



THE RISE AND RISE
OF EXCHANGE TRADED FUNDS
IN A CHANGING MARKET AND
REGULATORY LANDSCAPE

GOODACRE UK RESEARCH TEAM

FOREWORD

Since first hitting the market, ETFs have become, and remain, an increasingly popular choice for investors. Whether it's for their low fees, their diversification or their transparency, there's a host of benefits that are evidently contributing to their continued success story in private and institutional client portfolios alike.

The relative costs of investing in ETFs are lower than for other categories of instruments, making them potentially more attractive to a wider client base. There is certainly evidence that ETF growth is not just being driven by private investors; institutional asset owners are also increasingly making use of ETFs in their portfolio allocation process.

European regulation is showing more concern regarding market transparency with the aim to improve the efficiency and resilience of financial markets. The biggest potential change in this respect is coming from MiFID II pushing for all ETF trading to be on exchange.

The fragmented nature of our capital markets across Europe is among the key challenges standing in the way of ETFs

reaching their full potential. Both due to the fact that ETFs are traded across geographically diverse exchanges in Europe, and to the fact that there is fragmentation between retail investors, who mostly trade on an 'on-exchange' basis, and institutional investors, who are generally trading "over the counter" at more favourable prices.

In its role as market infrastructure, and part of Deutsche Börse Group, Clearstream supports measures to bring more European ETF trading on to exchanges. Joint market initiatives in this respect could not just bring costs further down, but the market would also benefit from advantages that include higher liquidity and more transparency. As this will not happen in the short term, Clearstream already ensures that every investor type has its preferred channel or the required order mechanism in place.

As an International Central Securities Depository (ICSD), Clearstream also offers an international issuance model for ETFs addressing the fact that ETFs are listed in multiple exchanges and thereby improving liquidity, reducing cost and speeding up realignments within Europe.

Philip Brown
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Banking SA*



MANAGEMENT SUMMARY

There is no other phrase that could describe the phenomenon happening within the Exchange-Traded Funds (ETFs) industry other than “continuous growth”. Assets under management of ETFs have grown rapidly in the last ten years, from \$800 billion in 2008 to \$5 trillion in May 2018.

This Report features information from a Goodacre UK Industry Survey of companies involved with the ETF market. With direct input and comments made from firms who kindly provided specific information, supported by further research from Goodacre UK’s consultancy team, the report aims to identify the consensus towards ETFs from established market players.

The main views from the majority of respondents in respect of ETF’s were as follows:

- Low fees are the most important factor attracting investment
- Investment will accelerate during the next 5 years
- Costs and fees will fall slightly
- Will take over from mutual/actively managed funds as the most popular investment in the UK
- Offer a quicker route to market than UCITS funds
- Participants are not fully aware of the benefits of the ICSD issuance model for multi-listed ETFs
- Increased regulation will make no difference to popularity
- Doubts as to whether they should be used as a lending asset class
- Market risk is among the biggest threats

This paper points out that the ETF landscape is rapidly evolving as more products debut on the market, and an increase in regulatory requirements for more transparency on costs come into effect.

In summary, the results show a robust industry that still has space to develop. Offering price transparency is one of the key advantages of ETFs. Investors can see, almost in real-time, how much their fund is worth where contrast, traditional mutual funds are typically valued no more than once a day. These benefits of ETFs must be balanced against perceived limitations. Care needs to be taken not to imply greater liquidity than the underlying assets. The survey report also considered potential barriers to growth for the ETF market. Compared to the US, the European ETF market has not grown as fast because Europe is less harmonised. The US system is furthermore, more transparent as all ETF trading is visible. In Europe, there tends to be a distinction between retail ETF investment, which is generally on-exchange, and institution ETF investment, which in many cases occurs over-the-counter.

HOW DOES THE ETF MARKET WORK

ETFs are hybrid products that combine the benefits of open-ended funds, like mutual funds; and the flexibility and liquidity of the closed-ended funds, like the stock market. These underlying assets of an ETF are commonly a collection of equities belonging to the same index; but these could very well be commodities, bonds, and other securities or currencies.

There are four participants in an ETF market:

- Fund sponsors and trustees who issue shares and who make sure that the fund mirrors the index it is tracking
- Authorised Participants (APs), which serve as the middlemen between the fund sponsors or issuers
- Investors (institutional or retail)
- Stock market regulators who allow the listing and trading of ETF shares in the stock exchange

Figure 1 summarises ETFs complex market structure which straddles two markets: the primary market where fund sponsors, the AP and institutional investors operate; and the secondary market where institutional and retail investors trade ETF shares alongside other equities. When an exchange-traded fund is set up, APs ask the fund sponsors to create

shares in exchange for a basket of assets plus cash.

The basket of assets become part of the fund's assets under management (AUM), while the shares created in exchange for them will be given to APs. APs then have the option to keep the shares for themselves, or to resell them to other investors in the secondary market.

APs play an important role in the ETF market structure: they make sure that the price of the ETF in both markets are roughly the same. The arbitrage mechanism makes sure that ETF share prices are relatively close to the net asset value (NAV) of its underlying assets.

One unique feature of the ETF structure is that trading in either market will not directly affect trade in the other. Fund sponsors and APs may trade assets and shares as part of the creation-redemption process as often as they wish, but they cannot influence the price of ETF shares. They can only change the number of outstanding stocks in the market. Trading on the stock market too, will only involve cash and shares changing hands; the underlying assets are untouched under the care of the fund sponsor.

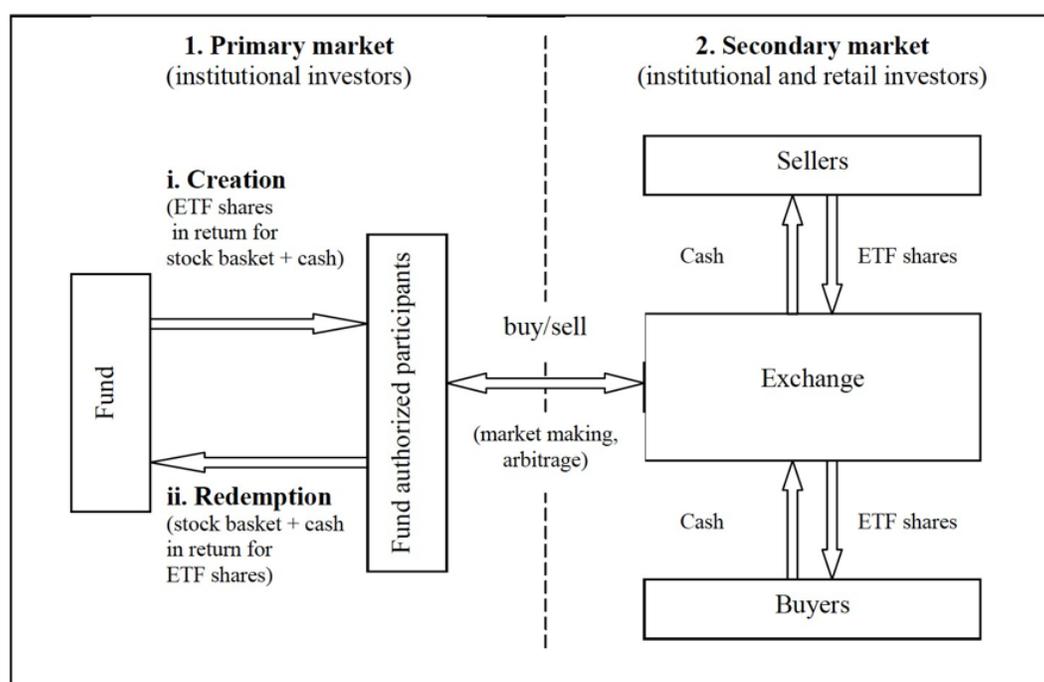


Figure 1: Primary and Secondary ETF Market Structure

ETFs VS OTHER FUNDS: What makes ETFs attractive?

Clearly there are many reasons to invest in an ETF. Some use them for day trading, others to gain exposure to a broad asset class, such as US equities, in a quick and efficient manner. The cost-effectiveness of ETFs is still among the main reasons why a huge bulk of investments have gone into ETFs during the last decade.

This is shown through the results of the research conducted among regulated companies who offer ETFs to their clients (Table 1). The most important factor contributing to ETFs attractiveness, according to almost half of the respondents, are low fees associated with ETFs. As these are passive investments there is no need to pay an active fund manager to make frequent trades and attempt to beat the market. The index an ETF seeks to replicate, dictates the composition of an ETFs portfolio, which means that each share of the ETF is already diversified. There is no need for investors to buy each individual stock on the index because it is already encapsulated in the ETF share.

Another prominent reason that makes ETFs attractive is 'ease of access', which was voted for by 20% of respondents, and 'liquidity', which garnered 16% of the votes.

Liquidity and transparency are a consequence of being tradable on the stock market. These are very important aspects in ensuring that the ETF market structure works as efficiently as possible. Unlike other funds that can only be bought or sold at the end of the trading day, ETFs can be traded anytime within trading hours. Stock market transactions are very transparent, too, because prices are made available to the public throughout the day. ETF companies are therefore mandated to disclose their portfolios every day, as opposed to mutual funds whose managers are only required by law to disclose their holdings on a few occasions during the year.

Table 1: What is the most important factor that attracts investments to ETFs?

Factor	% of respondents
Ease of access	20.19
Liquidity	16.35
Low fees	45.19
Open market pricing	6.73
Transparency	5.77
Others (please specify)	5.76

ETFs IN THE UK MARKET

Participants in the survey of the ETF industry, share the world's fondness of the exchange-traded funds. 75% of respondents are expecting that the UK ETF market will grow rapidly over the next five years. 11% are unsure about what's going to happen to the ETF industry, while only 7% said it would stay the same (Table 2).

Table 2: Expectations on the UK market in the next five years

Will accelerate	75.24
Don't know	10.47
Will stay the same	6.67
Will slow or stop	4.76
Assets will fall and reverse growth	1.9
Others	0.95

A growing ETF market also means a fast-changing landscape. More ETF products and companies introduced to the market will mean tougher competition among issuers of ETF shares. It is therefore logical to consider ETF expense ratios to fall, even if slightly, so that ETF shares can remain attractive to investors.

Figure 2: Expectations on ETF costs and fees

The survey's results show that two-thirds of respondents are expecting total costs and fees associated with exchange-traded funds to fall slightly in the next couple of years. 18% think the expense ratio for ETFs will remain the same. Only 5.7% expect these costs and fees to grow in the near future (See Figure 2).

The market shows evidence that ETF providers will continue competing on price as a means of raising assets. Going forward we nevertheless expect a growing number of ETF launches which track niche indices/baskets where they face less pressure on fees.

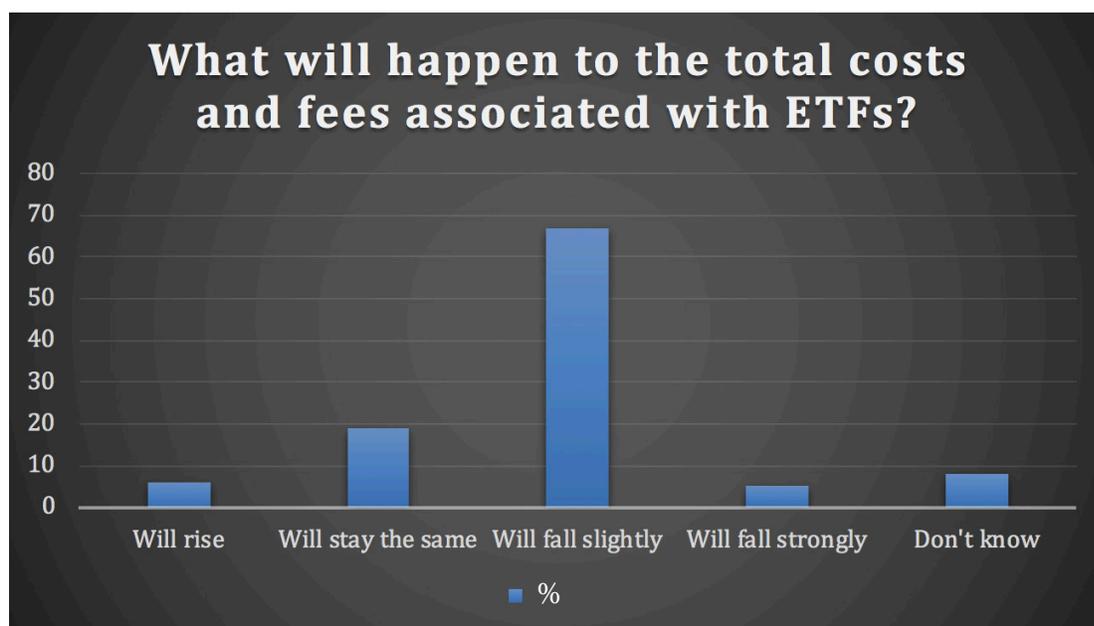


Figure 2: Expectations on ETF costs and fees

ETFs IN THE UK MARKET

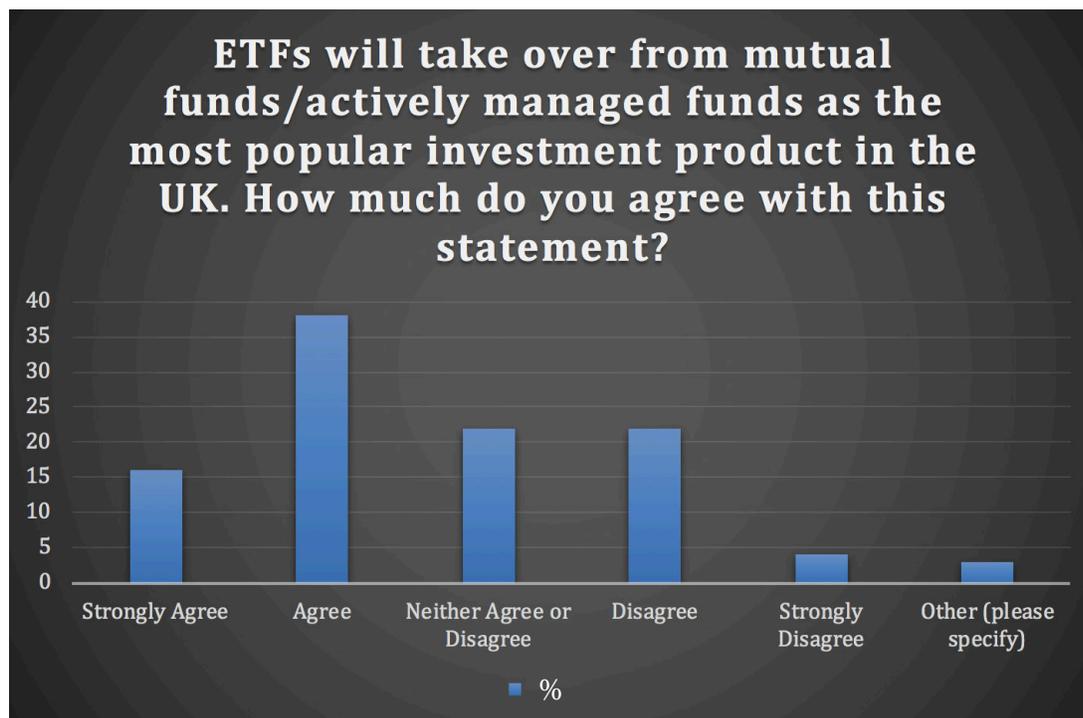


Figure 3: Perception of the ETF Industry's Future in the UK Markets

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Optimism with the future of ETFs continues to soar. The majority of respondents (54%) suggest that ETFs will eventually eclipse the popularity of mutual funds/actively managed funds in the UK (Figure 3). However, 25% of the total respondents disagree. For almost 7% of the respondents, the possibility of ETFs overtaking mutual funds may happen eventually, but changes must take place first. One respondent stated that educating more retail investors about ETFs and its mutual fund counterparts might cause a rise in popularity, while some 22% of the respondents are ambivalent about the future of ETFs in the UK.

ETFs IN THE UK MARKET

Due to its nature, ETFs have some accessibility benefits over other fund types. The most popular answer of survey participants, attracting 50% of the responses, was 'offer a quicker access to market than UCITS funds' (see Figure 4). This finding suggests ETFs may sometimes be more appealing than conventional fund types for asset managers hoping to launch products rapidly.

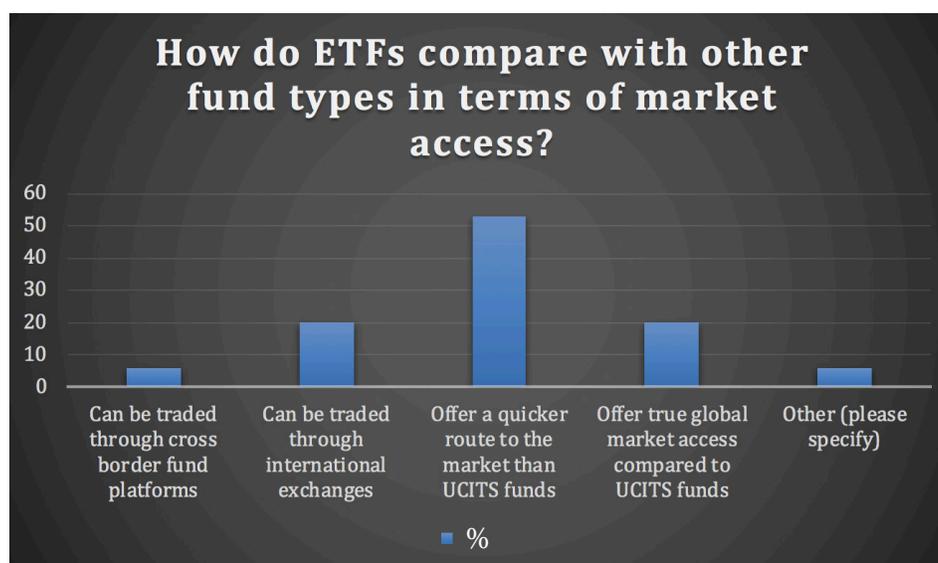


Figure 4: Market Access of ETFs Fragmentation – potential barrier of growth for the ETF market across Europe

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Fragmentation – potential barrier of growth for the ETF market across Europe

The fragmented nature of our capital markets is among some of the challenges standing in the way of ETFs reaching their full potential across Europe. Steps are being taken to address this. In regards to market reforms, the pan-European platform for securities settlement, TARGET2-Securities – may have some positive impact in terms of solving the issue of geographical fragmentation, while regulations such as MiFID II – the revised Markets in Financial Instruments Directive – may provide some benefits regarding the question of exchange trading versus over-the-counter trading.

CROSS-BORDER ETF INVESTMENTS

Cross-border ETF investments and the ICSD settlement model

Change, however, should not be purely driven by regulation – the market also has a responsibility to provide an attractive offering to customers. For its part, Clearstream has expanded its cross-border fund processing platform into multi-listed ETFs. The platform allows, for example, a French investor to buy into a German-listed ETF and sell it on the UK stock exchange seamlessly. Although fund units are custodied in the countries where they are listed and sold, Clearstream creates a mirror of transactions in its International Central Securities Depository (ICSD) in Luxembourg. The service allows for transactions in ETFs listed in multiple exchanges, without complexity for the client.

A centralised ICSD settlement solution can solve the cross-border liquidity problem that ETF providers are faced with. ICSD ETFs are settled in ICSDs by default, which means that local Central Securities Depositories (CSDs) will need to have accounts at the ICSD where they intend their international ETFs to be cleared.

Almost half (46%) of our respondents expressed a lack of understanding of the benefits of the ICSD issuance model (see Figure 5). A third of them believed that ICSDs make markets more efficient. The result of the survey suggests there is space for more education about the challenges connected to cross-border functionality of ETFs and more needs to be done to explain the benefits of the ICSD issuance model.

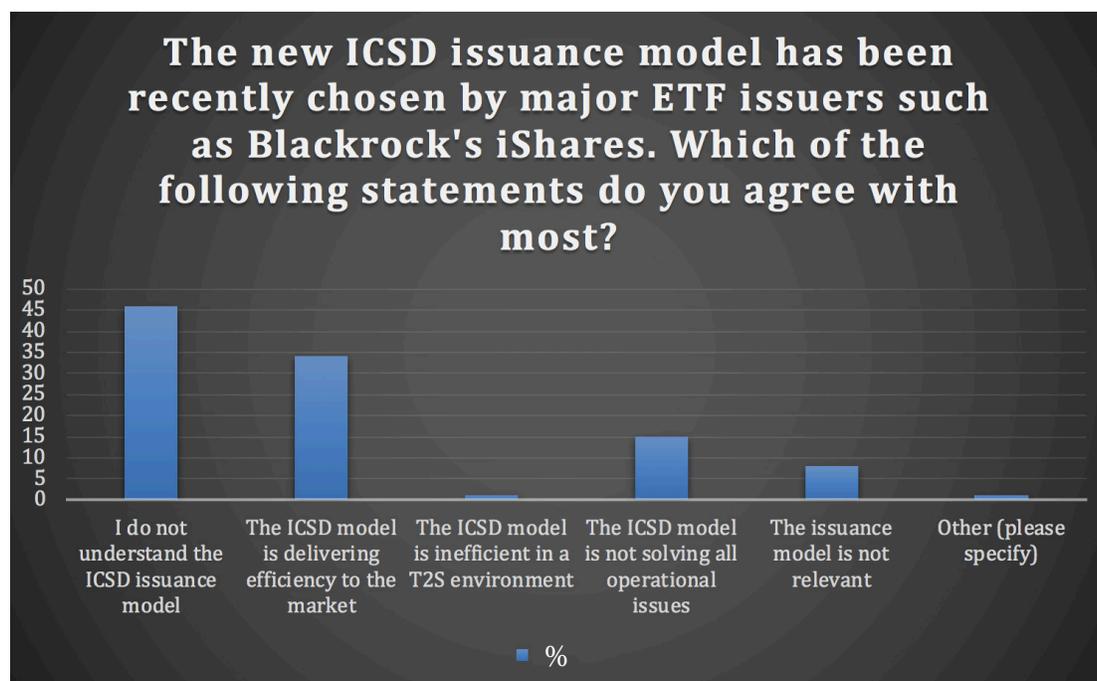


Figure 5: International Market Access and the ICSD Issuance Model

ETFs AND REGULATION

Regulation is a hugely important factor in the fate and popularity of any financial product. If the regulatory environment is not supportive of the financial instrument, that investment vehicle will not succeed.

The EU is increasingly showing concern regarding market transparency. On January 3, 2018, the second version of Markets in Financial Instruments Directive (MiFID II) and Regulation on Markets in Financial Instruments (MiFIR) took effect. These two regulations aim to further protect investors by improving the efficiency and resilience of financial markets, and increasing transparency.

Prior to MiFID II taking effect, ETFs were not required to report their trades. The existing data from this period regarding

the ETF market in the EU originates from market players volunteering the information themselves. ETF companies and market players will now have to disclose their transactions.

ETF providers are divided on how this new regulation can affect their client base. 40% of the survey respondents say laws like MiFID II will make no difference when it comes to the popularity of ETFs among investors, while 38% of them say it will actually promote the investment vehicle (Figure 6). Keep in mind that the very structure of ETFs already promotes transparency, given that it is trading within a stock exchange. If the ETF scheme is not transparent, authorised participants and liquidity providers will not be able to carry out the arbitrage mechanism efficiently.

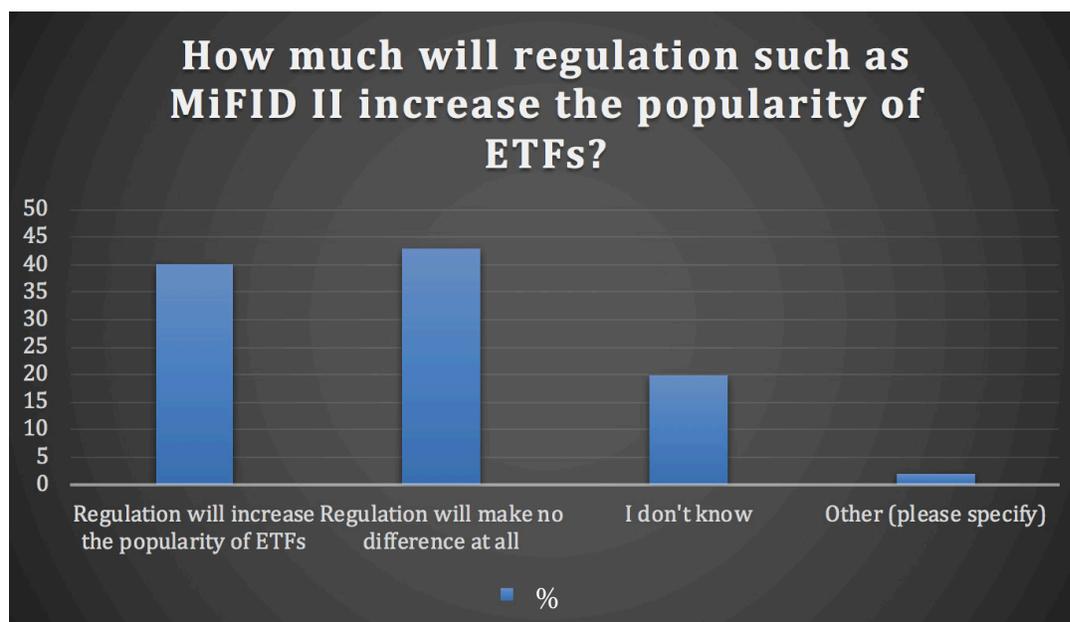


Figure 6: Anticipated effect of regulation in the popularity of ETFs

ETFs AS A LENDING ASSET CLASS

Traditional index-based exchange-traded funds may be passively tracking an index, but that does not limit the means it can use to achieve its goal of tracking an index's returns. Using ETFs as a lending asset which can generate additional revenues either for the fund, or for its investors has created some discussion among market participants.

We asked a pool of registered companies that sell ETFs to their clients if they are considering lending out their securities in this sense. Only 38% of the respondents are open to the idea. A greater percentage (46%) is unsure why they should do that, while only 15% flat out rejected the notion of using underlying assets for securities lending (*Figure 7*).

It seems that many respondents believe the structure of ETFs means they are not suitable for lending, despite the potential to increase returns for investors.

However, and despite some concerns, large ETF providers actually promote and are engaged in the practice. Citing Morningstar data, around 30% of Europe-based ETFs lend out their securities, while a good 70% of US-domiciled exchange-traded funds are in the businesses of loaning their assets.

IHS Markit analysts consider the practice of outside lending as niche for now, but they also pointed out that the revenue from the practice vastly outweighs those earned from the type of lending most commonly associated with the asset class. This is due largely to the fact that the demand for borrowing ETF units is great, but there are still very few parties willing to cater to that need. Profitability in outside lending of securities depend on the asset class of the ETF in question, as well, so the venture will not be risk-free.

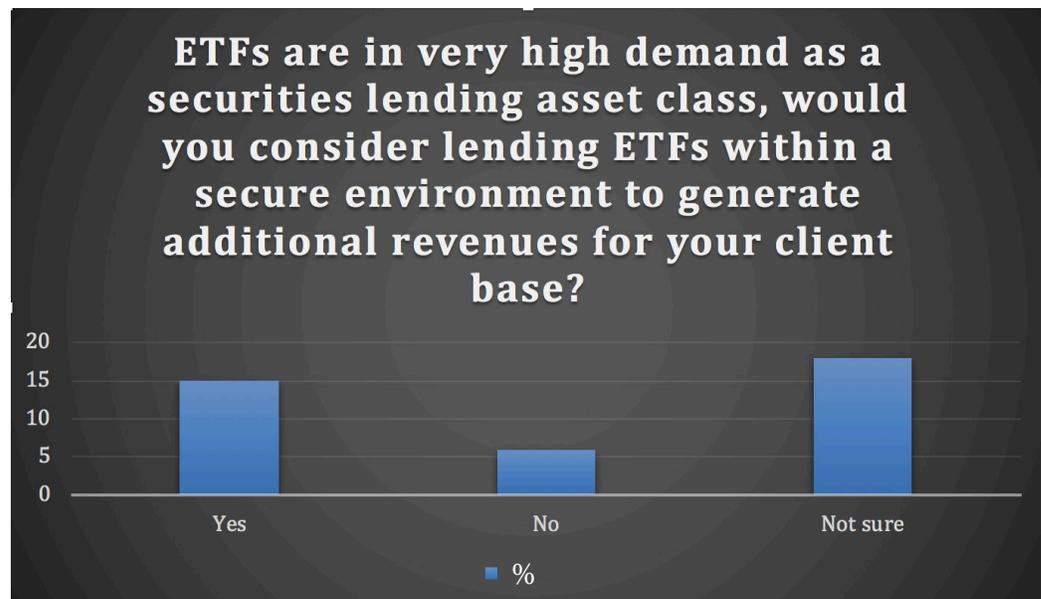


Figure 7: ETF securities as lending assets

ETFs AND ILLIQUID ASSETS

Liquidity is a pre-requisite in any fully functioning and efficient ETF market. The more liquid the underlying assets and the shares of an ETF are, the bigger the opportunity for profit through the arbitrage mechanism. When we asked ETF providers if they think exchange-traded funds may be used to invest in illiquid assets such as real estate, more than a third of them are undecided about the issue. 28% of them, however, think that it is a bad idea, while only a fifth of all respondents say ETFs are appropriate investment vehicles to

use for these 'harder-to-dispose-of assets' (Figure 8).

Combining a highly liquid asset like ETF shares with a very illiquid underlying asset may seem like a bad combination, but it is possible to reconcile the two with the ETF structure. The fear is that when panic takes over the markets, investors will try to sell their ETF shares at the same time. If the underlying asset is illiquid, the market will lock up because it will be overwhelmed by sell orders.

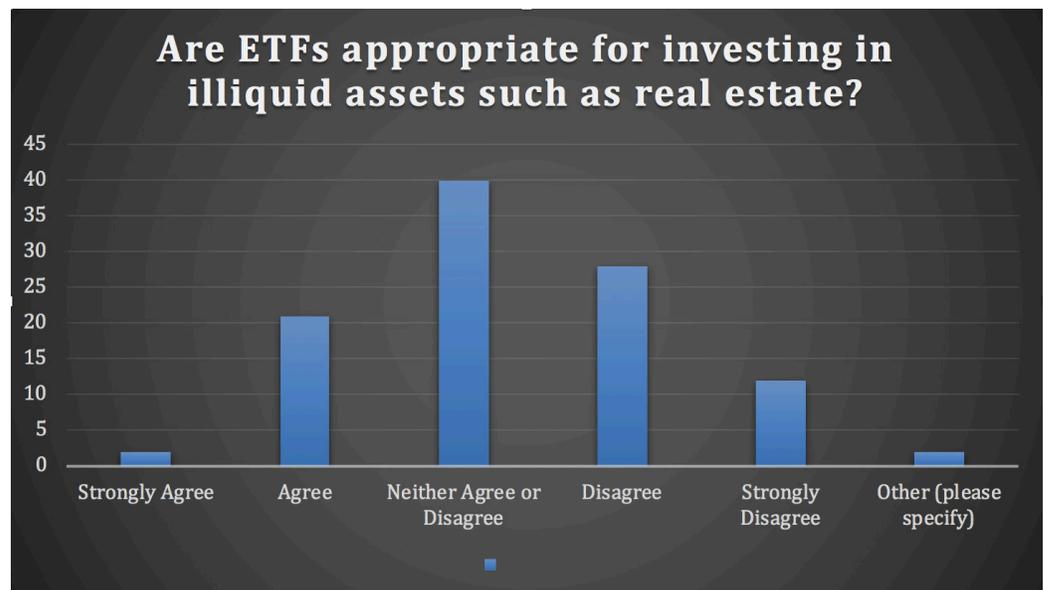


Figure 8: Are ETFs appropriate investments for illiquid assets?

THE RISKS INVOLVED IN ETFs

More than a quarter of the ETF providers (27%) we have spoken to say that the markets are the biggest risk to ETFs at the moment (Figure 9). After all, the value of ETFs is based on the value of its underlying assets and if those go south, so do ETFs. Liquidity is also a big concern for 16% of ETF providers we surveyed. This is to be expected, since the success of the ETF structure relies heavily on the liquidity on the primary and secondary markets. As far as ETF traders in the secondary market are concerned, the option to buy or sell their shares at any time during the trading day is of paramount importance. For authorised participants and ETF sponsors, liquidity is measured by how fast they could create or redeem ETF shares to cater to the demands of the secondary market.

Taxes are the fourth biggest concern of the ETF providers (13%). Taxes levied on gains from ETF trades are also often overlooked when choosing which financial instruments to invest in. It's not always clear if gains from ETFs (including dividends) will be classified as capital gains or income, and the corresponding tax for those can vary substantially. It depends

on a number of factors, like where the investor is based and where the fund he or she is investing in is domiciled. Investors also have to keep in mind the taxes involved in moving funds across state and/or national borders. Information on these will likely be found in the prospectus of the ETF.

The second largest concern from respondents, however, is the hype involving exchange-traded funds. Since 2008, the global ETF industry has grown from a mere \$700 billion in assets under management, to \$5 trillion as of May 2018.

If an ETF tries to replicate an index, it just places buy orders for the largest assets on the index and executes them on a daily basis. This will still allow them to mirror the returns of the assets, even if they do not hold each and every security in the index. But it also inflates the price of those securities beyond its fundamentals. They fear what could happen to these large, high- market cap stocks once the ETFs' automatic bids stopped coming.

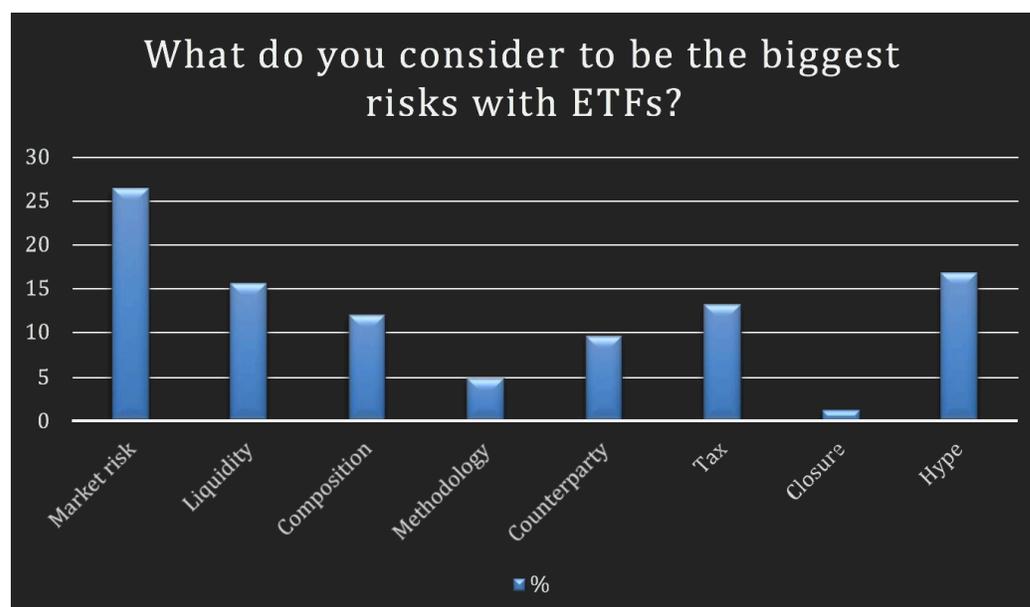


Figure 9: Biggest Perceived Risks to ETFs