

Global trends in institutional ETF trading

Risk.net Q4 2017

Survey report



Risk.net

Executive summary

This report presents the findings from *Risk.net's* first global exchange-traded fund (ETF) trading survey, commissioned by Jane Street. It incorporates responses from 210 institutional investors – 86 from the US, 79 from Europe and 45 from Asia – alongside qualitative interviews with a number of market participants. The report provides insights into how institutional investors approach ETF trading, the counterparties they work with and how they evaluate liquidity.

Key findings:

How institutions are trading ETFs

Frequency and size of trades – 30% of global respondents execute more than 50 ETF trades a month and, in Europe, 42% report trading at this frequency. This coincides with a European tendency to use ETFs more tactically. 21% of respondents executed block trades in excess of \$100 million in 2016.

Request for quote (RFQ) platforms – 32% of surveyed traders report using RFQ platforms to execute ETF block trades, with Europe leading the way at 41%. Trading on RFQ facilitates price transparency for ETF users and puts a broader set of counterparties in competition for a given trade.

Order types – Risk pricing (including block trades) dominates execution styles, with 41% of respondents using it most frequently. US institutions favour risk pricing to a much greater extent than their Asian counterparts – by a margin of 44% to 16%. Likewise, heavyweight funds, with assets under management (AUM) in the \$50 billion–\$100 billion range, outstrip funds with AUM of \$1 billion or less in their use of risk pricing by 56% to 29%.

Who institutions are trading with

Counterparties – Globally, 34% of institutions reported they most commonly execute orders through agency brokers. 29% work with independent market makers for their ETF trades and 27% are using investment banks. In Europe, market makers are the most popular counterparty, with 36% of institutions reporting trades with them; in Asia, more than 53% of institutions most commonly trade through investment banks.

Market makers – As investors seek to bolster allocations to more complex ETFs tracking less liquid underlyings, the capabilities of market makers are coming into greater focus. Key advantages include a willingness to commit firm capital, their investment in trading technology and a concentrated focus on ETFs.

How institutions evaluate liquidity

Metrics – Half of the institutions surveyed identified average daily volume (ADV) or the liquidity of the underlying securities as their preferred gauges of ETF liquidity. One-quarter are looking at bid-ask spreads on-screen, and 10% use the size of the ETF in terms of AUM as a key criteria.

Asset classes – Emerging markets and high-yield ETFs are areas where concerns around liquidity are highest, with 70% of respondents rating their level of concern as 4 or 5 on a scale of 1–5, where 1 is “not important” and 5 is “very important”.

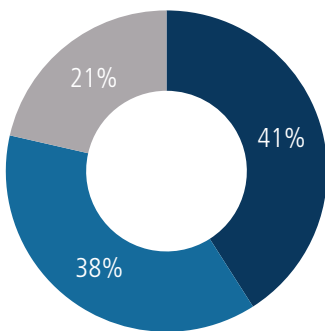
How institutions are trading ETFs

In recent years, ETFs have become essential building blocks in institutional portfolios. Cash has poured into these funds from a diverse range of buy-side firms and an entire ecosystem has arisen to facilitate institutional ETF trading.

This survey reveals how ETFs are traded by institutional investors and the factors that inform their trade behaviour. The research sample includes global representation from a wide array of institutions. Across the 210 responses, 113 were asset managers and hedge funds, 40 were private wealth platforms/family office/registered investment advisers, 23 were insurance companies, 16 were pensions and 8 were sovereign wealth organisations.

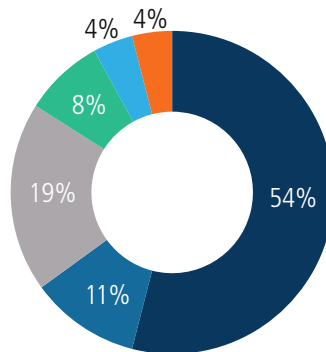
Many of the participants are large institutions, with 22% managing more than \$100 billion in assets. More than half of the institutions surveyed manage more than \$10 billion.

1. Respondents by region



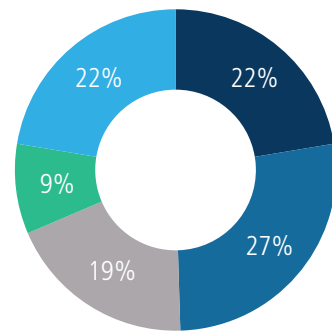
- US/Americas
- Europe
- Asia

2. Respondents by type



- Asset managers and hedge funds
- Insurance companies
- Private wealth platforms, family offices and registered investment advisers
- Pensions
- Sovereign wealth funds
- Other

3. Respondents by assets



- Less than \$1 billion
- \$1 billion–\$10 billion
- \$10 billion–\$50 billion
- \$50 billion–\$100 billion
- More than \$100 billion

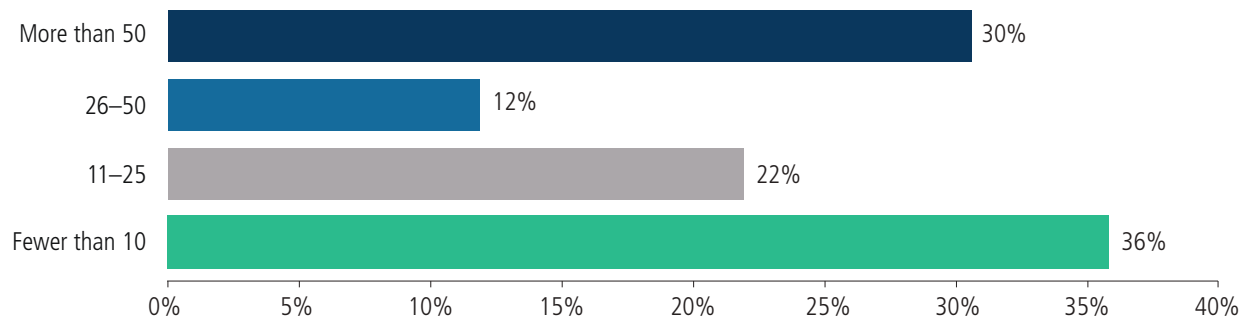
Frequency and size of trades

Across the universe of respondents, the average institutional investor reported 19% of assets allocated to ETFs. A hefty percentage of these firms are very active participants in ETF markets, too. Almost one-third stated they execute more than 50 ETF trades a month, with European institutions the most active of all, with 42% reporting they trade at this frequency. Just over half of Asian firms say they trade ETFs 10 or fewer times a month.

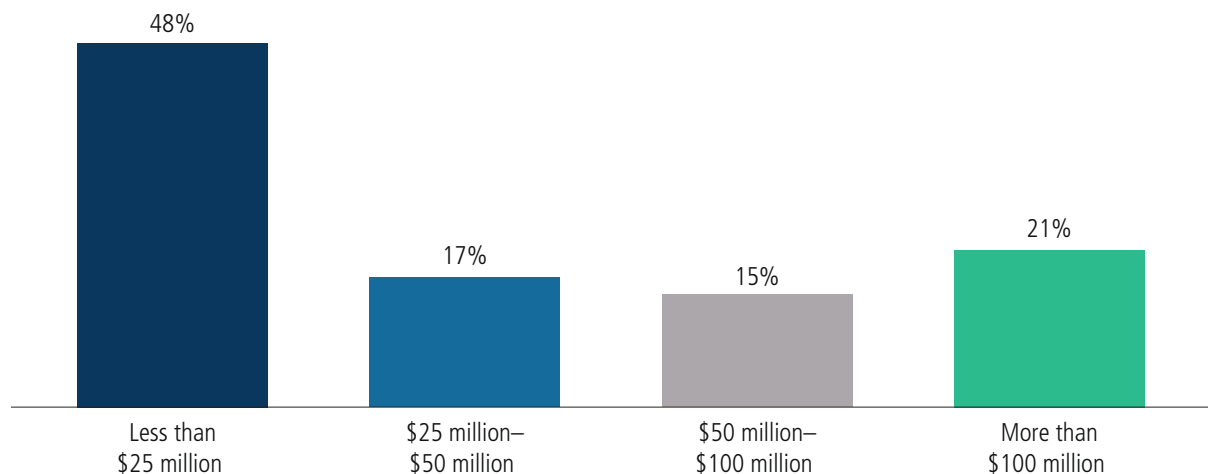
Institutions are also trading ETFs at scale. Though the size of the largest trades by each institution is invariably linked to its total AUM, it is notable that 21% of traders surveyed executed blocks in excess of \$100 million over the past year.

21%
of institutions
executed ETF block
trades of more than
\$100 million in 2016

4. Average number of trades per month



5. Largest ETF trade size in 2016



ETF use by region

ETFs are versatile instruments, capable of being deployed to fulfil multiple investor goals. Globally, a mix of core and tactical objectives are most prominent – constituting more than 50% of responses.

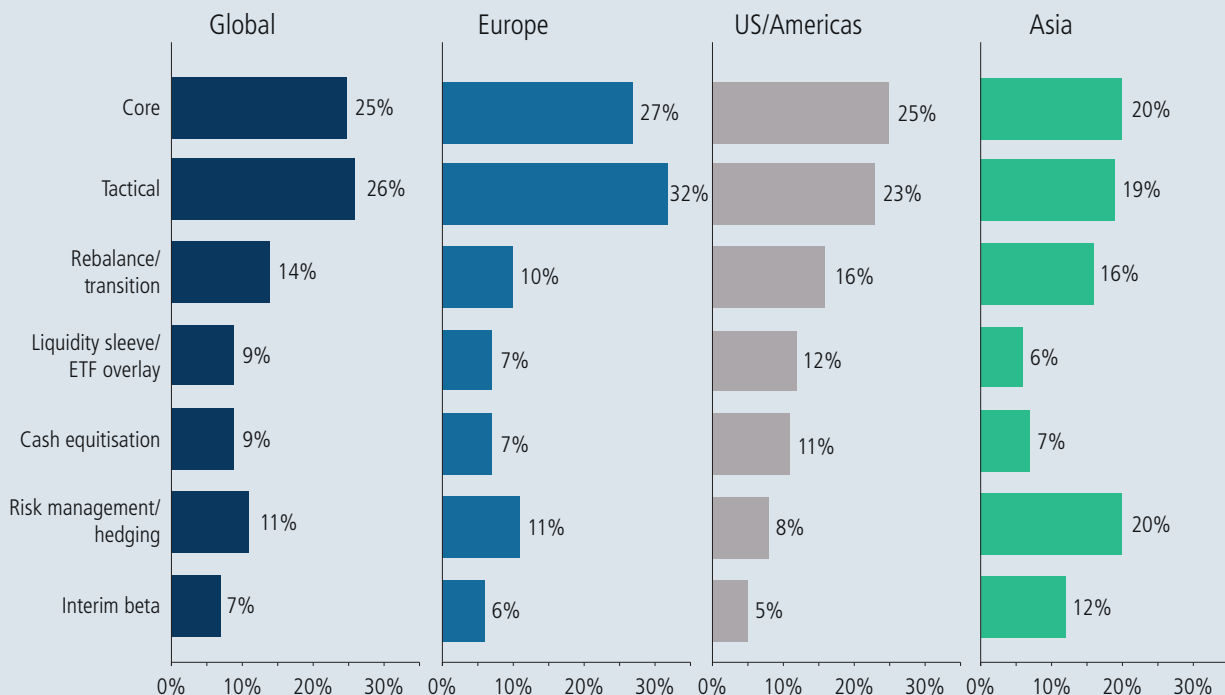
Angelo Meda, head of equities at Banor SIM, an independent investment management firm based in Italy, says: “We use these [ETFs] mainly for strategic allocations, although we sometimes use them for hedging or for tactical exposure. We like the classical US market or Japan ETFs – markets that are referenced by our benchmark but where we don’t want to have a specific single-stock allocation. However, sometimes we also use them to gain specific exposures. We have used financial ETFs to gain sector-specific exposure, for example.”

Survey results indicated that European traders use ETFs most tactically versus global peers. 32% reported using ETFs in this capacity, compared to a global average of 26%. In the US/Americas, traders are using ETFs for core and tactical purposes, but also indicate using them for liquidity sleeves/transition management for large-scale allocation shifts.

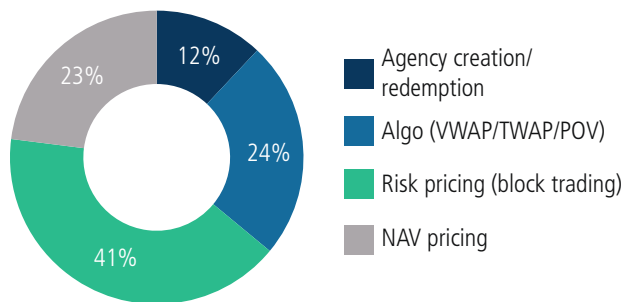
Leighton Shantz, director of fixed income at the \$27 billion Employees Retirement System of Texas (ERS) notes, “There have been times we’ve used ETFs as a transition mechanism and then others for tactical allocations. For example, during the ‘taper tantrum’ of 2013 we noticed that emerging-market debt was underperforming related to other fixed income. We shifted assets into this class using ETFs, as this was the most tactically efficient mechanism.”

In contrast, Asian institutions responded that they use ETFs slightly more for risk management and hedging, with 20% reporting ETF usage for this purpose versus a global average of 11%.

6. For what purpose do you typically buy ETFs?



7. Most commonly used off-exchange order types



41%
of institutions used risk pricing as the common trade type

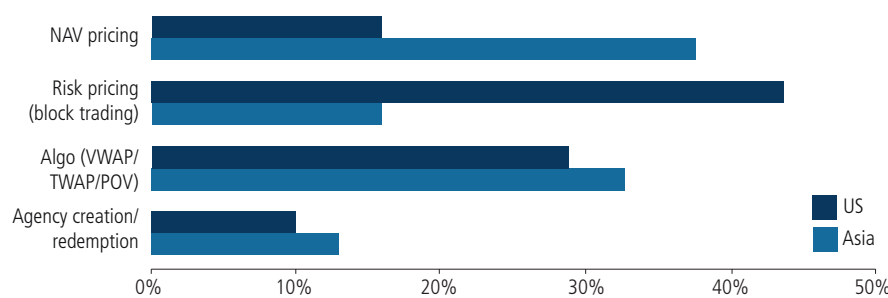
Order types

The survey revealed that risk-priced orders are the most commonly used means of trading ETFs off-exchange, with 41% of respondents citing the methodology as their top preference. Beyond risk pricing, 24% of institutions most commonly used algorithmic trading and 23% used net asset value (NAV) pricing.

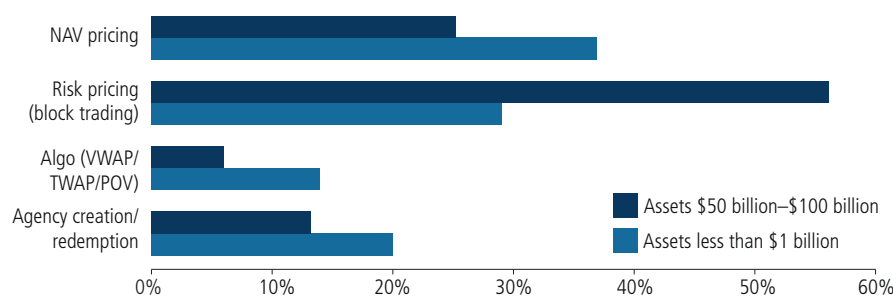
There are marked disparities by a firm’s domicile and size. US institutions favour risk pricing to a much greater extent than their Asian counterparts – by 44% to 16%. Likewise, heavyweight funds, with AUMs in the \$50 billion–\$100 billion range, outstrip funds with AUMs of \$1 billion or less in their use of risk pricing by 56% to 29%.

It is likely the case that larger funds trade more jumbo tickets off-exchange, and are simply more sophisticated in general because of their scale. A risk-priced trade passes the market risk of a trade from the investor to the counterparty instantaneously. The advantages of risk pricing are harnessed by Darshan Bhatt, co-founder and portfolio manager at US-based global macro fund Glovista, which allocates 60% of its assets to ETFs.

8. Order types – US institutions versus Asian institutions



9. Order types – Institutions with less than \$1 billion AUM versus \$50 billion–\$100 billion AUM





“If we are trading an ETF where the on-screen liquidity is extremely large versus the size we are trading, we would typically use an electronic algorithm to execute that. In cases where our trading size is larger than what we see on-screen or exceeds the ADV – but we know the underlying securities are very liquid – that’s when we use risk pricing”

Darshan Bhatt, Glovista

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Some institutions shy away from NAV pricing when trading US-listed ETFs that track non-US markets. Bhatt says that, when the underlying markets are closed, a risk-based quote is preferred. “We do not do many NAV trades, especially for international markets, primarily because their liquidity profile makes targeting NAV difficult,” he says.

An NAV trade price is typically calculated using the closing prices of the instrument’s underlyings. These prices can fluctuate between execution and market close.

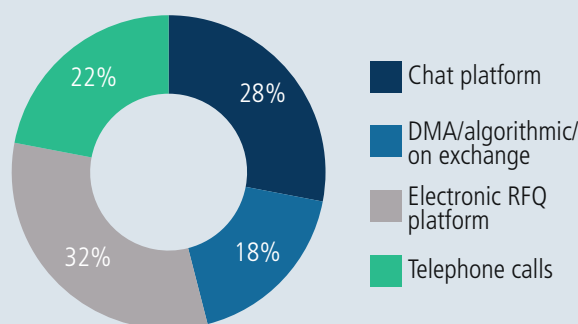
Risk pricing takes away this uncertainty. The spread payable will depend on the chosen market maker’s internal flow, risk appetite and ability to commit its own

RFQ PLATFORMS IN VOGUE

The burgeoning worldwide popularity of request for quote (RFQ) platforms should encourage firms to put a broader array of counterparties in competition, and could nudge investors to be more discerning when it comes to counterparty selection. Services provided by Bloomberg RFQE and Tradeweb allow institutions to conduct real-time auctions with multiple broker-dealers in pursuit of best execution. 32% of respondents globally said they use these platforms to submit block trade orders, with Europe leading the way at 41%.

“I have been using Bloomberg’s RFQ platform for the past two years and it’s been great,” says Will Wall, trading and operations manager at US-based Riverfront Investment Group. “The old-fashioned way was you’d either pick up the phone and try and call as many people as you can in a short period of time or just send out instant messages and try to aggregate all that information yourself. The RFQ platform has been very helpful in consolidating all of that information.”

10. How do you most commonly submit block trade orders for an ETF?

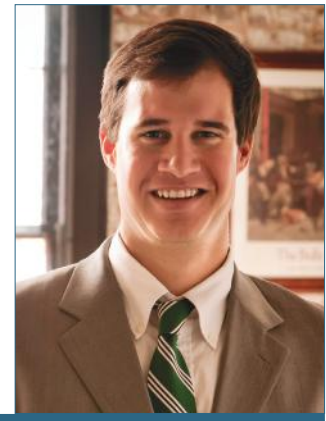


Use of RFQ platforms may continue to increase among European institutions in anticipation of the Markets in Financial Instruments Directive II (Mifid II). The European directive classifies RFQ platforms as multilateral trading facilities, one of three types of permitted trading venues under the rules.

balance sheet to the trade. For products that trade thinly or reference less liquid underlyings, or both, risk pricing can yield benefits to institutions conducting block trades.

Will McGough, portfolio manager at Stadion Money Management in the US, utilises risk pricing to minimise the execution risk associated with trading volatile ETFs. "There are certainly situations where we want to trade immediately because we feel we'd rather pay more in spread to not take on the time component of execution risk. So we do lay off risk through spreads with liquidity providers. We talk to multiple counterparties to figure out who has the best pricing for that trade," he says.

Price certainty at the time of the trade can be especially valuable in uncertain market conditions: "Where there is a spike in volatility, unless we have a strong opinion as to which way the market is going to move, we will try and execute as quickly as possible, which will be a risk trade," says Will Wall, trading and operations manager at US-based Riverfront Investment Group.



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Will Wall, Riverfront Investment Group

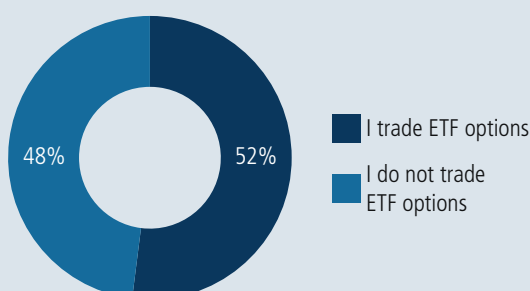
ETF OPTIONS

US respondents are almost evenly split on ETF options – around half use them and half do not. Of those institutions that trade them, the majority do so to gain tactical exposure to a specified asset class.

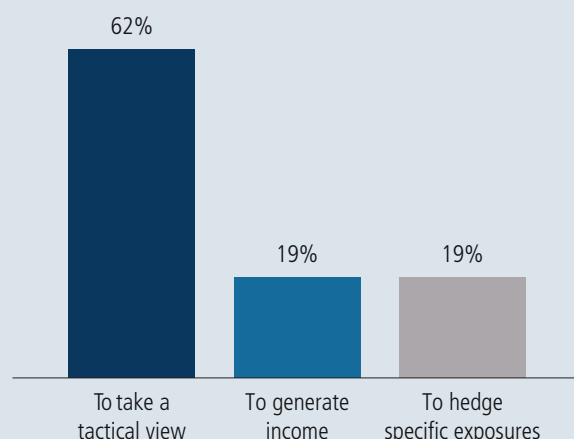
"For us, they are a replacement for underlying cash positions. It's a narrow subsection of the most liquid ETFs that have viable options markets, and most market makers have not started making active markets in these yet," says Darshan Bhatt, co-founder and portfolio manager at US-based global macro fund Glovista.

Yet others appreciate their more versatile character. "We have two alternative strategies that use options. They are used to manage risk differently and achieve our objectives of getting decent market returns for less volatility. We mix ETF options with index options, as sometimes one or the other will be more attractive from a tax perspective," says Will McGough, portfolio manager at Stadion Money Management in the US.

11. Do you trade ETF options?

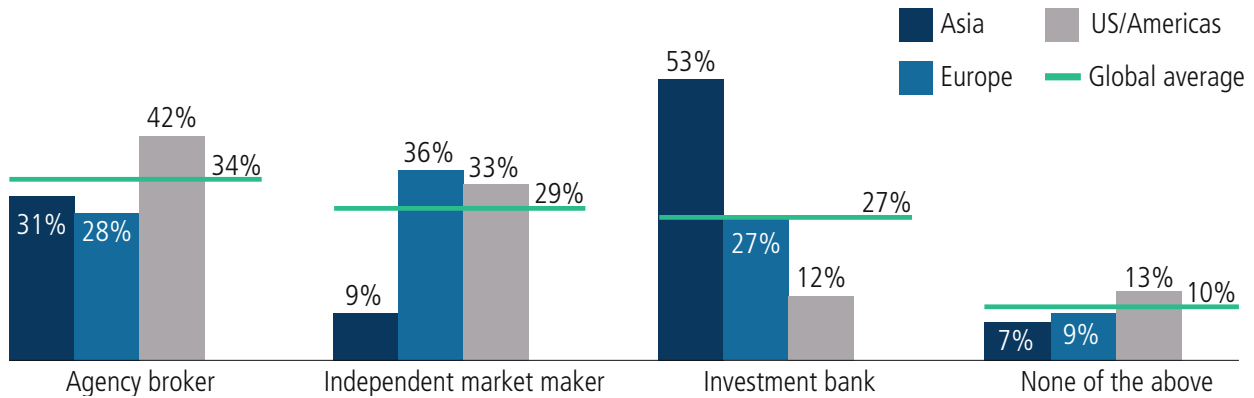


12. Why do you primarily use options?



Who institutions are trading with

13. Who do you most commonly work with to execute ETF trade orders?



“We draw upon a wide range of counterparties depending on size and asset class, with our global trading team focusing on best execution”

John Roe, Legal and General Investment Management

Counterparties

A variety of firms compete for ETF orders, with traditional investment banks jostling for position alongside agency brokers and independent market makers.

“We draw upon a wide range of counterparties depending on size and asset class, with our global trading team focusing on best execution,” says John Roe, head of multi-asset funds at Legal and General Investment Management in London.

Agency brokers pair liquidity seekers with liquidity providers. They are the most commonly used counterparty – 34% of institutional ETF traders report working with agency brokers.

Investment banks typically provide all-in-one solutions, including but not limited to trade execution research, custodial services and securities lending. Globally, 27% of institutions are using investment banks for their ETF trades.

Independent market makers typically trade for their own account, and often focus on ETFs specifically. 29% of all institutions surveyed are working with market makers to execute ETF trades.

Market makers

Independent market makers have been gaining traction with some institutions. Will Wall at Riverfront Investment Group states, "On an aggregate level – looking at a quarter or full year, for example – typically, the specialised ETF market makers will win the majority of our trades."

Some of their competitive advantages come from a focus on the more complex, less liquid portions of the market.

Leighton Shantz at the Employee Retirement System of Texas adds, "In fixed-income ETFs, I believe much of the prowess of independent market makers is driven by their investment in technology, simply because, when it comes to trading products referencing hundreds or thousands of bonds, this becomes a complex mathematical issue rather than a straightforward trade."

Investment banks have the largest footprint in Asia, where they account for the majority of ETF trading. 53% of survey respondents reported trading with these firms most frequently.

Only 9% of Asian survey respondents indicate they work with independent market makers. However, some institutions see market makers gaining ground in the region.

"Market makers are investing and marketing their services in Asia. This means they are more aggressive on price. When it comes to risk pricing, they are much faster than the competition," says Michael (Bumkeun) Cho, portfolio manager at Samsung Asset Management. As Korea's top asset manager, Samsung manages \$206 billion in assets.



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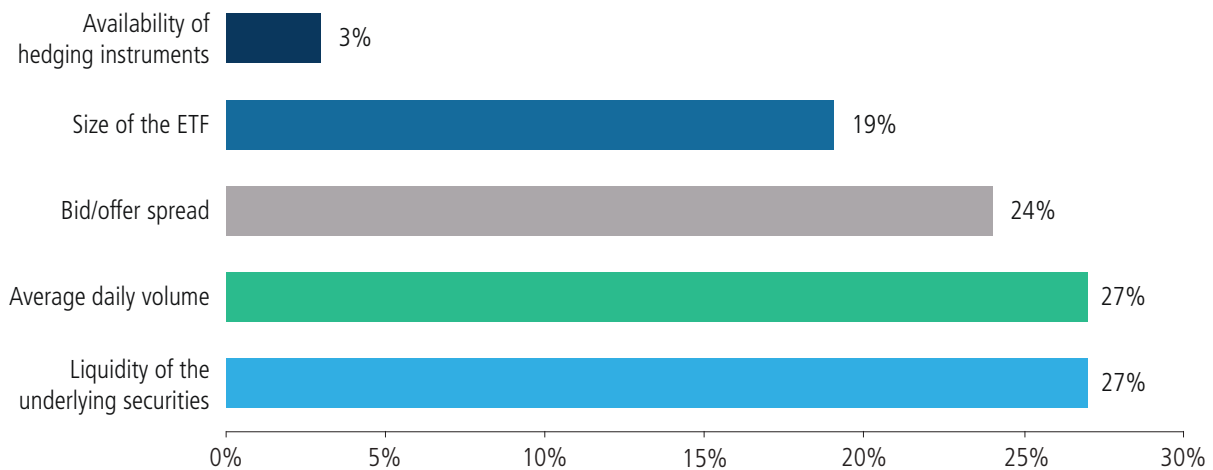


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Michael (Bumkeun) Cho, Samsung Asset Management

How institutions evaluate liquidity

14. What criteria do you use to evaluate the liquidity of an ETF?



“To measure secondary liquidity, we look at bid-ask spreads and ADV traded across multiple periods, as well as trading behaviour during stressed market environments. We also assess the current size of the fund in relation to potential inflows from our team. For underlying liquidity, we measure the creation basket to understand how much of the underlying securities would be impacted given different creation sizes”

A senior trader at a large US asset manager

Metrics

Institutions have to weigh up a variety of factors when deciding how to trade a certain ETF. High on the list is the selected fund’s liquidity.

“The number one hurdle most people need to get over is that the on-screen liquidity of an ETF is not the only liquidity there is: it’s whatever the liquidity of the underlying security basket is,” says McGough at Stadion.

Survey respondents have a sophisticated understanding of the nature of ETF liquidity, with firms identifying ADV and the liquidity of the underlying securities as the two most favoured gauges. US and Asian investors tend to lean on ADV to a greater extent than their European counterparts, which may reflect the greater amount of on-screen ETF liquidity available in the US.

A senior trader at a large US asset manager explains they take a multilayered approach to evaluating liquidity, assessing both the on-screen liquidity of the ETF itself as well as that of the underlying constituents. “To measure secondary liquidity, we look at bid-ask spreads and

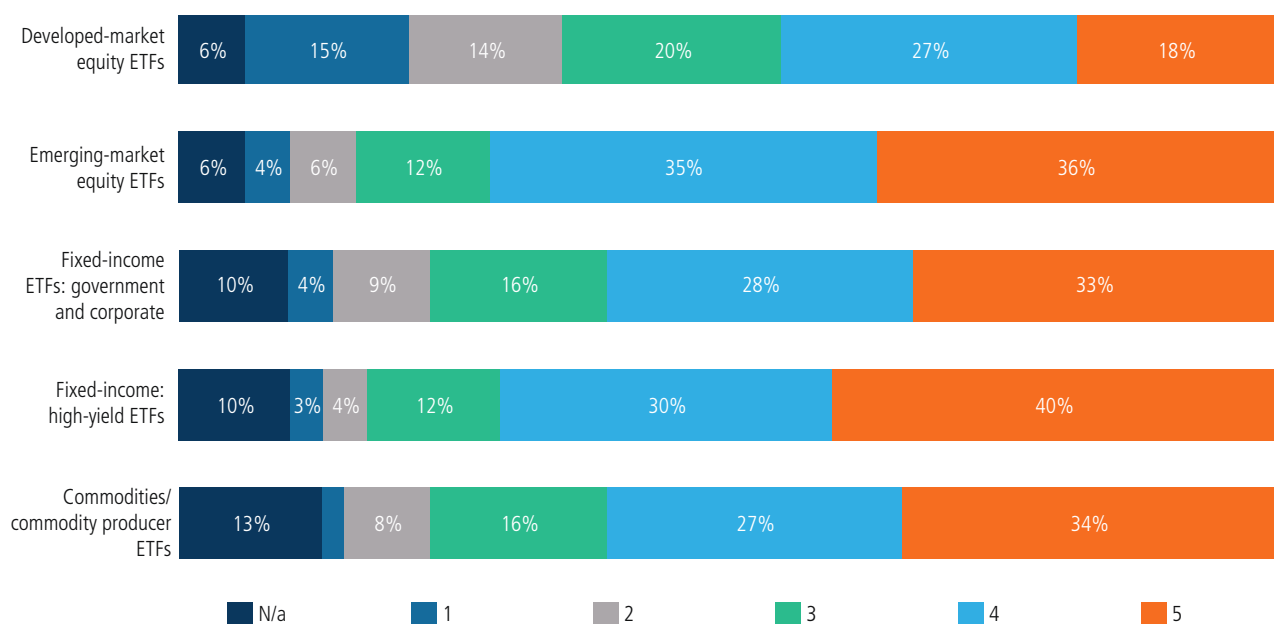
ADV traded across multiple periods, as well as trading behaviour during stressed market environments. We also assess the current size of the fund in relation to potential inflows from our team. For underlying liquidity, we measure the creation basket to understand how much of the underlying securities would be impacted given different creation sizes," he says.

Investors in Asia tend to evaluate ETFs as if they were equities. "I measure the size of the ETF compared with what I would like to put in. Secondly, I look at the spread between the bid-offer," says Martin Wong, senior investment manager at Jun Yang Financial Holdings in Hong Kong.

For their part, European institutions favour bid-offer spread, a traditional measure of how eager market participants are to provide liquidity.

Considerations understandably vary depending on trade ticket size. Institutions can allocate to ETFs in creation unit sizes or larger, where primary liquidity is often the key metric. They may also need to trade around their position from time to time, and here the liquidity of the secondary market tends to be more important.

15. When trading the following types of ETFs, how great a concern is liquidity?



Votes were cast using a scale of 1–5, where 1 denotes liquidity as "not an important concern", and 5 denotes "a very important concern".

Asset classes

ETFs that offer exposure to less liquid underlyings and exhibit price volatility are often prime candidates to be traded using risk pricing, in order to provide investors with a certainty they would not gain through NAV pricing.

Survey respondents reported that liquidity is of greatest concern when trading high-yield fixed-income ETFs, closely followed by emerging-market equity funds and commodities-based products. Developed-market equity ETFs prompted the fewest concerns.

Emerging-market and high-yield ETFs are areas where concerns around liquidity are highest, with 70% of respondents rating their level of concern as 4 or 5 on a scale of 1–5, where 1 is “not important” and 5 is “very important”.

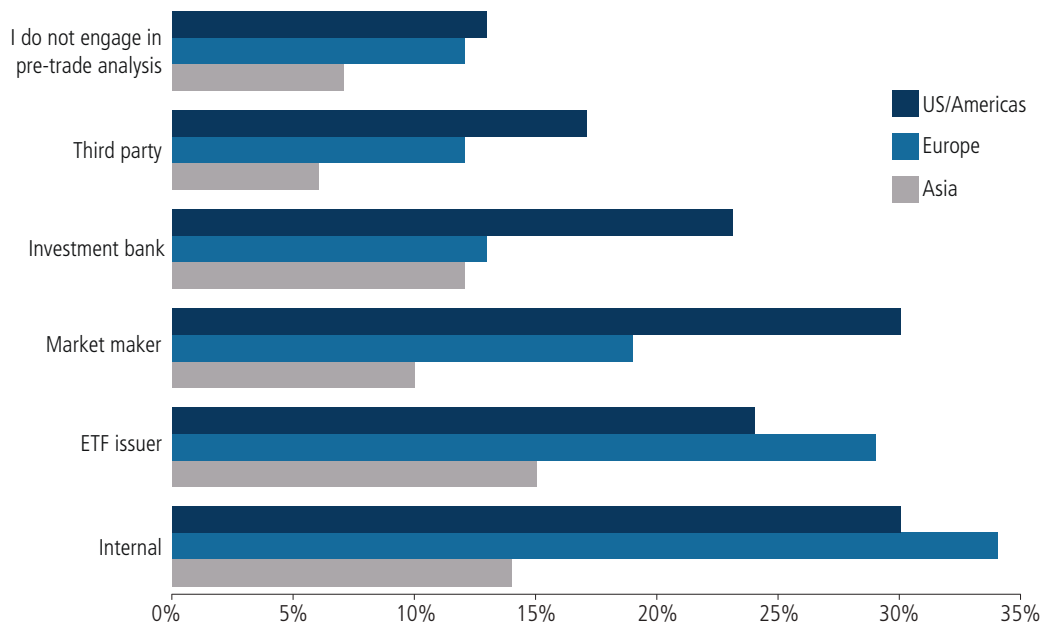
Notwithstanding these concerns, there has been an explosive growth in fixed-income and emerging-market ETFs in recent years. Morningstar data shows that bond ETFs attracted \$91.9 billion in net inflows over 2016, an increase of 50% from 2015. Allocations to emerging-market ETFs, meanwhile, currently hover around \$244 billion, and make up 19% of the total invested in emerging-market mutual funds, according to Citibank research.

Institutional investors’ reasons for pivoting to these ETFs are straightforward. For one, they offer portfolio diversification. “The driver is the increasing importance and stability of emerging markets on their own,” says Ulrich Busch, a fund manager at asset manager Baumann Partners in Luxembourg, who has bolstered his portfolio’s emerging-markets ETF allocation by 30% over the past two years.

Bond ETFs, similarly, allow fund managers to inject credit exposure into their portfolios. Baskets of high-yield and emerging-market credit can be accessed through ETFs at generally lower cost than if each bond were traded individually. The accompanying settlement complexity can also be avoided.

The complexities associated with trading these types of ETFs place a premium on pre-trade analysis. Survey responses indicate that buy-side traders draw assessments from a number of market participants and do not lean too heavily on any single source. US traders appear to tap market makers and investment banks for analytics to greater degree than suggested by the global average, while European firms favour ETF issuers more. All surveyed institutions report that in-house assessments play a key part in the decision-making process.

16. Where do you typically source your pre-trade analysis?



Conclusion

The findings of this global ETF trading survey suggest that, as institutions increase their use of ETFs, they have also grown more discerning with whom they trade and how these trades are executed.

Looking ahead, this is a trend that may accelerate as institutions expand their ETF allocations to encompass funds tracking less liquid and more volatile assets. Emerging-market equities and high-yield credit are good examples. Here, selecting an appropriate counterparty and trading strategy can help investors achieve best execution.

Additional factors may influence institutions' trading behaviours. A tighter focus on trade execution will make institutions more price-sensitive. This is especially true in Europe, where the rise of RFQ platforms, coupled with incoming regulation, will push firms to be more discriminating in their selection of counterparties. Indeed, certain market participants are already reassessing their counterparties ahead of the implementation of the Markets in Financial Instruments Directive II (Mifid II).

Worldwide, a switch in the present market environment could trigger a wholesale transformation in trading activity. The historically low-volatility regime has bolstered the attractiveness of algorithmic trading, as investors do not expect large price swings to complicate their orders. An uptick in volatility could lead investors to increasingly favour risk pricing.

THE 2017 GLOBAL ETF TRADING SURVEY METHODOLOGY

The 2017 Global ETF Trading Survey was conducted by *Risk.net* and commissioned by Jane Street, receiving 210 valid responses. The survey was conducted between April and August 2017, and respondents were drawn from institutional investors who trade ETFs. The results were collated from respondents who answered 100% of the survey from the following regions: Asia (21%), Europe (38%) and US/Americas (41%).

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- **Michael (Bumkeun) Cho**, Portfolio Manager, Samsung Asset Management (South Korea)
- **Will McGough**, Portfolio Manager, Stadion Money Management (US)
- **Angelo Meda**, Head of Equities, Banor SIM (Italy)
- **John Roe**, Head of Multi-asset Funds, Legal and General Investment Management (UK)
- **Leighton Shantz**, Director of Fixed Income, Employees Retirement System of Texas (US)
- **Will Wall**, Trading and Operations Manager, Riverfront Investment Group (US)
- **Martin Wong**, Senior Investment Manager, Jun Yang Financial Holdings (Hong Kong)

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