

quantifying the future

INVESTMENT RECOMMENDATIONS GO DIGITAL

Technology and regulation are revolutionising the relationship between the buy and sell side to create a 'digitally led' engagement model.





executive summary: investment recommendations go digital

Technology and regulation are revolutionising the relationship between the buy and sell-sides, creating a 'digitally led' engagement model which will radically alter both the consumption and provision of investment recommendations.

Active investment management is under pressure and has been losing out to technology driven investment styles. The initial beneficiary of this shift was passive management but quantitative management is growing. Active managers are taking notice and a new style of quasi-active models is emerging, requiring entirely new tools and techniques and expanded data sets. In our global research based on interviews with fund managers, evenly split between quantitative and active managers, 94% of respondents thought that funds using quantitative techniques would continue to increase in popularity.

This creates different demands on the sell-side and quantitative managers are leading the way in redefining the service requirements. The industry is moving away from an emphasis on individual research recommendations towards cumulative data streams from a diverse set of multiple sources. This provides a faster, continuous view of market sentiment. 61% of those interviewed are already reacting to aggregate market sentiment rather than individual research recommendations. Whilst the responding firms may continue to process research recommendations, they are increasingly placing more weight on short-term ideas and other broker signals than on research alone.

The breadth of information being sought is not only generated by multiple contributors from chosen sell-side firms but also from new data sets generated by different brokers and individual experts. 69% of respondents thought that the best quality recommendations in small and mid-cap now come from local and regional specialists. Some cited new sets of broker-compiled data that they pay for, for example summaries of short positions or agricultural data feeds.

Whilst brokers search for new ways to engage with their clients on a digital basis, funds are now incorporating strategies based on increasingly diverse sources of alternative data. Some of this is financial such as earnings persistence and company information but it also includes data generated, for example, by satellite imagery, social media and records of credit card transactions. Our research revealed 56% of those interviewed are now paying fees for other third party data sets.

As the amount of available data increases, the ability of humans to process it is declining and the sell-side is finding it more difficult to be heard. More than half the interviewees now delete or ignore over 50% of the emails and phone calls they receive from their brokers and 44% of those interviewed already have automated processes in place to manage incoming information from brokers.

The old style relationship based on written research and conversations between buy and sell-side is therefore unsustainable. While the majority of firms interviewed still incorporate research recommendations into their investment process there is a mismatch between what they consume and what they value. 61% of the firms interviewed valued broker research either to a small degree or not at all. As fund managers allocate budget to increasing numbers of data sets, they will be forced to be more discerning about the data they take, the suppliers they rely on and the evaluation metrics they use. Technology and economics may help, but changes in regulation will accelerate these new requirements.

In Europe, the Market Abuse Regulation (MAR) and the Markets in Financial Instruments Directive (MiFID II) are transforming the way investment recommendations are recorded, evaluated and paid for. This will have global ramifications. Although 43% of respondents are based outside Europe, only 28% believe they are out of scope of MiFID II and 56% plan to change their current processes ahead of it. 77% expect to put automated processes in place to manage and measure broker contributions in the future.

Sell-side firms must recognise that, while demand for access to investment recommendations remains strong, the delivery and consumption of these recommendations is undergoing radical transformation. There are clear opportunities for firms that embrace a digital model. Many quantitative funds have been underserviced by the bigger banks but technology is helping them to engage easily with local and specialist firms who are creating new data products to monetise. Some funds may not be big enough to access or normalise all the data they would like and brokers may be able to partner with other data originators or delivery mechanisms to help their clients. Those who wish to remain providers of research must recognise the need to make their products more interactive and change their product economics. Most of all this requires a change of culture and discipline that needs strong leadership from the top of the organisation.

MARKET CONTEXT

New styles of investment management, driven by economic, regulatory and technological shifts, are driving a permanent transformation in capital markets.

Since the financial crisis, active results have consistently failed to beat or even equate to the benchmark return to justify the fees charged to end investors, driving a marked shift towards passive investment where managers track a benchmark at a lower fee.

Active funds lost \$236 billion in assets in 2015 versus inflows of \$229 billion for passive funds¹ and, according to a recent study, 83% of US mutual funds and 86% of European funds have underperformed the market over the past decade².

Despite this, the size of actively managed assets still far exceeds the size of passively managed assets³ and investors recognize that passive investment alone is not a panacea. They now want a hybrid model of passive, 'fundamental' active management⁴ and 'quantitative' or 'quant' strategies⁵, to give them a more diversified armoury to make successful investment decisions.

Once a niche business, quantitative investment management is on the rise and provides the best hope of countering the shift to passive investment. Active managers are taking note. The lines between quantitative and fundamental management styles are becoming increasingly blurred. Along with the rise in pure quantitative funds, fundamental managers are expanding their investment strategies into more fluid, quasi-active models, requiring entirely new tools and techniques and expanded data sets and sources.

To date, active fundamental managers have set the parameters of the buy and sell-side relationship by receiving vast quantities of research and investment recommendations as part of an overall service offering from brokers. There has been no requirement for fundamental managers to pinpoint where the real value in research lies because information has been available on demand. However, changing economics and new regulation mean that this level of service is unsustainable without a clearer idea of the value being provided relative to the cost.

Despite significant inflows to passive managers, there has been no need to change the rules of engagement around investment recommendations as they are only tracking a benchmark. It is the emerging quantitative managers who offer a blueprint as to how the origination and use of investment recommendations will have to change. They are redefining the service requirements with the sell-side through digital engagement, changing the type of information they value, how they process it and evaluate it and how they pay for it.

At the same time, European regulation in the form of MAR and MiFID II is enforcing transparency and automation. All styles of investment managers will have to evaluate and justify the use of data in their investment strategies to meet regulatory demand and maintain a competitive edge. This will further squeeze the economics for the buy and sell-side and encourage greater adoption of the techniques that quantitative managers are already putting in place.

In every industry change begins at the margin, usually driven by technology, by lowering barriers to entry and by creating new opportunities for a small subset of firms to drive that change. However, what begins as a marginal activity ultimately moves mainstream and is usually accelerated by regulation. **The relationship between buy and sell-side firms now needs to go digital in order to survive.**

- 1 MorningStar, FT Article 19 July 2016
- 2 Spiva Survey, S&P 2016
- 3 PWC, Asset Management 2020
- 4 Fundamental managers are typically supported by teams of analysts and make investment decisions based on their research, experience and future expectations
- 5 Quantitative models use tools and technology to process and analyse data to identify investment opportunities and construct portfolios. Given the reliance on data, the models tend to be backward looking at historic data.

what's next for buy and sell-side firms?

BUY-SIDE: Q IS FOR QUANT

Participants interviewed for this research were near unanimous in their view that quantitative strategies or the use of quantitative techniques in whatever guise will continue to rise in popularity (see Exhibit 1) in investment management.

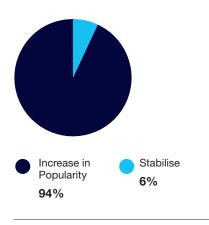
This does not mean that all active investment managers should pursue quantitative strategies but that they will need to adopt quantitative principles within their investment process to make the best use of technology and data available.

At the same time, MAR and MiFID II will force greater quantification of data that is used in the investment process. Use of digital techniques in consuming and managing investment recommendations and third party data should bring significant competitive advantages but will also be required to meet regulatory obligations.

This has significant ramifications for the entire industry from issuers through to regulators but for now the focus is on the transformation of buy and sell-side relationships.

EXHIBIT 1

Future expectations for quantitative funds



SELL-SIDE: P IS FOR PREPARATION

Brokers must prepare for structural change as buy-side behaviour adapts. The value of traditional research will decline further whilst budgets are stretched by regulation and the need to purchase ever increasing amounts of data from other parties.

New competitors will emerge. Binary broking relationships are likely to be replaced by wider partnerships that enable the buy-side to create strategies based on the analysis of multiple financial and non-financial sources of data over time. This will create opportunities for niche specialists with good products but only if they can originate and deliver information on an automated basis.

Sell-side firms need to become more innovative, creating new data products or partnering with other firms who can help develop products or distribute and evaluate data in order to stay ahead of the pack.

This requires a change in culture led from the top. Brokers need to ensure that they have the right mix of people and technology skills in place, supported by the right systems and processes. The more data is disseminated digitally the more people can be involved and the more readily its use can be tracked, evaluated and audited. However, the culture has to be in place to make this effective in order to improve profit margins and gain a competitive edge.

Brokers that successfully recognize their clients' needs for high levels of diverse but consistent data streams, which they can digitally integrate and interrogate, will emerge the winners.

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about the research

This research highlights the trends shaping how investment recommendations will be delivered. It is based on interviews with 18 fund managers, and discussions with five brokers (three global, two large regional), one independent research firm and three international regulators.

The investment managers interviewed are evenly split between fundamental and quantitative investment strategies and are based in Europe, the US and Australasia. The majority of those interviewed are based in Europe.

The respondents represent investment firms managing \$5.6 trillion* in total and comprise both global and domestic managers. At each firm one individual was interviewed about the specific fund/s that he or she represented, except in the case of one large investment manager where interviews were held with a representative who managed fundamental strategies and also one from a quantitative fund.

Some managers responded on behalf of more than one fund within their organisation. The total amount of assets being managed by the interviewees responding to this research represented USD\$609 billion*.

This study was sponsored by TIM Group - the authors maintained complete discretion over the content and findings.

^{*}Three smaller funds did not provide precise figures but gave some guidance as to total AUM and funds being managed by the interview respondent. Where FX conversions have been required, the rate used was the average for Sept 2016 from Oanda.

broker relationships go digital

The origination and use of investment recommendations has long been the basis of the buy and sell side relationship, setting both the service and the economics expected between the two parties. Written research and verbal conversations have been the staple method of distributing broker investment recommendations to their clients. A specific research analyst is responsible for writing broker research and publication is a carefully controlled process that happens at periodic intervals, usually around a company event such as results.

The rise of quantitative managers has placed new demands on the sell-side for investment ideas or trade ideas over a continuous period. These ideas provide wider, multiple shorter-term perspectives in automated formats which can be triggered by any number of events, requiring constant and instantaneous publication.

Quantitative managers are interested in gathering as many views as possible from within an organisation. The effect of this trend is that quantitative managers are broadening both the number of people who contribute to the investment recommendation process and the type of signals they receive.

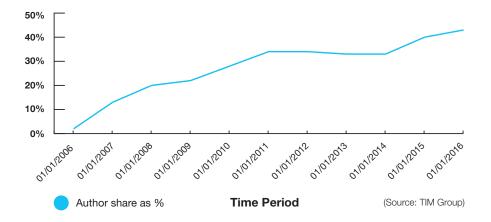
This has driven the adoption of proprietary and third party technology that can track, audit and measure the virtual performance of each recommendation. Statistics from TIM Group, a third party aggregator of broker investment ideas, show significant increase in the proportion of sales people now generating trade ideas (see Exhibit 2).

"We see trade ideas as a way to broaden the reach, to get desk and sales orientated folk who are not analysts to contribute. People in these types of roles tend to be more adaptive – they have a shorter time horizon."

Global Quantitative Manager, UK

EXHIBIT 2

Proportion of sales people sending trade ideas



the importance of the cumulative view

A significant factor underlying the shift towards using short-term perspectives from stock specific research is the ability to aggregate them into a cumulative, in-depth picture of overall market sentiment in real time.

61% of interviewees stated that they react more to market sentiment than to any individual idea or recommendation (see Exhibit 3), and noted that they value both the ability to spot contrarian views as well as to gauge overall sentiment.

Additionally, as buy-side firms undertake more of their own in-house analysis, they are increasingly using all types of broker investment recommendations to validate internal investment ideas rather than acting on any single broker recommendation (see Exhibit 4).

In particular, quantitative firms also encourage multiple inputs from a variety of sources to provide an additional safety net in managing and mitigating risk.

"One trade idea is worthless, it's all about the overall sentiment rather than the individual idea. The aggregate data set is what is most important to us."

Systematic Hedge Fund Manager, US

EXHIBIT 4 EXHIBIT 3 Are you reacting to individual How are broker investment recommendations or overall recommendations used? market sentiment? Validation of 59% Internal Ideas Use Tech Signals & 35% Analysis Natural 6% Market Broker Flow Sentiment Ideas 61% 39%

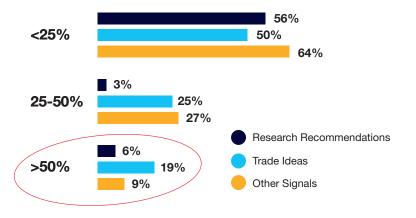
"We don't use stock specific research ideas. We have a programme that reads stock level research in aggregate but we are consuming it for sentiment and not for individual ideas."

Global Quantitative Manager, Europe There's a clear emphasis on the importance of short-term signals generated by the brokers (See Exhibit 5). It is not just the broker recommendations that are of interest. Firms interviewed are working with their brokers to receive alternative rich data sets that are perceived to have real-time value, such as broker-provided summaries of market short positions. Some of the brokers we interviewed now receive a separate fee for providing analysis of market trading patterns while one broker highlighted a new service providing agricultural data feeds.

"The value of short-term ideas is that it is a faster measure of sentiment and we have a faster objective measure of insight by consuming their views."

Global Quantitative Manager, Australasia

EXHIBIT 5 What weight of importance is attributed to different broker signals?



"Many of the trade ideas we receive are ones that we can't utilise. Brokers might think they are good ideas but we can't really act on them because of our investment style. The value of the idea is gone in a few minutes and we need a human to consider it first and a few days to get set to invest."

Active Investment Manager, Australasia

While short-term investment ideas and new data sets are increasing in value for some fund managers, there are some important caveats for others. The alpha of some investment ideas may erode by the time the manager is able to place the trade, given the internal consideration required to approve and implement a complex idea across a number of funds.

Short-term information is generally irrelevant for an investment strategy with a horizon of more than 12 months and fundamental managers often see quantitative processes as too reliant on historical data. Most fundamental firms interviewed, however, recognise they will have to adapt their investment processes to accommodate increased data availability: for example, by using models to identify suitable investment opportunities for further analysis.

"If this is a weapons race then we still need to update our weapons."

Fundamental Active Global Asset Manager, Europe

democratisation broadens the field

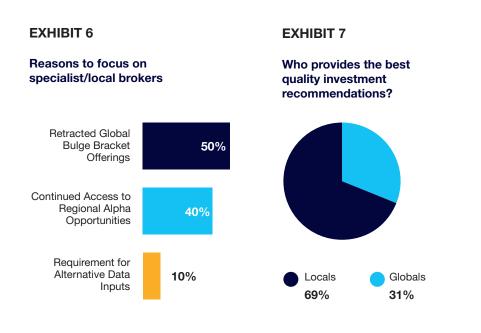
As funds expand their search for alpha, the broader mix of ideas provided by independent research firms, regional and specialist brokers provides an opportunity to level the playing field – particularly as global sell-side firms retract coverage (Exhibit 6).

Local brokers are perceived to be in a strong position to provide the best quality investment ideas for small and mid-cap companies (see Exhibit 6) and some are reaping the rewards.

One regional broker said that the revenue generated by short-term investment ideas had almost reached a double-digit percentage of the firm's everyday transaction commission revenue, a figure that would have been zero seven years ago.

"The more lucrative trade ideas definitely come from regional players. For a global to cover 400 stocks -well it's ridiculous; you don't need 5 or 6 Dutch brokers but you need a good access point to each region."

Global Quantitative Fund Manager, US



Motivation for working with local brokers and specialists depended on fund size and budget. Firms that were receiving a full service from bulge bracket brokers were supplementing what those brokers provided with additional data sets or they were looking to consolidate services to one or two core regional brokers. However others felt that regional specialists were able to find better quality, more in-depth ideas and, as a result, were expanding their relationships further afield, or using local knowledge to validate their own research and analysis.

Regional brokers and specialists can add significant value if they can match their offering to the latest technological and regulatory demands on buy-side firms. One independent specialist was considering providing individual reports with innovative technological analysis used by non-financial industries to create a different interpretation of research readership statistics and signals generated.

Many asset managers are moving to a blended subset of brokers and specialists, including global brokers expressing views about local markets as well as incorporating niche providers directly.

"The sell-side has been hit by aggressive cuts and no longer covers the small-mid cap space where the true value lies."

UK Quantitative Manager

"One person may be more of an iron ore specialist whilst another is an expert on global rates or currency. Having a mix of ideas is what is most helpful."

Global Quantitative Manager, Australasia

casting the net wider

As alpha opportunities become increasingly scarce, and risk mitigation techniques change, firms are incorporating strategies based on the consumption and analysis of multiple data sources – and spending more to acquire them.

As well as using third party financial data such as earnings persistence, pricing and company information, participants interviewed for this study are already analysing a wide array of data: from social media, satellite imagery, and directors' dealings to cameras measuring energy outputs and records of credit card transactions.

These data sets are used to obtain real time insights into demand and supply or sentiment rather than waiting for a published result. For example, images of a car park at a retail outlet may give an indication of how busy that outlet is, payment data may provide an indication of consumer confidence and social media may give an idea of current perspectives about a particular issue.

"We probably spend 10% of our research budget on company announcements and social media – it's not a huge amount but then it's the pace at which it is growing."

Global Quantitative Active Fund Manager, Europe

LOOK NO FURTHER THAN BREXIT

The UK's 2016 EU Referendum shows how social media offers an alternative perspective on risk and investment opportunities.

Before the vote, financial markets pointed to a guaranteed win for Remain. However, a review of Twitter showed hashtags associated with a Leave vote outnumbered Remain nearly six fold.

- #Brexit was mentioned 139,758 times in a 24-hour period.
- #voteleave and #leaveEU were mentioned 33,751 times in conjunction with #Brexit.
- Hashtags that indicate a preference to stay in EU (#remain, #voteremain and #strongerin) were mentioned a total of 21,721 times.

Source: Social Market Analytics. A final look at #Brexit, 22nd June 2016 "Our use of social media is growing faster than use of alpha capture."

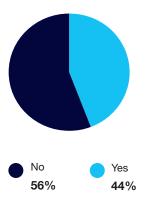
Global Quantitative Asset Manager, Europe

But the digitalisation of investment ideas is far more than simply trawling Twitter feeds for the answers. All data sources have to be normalised into the investment process and investment ideas have to be filtered to ensure only those with a consistently strong track record are incorporated. To do this some firms take the raw data from the third party provider and then run their own analytics and scenarios, while others buy ready-formatted information from external providers. The effectiveness of data signals is measured through forecasting ability, research and back testing a single signal alongside others in a suite of strategies.

Fund managers are now using non-financial sources and third parties such as Bloomberg, RS Switch, IPRESS, IDC or more specialist offerings such as TIM, OTAS, Alphametry or Research Xchange; 44% of participants now pay a third party provider for alternative data feeds (see Exhibit 8) and the pace looks set to grow.

EXHIBIT 8

Do you pay a fee for 3rd party signals?



eliminating the noise but seeing the trend

The consensus from most of the interviews is that the more ideas a firm or strategy is exposed to, the easier it should be to make the right investment decision. The use of multiple sources of real time data, however makes human-led analysis much harder.

Asset managers report that they disregard much of what they receive from brokers. More than half of the interview participants now delete or ignore over 50% of the emails and phone calls they receive from their brokers (see Exhibit 10).

Investing in technology allows firms to incorporate multiple data streams from as broad a reach as possible. For example, many interviewees rely on automatic textual analysis of the research they receive in the first instance. In fact, 44% of interviewees already have automated processes in place to manage incoming information from brokers (see Exhibit 9).

"I can't afford to restrict access even if 95% is junk, it is still essential to access as much as possible as 100% of our results are dependent on deciding what is correct and useful info - we need access to more ideas, not less."

Active Investment Manager, Australasia



How do you filter broker investment recommendations?



Process

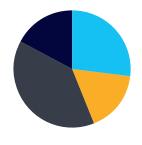
44%

Manual Selection Process

56%

EXHIBIT 10

What proportion of your brokers email/phone calls do you delete or ignore?



Up to 25% **27%**

25-50% **17%**

>50% **39%**

100% **17%**

"A human quickly scans incoming information and filters research by relationships. We will have already determined if that person is reliable and then we look to see if it is a new or different idea."

Active Fundamental Investment Manager, Australasia Brokers and research firms are responding by making their output more interactive, for example by using hyperlinks or enabling buy-side recipients to manipulate the numbers in a report. This allows brokers to track usage of their reports but brokers we interviewed felt that the buy-side have mixed views on this. Some buy-side firms are interested in analytics showing whether research has been read, and how much time is spent looking at certain sections. However, others expressed concern that brokers may derive an "unfair" advantage from this information.

Not everyone is keen to adapt. One sell-side analyst interviewed spoke about making every effort to avoid using words that would allow his research to be easily "scraped" by a machine, demonstrating the tension between accommodating changing buy-side demand and maintaining a "human" relationship with clients.

Some interviewees, mainly those that represented fundamental strategies, said that their selection of what to look at was based on the traditional sense of a business relationship i.e. where a person is known and can be relied upon as a good source of information. This leads to a natural, but limited, selection of people that a firm might trust or have a relationship with which may rarely get revisited or re-evaluated.

This approach to assessing the provision of investment ideas is set for radical change under MiFID II. The UK regulator's recent consultation papers highlight the requirement for regular assessment of the quality of purchased research to measure its ability to contribute to better investment decisions 1, - while the French regulator acknowledges that the provisions set out in MiFID II will "profoundly change the funding of research."2

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With the increase in quantitative techniques, a trend amongst some hedge funds and quantitative managers has been systemised psychological profiling of the broker personnel who contribute investment ideas.

Few of the interview participants discussed this profiling in any detail because it is a confidential part of their process. Brokers, however, spoke about how certain asset managers want to assess both the professional and personal circumstances of the person making a recommendation and see how their investment ideas perform as their circumstances change. This includes very personal situations such as divorce and bereavement, as well as change in the working environment. These managers may want to meet and interview the person who will be contributing ideas to them but the number of people they can profile using technology is potentially unlimited. It therefore allows investment firms to expand their circle of trusted providers away from traditional sell-side brokers and be more fluid as to who can enter that circle of trust.

Brokers report an increasing drive from quantitative clients to access the "elite" idea generators in their firms and that it is becoming more important to recognise these good idea generators and their value to clients internally. Through the digitised process clients have greater transparency as to who the best idea generators are and the industry has already witnessed a transition of those idea generators from the sell-side to the buy-side as it becomes easier to discern who is adding value.

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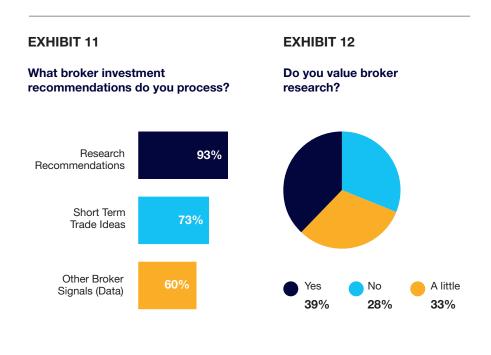
the mismatch

Regardless of the changes in investment techniques, buy-side firms currently incorporate written research recommendations into their investment process far more than other broker signals such as cumulative feeds, corporate data and company announcements (see Exhibit 11).

Yet there seems to be a mismatch between what many buy-side firms consume and what they actually value. Despite nearly all firms taking broker research, 61% of the firms interviewed for this study value their brokers' investment research either to a small degree or not at all (see Exhibit 12). In the current environment of regulatory, competitive and technological change, this simply isn't sustainable.

"We value internal research more than any research we get from any broker – we have more data for a start."

Global Quantitative Asset Manager, US



QUANTIFYING THE RELATIONSHIP

To fund managers both the provision of research and shorter-term investment ideas are considered part and parcel of the service a broker must provide in order to have a seat at the table; irrespective of the end value of the investment recommendation. Many interviewees struggled to define a difference and saw all types of recommendations and sell-side data as a co-existing service.

Brokers emphasised how much work has to go into the process of an investment ideas programme, but that they often struggle to attribute revenue due to lack of internal data, system constraints and/or client feedback.

From a broker perspective the relationship has moved from sales distribution, where one person calls the client each day to a team of people all over the brokerage firm who are spending time running an active portfolio of ideas for a client. This team has to be managed by someone who understands how the client's strategies change and who can constantly enhance the service being provided to best suit the client. This level of tailored service is generally unsustainable unless brokers can establish where the real value lies and how to price and resource this effectively. Fundamentally the clients will have to provide more feedback and the brokers will have to process data more effectively.

MiFID II should help this. If the buy-side intends to pay for research using client commissions through a Research Payment Account (RPA), it will have to be much clearer about the value added and charges paid on behalf of their clients and the sell-side will need to adjust the services it offers accordingly.

While the majority of interview participants still pay a bundled commission fee for all broker investment inputs, some participants are starting to break this down. Just 12% of interview participants currently pay a separate fee for broker research recommendations (see Exhibit 13), potentially reflecting the fact that research is the hardest input to value.

"We pay commission via CSA - it all falls under meetings, research notes, analyst meetings, idea value generation - we don't explicitly pay for this but it is deemed part of the service brokers must provide."

Global Quantitative Asset Manager, US

Typically hedge funds and quantitative funds make the clearest distinction between research and short-term investment recommendations. They reward brokers according to the quality and different types of recommendations that they receive and measure the value, particularly of shorter term ideas, in a more sophisticated manner.

This can be seen in the interview statistics which show 25% of participants pay separately for short term trade ideas and 36% pay for other signals such as cumulative data feeds, short sales data etc. (see Exhibit 13).

"We assess the value of trade ideas quarterly and every quarter we reset the clock and start again. At the end of the quarter we rank every firm by number and measure performance to an individual level. We pay the top 25% of the contributors and the rest get zero."

US, Systematic Hedge Fund

EXHIBIT 13

Do you pay a separate fee for broker research recommendations/short term trade ideas?

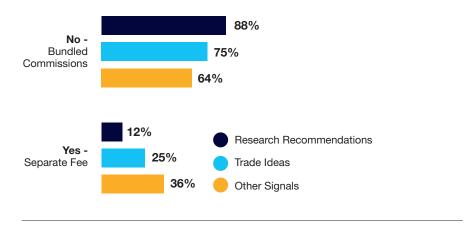
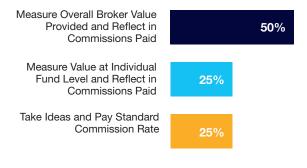


EXHIBIT 14

How do you measure and pay for the value of a trade idea?



One broker stated that the larger quantitative funds are increasing the amount they pay for shorter-term ideas at a pace that is far outstripping what other active funds allocate as budget. A small hedge fund confirmed that this is a problem for the smaller players; it is leading brokers to believe that the budget for trade ideas is big and therefore they can charge a premium.

For smaller players this shift in barriers to entry is an issue. As a rough estimate, this hedge fund felt that a data set had to create ten times the alpha that the data set cost or it was hard to justify the fee. For larger players that ratio of alpha return versus data cost could go down as each additional data set was seen as a more marginal cost. Nonetheless this respondent felt that data was only a small part of the investment management process and the greatest value proposition was in the formulation of the strategy itself.

But for most, the incorporation of all investment ideas still remains a more qualitative than quantitative exercise. The challenge for the sell-side is to understand where buy-side firms derive value from the different investment recommendations they receive, and whether they are still willing and able to pay for this given forthcoming regulation.

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regulatory ramifications

MiFID II includes measures to increase transparency over the cost of research to the end investor, with the aim of creating a more competitive and innovative market for pricing and distribution models.

Where asset managers choose to use client commissions to pay for research, the purchase of research must be governed by a strict budgetary process. This includes an evaluation of the research received, as well as its benefit to the underlying fund.

REGIONAL CHANGE WITH GLOBAL IMPACT

This European regulatory change is impacting firms globally. Major US and APAC based firms are adjusting systems and processes to ensure MiFID II compliance due to the global nature of their investment process.

Even though 43% of interviewees are based outside of Europe, only a third of all interviewees considered themselves out of scope of MiFID II. 39% of interview participants are unsure as to their ability to maintain access to investment ideas post-MiFID II using current methods (see Exhibit 15), and just 21% of participants feel ready for the change ahead. 56% of participants acknowledge that they need to review their current position to determine what changes they need to make, but only 13% know what changes these will be (see Exhibit 16).

"We probably will have to assess our research consumption in the future but currently this is more ad-hoc engagement & not in any kind of structured way. The issue is how you evaluate it - until you know the value, you can't pay for it."

Global Active Asset Manager, Europe

EXHIBIT 15

Levels of confidence in methods of accessing broker investment ideas post MiFID II

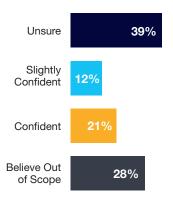


EXHIBIT 16

How do you plan to change current processes ahead of MiFID II?



THE QUESTION OF HOW TO PAY FOR AND EVALUATE RESEARCH

MiFID II will transform the definition of research. Currently long and short-term investment ideas are seen to co-exist and are mostly paid for with the same commission and will render manual processes to manage payments virtually unsustainable. If the buy-side does not value (and therefore pay for) research, but the sell-side nevertheless provides it (even if it is of no value), it must be rejected or it may be perceived as an inducement to trade. It seems impossible to imagine how research could be provided without some form of automated and auditable tracking and payment. It is also likely that there will need to be a real-time gate-keeping facility on the buy-side to manage the process.

There is a risk that regional variations may emerge in how the rule is applied within Europe although the European Securities and Markets Authority is at pains to stress their intention to ensure a level playing field. Whatever the outcome, it is clear that buy-side firms will need to apply a cost and must evaluate the research they elect to take before justifying the designated cost.

Firstly, defining the value of research will require far greater granular analysis than relying solely on a lump sum year-on-year budget. Firms will need to establish how they measure and report what adds value to the investment process as well as how research is evaluated. They will also need to determine the benefits of research to clients and track how all of these factors change over time. Regulation will demand robust systems, backed up by data to demonstrate the integrity of both policy and process. The implementation of an algorithmic rules engine would enable firms to accurately allocate the correct research charges post-trade.

Secondly, the justification of the value of research chosen is complex because it can be subjective to some degree, and the proof of value may change or take time to emerge. Many firms take external research to validate ideas, often resulting in contradictory views. To the fund manager this may be valuable but is the firm, or even the manager, willing to pay for this research, particularly if this then requires justifying the cost to end clients? Sometimes good research involves the consumption of vast amounts of useless information in order to spot the value idea from cumulative noise. For short-term trade ideas this is easier to justify cost as it is easier to measure the the contribution of the idea, either the trade idea has worked or it hasn't, whereas for longer-term research ideas the ability to justify research can be blurred.

"There is still value in a research sales person and if they can help put the right things on my plate – that's great. Quants won't take over, maybe there will be more quant research attached to the handling of ideas, to scrutinize more ways of distinguishing between the money you pay brokers after MiFID II."

Global Active Asset Manager, Europe

Thirdly, end clients may choose to opt out of paying for research. For buy-side firms who choose to continue purchasing research from the sell-side, a refusal by some end clients to agree to pay for research could lead to them having to split aggregated orders between those funds willing to pay for research versus those who are not. This scenario has implications for order flow with asset managers potentially losing the benefit of aggregating order flow and therefore incurring higher post-trade transactional costs.

Ultimately whichever path the buy-side takes will impact the industry in its entirety. If the buy-side only pays for what it values, the sell-side will be forced to adjust. Not only will the way in which the buy-side selects the brokers come under increased scrutiny, but also some buy-side firms may choose to switch to greater internal analysis, altering the level and type of information they will require from the sell-side.

THE BURDEN OF PROOF

For the most part, buy-side firms already use some sort of data to assess and benchmark the performance of investment ideas. For some firms, however the selection of research is still based on the perceived value of the overall relationship with the broker, rather than on solid, quantifiable data (see Exhibit 17).

Most firms expect to measure the contributions of brokers' investment recommendations, and audit their investment decisions, using automated processes in future. More than a quarter, however, do not yet know how they will manage this process (see Exhibit 18) or measure the overall value that a broker contributes.



Auditing investment decisions has always been critical to achieving good performance. As the range of data that informs investment decisions expands it will become essential to identify where value has been derived. One third of the funds we interviewed have already set up models to validate specific investment decisions in response to client demand for greater transparency on the rationale behind overall investment strategy. These ad-hoc processes are likely to be significantly developed and more widely adopted in future.

"We can't quantify the value of individual research but we can quantify the value of a trade idea."

Global Quantitative Manager, Europe

IDEAS AND INTENTIONS UNDER MAR

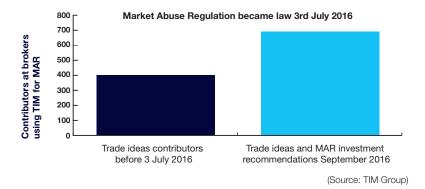
European Market Abuse Regulation (MAR) stipulates that firms must capture records across multiple channels from all approved devices to help detect potential market abuse. This includes communications that are intended to lead to orders to trade, but may never result in a transaction. It also mandates that this data is stored for a minimum of seven years in a permanent, durable medium that cannot be altered or deleted.

The sheer volume of different communication tools creates unprecedented challenges in ensuring all relevant data is captured. Buy-side firms will need to receive and record information on investment recommendations, while sell-side firms must revise their internal compliance procedures around marketing communications and investment recommendations.

This is only possible using real-time, automated archiving, and firms are rapidly altering their behaviour to ensure investment recommendations are appropriately monitored in advance of the forthcoming regulations. TIM Group reports a significant increase in contributors at firms since MAR was implemented, with the number almost doubling in three months.

EXHIBIT 19

Additional contributors at firms using TIM for MAR investment recommendations



the digital culture

The future is clear: buy-side managers across the spectrum of investment styles will be compelled to think about how to blend data with their strategies and thus to digitalise processes and relationships.

The quantitative approach is not a panacea - some interviewees were keen to highlight the danger that increased use of automated techniques results in a herd mentality that exacerbates volatility in a downturn. Nevertheless, many of the disciplines employed by quantitative funds in their investment process, as well as how they engage with providers of investment recommendations will ultimately become mainstream, transforming the relationship between the buy and sell-side.

Of the firms who participated in this research, not one respondent indicated a slowdown or restriction in their demand for access to investment recommendations. 40% of participants, however still include manually processed investment ideas, i.e. they need to be read by a person (see Exhibit 20).

This does not mean humans are being completely removed from buy and sell-side relationships but the roles they undertake and how technology is incorporated will have to change. The buy-side will require people to develop strategies using structured and unstructured data and to interpret results, tweaking strategies as necessary. Sell-side firms will require more people to generate quality ideas on a continuous basis, innovators to develop new data products and programme managers who understand individual client needs, act as filters and help make real-time adjustments across a team of contributors. All this will be taking place under a new regulatory regime in a world where the economics between buy and sell-side will be permanently transformed.

Both sides are hiring people with quantitative and technology experience but the skills are in short supply. Many firms interviewed spoke of their difficulty in finding appropriately qualified candidates.

At the same time, expenditure on technology is ever increasing. Some asset managers are already investing heavily in improved quantitative techniques and data processing, as well as applying machine learning to a wider universe of assets.

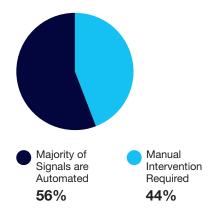
Those asset managers who understand the change in culture and the investment in the right people and technology will pull ahead of the pack, taking the brokers who understand this shift with them.

"Human intervention is now very minor – it's just to tweak the model when required."

Global Active Asset Manager, US

EXHIBIT 20

Use of information that a person needs to read



about the authors

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Niki has more than 25 years of capital markets experience, particularly focusing on capital markets infrastructure and the impact of regulation and technology on market participants. She spent 17 years working in investment banking and became Managing Director and Head of EMEA Market Structure at Merrill Lynch International before founding Market Structure Partners, a strategic consulting firm specialising in the structure of capital markets. Clients include international exchanges, clearing houses and depositories, as well as regulators, financial technology firms and market participants.

Niki also has a number of Non Executive Board roles. She is Chairman of Aquis Exchange, and a member of the Boards of Borsa Istanbul, Cheuvreux International Limited and IRESS Limited, having previously spent 4 years as a Board Director of the Moscow Exchange. Alongside these roles, she also sits on the Consultative Working Group to the European Securities Markets Association's (ESMA) Secondary Markets Standing Committee and is a member of the UK Financial Conduct Authority's (FCA) Regulatory Decisions Committee. Niki holds a first class honours degree in Information Systems and Management.

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A recognized thought leader in market structure, regulatory reform and financial trading technology, Rebecca is a research analyst focusing on the complex challenges facing the financial service industry. Writing research since 2011 Rebecca has authored research papers covering European equities, FX, fixed income, dark pools, TCA, HFT, FTT, market surveillance, market structure and regulatory reform; focusing on how technology can help address current challenges, improving capital markets both for participants and investors Prior to writing research since 2011, Rebecca held various positions at Bankers Trust, Goldman Sachs, and Credit Suisse, where as Vice President she was instrumental in launching the successful AES product from its inception in 2002. She was the first electronic trader at Credit Suisse to be registered for all electronic European cash equity markets. Rebecca holds a Bachelor of Arts degree in Spanish & Latin American History & Politics from the University of London. Rebecca is now Head of European Market Structure and Strategy at Liquidnet.

about the sponsor

TIM Group is the world's largest trade ideas network; specialising in the electronic distribution of trade ideas and investment recommendations through their independent platform (TIM).

Their mission is to provide investors with insights that will help them earn market-beating returns, and simultaneously help originators of market insight to earn incremental revenue. This is achieved through the TIM network which connects sell-side contributors and buy-side recipients by:

- 1. Distributing trade ideas and other investment recommendations
- 2. Analysing trade idea performance
- 3. Providing tools to facilitate regulatory compliance

The TIM network is used by over 4,000 equity sell-side contributors at 300 investment banks and brokerages. Combining their insights with TIM Group services, it creates the world's leading end-to-end trade ideas service for sell-side contributors and buy-side recipients.

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