independent mechanism to aggregate, deploy and monitor trading algorithms from a host of providers, the switch to trading FX and fixed-income products electronically will lead to new requirements such as interoperability and greater input of data which will have a knock-on effect for equity execution and the next stage of its evolution.

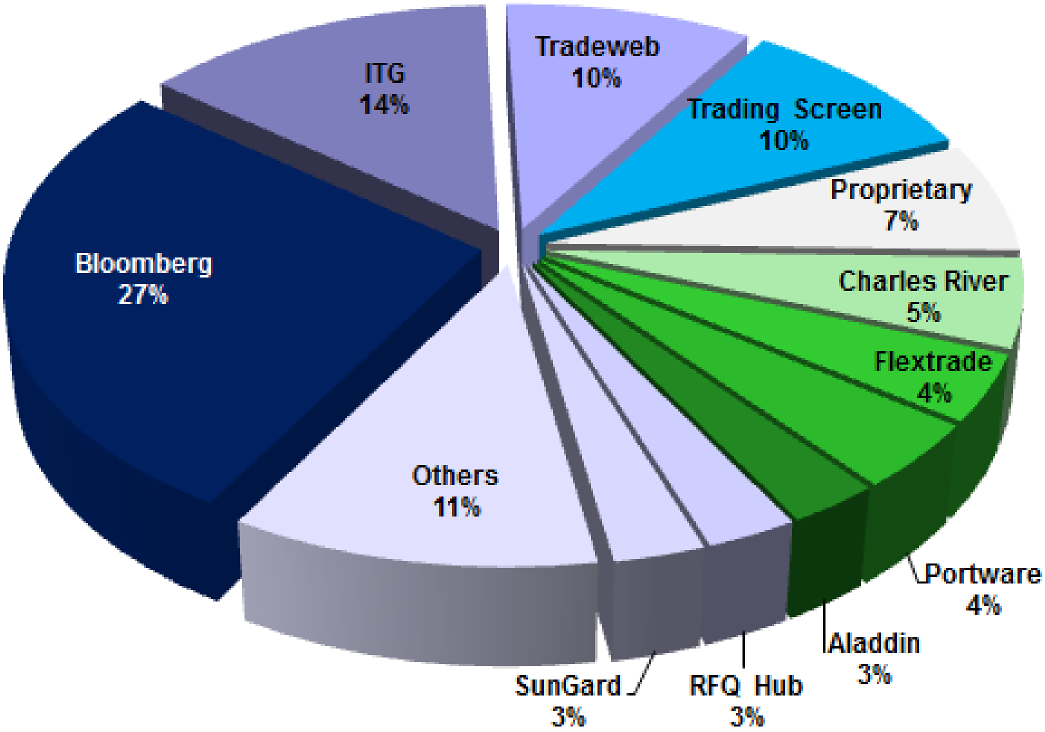
Exhibit 41
Are You Considering Switching OMS/EMS Providers in the Near Term?



Source: TABB Group

Currently Bloomberg looks well positioned to maintain its lead in the EMS space (see exhibit 42). As more on the buys side are looking to integrate and consolidate, a terminal already positioned on the desk top is proving a cost effective method for many to centralise and access data. From IOI's, to dark pool aggregator to visibility of fills, the Bloomberg extensive reach over multiple data sources is creating a quasi-Consolidated Tape.

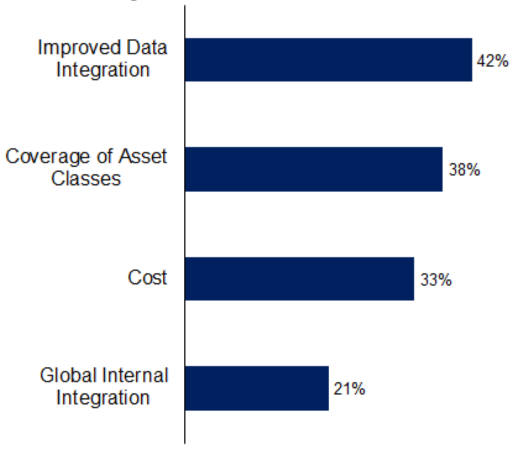
Exhibit 42
EMS Providers by Frequency of Mention 2013



Source: TABB Group

While some participants suggested they would prefer to access other systems, cost efficiency and the ability to centralise data – particularly across other asset classes - will ensure Bloomberg's success in the EMS space for some time to come with participants acknowledging the challenges in switching OMS or EMS provider. This means over 60% of participants are unlikely to change provider in the near term (see exhibit 41).

Exhibit 43
What Factors Would Influence Your Decision When Switching OMS/EMS Providers?



Source: TABB Group

However even those still heavily wedded to their broker for technology will eventually have to bite the bullet in terms of investment if they are to keep their place in the pack. Factors for switching providers focused on improved data integration and expanding asset class coverage (see exhibit 43).

As the information overload kicks in, together with greater regulatory requirements for trade reporting and collateral management across the asset classes, segregation will increase between market participants: those who see technology as the only viable solution to the new capital markets environment, extending the sell side model within a buy side infrastructure, versus those left hobbling along with existing resources, destined to fall further behind.

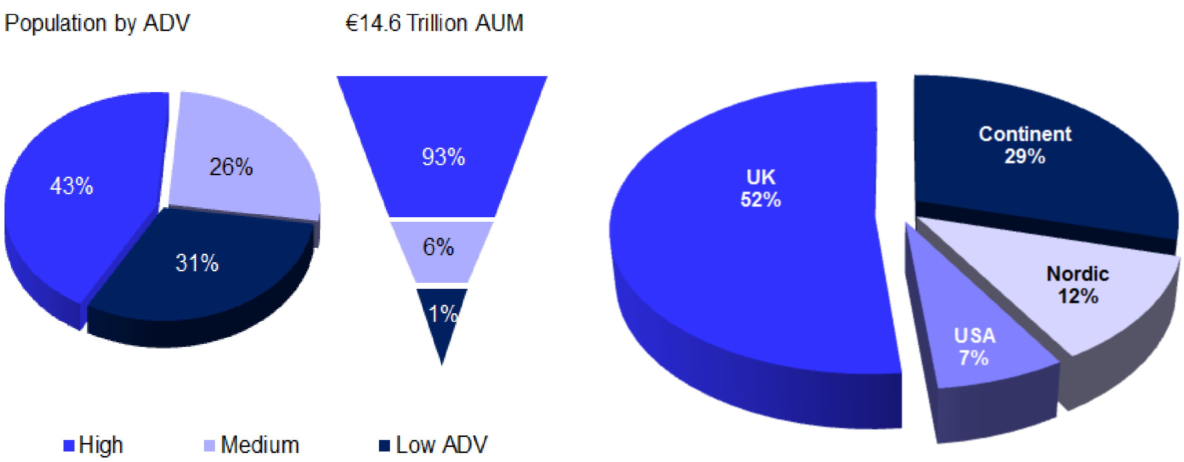
The challenge for market participants will be creating this within variable costs. In this environment, no firm – buy or sell side – can afford to be lumbered with high fixed costs. As in 2012/13, when outsourcing became main stream, the appetite for sharing technology and leveraging resources to ensure easy and flexible deployment to generate unique alpha will dominate in 2014 and beyond.

Methodology

We conducted interviews with 58 head traders of equity desks during September to November 2013. These firms comprise 49 long-only asset management firms and nine hedge funds, managing €14.7 trillion in assets under management (AUM) worldwide (see exhibit 44). Our participants are primarily located within Europe, but we also include firms located in the United States that trade the European markets directly. This year's report contains responses from 81% of the same firms who participated in 2012. We also segment our participants by size, based on average daily volume (ADV) and commissions paid to reflect the influence of their flow in the current environment. As with prior years, we segment our participants according to size of AUM, as outlined in the table below.

Firm Type	***Large***	***Medium***	***Small***
Asset managers	>€50 billion	€10 billion to €50 billion	<€10 billion
Hedge funds	>€2.35 billion	€380 million to €2.35 billion	<€380 million

Exhibit 44
Participants Segmented by Assets under Management / Location and Commissions Paid



Commission Size 2013			
Category	Definition ($USD)	Proportion of Wallet	Aggregate US Equity Commission
Major	>$45mm	59%	$690.83mm
Moderate	$8-45mm	35%	$416.15mm
Emerging	<$8mm	6%	$68.48mm
Total		58	$1.175.46mm

Source: TABB Group

Conclusion

One year on where do we stand; in January 2013 TABB stated that the year would prove to be a watershed year for European equities. After years of demise, Europe is turning the corner and breaking free from the shackles of the past to emerge leaner, fitter and ready for the upturn. This has come to pass – but who will benefit and when?

As the appetite for alpha in Europe returns, it will be the global liquidity powerhouses who will gain the immediate advantage; those who have scrutinised their cost base and stream-lined their businesses. While liquidity remains the number one priority for the buy side, electronic access will continue to encroach on traditional business models as the industry turns in on itself in search of efficiencies. Turnover may be up but as the industry has shifted to automation and reduced rates to the bare minimum, there is now no fat to cut; we are down to the bone. As such many buy side firms no longer have sufficient order flow to pay for research bills in the traditional manner. Both buy and sell side will need to maintain or even increase investment in technology to centralise and optimise their liquidity, relationships and resources – the law of the jungle will prevail and the only the fittest will survive.

The era of simplistic algorithms is over; multi-faceted interaction via automation is now the cutting edge asset managers prerequisite. Declining liquidity in specific stocks and countries will ensure fund performance is ever more reliant on alpha retention and cost controls. As the buy side switches providers to find improved execution performance, the need for clean data provision as well as strong analytics will continue to escalate. Real-time analytical tools will enable buy-side traders to access the right flow at the right time on the right venue.

This will lead to a revolutionary change in behaviour by all market participants. While large buy side firms already scrutinise trading behaviour and strategy, it will be the constant collaboration and consolidation in the industry which will lead to new and previously unlikely partnerships. The traditional roles of market participants will continue to disintegrate as the industry advances through its metamorphosis.

Execution performance will remain the essential benchmark for other services but as charges for products and services become more transparent, price will continue to dominate centre stage. Asset growth and efficiency will be prerequisites for achieving essential economies of scale. As a result the switch in clients' products and services will continue. The precarious balance between global technology and local expertise will escalate as the buy side looks for partnerships in an increasingly challenging environment.

A tremendous opportunity is emerging within financial services and European Equity dealing desks which are now in pole position. Previous experience from MiFID I will provide the valuable opportunity to capitalise. Trading teams have already been dramatically redefined, providing a framework to build a sustainable future for a new era of execution. Disruptive new business models, products and services – enabled by exponential improvements in technology and driven by the underlying European economics – will fundamentally challenge incumbent firms and market structures. Optimisation of the implementation process, greater tactical positioning around core portfolios and the creation of new opportunities as market dynamics alter the relationship once more between the buy and sell side. Low touch domination is now set to take off.

About

TABB Group

TABB Group is a financial markets research and strategic advisory firm focused exclusively on capital markets. Founded in 2003 and based on the methodology of "first-person knowledge," TABB Group analyses and quantifies the investing value chain from the fiduciary, investment manager, broker, exchange and custodian. Our goal is to help senior business leaders gain a truer understanding of financial markets issues and trends so they can grow their businesses. TABB Group members are regularly cited in the press and speak at industry conferences. For more information about TABB Group, go to www.tabbgroup.com.

The Author

Rebecca Healey

Rebecca joined TABB Group in March 2011, bringing more than 15 years' experience in e-trading and financial services. Rebecca has held various sales and trading positions with Bankers Trust, Goldman Sachs, and most recently Credit Suisse, where as Vice President she was instrumental in launching the successful AES product to hedge funds from its inception in 2002 until 2008. Prior to this she was the first electronic trader at Credit Suisse to be registered for all electronic European cash equity markets and covered sales trading into Asia and then Europe between 1997 and 2000. More recently, Rebecca was based in the Middle East from 2008 to 2010. There she was employed by the British Embassy in Bahrain, where she successfully launched the UK Government's financial services strategy and set up the Bahrain Financial Services Roundtable, which remains a key source of information for the UK Government today, especially in relation to Islamic finance. Rebecca holds a Bachelor of Arts degree in Spanish & Latin American History & Politics from the University of London. At TABB Group, Rebecca has authored *Dark Matters; One Touch, One World: The Future of Investment Banking; FX in Transition: Taking The Quantum Leap; MiFID II and Fixed-Income Price Transparency: Panacea or Problem?; Market Surveillance in Europe: Under Starter's Orders; European Equity Trading 2011/12: Looking for Allies in the Face of Adversity;* and *European Algorithms: The Evolution; and Trading in the Middle East: the Road to Mecca.*

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