

IOSCO Committee on Investment Management (Committee 5)

Questionnaire on ETFs for industry participants

The purpose of this questionnaire is intended to support our IOSCO mandate by seeking to generate a more granular understanding of certain topics regarding ETFs including during the market volatility in March/April 2020 and particularly fixed income ETFs (FI ETFs). It targets both ETF issuers (Part A) and market makers (MMs) / liquidity providers (LPs) (Part B) that are active in these markets. IOSCO will take into account the questionnaire responses in formulating any potential guidance with respect to ETFs in the future.

Individual responses will remain confidential and used only in anonymized and/or aggregated format in any future publications by IOSCO. For ETF issuers, please provide responses to questions under Part A only. For ETF MMs/LPs, please do so to questions under Part B only. Respondents may choose to provide responses to all or just some questions under the given section. The submission deadline is 1 March 2021.

Part A: Questions for ETF issuers:

Stresses in March/April 2020

1. During the stress period in March/April 2020, please provide your understanding about how the FI ETF ecosystem operated, including any information and data regarding:

AFG is the French asset management association that covers all investment management styles and types of funds, active and passive managed from France. Before going into the detailed answers below, we felt the need to indicate some important features.

Regarding the fixed income (FI) market, AFG believes it is very important to take into account the structural organisation of the FI market and some of the resulting structural issues of FI indices. The vast majority of FI instruments are traded OTC, with counterparties posting indicative prices on various OTC platforms. Indicative prices are not necessarily traded in actual transactions, meaning that real executed prices might be far away from screen indications. On the other hand, these indicative prices are used by index providers to compute the value of the FI indices, and the end of day fair prices of each security used and published by an index provider are used for NAV calculation purposes. In other terms, the prices used for NAV calculation represent a fair estimate of the real trading levels. However, in periods of stress, this estimate can be less representative.

Regarding ETFs, they are traded on regulated markets, with executable prices posted by the market makers, and real traded prices are easily observable. Therefore, ETF price should reflect at all times the current market conditions for the underlying assets that compose the ETF portfolio, otherwise easily exploitable arbitrage opportunities will arise. ETF liquidity is ultimately linked to the liquidity of the underlying instruments. If an exceptional dry-up of secondary market liquidity arises, the underlying liquidity can still be accessed through the primary market creation and redemption mechanism: the liquidity of an ETF is therefore at least equal to the liquidity of its underlying instruments. AFG believes that liquidity analysis for ETFs – especially taking into account stress periods like the ones seen in March/April 2020 – should therefore be extended beyond ETFs to the underlying securities and more broadly to any instrument providing exposure to these securities.

AFG thus recalls that the liquidity of fixed income ETFs is ultimately directly linked to the liquidity of the underlying bonds and their types (ie Investment Grade, High Yield, Govies...).

Regarding the primary market, most fixed income ETFs trade predominantly in-kind (including during the March/April episode). In addition, we remind that ETFs frequently implement anti-dilution levy (ADL) /swing pricing mechanisms to further protect the investors' fairness.

(a) Significant price dislocations and how long did such price dislocation typically last?

In AFG members' opinion, there is no real "price dislocation" between ETFs and their underlying bonds, but rather an inefficiency in bond price discovery mechanism. The dislocation, therefore, is between the bond screen/valuation price and real bid/offer executable prices for the bond in question. This dislocation typically lasts 2 or 3 days, but it can last even longer depending on the liquidity of the underlying bond baskets. Indeed, for ETFs providing exposure to Corporate bonds, our members report that they were the most impacted (lasted around 3 weeks from early March until the announcement of the Central Banks).

(b) Please provide information on how many and what types of ETFs were affected and how long the price dislocation lasted?

AFG members explain that ETF prices were not affected by price dislocation vs. real underlying bond prices. Bond screen/valuation prices were dislocated vs. real bond prices, mostly in the riskier segment of the FI market. All fixed income ETFs were impacted by the underlying bonds prices dislocation but with different intensities depending on their exposure: ETFs providing exposure to Corporate bonds were the most impacted funds in the ETF market. These prices dislocation lasted from one week to 3 weeks during the month of March 2020. Our members noted an easing in those price dislocations towards the end of March when Central Banks announced that they would support the credit market and volatility decreased.

(c) Were there any notable changes in the primary activities and secondary market trading of the affected ETFs (e.g. the mix of in-kind and in-cash primary activities, the number and composition of AP participation, the mix of primary and secondary market volume, shifts from OTC trading to exchange trading)?

In-kind creation/redemptions on the primary market were already a standard market practice for most fixed income ETFs and, where needed, the practice was reinforced during the liquidity crisis in order to protect the holders against the bond price's inefficiency described above. Our members report that the discounts did not impact the primary activity of the ETFs and that the number and composition of AP participation did not change over the period.

The ADL maximum limits were increased to reflect market conditions and ADL levels were reviewed accordingly on a daily basis.

Discounts did not have any significant effect on the secondary market activity, neither at the ETF level nor for the entities of the ETF ecosystem (issuers, market makers, exchanges etc.). ETFs played an important role in price discovery, giving live indications of tradable prices for underlying bonds. Net Asset Values (NAV) however were in most cases calculated using the same valuation convention as defined in the underlying index methodology.

Investors could continue to trade ETFs on the secondary market throughout the period, deciding to trade or not based on their own constraints and perceived cost of liquidity.

(d) In your view, what were the likely causes of FI ETF discounts? Do you have views on any good practices that facilitate the pricing normalization process?

Our members point rather to the OTC bond price discovery mechanism, not to the ETF price formation. To improve bond valuation methods, ideally only executable and binding prices should be allowed to be posted on screens for FI securities. In any case, index providers should be pushed to use more tradable prices for calculating their index levels, so as to make their indices more representative of the true markets conditions. Even though index levels were not aligned with market prices, our members, as ETF providers, protected ETF clients' interests by accepting only in-kind creations/redemptions.

For the NAV calculation, ETF components are usually priced using the same convention as in the index, i.e. a mix between reported prices, contributed quotes and marked to model prices. When liquidity is good, those prices are globally in line with the level at which the bonds trade, and what market makers would actually price as well. But this is not true in stressed markets when bond fixings may demonstrate a delay in incorporating live prices, especially as the number of trades in the bonds decreases.

(e) Should the risk of discounts be mitigated, and/or do they provide potential opportunities?

Our members think that ETF "discounts" are not real discounts, and they do not provide investment or arbitrage opportunities.

Indeed, discounts on fixed income ETFs are primarily a technical phenomenon driven by the lack of a publicly available, widely accepted, actionable tradable price for bonds. Discounts are not an issue in themselves, they are a mere representation of the difference between the theoretical stale prices of bonds and the actionable, tradable levels implied by market makers in their ETF pricing.

During the stressed markets conditions of March 2020, bid-offer spreads widened, and fixed income ETFs traded at a discount or premium – reflecting the dry up in the underlying securities – however there was no interruption in the trading of ETFs. ETFs continued to act as a means of price discovery in the market, allowing investors to access liquidity, while respecting the functioning of each stock exchange.

(f) To the extent that you also managed other unlisted fixed income funds, please discuss whether and how the discounts observed in FI ETFs affect these funds.

Our members that manage several types of funds including ETFs report that there was no spill-over to the other non-ETF FI funds. Trading conditions of the bonds were identical regardless of the investment wrapper (ETF or index fund), which shows that the subject is not so much the investment vehicle itself, but the valuation of the bond underlyings.

(g) Did you receive any investor complaints regarding the pricing difference between the NAV and the ETFs' secondary market prices? If so and if possible, please elaborate.

Our members report not to have received complaints, but questions related to the exceptional market circumstances.

2. During the stress period in March/April 2020, were there any noteworthy developments or stresses concerning futures or derivatives-based ETFs under your management or coverage? If so, do you have views on good practices that seek to address these stressed scenarios?

Our members (that have both types of replications) report absolutely no specific issue for derivatives-based ETFs during the stress period of March/April 2020.

Effective Product Structuring

1. (a) As part of the design phase of a FI ETF, please describe the decision-making process you follow to decide on appropriate arrangements/product features that support the arbitrage mechanism, including the adequacy of the number of authorized participants (APs) / MMs, the attributes that you look for in APs/MMs and their business model.

As AFG has always advocated, the liquidity of an ETF is dependent on the underlying's market liquidity. The more liquid the underlying exposure, the more liquid the ETF is. We do not include here the specific situation of some commodities ETFs traded in non-EU markets that have different features than the classic ETFs our members manage and whose liquidity is naturally dependent on the underlying market as explained.

Our members thus report for instance:

- making a full analysis of liquidity and scalability of the index underlying bond basket,
- analysis with Market Makers & Authorized Participants to ensure that the index and its underlying bond baskets are easily tradable
- in-kind priority, but in case of specific request to create/redeem in-cash, specific trading pricing and protect clients from potential arbitrage.
- at least a minimum of two MM/liquidity providers on every FI ETF on every exchange (caution: all markets do not have the same MM/LP coverage, but at the same time not the same volume either; so the sole number is not a relevant absolute indicator in all markets).

(b) To the extent that there are a small number (e.g. 1-2) of APs/MMs for a particular FI ETF, please describe measures / features (including those relating to market structure and trading incentives) that aim to promote participation by other market participants (e.g. institutional investors) in arbitrage activities or liquidity provision.

As explained, our members' FI ETFs are trading mainly in-kind on the primary market, meaning the end-clients can benefit from the inventory of the AP at best conditions. In addition, should one AP/MM fail in its duties, the ETF can swiftly implement an alternative setup. Any other AP/MM can place creation/redemption orders directly on the primary market of the fund at very short notice. In addition, European UCITS ETFs already permit investors to redeem directly from the ETF.

(c) Please comment on any industry practices for exclusive arrangements to APs/MMs and the reasons for them.

AFG believes that a diversified and broad network of APs and market makers provides diversification and is a risk mitigation factor. We are not aware of exclusive arrangements of our members with APs/MMs. Primary markets are open to any new AP.

2. Please describe your policies and procedures for valuation and if applicable, any reliance on third party valuation advisors, including for less liquid holdings. How do you evaluate the valuation advice from third party? Do you rely on index prices for valuation and, if so, please outline the extent, and circumstances in which you might vary from these prices.

ETFs apply the same pricing as the underlying index. In case of defaulted or liquidated holdings, the firm valuation governance, which includes an independent service, appraises the relevant estimate. Advice from 3rd party providers advice might be considered in this process, depending on the situation in the best interest of investors.

3. If applicable, please describe how you calculate iNAV for FI ETFs. Please also comment on the utility of iNAV pricing information to investors and market participants (e.g. MMs and LPs). What improvements, if any, could improve the quality and the availability of iNAV in facilitating arbitrage? Alternatively, please comment on any possible alternative approaches if you do not produce an iNAV for FI ETFs.

In France, Euronext requires iNAV calculation (used for their halt mechanism which has proved to be efficient during market stresses) and the French AMF requires it. Our members iNAVs are either calculated by the exchange or by a third party data provider.

iNAVs are also used by small to mid-size trading desks to benchmark their executions. They are a good proxy for retail investors when they need to place an order. Generally, the iNAV is a powerful tool and in some cases it remains a good proxy of the value of the fund. The iNAV is particularly relevant for exposures that trade at the same time as the ETF (i.e. European equities) or for which there is a reliable proxy that is quoted at the same time as the ETF (e.g. Futures).

However, this service has a cost. There should be at some point a recognition of public service with regards to the iNAV as some index providers may ask data licensing fees for iNavs calculation, to the iNav calculator agents. Thus, some index providers are charging data licence fees at multiple levels, for providing their indices compositions: ETFs providers (for portfolio management and production of reportings & marketing materials), iNav calculators, PCFs calculators, the custodian banks (in charge of controls)....

Calculating an iNAV requires specialized market knowledge. The tool might not be appropriate to all markets liquidity situations and in these case there might be other indicators that showed their effectiveness in the past, already in place on the different European stock exchanges for example (volatility indicators, proxy indicators, with dynamic price references for ex.). Our members believe that an efficient metric enabling stock exchanges circuit breakers to operate is essential and that the iNAV is one of them. This metric needs to both reflect the ETF underlying market liquidity and allow circuit breaker to operate efficiently.

4. Are there any mechanisms other than full portfolio information which could be of use to facilitate effective arbitrage? Please elaborate. For example, please discuss your views on whether disclosing portfolio and creation/redemption information solely to APs/MMs impedes or assists arbitrage.

Full portfolio disclosure is not sufficient. In a context of stress market conditions, it does not give an indication on liquidity conditions. Disclosure of primary market creation/redemption costs to end clients can facilitate the selection and give a more accurate view or the “real” costs to trade any product, hence facilitating efficient trading conditions. Disclosing the portfolio composition to APs and market makers is critical for an efficient secondary market functioning.

5. Are there asset classes or investment strategies that may present particular challenges (or be otherwise inappropriate) for the ETF structure? In responding, please provide any supporting data or other information.

To avoid future potential problems, transparency should be considered as consubstantial to the good functioning of the ETF format. The same high level of transparency on portfolio holdings and the use of protective mechanisms, such as iNAV calculation, should be a pre-requisite for all ETFs, passive or active.

In Europe, UCITS ETFs benefit from a very protective mutual fund layer. It forbids investing in ineligible assets, as real assets, physical commodities, or illiquid assets. Please see AFG's synthesis on the [UCITS ETF protective format](#).

6. Please discuss your views on causes of divergences, in general, of the ETF secondary market price from NAV, particularly for FI ETFs, and how they could be addressed. Please focus your answer on your experiences beyond the COVID-19 stress in March/April 2020 as covered in the first section above to consider the ETF structure more generally.

ETF price deviations from NAV are short-lived situations primarily caused by technical causes (e.g. time difference, valuation methodology for NAVs, temporarily closed underlying markets etc.). Market Makers are usually there to limit the potential deviations. The 2020 crisis episode was a liquidity problem arising at the level of the underlying markets, structural to the fixed-income market and fixed-income indices, and not an ETF dysfunction.

Disclosure Aspects

1. If applicable, please describe your policies for assisting investor understanding of ETF fees and expenses. Are there particular disclosures (e.g. income from securities lending) or measures that are effective in the case of a zero-fee ETF?

Our members do not practice zero-fee ETFs and AFG believes that in general such a practice might be somewhat misleading and unsound.

UCITS funds have extensive reporting of costs and charges.

- UCITS ETFs (like all other traditional funds) publish their On-going Charges on an annual basis in their legal documentation (KIID)
- Transaction costs are published to institutional clients and distributors in the MiFID2 and PRIIPs reporting templates (EMT and EPT respectively)

In addition, AFG believes that the 1 year tracking difference vs. the index, as well as the 1 year tracking error are important indicators.

2. Please describe your views on how to make disclosures of secondary market trading costs, spreads and variations from NAV, rebalancing and swap costs, and securities lending/repo income more effective for different investors, including retail investors.

Most of the costs impacting the NAV of ETFs are resumed in the Mifid EMT files, under several cost categories. Market costs, like creation and redemption costs, are disseminated periodically to relevant actors (Aps, MMs, etc.) by the issuer and in some case published on the issuer's website.

Tracking Difference and Tracking Error metrics capture all the information related to costs and revenues needed in order to effectively analyse the quality of replication of the ETF (meaningful for this type of fund).

Liquidity Provision

1. Please describe how you prepare and plan for the exit (even temporarily) of a MM for ETFs with less liquid assets.

Our members that offer ETFs work with large networks of diverse market markers. If a MM exits the relation, other MMs are available and can be contractually entered following negotiation

depending on the prevailing market conditions at the moment this action is needed in the best interest of the fund holders.

2. Please describe your policies for monitoring secondary market trading and market making activities of the ETFs you manage, including the major risks being monitored and the potential follow-up actions. If possible, please provide examples.

Our members report to monitor secondary market activity on a continuous basis. One of the major risks identified is a long suspension period. The reasons of the trading stop are analysed and actions are taken with MM/LP to restart trading if there are no valid reasons for the suspension.

Liquidity and mispricing are also potential risks and various steps and tools are in place to deal with different situations if they arise (ADLs for liquidity risks, real time and periodic market monitoring on variables such as bid-ask spreads, respect of each exchange's specific requirements, order book depth, price deviations compared to underlying securities traded volumes and premiums/discounts, etc). If the bid/ask quote of some ETFs is misaligned with the theoretical fair value of the ETF, an exchange with the MM on the misalignment is immediately organised.

Part B: Questions for ETF MMs / LPs

General

1. Under what circumstances could the arbitrage mechanism of FI ETFs fail? What factors could contribute to this under stressed market conditions? Please describe any good practices to mitigate the impact of this occurrence.
2. Given the comparative lack of transparency and liquidity in fixed income markets, and the OTC nature of trading, please describe good practices to manage any potential conflicts (notably pricing conflicts) with respect to business models and market making/arbitrage activities.

Stresses in March/April 2020

1. During the stress period in March/April 2020, did you have any general observations how the FI ETF ecosystem or underlying markets operated? For example, did you experience difficulty in transacting in fixed income instruments?
2. Please provide your views regarding the discounts to NAV seen in FI ETFs during the stress period in March/April 2020. In particular,
 - (a) How many and what types of ETFs were generally affected? In case of any significant price dislocations, how long did the price dislocation typically last?
 - (b) Were there any notable changes in the primary activities and secondary market trading of the affected ETFs (e.g. the mix of in-kind and in-cash primary activities, the number and composition of AP participation, the mix of primary and secondary market volume, shifts from OTC trading to exchange trading)?
 - (c) In your view, what were the likely causes of these discounts?
 - (d) Do you have views on any good practices adopted to facilitate the pricing normalization process?
 - (e) Should the risk of price dislocations or discounts be mitigated, and/or do they provide potential opportunities?
 - (f) If applicable, were the funding conditions tightened by your prime brokers during the crisis? If so, please describe to what extent these changes affected your liquidity provision capabilities and how you mitigated the impact.

To the extent possible, please support your responses by sharing relevant data.

3. During the stress period in March/April 2020, were there any noteworthy developments or stresses concerning futures or derivatives-based ETFs under your coverage? If so, do you have views on good practices that seek to address these stressed scenarios.

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