9 November 2016

Harmonising and standardising ETF processing

A proposal of the Joint Working Group ETF Processing (JWGETF)

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1. Executive Summary

Exchange Traded Funds (ETFs) and more generally Exchange Traded Products (ETPs) are globally among the fastest growing investment instruments. Yet, their growth rate in Europe is restrained by a high degree of fragmentation, in particular in the post trade space, an issue that has been included in the list of outstanding and emerging barriers and bottlenecks collated by the European Post Trade Forum, an expert group set up by the European Commission in the context of its Capital Market Union project..

The Joint Working Group ETF Processing (JWGETF), an industry working group with representatives from all relevant constituencies has therefore engaged in

- identifying **legal obstacles**
- developing **best market practices for ETF processing**
- proposing **measures to increase the liquidity** of ETFs.

This document contains in the introductory chapter a high level description of ETFs / ETPs, the ETP market and the ETP ecosystem, determines in the Issuance chapter a legal issue in Germany and proposes a solution thereof, analyses operational issues in the primary and secondary market as well as in the space of realignments and corporate actions for which best market practices have been developed and determines issues in the securities lending and collateral space that impair the liquidity of ETF markets from which recommendations are derived.

For easy reference, **the proposed legal change in Germany and in the UK, agreed best market practices, a proposal in regard of the treatment of ETFs in buy-in regimes and the recommendations of means to increase liquidity in ETF markets are outlined in the conclusions chapter.**

In view of the scope of the EPTF mandate and although the operational processing of all ETPs is similar if not identical, in this document we use the term ETF.

2. ETFs / ETPs – An introduction

Exchange Traded Products, or "**ETPs**" are passive investment vehicles that derive their value from an underlying portfolio of assets such as shares, bonds or commodities. Unlike mutual funds, ETPs are continuously tradable on an exchange during trading hours. ETPs have experienced significant growth in Assets under Management, trading volumes and adoption among institutional and retail investors. According to BlackRock Advisors (UK) Limited ("BlackRock") global ETP Assets under Management grew from $598 billion in 2006 to $3,389 billion in 2016.[1]

ETPs provide exposure to a wide variety of underlying assets, ranging from ETPs that replicate the composition of a particular equity index, to those that provide investors exposure to assets in specific sectors or countries, to commodities, or to currencies. ETPs allow investors to create and manage diversified investment portfolios in an efficient manner and facilitate switching exposures at any given moment during trading days. Three major categories of ETPs include:

- Exchange Traded Funds ("**ETFs**"), which derive their value from shares or bonds held in proportion to an index. For example, a Euro Stoxx 50 ETF would track the same shares as the Euro Stoxx 50 index, in approximately the same proportions. Fixed-income ETFs derive their value from a portfolio of debt instruments, for example bonds included in the Barclays US Treasury 1-3 Year Term Index. ETFs are the most widespread among ETPs as measured by Assets under Management.

[1] Source: BlackRock Global ETP Landscape, Industry Highlights, September 2016, p.4

- Exchange traded commodities ("**ETCs**"), which typically derive their value from a commodity index such as the Bloomberg Commodity Index, but in some cases derive it from just a single commodity such as gold or oil, or a certain currency. For example, the SPDR Gold Trust ETC tracks the value of physical gold. ETCs may hold physical assets but exposure may also be held through derivatives of the underlying in combination with cash.
- Exchange traded notes ("**ETNs**"), which are a type of unsecured, unsubordinated debt securities issued by an underwriting bank. The returns of ETNs are based upon the performance of the index being tracked. For example, the iPath S&P 500 VIX Short-Term Futures Index TR ETN would track the volatility index of the S&P 500.

According to BlackRock, Assets under Management by asset type were $2,577 billion for equity ETPs, $612 billion for fixed income ETPs and $199 billion for commodity ETPs and other asset classes as of September 2016.[2]

ETPs have a number of attractive features that have led to their increasing adoption as investment products by both institutional and retail investors:

- Most ETPs are transparent as their constituents and their relative weightings are fully disclosed.
- Most ETPs have a low cost structure (in terms of the total expense ratio or "**TER**"[3]) as they apply passive investment strategies. These passive strategies do not entail stock picking or other active investment management activities which may be more expensive. Most ETP issuers clearly disclose associated costs on their website. By way of example, the SPDR S&P 500 TRUST ETF has a TER of [0.09]%, the iShares Core MSCI Emerging Markets ETF has a TER of [0.14]%, the Vanguard Total Bond Market ETF has a TER of [0.06]% and the SPDR Gold Trust ETC has a TER of [0.40]%.[4]
- Finally, ETPs are typically liquid as they can be continuously traded during trading hours, unlike mutual funds that have more limited, predefined transaction times. Liquidity providers such as Force quote bid and ask prices allowing ETP investors to enter and exit positions at any time during trading hours.

ETP Market and Trends

ETP Assets under Management and inflows

According to BlackRock, global ETP Assets under Management grew from $598 billion in 2006 to $3,389 billion in 2016, reflecting a compounded annual growth rate ("**CAGR**") of 18%.,[5] As low-cost passive investment strategies continue to grow in popularity, ETP Assets under Management are widely expected to continue to exhibit robust growth. For example, BlackRock expects ETP Assets under Management to more than double to $6 trillion by 2019,[6] in line with Ernst & Young, which expects growth of 15-30% per annum globally over the coming four years.[7] The expansion of the ETP industry accelerated worldwide and numerous records for investment inflows into ETPs were set in 2014, across asset classes and geographies.[8] At the same time, the global annual net flows into mutual funds have experienced a significant decrease.[9]

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[2] Source: BlackRock Global ETP Landscape, Industry Highlights, September 2016, p.5

[3] Typically calculated as the total annual cost of a fund to the investor divided by its total assets averaged over that year

[4] Source: TER as listed on the websites of the respective issuers

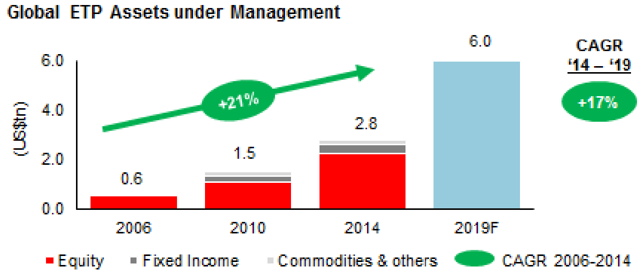
[5] Source: BlackRock Global ETP Landscape, Industry Highlights, September 2016, p.5

[6] Source: BlackRock Global ETP Landscape, 2014 Year in Review, December 2014, p. 5

[7] Ernst & Young Global ETF Survey, January 2014, p. 2

[8] C. Flood (2014), 'ETF industry booms in record-braking year', Financial Times, 11 January 2015.

[9] See figure [•]



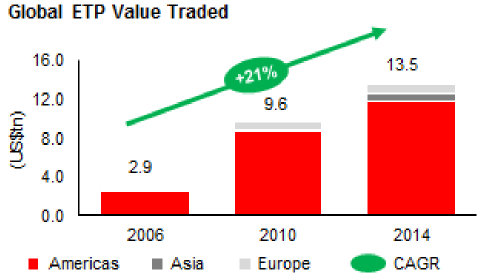


Figure [•] - Global ETP Assets under Management[10]

Figure [•] - Global ETP Value traded[11]

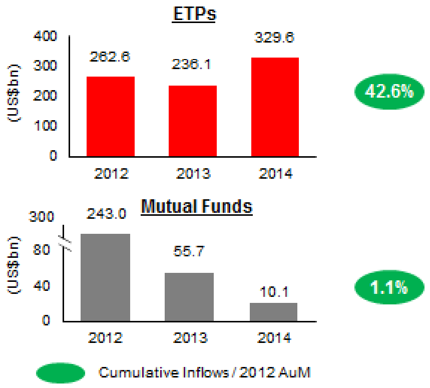


Figure [•] - Global Annual Net Flows[12]

In addition to the transparency, low cost and liquidity of ETPs, growth in ETPs has been, and continues to be, driven by a number of developments. These include the growing adoption by investors previously not investing in ETPs (including retail investors in Europe), the increasing share of investment in ETPs as part of their portfolio by existing institutional investors globally[13], the broadening variety of ETPs available to investors in terms of strategies and exposures, and the increasing flows of already extensive cross-border investment into ETPs.

Global ETP trading

All ETPs are listed on exchanges, where the majority of trading takes place. However, a significant part of ETP trading volume is traded off-exchange.[14] On exchange, ETPs are traded on a variety of venues globally, including the global exchanges listed in figure [•] below.

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[10] BlackRock, Global ETP Landscape, January 2015, p. 4 and BlackRock Global ETP Landscape, 2014 Year in Review, December 2014, p. 5

[11] Represents value of ETPs traded on-exchange globally, per WFE data; 2006 excludes LSE and Borsa Italiana data.

[12] BlackRock, Global ETP Landscape, Industry Highlights, January 2015, p. 5, BlackRock, Global ETP Landscape, Industry Highlights, BlackRock, Global ETP Landscape, Industry Highlights, October 2013, p. 9, BlackRock, Global ETP Landscape, Industry Highlights, October 2014, p. 10-11 and BlackRock Global ETP Landscape, Industry Highlights, January 2015, p. 10-11

[13] BlackRock Global ETP Landscape, December 2014, p. 2

[14] No reliable trade data is available given limited reporting obligations in many jurisdictions

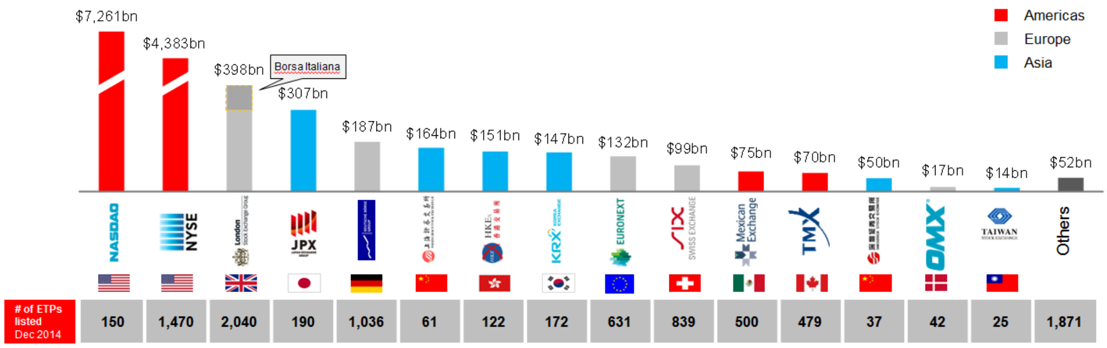


Figure [•] - On-exchange ETP trading volume by venue[15]

The strong proliferation of passive investing and resultant adoption of ETPs has led to the growth in ETP trading volumes in line with the growth in global ETP Assets under Management.[16] Since 2006, CAGR in on-exchange ETP trading across the three regions exceeded 21 %, with Asia growing fastest at a CAGR of approximately 38%. The U.S. is the largest market by on-exchange ETP value traded, followed by the European market and Asian market respectively.[17] As ETP Assets under Management continue to grow, it is expected this will continue to drive further growth in ETP trading volumes globally.

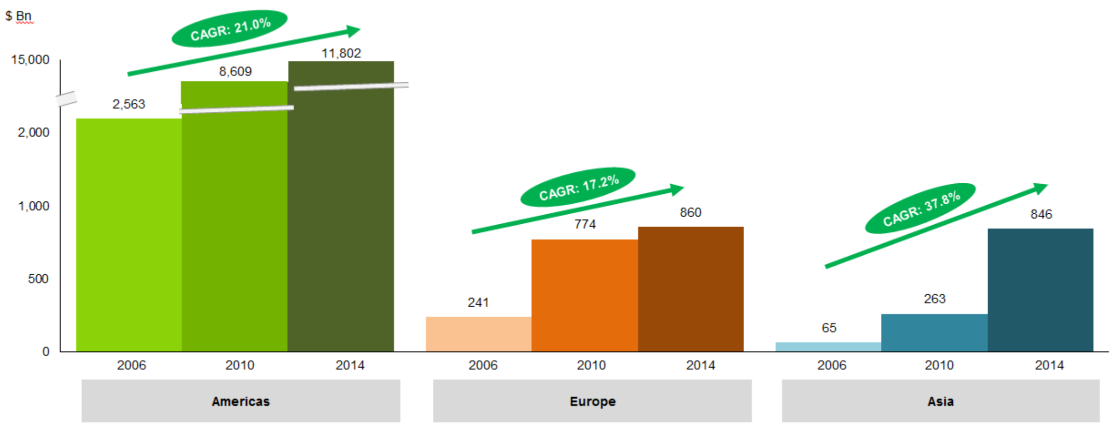
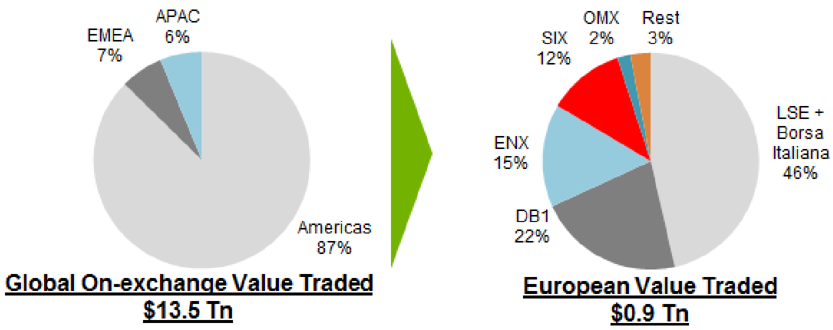


Figure [•] - Growth in on-exchange ETP value traded by region[18]



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15 World Federation of Exchanges, http://www.world-exchanges.org/statistics/annual-query-tool, London Stock Exchange - ETP defined by World Federation of Exchanges as portfolio investment products that are admitted to listing or trading on a regulated exchange.

16 World Federation of Exchanges, ETF defined as portfolio investment products that are admitted to listing or trading on a regulated exchange

17 World Federation of Exchanges, London Stock Exchange - ETP defined by World Federation of Exchanges as portfolio investment products that are admitted to listing or trading on a regulated exchange

18 Represents value of ETPs traded on-exchange by region, per World Federation of Exchanges (WFE), LSE, Borsa Italiana and Federation of European Securities Exchanges (FESE) data.

Figure [•] - Global ion-exchange ETP value traded by region[19]

ETP trading volumes are highest in the U.S. where markets are characterized by relatively tighter bid-ask spreads, in particular for the most liquid ETPs such as the SPDR S&P 500 Trust ETF. This resembles the trend that for mature markets and products the bid-ask spreads tend to be tighter and trading costs are typically lower (compared to less mature markets). In the U.S. ETP Assets under Management grew from $1,349 billion in 2012 to $2,007 billion in 2014, reflecting a CAGR of 22%, while the on-exchange ETP value traded grew from $10 trillion to $12 trillion during that same time period, reflecting a CAGR of 9%.[20]

The European ETP market is the second biggest market after the U.S. bid-ask spreads in Europe are on average generally wider in comparison to the U.S. due to a more fragmented financial market structure. Despite a more fragmented market structure compared to the U.S., trading costs are slightly higher but still relatively low. The European ETP market grew substantially over the last decade, despite the challenging macroeconomic environment, and continues to grow: in Europe, ETP Assets under Management grew from $367 billion in 2012 to $457 billion in 2014, reflecting a CAGR of 12%, while on-exchange ETP value traded grew from $677 billion to $860 billion during that same period, reflecting a CAGR of 13%.[21]

In Asia, the ETP market is significantly fragmented and there are large differences in trading volumes, trading costs, regulation and maturity between countries. Trading costs are higher compared to the more mature U.S. and European markets while bid-ask spreads are typically wider. However, investor familiarity with ETPs and ETP adoption by investors is increasing, markets are maturing and expanding, and new markets are developing gradually, notably in India and China. In Asia, ETP Assets under Management grew from $127 billion in 2012 to $201 billion in 2014, reflecting a CAGR of 26%, while the on-exchange ETP value traded grew from $341 billion to $846 billion during that same period, reflecting a CAGR of 57%.[22]

The ETP ecosystem

ETP Market Participants

Participants in the ETP ecosystem include investors, ETP issuers, exchanges, liquidity providers and Authorized Participants, which all together facilitate the investing in and the trading of ETPs. The ETP ecosystem is divided into the primary market and the secondary market.

The primary market for ETPs consists of the interaction between Authorised Participants and the issuer, where additional ETP units are issued ("created") and existing units are cancelled ("redeemed") as described further below. The secondary market for ETPs is characterized by the trading of existing ETP shares between market participants, similar to the trading of ordinary shares, at market-determined prices. Secondary market participants include institutional and retail investors.

Liquidity providers, serve a critical role in maintaining and improving the overall transparency and efficiency of this ecosystem through continuously quoting bid and ask prices for ETPs against which market participants can trade. They facilitate the effective and efficient risk transfer between market participants, thereby facilitating the smooth functioning of ETP markets and eliminating pricing irregularities. Liquidity provision

[19] World Federation of Exchanges
[20] World Federation of Exchanges
[21] World Federation of Exchanges
[22] Source: Blackrock, World Federation of Exchanges

makes it easier for investors to efficiently manage their portfolios and often results in higher execution probability and lower trading costs.

There is an important difference between liquidity providers in the USA and Europe. This difference lies in the fact that in the USA all exchanges are cleared and settled by DTCC, which means that for a liquidity provider in the USA all transactions are settled into one securities depot. In Europe this is not the case in most cases you will settle ETP's domestically, which means that every transaction settles and is being kept for safekeeping in the country where you trade. This fragmentation is caused by the fact that issuers want to list on multiple exchanges this is to make their products available to every local exchange.

Liquidity providers generally do not take positions in the ETP's in which they provide liquidity which means they need to do position management to make sure all safekeeping accounts at the domestic custodians have essentially zero positions. This is done by doing so called realignments, which means you are doing position transfers from one securities depot to another. As this is also subject to their own set of rules and settlement periods it makes trading in Europe more challenging than in the USA, this is also seen implicitly by comparing the bid/ask spreads between European and US-ETP's. As liquidity providers incur costs for these realignments and settlement delays the pricing can be a little wider and skewed because of this.

Another factor which increases the costs for the European ETP's is that in contrary of the USA, European liquidity providers must comply with the strictest CCP-rules on settlement discipline which apply to all other investors too.
This settlement discipline for liquidity providers is complicated as we see later on in the creation redemption part where delays of the creation/redemption can create risks for the liquidity providers. Example of this risk is as followed:
an group of investors buy ETP's on exchange from the liquidity provider. This liquidity provider needs to make sure that his sells are settled on time. This can be done by making sure he has an inventory, which is due to the fragmentation of the many security depots in Europe is not always possible, so he needs to execute some realignments from his other security depots these realignments take time and are normally settled in the same period as normal exchange transactions. If a realignment is not possible another solution is either borrowing the shares from an external security borrowing and lending agent or creating it via the authorizes participant at the issuer. (complications which could arise due to these creations/redemptions are explained below)

Authorized Participants are market participants who have agreements in place with ETP issuers, enabling them to take part in the creation and redemption processes described below. Through these processes, the primary and secondary markets are connected.

ETP Creation and Redemption

ETP issuers issue and cancel ETPs through a process called 'creation' and 'redemption' involving Authorized Participants. The ETP creation and redemption processes can increase and decrease, respectively, the number of outstanding shares in an ETP. This occurs in reaction to market demand for or supply of the respective ETP. Since ETPs are typically structured as open-ended funds, additional shares can generally be issued and redeemed on a daily basis. Authorized Participants can create ETPs directly with the issuer by delivering the corresponding underlying assets and/or an amount in cash to the ETP issuer in return for receiving new ETPs. The delivered assets in the case of ETP creation accrue to the Assets under Management of the ETP. In this way, the issuance of ETPs through Authorized Participants provides the issuers with access to a broad investor market without having to support a complex and costly trading infrastructure which would be non-core to their business. Independent, efficient and competitive liquidity provision by liquidity providers therefore help issuers with the distribution of their ETPs while investors benefit from tighter spreads, higher transparency and wider availability of ETPs.

ETP redemption is the reverse of the creation process, whereby the Authorized Participants may offer an ETP back to its issuer in exchange for the portfolio of underlying assets and/or a cash payment. As a result of this transaction, the ETP's Assets under Management decrease proportionally to the number of ETP shares redeemed.

Creations and redemptions may usually only take place for large amounts of ETP units, often 50,000 or 100,000 shares, or in multiples thereof, this is to ensure that a fund tracks its index accurately, the size is generally constrained by the number of securities in the index. This helps to limit the administrative burdens of primary market activity to issuers, contributing to the low-cost nature of ETPs.

Through the creation and redemption processes, Authorized Participants play a vital role in the change in ETP Assets under Management. As the demand for ETPs increases, an Authorized Participant can create new shares to satisfy this demand. As creation and redemption usually occurs at net asset value of the underlying assets, the creation and redemption processes contribute to keeping the market prices of ETPs at or close to their fair value. For this same reason, creations and redemptions themselves do not typically generate revenues for Authorised Participants. For Authorized Participants, these processes allow them to effectively and efficiently manage their positions on a daily basis and maintain pricing in an effective manner in all market circumstances.

The creation redemption against the underlying assets (creation/redemption in kind) is a direct way to transfer the underlying assets to the issuer and getting the ETP in return, for redemptions the process is reversed. Due to market practices it is important to mention that these in-kind transactions can give issues because of the fact that both legs need to be transferred simultaneously. However many ETF issues allow short settlement of the ETF leg of the creation trades in order to settle short positions. Important fact here is that if one of the markets where the underlying assets trade is closed due to holidays, this will delay the settlement process until the market is open again. For example, in some countries like for example China it could happen that the exchange is closed for multiple days which will cause a costly delay to the creation or redemption.

3. Issuance – a legal issue to be resolved in Germany and in the UK

Background

Leveraging from the previous reports of the JWGETF, we determined that each ETF should ideally be issued into a single (I)CSD and we should thereafter be able to rely on the (I)CSDs links to have an efficient settlement. This settlement process can then indeed rely on the quality of direct or indirect links that exist across the various (I)CSDs used across Europe.

Unfortunately to date, there are still legal issues creating uncertainty about the legal rights of the investors that hold securities and ETFs through cross-border CSDs links. Those difficulties have been identified and described within the two advices provided by the Legal Certainty Group in 2006 and 2008.

Not all of those issues have direct impact in the day to day operations of the ETF market, but the issue of “Collective Safe Custody” status in on the German Market is certainly one affecting the settlement efficiency of the ETFs primarily issued on Euroclear UK & Ireland. The below provides more details on this issues and avenues for resolution.

Collective Safe Custody regime

Clearstream Banking AG, based in Frankfort is the national CSD for the German Market. It is commonly referred to as CBF. CBF is actually providing two separate services:

- A domestic service that provides settlement and safekeeping for securities directly issued under the German law or held by CBF through a link to a foreign CSD that is compatible with the German law.
- An international service that provides settlement and safekeeping for securities based on the ICSD infrastructure.

Securities maintained in the CBF domestic system need to comply with the German Collective Safe Custody (CSC) criteria. Securities that do not comply with those can be held only in the international system.

Under those criteria, foreign securities (and ETFs) are recognised if they are held by CBF into a foreign CSD. French ETFs for example, issued in Euroclear France, can be settled and safe kept into CBF domestic service and benefit from the Collective Safe Custody regime. The same is true for securities issued by LuxCSD in Luxembourg as another example.

It is customary for ETFs domiciled in Ireland to be issued in Euroclear UK & Ireland (EUI). Unfortunately, EUI does not perform the notary function for the ETFs as this function is directly performed by the ETF registers. The ETFs that are issued in EUI do therefore not carry rights aligned with the CSC status and are not directly admitted onto the CBF domestic system.

To overcome this difficulty, ETF issued in EUI and that need to reach CBF domestic system as investor CSD are "re-certified" under a German vehicle that carries a German ISIN. This "re-certification" provides that the German investors benefit from the Collective Safe Custody regime attached to the domestic settlement system. This leads to a situation where the same ETF carries different ISINs (IE and DE) depending on the exchange where it is traded or settled.

Alternatively, the Irish ETF could be issued directly in CBF or in another European domestic CSD that is compatible with the German law. This solution is in place for Irish ETFs that are exclusively distributed outside of the UK. It is however not allowed to settle those Irish ETFs, primarily issued into another domestic CSD, under their initial form in the UK market.

Finally, there is a possibility for the German investors to use the international service of CBF to hold the Irish ETFs through Clearstream ICSD infrastructure and thus not under CSC status. This requires though a specific set-up to link the stock exchange trades to that international system of settlement.

This issue has been described and logged by the "legal Certainty Group" under the following documents:

- Generic inclusion in the Advices provided in 2006 and 2008
  Advice 2006 - http://ec.europa.eu/internal_market/financial-markets/docs/certainty/advice_final_en.pdf
  Advice 2008 - http://ec.europa.eu/internal_market/financial-markets/docs/certainty/2ndadvice_final_en.pdf
- Annex to Advice 2006 that describes specifically the issue in its point 4
  http://ec.europa.eu/internal_market/financial-markets/docs/certainty/advice_annex_en.pdf
- A background working documents prepared by Eva Micheler, member of the Legal Research Sub-group that describes also the specific UK vs German law issue

http://ec.europa.eu/internal_market/financial-markets/docs/certainty/background/13_2_6_micheler_en.pdf

Perspective

T2S

With the implementation of T2S, all settlement activity of CBF is outsourced to that common infrastructure. This will cover the activity that today are handled both in the domestic and the international systems of CBF. With that transfer, the operational impact of an ETF complying or not with the CSC is largely diminished.

Indeed, within T2S, CSC and non-CSC compliant securities will only be distinguished via a flag indicating to the investor whether he benefits or not from this status. If an investor is indifferent to this status, he will be able to trade on such ETFs and settle directly in CBF on T2S.

T2S will thus not fix the legal issue, and the ETFs issued in EUI and brought in CBF as investor CSD will not provide the same Collective Safe Custody regime than German securities or foreign securities held with a CSD that assumes the notary function. However, the practical operational impact of not having that status will almost disappear when Clearstream will be ready to make UK securities eligible in T2S..

CSDR

We understand that both CBF and EUI will be able to obtain a license under CSDR without making any change to the behaviour gap that is causing the difficulty above. Indeed, CSD will be operating securities settlement systems and either

- Provide initial recording of securities in a book-entry system ('notary service') and/or
- Provide and maintain securities accounts at the top tier level ('central maintenance service');

Therefore, CSDR in itself will not remove the Collective Safe Custody issue.

Legal propositions

As mentioned above, CSDR is not aligning the securities laws, nor the fundamental options of the domestic settlement systems. However, CSDR pushes two principles that can be useful:

1. It provides recognition of CSD status across Europe and defines common rules that each CSD has to comply with.
2. It also recognises any European domestic CSD with the freedom to provide services in another Member State.

Based on the first element above, the Joint Working Group ETF Processing is advising the Commission to request the German Authorities to re-consider the interpretation of current German Laws to possibly allow a Collective Safe Custody status to Irish ETFs that would be held through CSD links, directly or indirectly with Euroclear UK & Ireland.

Based on the second element above, the Joint Working Group ETF Processing is also advising the Commission to request the UK Authorities to ensure that Irish ETFs can be traded and settled on the UK market even if they are primarily issued in another European domestic CSD.

4. Operations – conclusions and proposed best market practices

4.1. Primary Market

Introduction
Despite the continued growth of the European ETF market a number of challenges persist in harmonising the framework for an efficient ETF infrastructure. Variance in issuance structure and the well documented fragmentation of the European post trade environment conspire to place downward pressure on the ETF market within Europe and acts as an impediment to delivering an efficient and liquid market.

Conclusions
The group concluded that the following areas of best practise should be implemented across the fields of ETF issuance and primary market practises.

Issuance
- Issuance of ETFs via a single ISIN provides for greater downstream efficiencies.
- Issuance via a single CSD or via an ICSD delivers a number of downstream benefits by reducing the need for complex re-alignments, enhancing inventory management capabilities, reducing operational risk and associated costs, delivering a framework for the expansion of collateral and lending activities. The issuance via the ICSD structure is particularly beneficial for products that are listed in multiple currencies across multiple national stock exchanges. The group acknowledges the development and implementation of T2S and believes this will further enhance the capabilities of T2S member CSDs for European ETFs settling within T2S approved currencies.

Primary Market
- All ETF Issuers to utilise online order platforms for the placement, capture and processing of primary market transactions. Issuers should further work towards the harmonisation of proprietary order platforms to add further efficiencies to the primary market order process for market participants.
- ETF Issuers to implement a settlement description field as part of their core static data. This field should at a minimum detail the home CSD or ICSD for settlement purposes. Furthermore, Issuers should work with external data vendors to ensure this data element is incorporated as standard and clearly visible for market participants.
- Issuers to make available PCF and NAV data pre market open. Issuance of data should be automated where possible and should be in CSV, Excel file types for ease of utilisation by market participants.
- Administrators to issue primary market order confirmations to Authorised Participants in a timely manner. Top this extent the group believes a confirmation issuance deadline of DD+1 / 10:30am (local administrator time) should be seen as standard.

4.2. Secondary Market

Introduction
The Secondary Market Working Group has analyzed the impact of the fragmented European post-trade infrastructure on the European ETF industry in detail. The group compiled a summary of various European buy-in rules and settlement models applied by European CCPs. The group agreed the harmonization of settlement discipline could help in streamlining the post trade processes as it would bring the European model closer to the one seen in the United States which is very efficient and operationally less complex. The group welcomes ESMA's approach to settlement discipline and would like to take this opportunity to highlight why ETF specifics should be taken into account when implementing new regulations.

Conclusions

The European ETF industry is just over sixteen years old and has seen tremendous growth over the last decade. ETFGI reports that at the end of June 2016, The European ETF sector has approx. 1,600 ETFs, with 5,700 listings and assets of USD 500 billion. It is expected that the assets under management will double globally over the next five years. The group believes that it is very important for policymakers and regulators to support this industry in its critical growth phase as ETFs give investors access to diversified exposure in a cost effective and a transparent way.

The uniqueness and fragmentation of the European ETF industry is a result of products being cross listed across various European exchanges and market participants being required to deal with various settlement rules that differ significantly across markets. The split of volumes across various European exchanges requires market participants to manage ETFs inventory on a line by line basis and process dozens of realignments between CSDs in order to manage positions in a manner meeting settlement regime. This process is expensive, operationally complex and lengthy as in certain cases it might take up to three days to move ETF shares between two European CSDs. The group recognizes the efficiencies that T2S will bring along but notes that not all European markets are part of T2S. Therefore, it is expected that market participants will continue to experience delays in moving shares between European CSDs.

It is our understanding that ESMA wants to align on and off exchange buy-in models. As per the latest RTS published in February 2016 ETFs will be classified as illiquid instruments and subject to a seven-day extension before a buy-in is executed. We welcome ESMA's decision to allocate longer extension periods to ETFs but would ask the regulators not to categorize ETFs as illiquid instruments given the growth phase the industry is experiencing and the increasing allocation of investors to ETFs. We would advocate for ETFs to be assigned to the group "illiquid instruments and ETFs".

The group welcomes ESMA's approach towards harmonization of CCP buy-in rules but we are highly concerned that the provision for mandatory OTC buy-ins will have an adverse impact on ETF liquidity. It is our understanding that the new settlement discipline will come into force after CSDR ratification by the European Commission, expected date is Q4 2018, and it will replace the Short Selling Regulation. CCPs will then be required to adopt the new regime which will supersede all local laws and various CCPs rules. The group agrees that giving ETFs a seven-day extension is appropriate given ETF complexity, ad hoc restrictions on accessing ETF primary markets and the lack of a fully functioning ETF lending market. The number of ETF units in issue can only be increased by placing an order on a primary market through a mechanism known as a creation. Primary market can be only accessed by authorised participants (AP) who are approved financial institutions. The process of placing orders in the primary market is directly related to the index tracked by an ETF e.g. an ETF tracking one of the Chinese Indices will be closed for creations and redemptions during the Chinese New Year celebrations as APs will be unable to source underlying index components when the market is closed for trading. This can have a significant impact on liquidity providers trying to cover short positions that they have accumulated by fulfilling their obligations. The group believes that official liquidity providers should be protected by a possibility of receiving additional buy-in extensions if they are unable to settle trades when a primary market is closed or if they can prove that they are experiencing delays in moving shares between two European CSDs, similar to Article 7.4(b) of the CSDR where repos are exempted as the timeframe is sufficiently short to render the buy in process ineffective. This belief is also supported by the previously mentioned insufficient ETF lending pool and ETFs industry being at critical growth phase that should be supported at the same time the group recognizes that CCPs guarantee its clients a timely settlement and this obligation might not always be met if there are different rules for liquidity providers and ordinary investors. The additional operational complexity for the CCP has also been raised.

Summary
The group came to the consensus that harmonizing certain CCP rules such as margin requirements and trade netting models will be difficult, but welcome ESMA's initiative to harmonize buy-in regimes which we believe should not differentiate between member types and should instead be related to the instrument type. The group agrees that a seven-day extension period will serve the ETF industry better than the four-day period applicable to liquid shares but we would like to ask ESMA not to classify ETFs as illiquid instruments and instead create a new grouping for products with a seven-day extension called "illiquid instruments and ETFs". This view is supported by arguments associated with various realignment processes taking time to settle, still relatively low lending pools and primary market access restricted to some market participants or closed during underlying components holiday. However, consideration should be given to further extension of the buy in periods where underlying markets are closed and ETFs cannot be created. In our view, a buy in at this situation does not benefit any actor.

4.3. Realignments and Corporate Actions

4.3.1. Realignments

Introduction
ETFs are listed on a growing number of exchanges and being held by investors in different markets. While ETFs are fungible at trading level, this is not the case at post-trade level, creating challenges to transfer an ETF from one market to another. Due to the nature of the market in Europe, there is a lot of segmentation and inefficiencies in the way how ETFs settle and how ETFs can be transferred from one market to another.

Below provide standards on realignments in order to reduce the frictions for moving ETFs between different markets. Below standards will contribute to a more effective post-trade environment enabling an easier distribution and trading in the different European markets.

The market standards cover realignments for the following **categories of realignments**:

Domestic model
The domestic model concerns ETFs issued in one dedicated home market and distributed & settled through the CSD linked to this home market (i.e. issuer CSD). ETFs issued in the domestic model can be traded in other markets different from the home market and settling in the (I)CSDs of these different markets (i.e. investor (I)CSDs).

International model
The international model concerns ETFs issued in an international structure through a Global Share Certificate held by a common depositary and distributed & settled through an ICSD (i.e. issuer CSD). ETFs issued in the international model can be traded in other markets different from the ICSD and settling in the ICSD or the CSDs of these different markets (i.e. investor CSD)

The scope of application of the market standards includes;

- all types of the above categories of realignments
- all ETFs listed and traded on a regulated trading venue and deposited and settled in Book Entry form with an (I)CSD in Europe should be process realignments, where possible, in accordance with the applicable standards hereof
- all parties involved, i.e. Issuers, market infrastructures (trading, clearing and settlement), transfer agents, and Intermediaries.

Proposed best market practices

- **Information standards**
  - The Issuer and the Transfer Agent need to provide guidelines in the prospectus and/or the factsheet on the agents and issuance stream to use per market. The guidelines must be provided upon issuance of each new ETFs and for each new listing place for an existing ETF.
  - The Issuer and the Transfer Agent must include information on the dividend practice per fund's country of domicile as well as the home CSD and should be in line with the Corporate Action Standards for ETFs
  - (I)CSDs linked to a trading place should follow the practice on dividend dates (trade date, settlement date and payment date) of the home CSD of the ETF and as defined in the Corporate Action Standards for ETFs
  - Intermediaries and (I)CSDs should not lock a market for realignments over a dividend period
  - (I)CSDs should not charge any penalties for realignments over a dividend period but apply the Corporate Action Standards for ETFs on Market Claims
  - Intermediaries should apply carefully the trade date and settlement date for realignments over a dividend period in order not to raise unnecessary market claims

- **Processing standards**
  - Transfer Agents, market participants and (I)CSDs should have the necessary procedures in place to ensure that a realignment can be processed within maximum 1 day after the receipt of the realignment instruction for the domestic model and within maximum 2 hours after the receipt of the alignment instruction for the international model.
    Exceptions to this turnaround time should be justified and well-documented
  - Transfer Agents, market participants and (I)CSD should have clear procedures in place for realignments from one (I)CSD to another, including procedures for indirect realignments between (I)CSDs (i.e. via third CSD).
    The procedures should be documented and accessible to market participants e.g. by publication on the website.
  - Market participants should process their realignment transaction as soon as possible and in connection with the processing of the linked trade as soon as possible.
  - Issuers, Transfer Agents, market participants, market infrastructures (trading venues, CPs and (I)CSDs) and data vendors should ensure market identification on the (I)CSD issuance structure is included in their systems (e.g. static data, securities database, etc.)

4.3.2. Corporate Actions

For ETF's the Market Standards for Corporate Actions Processing[23] should apply, except for additional ETF related definitions and specifics in regard of cash distributions as outlined (highlighted) in the Annex hereto.

5. Liquidity – Recommendations to mitigate ETF liquidity issues

ETF Securities Lending:
The benefits of a Securities Lending market for ETFs shares are as follows:

[23] [add hyperlink]

- the simplification of providing liquidity by increasing the number of market participants.
- liquidity providers can manage short positions more efficiently without having to access the primary market.
- It is supportive of the establishment of an Options market through efficient hedging
- Improved settlement rates
- Incremental revenue through Lending Fees.

We believe this will result in:

- Reduced trading costs with tighter bid/ask spreads
- A reduction in the Total Cost of Ownership
- Greater depth on exchange reducing the impact-cost associated with large trades.

Why is the UCITS ETFs Securities Lending Market less efficient than underlying Securities or US ETFs:

- There is perception of a lack of supply and demand. This results in a lack of realisation of opportunity for lenders to earn revenue and end users to use as efficient hedging tools.
- Fragmented EMEA market:
    - Multiple identifiers and settlement locations resulting in an inefficient locate process for Lenders and Borrowers
    - No lender of choice, and a requirement to frequently locate with the entire market
- Uneconomic fees, driven by historic demand for fail coverage trades, low value and short duration resulting in high fee expectations
- Lack of Supply
    - Potential systemic / data issues with Lender trading systems; classification as unique asset class
    - Assets held in small pockets, potentially under the radar of Custodial Lenders
    - Difficulty in providing revenue estimates to clients due to lack of data points
- Lack of Demand due to historically high fees, difficulty in locating inventory and a general lack of supply.
- Lack of on screen / reported liquidity entails increased education of market participants.

Collateral Acceptability:

ETFs are operationally challenging from a Collateral Management perspective

- The asset class is typically dealt with on an individual, line by line basis, thereby making the securities onerous for Risk Departments to approve and to maintain updated collateral parameters.
- An Index Provider (Markit) is providing a solution through a series of ETF Classification Filters, initially one Equity and one Government bond
- The Filter criteria is set using a number of parameters, which is provider agnostic.
- In order to utilise ETFs as collateral market participants need only approve the methodology for the Filter. All of the current constituents of the Index can be then be accepted.

What can Market Participants do to effect positive change?:

- Custodians

    - Scrutinise Custody holdings and lending clients assets to increase the Lending pool inventory by identifying and removing barriers to lending ETFs
    - Include ETFs as collateral by adopting Markitt ETF Collateral Lists
- CCPs
    - Include ETFs as collateral by adopting Markite ETF Collateral Lists
- Issuers
    - Lobbying of Securities Finance relationships on the adoption of ETFs as collateral
- Brokers
    - Ensure Prime Brokers are aware of short demand that is beyond typical fail coverage – this essential to "normalize" fees and introduce competitive fees
    - Brokers should be challenging funding rates for ETFs (fundability is improving)
- Regulators
    - Improve ETF treatment under Basel Liquidity rules, i.e. HQLA definition, NSFR categorisation

Post Trade Transparency:

What is post trade transparency?

    - The obligation to disclose data on trades executed on a trading venue or over-the-counter market
    - European ETFs are not currently MIFID instruments and there is no requirement to "print" over-the-counter trades
    - It is estimated that between a half and 2/3rd of ETF trade volumes go unreported
- Why is this data important?
    - Investors are unable to get a full understanding of the liquidity of the product (which acts as a competitive disadvantage to the US 40 Act funds or other index type products)
    - Price discovery is hampered
    - ETFs are more difficult to finance or use as collateral because of this perceived "lack" of liquidity
    - Impacts regulatory discussions when dealing with regulation such as Basel II HQLA; NSFR etc.
- What is preventing ETF trade reporting?
    - There is no regulatory framework for trade reporting ETFs
        - As a result a number of major market participants do not trade report
        - MIFID II would have addressed this, however legislation is now delayed
    - Potentially the cost of trade reporting is an issue, although costs have fallen substantially. A firms entire cost can now be reduced to less than €15k
    - Concerns about being "front run" on large trades
- What can be done in order to incentivize trade reporting ahead of regulation?
    - Delayed reporting for "large trades"
    - Mandating of trade reporting by all Stock Exchanges for their members (copy of LSE/SIX rules)
    - MIFID II

6. Conclusions

The JWGETF achieved the following agreements:

6.1. Proposed legal change in Germany and in the UK

We advise the Commission to request the German Authorities to re-consider the interpretation of current German Laws to allow a Collective Safe Custody status to Irish ETFs that would be held through CSD links, directly or indirectly with Euroclear UK & Ireland.

We also advise the Commission to request the UK Authorities to ensure that Irish ETFs can be traded and settled on the UK market even if they are primarily issued in another European domestic CSD.

6.2. Proposal in regard of the treatment of ETF's in buy in regimes

We ask ESMA to consider that to classify ETFs as *not* as illiquid instruments and instead create a new grouping for products with a **seven-day extension** called "illiquid instruments and ETFs".

This view is supported by arguments associated with various realignment processes taking time to settle, still relatively low lending pools and primary market access restricted to some market participants or closed during underlying components holiday. However, consideration should be given to further extension of the buy in periods where underlying markets are closed and ETFs cannot be created. In our view, a buy in at this situation does not benefit any actor.

6.3. Best market standards

6.3.1. ETF Issuance and Primary Markets

6.3.1.1. Issuance

ETFs and generally ETPs should be issues via a **single ISIN**.
ETFs should be issued via a **single CSD or via an ICSD.**

6.3.1.2. Primary Markets

- All ETF Issuers should utilise **online order platforms** for the placement, capture and processing of primary market transactions. Issuers should further work towards the harmonisation of proprietary order platforms.
- ETF Issuers should implement a **settlement description field** as part of their core static data. This field should at a minimum detail the home CSD or ICSD for settlement purposes. Furthermore, Issuers should work with external data vendors to ensure this data element is incorporated as standard and clearly visible for market participants.
- Issuers should make available **PCF and NAV data** pre-market open. Issuance of data should be automated where possible and should be in CSV, Excel file types.
- Administrators to issue **primary market order confirmations** to Authorised Participants in a timely manner. A confirmation issuance deadline should be DD+1 / 10:30am (local administrator time).

6.3.2. Realignments

- **Information standards**
  - The Issuer and the Transfer Agent should provide guidelines in the prospectus and/or the factsheet on the **agents and issuance stream** to use per market. The guidelines must be provided upon issuance of each new ETF and for each new listing place for an existing ETF.
  - The Issuer and the Transfer Agent should include **information on the dividend practice** per fund's country of domicile as well as the home CSD and should be in line with the Corporate Action Standards for ETFs.
  - (I)CSDs linked to a trading place should follow the **practice on dividend dates** (trade date, settlement date and payment date) of the home CSD of the ETF and as defined in the Corporate Action Standards for ETFs.
  - Intermediaries and (I)CSDs should not lock a market for realignments over a dividend period.
  - (I)CSDs should not charge any penalties for realignments over a dividend period but apply the Corporate Action Standards for ETFs on Market Claims.

- Intermediaries should apply carefully the trade date and settlement date for realignments over a dividend period in order not to raise unnecessary market claims

- **Processing standards**
  - Transfer Agents, market participants and (I)CSDs should have the necessary procedures in place to ensure that a realignment can be processed within maximum 1 day after the receipt of the realignment instruction for the domestic model and within maximum 2 hours after the receipt of the alignment instruction for the international model. Exceptions to this turnaround time should be justified and well-documented

  - Transfer Agents, market participants and (I)CSD should have clear procedures in **place for realignments** from one (I)CSD to another, including procedures for indirect realignments between (I)CSDs (i.e. via third CSD).
    The procedures should be documented and accessible to market participants e.g. by publication on the website.

  - Market participants should process their realignment transaction as soon as possible and in connection with the processing of the linked trade as soon as possible.

  - Issuers, Transfer Agents, market participants, market infrastructures (trading venues, CPs and (I)CSDs) and data vendors should ensure market identification on the (I)CSD issuance structure is included in their systems (e.g. static data, securities database, etc.)

6.3.3. Corporate Actions

- For ETF's the **Market Standards for Corporate Actions Processing**[24] should apply, except for additional ETF related definitions and specifics in regard of cash distributions.

6.4. Recommendations to mitigate ETF liquidity issues

- **Securities lending, collateral**
  - **Custodians** should seek to increase the lending pool inventory by identifying and removing barriers to lending ETFs.
  - **CCPs should** accept ETFs as collateral.
  - **Issuers** should lobby securities finance relationships to adopt ETFs as collateral.
  - **Regulators** should improve ETF treatment under Basel Liquidity Rules.

- **Post Trade Transparency**
  - The reporting of **'Large trades'** may be delayed.
  - All **stock exchanges** should be mandated of trade reporting for their customers

7. Members of the JWGETF

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Onno Porskamp, ABN AMRO Clearing

[24] [add hyperlink]

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