

Thematic Review of IOSCO Liquidity Risk Management Recommendations And IOSCO-FSB Analysis of Open-Ended Fund Liquidity during the Market Stresses of 2020

Survey of Market Participants

I. Introduction

IOSCO is conducting a survey to gather information on how entities responsible for the overall operations of collective investment schemes (Responsible Entities) manage liquidity risk. Responses to the survey will be used to inform analyses at IOSCO and the Financial Stability Board (FSB). **Participation in the survey is voluntary. All responses to the survey will remain confidential within IOSCO and the FSB, and no proprietary information needs to be shared.** The survey is being made available to respondents in accordance with individual national authorities' requested approaches.

Note that survey responses will not be used to compare or individually assess Responsible Entities, and any report produced by IOSCO or FSB will not identify Responsible Entities.

Respondents may complete the survey by providing a narrative response to the questions in a Word document and uploading the file to LRM-MPSurvey@iosco.org by 16 April 2021.

The survey is broadly organized into **two sections**.

- **The first section** relates to IOSCO's assessment of how its 2018 [*Recommendations for Liquidity Risk Management for Collective Investment Schemes*](#) (Recommendations) and its report on [*Open-ended Fund Liquidity and Risk Management – Good Practices and Issues for Consideration*](#) (Good Practices) have been implemented in practice.
- **The second section** concerns a joint IOSCO-FSB analysis of the availability, use, and impact of liquidity risk management tools for open-ended funds (OEFs) during the 2020 market stresses.

Additional information about these projects follows.

A. IOSCO's Assessment of the 2018 Liquidity Risk Management Recommendations

IOSCO is performing a Thematic Review of its 2018 Recommendations to (i) assess the extent to which they have been implemented through regulatory frameworks; and (ii) provide information about how implementation in practice has furthered the desired outcomes of the Recommendations. The Recommendations apply to open-ended collective investment schemes

(CIS)¹. IOSCO set forth its Recommendations to ensure that liquidity risk is managed to safeguard and protect the interests of investors, including in stressed market conditions. The Recommendations also sought to address potential structural vulnerabilities in the asset management sector identified by the FSB that could impact financial stability. To supplement the Recommendations, IOSCO published the Good Practices that provide practical information and examples regarding OEF liquidity risk management. At the time of issuing the Recommendations, IOSCO indicated it intended to assess implementation across relevant jurisdictions once a period of time (e.g., 2-3 years) had passed.

IOSCO is reviewing implementation of 10 of the Recommendations included in the 2018 report (i.e., the “Assessed Recommendations”). The Assessed Recommendations cover:

- Collective Investment Scheme Design Process (Recommendations 1-4, and 7);
- Day-to-day Liquidity Management (Recommendations 10, 12, and 14); and
- Contingency Planning (Recommendations 16 and 17).

IOSCO is surveying Responsible Entities in order to gather information about implementation in practice (see [Section II “IOSCO’s Assessment of the 2018 Liquidity Risk Management Recommendations”](#)). While information gathered from Responsible Entities will not be considered for the assessment of jurisdictions, it will help inform observations about industry practices on a global basis, including how implementation has furthered the desired outcomes of the Recommendations. Responses to the survey—together with feedback from securities regulators which will be gathered through a separate survey—will inform a report on the Thematic Review of the Recommendations.

The survey on IOSCO’s Recommendations and Good Practices includes questions relating to the 10 Assessed Recommendations. A Means of Implementation accompanies each Assessed Recommendation to provide context and guidance on how implementation may be achieved. Additionally, relevant excerpts from the Good Practices are included after each Means of Implementation under the heading “Related Good Practices.” Respondents are encouraged to review the Good Practices in their entirety for additional context.

B. Joint IOSCO-FSB Analysis of OEF Liquidity during the Market Stresses of 2020

IOSCO and the FSB are conducting a joint analysis of the availability, use and impact of liquidity risk management tools for OEFs. The joint work is examining the OEFs that experienced redemption pressures during the COVID-19 induced market stresses of March and April 2020; the availability, use, and impact of liquidity risk management tools on the broader market; and how these were linked to the liquidity of underlying assets.

To inform the work, IOSCO and the FSB are conducting outreach to industry, including through surveying market participants. This schedule of supplemental questions (see [Section III “Joint IOSCO-FSB Analysis of OEF Liquidity during the Market Stresses of 2020”](#)) is therefore designed to elicit targeted responses from Responsible Entities—on a voluntary basis—with respect to liquidity risk management practices and experiences during the market turmoil.²

¹ An “open-ended CIS” is a “registered/authorised/public CIS which provides redemption rights to its investors from its assets, based on the net asset value of the CIS, on a regular periodic basis during its lifetime - in many cases on a daily basis, although this can be less frequently.” The Recommendations at note 2. Please note that money market funds have been excluded from the scope of CIS.

² As stated above, responses to these and other market participant questions are voluntary, and Responsible Entities will not be compared or assessed individually.

Responses to the questions will inform the development of a joint IOSCO and FSB report.

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II. IOSCO's Assessment of the 2018 Liquidity Risk Management Recommendations

A. CIS Design Phase: Recommendations 1-4 and 7:

Recommendation 1: *The responsible entity should draw up an effective liquidity risk management process, compliant with local jurisdictional liquidity requirements.*

Means of Implementation

The liquidity risk management process, and its operation, is the fundamental basis of liquidity control within the CIS. The remainder of this section expands on some of the factors that must be taken into account as part of this process. The liquidity risk management process forms one part of the broader total risk management process. Risk management generally relies on strong and effective governance.

Some jurisdictions have an explicit definition of liquidity and set requirements on the “amount” of liquidity certain types of, or all, CIS must have at all times (for example, by a hard requirement on the percentage of the CIS that must be held in liquid instruments).

When considering creating a new CIS, the responsible entity must be able to (demonstrate that they can) comply with the relevant explicit or principles-based local liquidity requirements that will apply to the CIS.³

The liquidity risk management process, while proportionate, needs to be able to be effective in varied market conditions. Where the CIS is likely to be at a greater risk of liquidity problems, the responsible entity should construct (and perform) a more rigorous liquidity risk management process. Examples of CIS in this category include, but are not limited to, those with a high proportion of illiquid assets and/or a narrow investor base.

The responsible entity should fully consider the liquidity of the types of instruments in which the CIS's assets will be invested, at an appropriate level of granularity,⁴ and should seek to ensure that, taking account of the CIS's portfolio as a whole, these are consistent with the CIS's ability to comply with its redemption obligations or other liabilities.

A responsible entity does not need to construct a new process for each new CIS if it already operates a CIS with similar characteristics. However, it must ensure the process remains appropriate and relevant and sufficiently bespoke for any other CIS it is used for.

Related Good Practices

In constructing the portfolio and designing the redemption features, responsible entities could consider the following factors:

- The CIS's investment strategy, asset class and expected liquidity of the underlying market in various market conditions;
- The target investor base, investor profiles, concentration and expected redemption pattern, and distribution channels;
- The potential size of the fund relative to the underlying market

³ The remainder of the recommendations in this document should be interpreted in that context. For example, in the case where a certain percentage of the CIS's assets must be kept in certain types of liquid instruments, the responsible entity's systems should be appropriate to ensure that percentage is adhered to at all times.

⁴ Consideration at the level of the asset class may not be sufficiently granular - for example, some equities can be liquid and some illiquid.

Asset managers can then determine the appropriate structure, including:

- the type of vehicle (e.g., authorised/public fund vs private fund, open-ended vs closed ended);
- its redemption frequency (e.g., daily, weekly, monthly.);
- the relevant liquidity risk management processes (including, for example, defining relevant thresholds, classifying assets into liquidity buckets, having procedures to improve their knowledge of investors' behaviours); and
- other features (e.g., defining a % of highly liquid assets, a limit on illiquid assets)

Continuously monitor their funds' liquidity profiles and ensure that appropriate levels of liquidity are maintained in the funds, taking into account the liquidity available in the underlying asset market(s), redemption flows or other liabilities.

Ensure they have the ability and capacity to make any appropriate adjustments including, subject to national regulation, the activation of tools to restrict redemptions in exceptional cases (e.g., lock ups, notice period, swing pricing, redemption fees, redemption gates) that would need to be specified in the fund's documentation.

Survey Questions

1.1 Please describe (i) your liquidity risk management process in general, and (ii) what systems capabilities are important to enabling you to implement and monitor the liquidity risk management process (e.g., can the responsible entity's systems demonstrate that a percentage of assets are kept in liquid instruments and monitored over time, if required)?

AFG would like to highlight that our members evolve in a jurisdiction that already applies the IOSCO's Recommendations. AFG members implemented in addition the ESMA's Guidelines on liquidity stress-tests in application since September 2020, which enhanced the regulatory requirements tackling that topic. AFG has also issued a Guide to explain how to build an efficient risk framework to deal with liquidity stress tests : <https://www.afg.asso.fr/wp-content/uploads/2020/10/guidepro-liquidityrisk-201221web.pdf>. AFG has always been engaged in helping asset managers to implement sound liquidity risk management, including but not limited to liquidity stress testing. AFG has regularly issued guidance on these issues.

AFG members would like to remind that fund liquidity management has to be thought from the early design of each fund, on a case by case basis, taking into account all the parameters of the given fund.

The liquidity risk management of AFG members is generally based on a system that is fed by all positions in managed portfolios. We understand that liquidity assumptions relating to the participation rate in the volumes traded for equities and transferable volumes calibrated by information from negotiation tables (or, for other or smaller asset management firms, information coming from a multicriteria scoring based on the characteristics of the securities and the trading conditions for debt instruments) for debt securities are then applied to estimate the deadlines for the sale of portfolios under normal and stressed conditions. An important aspect of the system is to be able to estimate the liquidity at a given time but also to control variations in liquidity in order to detect whether changes in the structure of the liquidity of the fund occur (the beginning of a crisis vs. repositioning of the strategy)

In addition, as a general comment, AFG members would like to recall that they are regulated asset managers, with the vast majority of funds which are themselves regulated. Particularly, this means that in practice the regulator of the management company or of the fund - while adding to the specific responsibility of the management company to which it is added but does not replace, intervenes ex ante on certain subjects (e.g. on the ex ante consistency of the fund design). Then, the regulator must ensure compliance with local rules as well as with what it has validated in practice for each management company and each fund (e.g. activity program; individual design of each fund); and even proceed to sanctions if there is non-compliance with the rules or with the specific approvals received for the fund.

- 1.2 Please describe how the liquidity risk management process considers the specific characteristics of the CIS, including the investment strategy, the type of vehicle, target investor base, and type of investors, and the redemption frequency (e.g., daily or less frequently).

AFG members explain that at each fund creation or modification, the risk management performs an ex ante liquidity risk analysis based on for instance model portfolios or on the asset classes envisaged, on the patterns of the possible redemption and finally on the target customers. On the basis of these elements, the risk management reaches a conclusion, which may lead to the use of liquidity management tools (eg: swing prices, gates, etc.) or even to a veto at the launch of the fund if an excessively high mismatch between the assets and the liability side is detected.

- 1.3 Please describe at a high level any policies and procedures you may have for classifying the liquidity profile of a new CIS for each type of instrument or asset class, and the portfolio as a whole, taking into account the nature and expected redemption of investors.

The focus is on the portfolio liquidity as a whole.

In general, for each portfolio, a liquidity profile (what percentage of the fund can be sold for a given horizon) is estimated, which is compared with an estimate of the probabilities of redemptions taking into account investors' behavior. The thorough analysis of this data (estimation of the liquidity on the asset side vs. estimation of the liquidity on the liability side), allows funds to be classified according to liquidity risk (example : very low, low, potential, significant risk) and to adopt the appropriate measures (for example setting up a swing price).

- 1.4 Does the liquidity risk management process involve updates to management when illiquid asset limits are exceeded? If so, please describe the general substance and frequency of the updates.

We understand from AFG members for instance that limits are monitored regularly, that alerts are launched in case of breaches and that any significant deterioration of the liquidity is discussed in risk committees where the management participates.

Recommendation 2: The responsible entity should set appropriate liquidity thresholds which are proportionate to the redemption obligations and liabilities of the CIS.

Means of Implementation

The responsible entity should set appropriate internal definitions and thresholds for the CIS's liquidity, which are in line with the principle of fair treatment of investors and the CIS's investment strategy. The thresholds should act as a signal to the responsible entity to carry out more extensive in-depth, quantitative and/or qualitative liquidity analysis as part of the risk management process (with the intention that the responsible entity would then take appropriate remedial steps if the analysis revealed vulnerabilities).

For example, a daily dealing CIS would be expected to have stricter liquidity requirements than a CIS sold on the basis that investors would not be expected to redeem before a set period expired; or a CIS that invested predominantly in real estate but promised frequent redemption rights to its investors might consider it appropriate to hold a relatively large stock of more liquid assets (which could be related to real estate) as well, because of the expected length of time it would take to dispose of physical properties in order to meet redemption requests.

A responsible entity could place stricter internal thresholds on liquidity than its local regulatory requirements.

It should be remembered that investor redemptions are not the only source of liquidity demand on a CIS (for example, margin calls from derivative counterparties).

Related Good Practices

Liquidity buffers may not be appropriate for all circumstances. While liquidity buffers provide a level of cushion in the event of strong redemption requests, they also potentially divert cash from achieving the fund's objective of a return on investment in line with its target investments...

This is generally determined by the responsible entity and is difficult to standardise due to the variances in investment strategies as well as the changing nature of liquidity in various asset classes.

Highly liquid investment strategies may allow for smaller cash holdings and daily redemption features...

Less liquid investment strategies or strategies that need to meet an elevated demand for margin calls, however, may need cash holdings or a minimum amount of highly liquid assets as part of the fund portfolio, potentially in addition to restrictions on the daily redemption feature.

Continuously monitor their funds' liquidity profiles and ensure that appropriate levels of liquidity are maintained in the funds, taking into account the liquidity available in the underlying asset market(s), redemption flows or other liabilities. The relevant thresholds and targets are established to assist them in that process and make adjustments as appropriate.

High yield bond funds, in particular, may require additional mechanisms to manage liquidity. Some market participants have indicated having a policy of building liquidity buffers systematically in their high yield bond funds and favouring the most liquid instruments to gain the desired exposure (e.g., derivatives rather than cash markets or ETFs).

Survey Questions

1.1 Please describe how the responsible entity assesses the liquidity of a CIS, whether qualitatively or quantitatively.

AFG members tell us that fund liquidity is generally estimated via a quantitative model whose liquidity assumptions are based on participation in the volumes traded for equities (some members explain this is typically 20% or 25% of daily volume on normal conditions) and via traders' inputs or external providers (Bloomberg LQA offer for example) by market segments for debt securities.

- 2.2 Does the responsible entity use liquidity thresholds to carry out more extensive in-depth, quantitative and/or qualitative liquidity analysis that, in case of vulnerabilities, can trigger appropriate remedial steps? Please describe the governance process for setting any such thresholds and actions to be considered, such as additional analysis before taking remedial steps in the event of exceeding a threshold.

Liquidity thresholds are adapted depending on each fund's design and profile.

For example, managers explain to us defining 2 alert thresholds based on the results of their internal tool. The first is a threshold fixed in normal market conditions and corresponds to a liquidity percentage of the fund within 1 week (the percentage depends of the asset class); the second is a threshold in stressful market conditions and corresponds to a liquidity percentage of the fund within 1 week. If the liquidity of a fund is below one of the 2 thresholds, additional analyses at the liability level are carried out. If the conclusion of these analyses results in a liquidity risk deemed substantial, corrective actions are determined by a risk committee.

Another manager uses specific asset and liabilities gap scenario to ensure that the fund is able to meet in one day a redemption request of the largest investor in stress conditions. If it is not the case, action plans are envisaged (integration of liquidity tools like gates, or liquidity profile review)

- 2.3 Please briefly describe any liquidity requirements or mechanisms to manage liquidity that the responsible entity has in place for its CIS, or certain types of CIS it manages, that may be stricter than its regulatory requirements. If applicable, please include a discussion of mechanisms for continuous monitoring of fund liquidity profiles and associated thresholds/buffers.

AFG members explain to us adapting the liquidity requirements or mechanisms to the liquidity profile of each fund: liquidity requirements are general, but they have to be adapted to each fund design and liquidity profile. The daily management of the liquidity buffer of each fund is left to the discretion of the fund management (day to day business).

- 2.4 Does the responsible entity have a process for estimating the redemption flows and other liquidity demands, considering the characteristics of the CIS (e.g., investor profile, margin calls)?

(Yes/No)

Yes, AFG members have such a process.

If Yes, please briefly describe the process.

AFG knows that our members use in general information on customer knowledge communicated by the sales teams. In addition to this, for example, some members explained that risk management performs a statistical modeling of the distribution of fund subscriptions / redemptions in order to estimate a VaR or a CVaR against which the level of the fund's liquidity is compared. Some other members explained using a multicriteria scoring of investors depending on their sector of activity as well as the concentration score of the the largest investors.

Another manager uses hypothetical scenarios to simulate the redemption of main investors (for example, the largest in one day, the second in one week etc..) This is used to build liabilities stress scenarios to monitor redemption coverage ratio or asset and liabilities gap.

Recommendation 3: *The responsible entity should carefully determine a suitable dealing frequency for units in the CIS.*

Means of Implementation

Where there is not a specified local requirement, the responsible entity should ensure that they set a dealing frequency for units in the CIS which is realistic and appropriate for its investment objectives and approach, taking account of its liquidity risk management process, and allowing redemptions to be processed effectively.

Deciding that a CIS should be open-ended and the terms on which it is open-ended (to the extent the applicable law and regulation allows such discretion) is a significant design decision to be made. Often responsible entities may be subject to market pressure to provide very frequent dealing options when designing open-ended CIS even when they wish to invest in assets which are, or are likely to become, less liquid. Responsible entities should give due consideration to the structure of the fund and the appropriateness of, for example, the dealing frequency having regard to the target investor base, the investment strategy and objectives and also the expected liquidity of the assets. The investment strategy and objectives should be designed to give strong assurance that redemptions can be met in both normal and reasonably foreseeable (i.e. extreme but plausible) stressed market conditions.

The ability to gain certain tax treatment for a CIS, or to access a wider market for distribution, should not lead responsible entities to set a more frequent dealing frequency for units in the CIS than is appropriate.

Related Good Practices

Depending on the specific characteristics of a given fund and applicable laws and regulations, asset managers can then determine the appropriate structure, including its redemption frequency (e.g., daily, weekly, monthly)

Where the fund offers exposure to less liquid assets, such as small cap equities, or emerging markets, the asset manager may consider extending the dealing frequency (considering offering less frequent redemptions such as monthly)

One particular asset class where offering frequent redemptions can be a material challenge in light of the illiquid nature of the assets, is real estate funds.

Survey Questions

3.1 Please discuss the considerations you take into account in deciding whether a fund should be open-ended (and the terms on which it would be so).

Closed ended funds are very specific types of funds. The vast majority of AFG members manage open ended funds. The decision to design a fund as an open-ended one or not is related not only to the liquidity of assets as such, but more widely to all parameters which obviously include liquidity of assets as one of many parameters (investor profile, risk profile, strategy etc.).

3.2 Please discuss the considerations you take into account in deciding on an appropriate dealing frequency for an open-ended fund, notably for a fund that offers investors' exposure to assets that are less liquid or likely to become less liquid under stress (e.g., real estate or high yield bonds). In particular, please discuss factors such as (i) the dealing frequency having regard to the target investor base, (ii) the investment strategy and objectives, and (iii) the expected liquidity of the assets.

AFG members recall that strategies they invest in are liquid enough for them to offer daily liquidity to their clients. Of course, this hypothesis is challenged each time a fund is created by the risk management.

Regarding real estate for instance, AFG members explain that the dealing frequency is two weeks or more, as real assets by nature are not as liquid as financial instruments.

Liquidity is not a guaranteed concept, even the more liquid government papers may suffer from liquidity shortages in times of crisis. AFG members explain that regarding high yield bonds, in normal situation they can be tradable with a reasonable bid/ask spread. It is only in exceptional situations that they may lead to very bad price executions through the widening of bid/ask spreads on financial markets. And in that case, Liquidity Management Tools (e.g. swing pricing, gates, side-pockets, suspensions) can be used in France. Our members recall that these tools must be used in a proportionate manner depending on the fund's situation.

Recommendation 4: *The responsible entity should ensure that the CIS' dealing (subscription and redemption) arrangements are appropriate for its investment strategy and underlying assets throughout the entire product life cycle, starting at the product design phase.*

Means of Implementation

The initial design of a CIS presents an opportunity to put arrangements in place to underpin effective liquidity risk management. CIS should be designed to meet their redemption obligations. If those obligations cannot be met in a particular situation, then it must be managed in a prudent and orderly fashion which is in the best interest of investors.

As part of the initial design process for open-ended CIS, a documented assessment should be conducted of the liquidity risks likely to face the CIS, having regard to its proposed investment strategy, its target investors (as available to the responsible entity) and the assets and instruments it is intended to invest in. The assessment should set out why the relevant design features of the proposed CIS constitute an appropriate structure within which to manage liquidity risk in both

normal and reasonably foreseeable stressed market conditions.⁵ This should include consideration as to the quality of information about the investor base which is made available by different distribution channels for the CIS.

Given the importance of design decisions, the assessment should be subject to an internal approval process at an appropriate senior management and/or board level within the responsible entity where it can be reviewed and updated on an ongoing basis from both portfolio management and risk management perspectives. Such reviews should consider that the aim is to protect investors, maintain market integrity and thereby, as a consequence, promote financial stability.

Liquidity Risk Management Practices – Liabilities

There should be due regard in the design process, based on market knowledge and other information reasonably available to the responsible entities, to the likely risk appetite of the investors a CIS is designed to target and in line with the underlying investment mandate. As such, responsible entities should seek to engage with constituent elements of the distribution chain to take reasonable steps to improve their understanding of the underlying type of investors and the behavioural characteristics associated with such relevant types of investors.

Liquidity Risk Management Practices – Assets

In carrying out the design phase process, there should be due regard to the current and historical liquidity of the assets and instruments to be invested in, and where applicable, to the impact of limits which could be set, including limits on illiquid assets, concentration of assets, individual counterparty risk, CIS size, trading, limits on time allowed to correct unintended limit breaches and any other limits which could be imposed.

Depending on local law and regulation, responsible entities may also be required to consider the appropriateness of additional liquidity management tools during the design and authorisation process. This may, for example, be required by rules set out in regulatory frameworks or as part of an authorisation process which may consider the appropriateness of liquidity arrangements.

Liquidity Risk Redemption-constraining ‘Additional Liquidity Management Tools’

Having completed the design phase analysis of liquidity of the proposed assets, the characteristics of target investors and the features of every-day liquidity management practices, (for example, monitoring levels of subscriptions and redemptions), the responsible entity should consider in the design of the CIS an appropriate range of additional liquidity management tools to help manage redemptions in stressed market conditions (particularly those that could lead to severe market dislocation) or instances of unusually high redemptions, if not already required to in the circumstances outlined above. Such tools should be designed to operate in the best interests of investors within the CIS, taking into account the nature of the assets and its investor base. All such tools are subject to applicable laws and regulations.

Where securities regulators have concerns that appropriate consideration may not have been given to these factors they should, where allowed by local law and regulation, exercise their regulatory powers to seek to ensure all reasonable steps are taken by responsible entities to remedy the situation.

The responsible entity should consider the appropriateness of tools and additional measures for their CIS, taking into account the nature of assets held by the CIS and its investor base.

⁵ In particular, having open-ended structures, especially those offering frequent (e.g. daily) redemptions for CIS investing in illiquid assets such as infrastructure or real estate, would need a justification through such documented assessment. For further details, please see boxes 1 and 3 of the Good Practices.

Tools and additional measures should only be used where fair treatment of investors is not compromised, and where permitted by the law and regulation applicable to the CIS. Examples of tools which may be permissible in certain jurisdictions would include: exit charges, limited redemption restrictions, gates, dilution levies, in specie transfers⁶ lock-up periods, side letters which limit redemption rights or notice periods. Some of these tools (e.g. notice periods) may be built-in to the CIS's dealing policy, but others may be contingent (e.g. a limit to redemptions met the same day only if redemption requests exceed a certain percentage of the NAV).

Additional measures include side pockets⁷ or suspensions. CIS's should not be managed in such a way that the investment strategy relies on the availability of these measures, should liquidity problems be experienced.

Related Good Practices

At the design phase, managers should also consider if they might need to foresee specific redemption terms (e.g., lock ups, notice period, swing pricing, redemption fees, redemption gates) that would need to be specified in the fund's documentation.

The overall consistency of the fund's redemption terms and conditions with its investment strategy and investor base should be considered holistically taking into account all the parameters that have been built into the product...

Responsible entities are generally expected to ensure they have the ability and capacity to make any appropriate adjustments including, subject to national regulation, the activation of tools to restrict redemptions in exceptional cases.

Where the fund offers exposure to less liquid assets, such as small cap equities, or emerging markets, the asset manager may consider introducing lock-up periods and / or notice periods, etc.

Where the fund has a concentrated investor base, managers may want to consider introducing available mechanisms to protect remaining investors from the impact of potentially large redemptions, such as swing pricing, anti-dilution levies, exit fees or redemptions in kind.²² It could also consider imposing notice periods to have more flexibility in the event of large outflows.

Survey Questions

4.1 Please briefly describe the internal governance process for managing liquidity risk for the design and launch of a new CIS, including (i) the factors that the senior managers and/or board consider in the approval process; (ii) the required approval level by senior managers and/or the board; and (iii) steps for assessing the design features in both normal and reasonably foreseeable stressed market conditions.

We understand funds are created through a committee in which for instance a member of the management and risk analysts participate. A liquidity study is specifically carried out by the risk management, taking into account all the factors known or estimated at the creation date (for instance : target size of the fund, bid / ask spread of the asset class, transferable volumes

⁶ Retail investors should generally not be required to accept in specie transfers when they wish to redeem part or all of their investments. As a good practice, the responsible entity should only offer investors redemptions in specie where the institutional investor has consented to this arrangement. See *IOSCO Good Practices on the Termination of Collective Investment Funds Final Report*, (Nov. 2017), available at <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD588.pdf>.

⁷ In some jurisdictions, side pockets may be considered to be 'normal tools' rather than 'additional measures' for certain types of CIS. Their creation and use in this manner is generally not suitable for CIS offered to retail investors because illiquid or hard to value assets are not normally suitable for retail investors.

estimated by the trading desk, profiles of target investors, etc.). All of these elements allow the risk analyst to reach a conclusion on the liquidity risk, possibly with recommendations for measures to best manage this potential risk (for instance swing price, gates, notice period).

4.2 Please briefly discuss the extent to which the design process considers the following to help ensure that the fund can meet its redemption obligations on an ongoing basis: (i) the type or likely risk appetite of the investors a CIS is designed to target and in line with the underlying investment mandate; (ii) the current and historical liquidity of the assets and investments to be invested in, and (iii) the appropriateness of additional liquidity management tools.

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Recommendation 7: *The responsible entity should ensure that liquidity risk and its liquidity risk management process are effectively disclosed to investors and prospective investors.*

Means of Implementation

As part of the disclosures in a CIS's offering documents⁸ about the risks involved in investing in the CIS, there should be a proportionate and appropriate explanation of liquidity risk. This should include an explanation of why and in what circumstances it might crystallise; its significance and potential impact on the CIS and its unit-holders, and a summary of the process by which the responsible entity aims to mitigate the risk.

For example, disclosure of what actions the responsible entity would take in the event of a liquidity problem would be useful information. The explanation should set out clearly how the investor could be affected. In some jurisdictions, large unit-holder concentration risk may have to be disclosed.

Explanation of any tools or additional measures that could affect redemption rights (see Recommendation 17) should be included in the CIS's offering documents. The explanation should include what the tool or measure is, what effect its use will have on CIS liquidity/investor redemption rights and examples of when the tool or measure might be applied (if it is of a contingent nature). A responsible entity must take care to ensure that these descriptions are clear and comprehensible to investors.

The responsible entity must not consider disclosure of liquidity risk, and information about its liquidity risk management process, to be a substitute for the actual operation of an effective policy. The relevant disclosures concerning liquidity of the CIS should be properly designed taking into account the nature of the assets the CIS intends to invest in and the degree of sophistication of the investor profile. Basic day-to-day liquidity information (for example, the dealing frequency of the CIS and how to buy/sell units) should be disclosed to investors.

Disclosures concerning liquidity have the potential to provide investors with information to determine whether their liquidity risk appetite matches the liquidity risk profile of the CIS. In particular, such disclosure is most likely to be beneficial where the CIS is invested in assets or

⁸ The term 'offering documents' here refers to documents that are freely available to investors.

instruments which have a record of significantly varying liquidity across the financial cycle or where there is insufficient historical evidence⁹ to assess whether liquidity will vary significantly across the financial cycle.

Additional disclosure requirements to investors should include one or more of the following:

- A commitment in the initial offering documentation to provide to investors on a periodic basis and where appropriate, on an aggregate basis, information regarding the investment portfolios of the CIS that may allow investors to assess the liquidity risk attached to the CIS e.g. holdings of various asset classes/types of securities, detailed holdings of individual securities;
- Disclosure in the CIS offering documents of the general approach the CIS will take in dealing with situations where it is under liquidity pressure from a heightened level of net redemption requests.

The disclosure of the liquidity of assets to investors may be transparently done by profiling the actual or projected asset portfolio/asset class(es) which the CIS is currently or expected to invest in. At the time of the launch of the CIS, disclosure of liquidity in the offering documents can be focused on the types of prospective assets targeted by the investment strategy. Thereafter it can be disclosed or reported based on the actual investment strategy and/or assets and instruments held by the CIS. While disclosure regarding liquidity should be balanced against maintaining the confidentiality of market strategies where this is in the interests of investors, sufficient detail should be disclosed to make investors aware of material liquidity risks. Disclosures should be proportionate to their risks.

Where additional liquidity management tools (see Recommendation 17) are included in the design of a CIS, the details of how such liquidity management tools would operate and what the activation of such tools would mean for investors should be readily accessible and set out clearly and appropriately for potential investors.

Related Good Practices

Investors should be given sufficiently detailed material to be able to assess whether the fund is compatible with their risk appetite and make an informed investment decision. The key issue here is to seek to ensure investors understand the type of liquidity risk they are exposed to, how that risk might affect the value of the fund and their ability to redeem their units.

Investment managers also should be aware of how their distribution channels disseminate this disclosure. Good practice suggests that it generally should not be left to investors to read the terms and conditions, but that it should be highlighted by the distribution channels.

Survey Questions

7.1 The Recommendations provide that liquidity information disclosure is expected to be proportionate to the corresponding liquidity risks. Please describe the disclosures that responsible entities make to investors regarding liquidity, liquidity risk, and liquidity risk management.

- a) If applicable, please discuss how responsible entities balance the proprietary aspects of their portfolio management process and the degree of details of liquidity information that are disclosed to investors.

⁹ For example, where a particular asset has only come into existence in recent times, and therefore does not provide a sufficient period of historical evidence. A further example includes where an asset is primarily traded off market, and thus does not provide sufficient historical evidence of performance.

We understand from AFG members that portfolio management processes may include some elements of intellectual property which must not be disclosed publicly, due to competition with other fund managers. However, all these details are obviously made available to regulators on request – and sometimes are compulsorily provided to regulators due to regulations.

- b) If applicable, please discuss how responsible entities provide clear, transparent, and understandable information to investors.

B. Day-to-day Liquidity Management: Recommendations 10, 12, 14

Recommendation 10: *The responsible entity should regularly assess the liquidity of the assets held in the portfolio.*

Means of Implementation

The liquidity risk management process should enable the responsible entity to regularly measure, monitor and manage the CIS's liquidity. The responsible entity should take into account the interconnection of liquidity risk with other risk factors such as market risk or reputational risk.¹⁰

The responsible entity should ensure compliance with defined liquidity limits and the CIS's redemption policy, whether these are set by national regulation, set out in the liquidity risk management process, detailed in the CIS's documentation or other internal thresholds.

The liquidity assessment of the CIS's assets should consider obligations to creditors, counterparties and other third parties. The time to liquidate assets and the price at which liquidation could be effected should form part of the assessment of asset liquidity, as should financial settlement lags and the dependence of these on other market risks and factors.

Related Good Practices

Asset managers should monitor liquidity on an ongoing basis on the asset side (considering available data and metrics and where available information from trading desks and other relevant sources) and on the liability side (looking at redemption patterns, inflows and outflows and other liabilities).

For the monitoring to be effective, it should be based on up to-date and reliable data, and be complemented by stress testing and appropriate contingency planning.

Appropriate valuation policies and procedures are of paramount importance. Responsible entities should have policies and procedures in place in advance to manage scenarios in which fund assets are difficult to value, in situations where asset market liquidity deteriorates and redemption

¹⁰ It is accepted that some risk factors are difficult or impossible to specify quantitatively.

pressures arise. A sound valuation procedure should aim to consider appropriate models to value those assets that are not traded in an active market.

Fixed income securities that are infrequently traded and valued according to mark- to-model should update market liquidity spreads data incorporated in their model, on each fund dealing date...

Where the normal valuation procedure is based on assessment of the net realisable value of the assets assuming a willing buyer and a willing seller and flexibility over the time required to make the disposal (as for immovable property), the procedure may require adjustment in unusual market conditions.

Survey Questions

10.1 Please describe how the responsible entity regularly measures, monitors, and manages liquidity.

Internal procedures may stipulate for instance that the entire range is analyzed regularly from the perspective of liquidity risk with alert thresholds on the asset side. For funds on alert, a detailed analysis of the liabilities is carried out to assess the asset / liability risk appropriately. The conclusions are presented to the risk committee and knowledge is given to the management. This might lead to decisions being taken for instance to implement specific liquidity management mechanisms.

10.2 Please describe whether the liquidity assessment of the CIS's assets considers obligations to creditors, counterparties and other third parties.

10.3 Does the assessment of liquidity risk take into account the interconnection of liquidity risk with other risk factors such as market risk or reputational risk? Please describe.

In practice some risks are sometimes difficult to cross in terms of interconnection. Some managers explained to us they use specific stress test scenarios combining liquidity and market shocks to monitor the impact of those scenarios on liquidity costs and time to liquidation indicators.

Recommendation 12: *The liquidity risk management process should facilitate the ability of the responsible entity to identify an emerging liquidity shortage before it occurs.*

Means of Implementation:

The liquidity risk management process should aim to assist the responsible entity in identifying liquidity pressures before they crystallise, thus enabling it to take appropriate action respecting the principle of fair treatment of investors.

During stressed market conditions, the responsible entity should seek to ensure that the interests of investors are safeguarded and CIS investors are being treated fairly.¹¹ As such, the responsible entity should seek to maintain the investment strategy and attempt to maintain alignment between the funds' investment strategy and its liquidity profile taking into account investors' best interests, including ensuring that remaining investors are not left with a disproportionate share of potentially illiquid assets. One such step could involve the monitoring and management of large redemptions by investors which have the potential to reduce the normal liquidity profile to the extent reasonably practicable.

Retail investors, in particular, will have a general expectation that, in normal circumstances, the CIS will be able to meet redemption requests on the standard terms set out in its offering documents. While the use of additional measures may enable a liquidity issue to be "managed", by restricting investor redemption rights, it is preferable to avoid this if possible. Where a responsible entity has a choice as to whether to apply an additional measure – or a tool - that could affect redemption rights at all, or which of several tools or measures to apply, it must make this decision in the best interests of unit-holders (see Recommendation 17).

Responsible entities should make best efforts to manage future cash flows so as to assist with liquidity management (for example, it may be possible to negotiate a pre-notice period with brokers before changes in margin call formulas become effective, or to negotiate longer periods for repo agreements).

Related Good Practices

Therefore, it is considered good practice for the fund manager to actively monitoring asset liquidity as well as investor redemption activities across time while having a liquidity risk management process in place to actively adapt to changes in market as well as investor behaviours across time.

Having various management options available and being integrated in pre-defined contingency plans to address such changes are helpful practices for fund managers.

Survey Questions

12.1 How do you identify potential liquidity shortfalls before they emerge?

Monitoring bid / ask spreads on different asset classes deemed to be less liquid is very useful. Scenarios are used in case of potential large fund redemptions. A regime change might lead to question about the potential beginning of a liquidity crisis.

12.2 What mitigation strategies do you take to reduce the impact of potential liquidity shortfalls you identify, e.g. monitoring and management of large redemptions by investors which have the potential to reduce the normal liquidity profile, negotiating for a pre-notice period with brokers before changes in margin call formulas become effective, or for longer periods for repo agreements?

As far as possible, information from the sales teams are used to anticipate as much as possible potential major redemptions. Our members say that generally they need not negotiate specific clauses with brokers - the calibration being considered adequate to cope with redemptions, even substantial in times of crisis. Regarding the two last cases, might happen in the case of some leveraged funds, which are not at all the majority of our members's fund range.

¹¹ Of relevance is the *IOSCO Principles for the Valuation of Collective Investment Schemes*, Final Report (May 2013), available at <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD413.pdf>.

12.3 During stressed market conditions, how do you ensure that all investors are treated fairly (e.g., balancing the goals of meeting redemption requests while ensuring remaining investors are not left with a disproportionate share of potentially illiquid assets)?

In times of stress, monitoring of fund liquidity continues. Our members thus implicitly control the fact that there is no material deterioration in the overall liquidity of the fund.

During stressed market conditions, to ensure that all investors are treated fairly funds may make for instance use of swing pricing if needed and already planned in the fund's documents, always with the view to keep as far as possible the fair treatment of investors.

Recommendation 14: *The responsible entity should conduct ongoing liquidity assessments in different scenarios, which could include fund level stress testing, in line with regulatory guidance.*

Means of Implementation:

Stress testing can assess how the liquidity profile of, or redemption levels of, a CIS can change when faced with various stressed events and market situations. It is an important component of a responsible entity's liquidity risk management process. Stress testing should support and strengthen the ability of the responsible entities in managing liquidity risk appropriately in the best interests of investors. Specifically, stress testing can be used by responsible entities to assess the liquidity characteristics of the CIS's assets relative to the CIS's anticipated redemption flows under stressed market conditions and to tailor the CIS's asset composition, liquidity risk management, and contingency planning accordingly. Stress testing can enable responsible entities to pre-empt and respond promptly to the threat of a liquidity or redemption shock.

Given the diversity of the CIS universe, stress testing arrangements, as further set out below, should be appropriate for the size, investment strategy, underlying assets and investor profile of the CIS, taking into account other relevant market and regulatory factors.¹² For instance, fund level stress tests may not be required where this would be disproportionate taking into account the size, investment strategy, nature of the underlying assets and investor profile of the CIS.

Stress testing should be supported by strong and effective governance. In particular, the performance and oversight of stress testing should be sufficiently independent from the portfolio management function. Responsible entities should maintain appropriate documentation of stress testing and should be able to provide the relevant information to authorities upon request.

Appropriate stress testing should be carried out based on normal and stressed scenarios (for example, atypical redemption requests). Scenarios should include backward-looking historical scenarios and forward looking hypothetical scenarios, and could be based on parameters calculated using statistical techniques or concrete stress events where appropriate to do so.

¹² For example, stress testing would be more important and relevant to CIS with less liquid underlying assets and open-ended CIS with daily dealing arrangements.

Stress testing should be based on reliable and up-to-date information. Stress testing scenarios should be appropriate to the CIS. For example, the responsible entity could analyse the number of days that it would take to sell assets and meet liabilities in the stressed scenarios simulated, taking into account where practical and appropriate the expected behaviour of other market participants (e.g. the behaviour of other CIS managed by the same responsible entity if the circumstances are appropriate to do so) in the same conditions, any known inter-fund relationships such as inter-fund lending arrangements, and any actions the responsible entity would take (e.g. imposition of contingent liquidity management tools). In respect of collateral, stress testing could be used to demonstrate that the quantity of liquid assets is sufficient to meet settlement of margin calls on derivatives positions.

Responsible entities could also conduct stress testing related to other market risks and factors. For example, it may be appropriate to assess the impact of a credit rating downgrade of a security held by the CIS as one factor, as such a downgrade can affect the security's liquidity and that of the CIS. Reputational risk from a problem with another aspect of the responsible entity's business, or problems experienced in a similar CIS run by another entity, could also cause unexpected redemption requests.

It is also useful to conduct stress tests which start from the assumption that the responsible entity has been obliged to implement additional liquidity management tools, which then identifies situations where this might occur, and which works through the consequence of operating in those situations. This approach has the potential to improve the understanding of the circumstances in which the CIS may need to resort to additional measures, but it may not be appropriate for all CIS.

Feedback from any real situations experienced ("back-testing") should be used to improve the quality of output from future stress testing.

Stress testing results have the potential to contribute, as appropriate, into all stages of the CIS's product life cycle, including in the product design stage when determining the dealing and distribution arrangements and asset composition, and in performing investment and liquidity risk management (e.g. in calibrating holdings of liquid assets and other investments, and the use of different liquidity risk management tools and contingency planning) on an ongoing basis. Although it cannot prevail over their best judgement, stress testing can help support responsible entities when they use their best judgement in reasonably foreseeable circumstances.

Stress testing should be carried out at a frequency relevant to the specific CIS, especially in anticipation of reasonably foreseeable stressed market conditions to which the CIS would be sensitive.

Related Good Practices

Responsible entities should tailor stress testing scenarios, taking into account the CIS size, investment strategy, underlying assets and investor profiles; the current and expected market conditions; and the standards set out in the 2017 Recommendations; as well as the requirements and guidance issued by their local authorities...

For OTC securities without reliable and transparent trading data, the responsible entities often place more reliance on forward-looking hypothetical scenarios and the professional opinion of the responsible entities' traders or other market practitioners...

For CIS that adopt a nominee holding arrangement, responsible entities may assume that the CIS faces redemption for all the units sold through a particular distributor or faces overall redemptions of a certain magnitude...

Collateral posted by a CIS's counterparties in derivatives and securities lending transactions may affect a CIS's liquidity, and for CIS of which collateral comprises a significant proportion of assets, various responsible entities find it useful for stress testing to also cover the collateral...

Some of the key ways that stress testing results could be used include:

- to determine and assess the appropriate dealing arrangements for each CIS in light of its investment strategy and underlying assets, even under stressed scenarios
- to consider if any adjustments to the CIS's dealing arrangements, investment strategy and underlying assets (including the holdings of liquid assets) are necessary; and
- to formulate action and contingency plans to deal with plausible stressed market conditions by the use of different liquidity risk management tools...

Stress testing should be supported by strong and effective governance...

Stress testing should be performed by the risk management function of the responsible entity, with inputs from other relevant functions such as portfolio management and trading, and that stress testing results should be reviewed by the fund board, committee or senior management responsible for liquidity risk management...

Responsible entities should maintain appropriate documentation of stress testing, particularly regarding whether any actions are taken in light of the stress testing results...

When analysing stress testing results and determining appropriate follow-up actions in view of the stress testing results, examples of factors considered by responsible entities include:

- The risk and impact to the CIS under stressed scenarios
- The likelihood of stress market scenarios materializing
- The availability of liquidity risk management tools and plans, and whether such tools and plans are able to address the risks...

Even if a responsible entity decides that no immediate actions are warranted, it normally would still put in place action plans regarding how it will meet a CIS's liquidity needs should any of the stressed scenarios materialise

Stress tests should be carried out based on normal and stressed scenarios (for example, atypical redemption requests). Scenarios could include backward-looking historical scenarios and forward looking hypothetical scenarios, and could be based on parameters calculated using statistical techniques or concrete stress events...

Responsible entities must take into account factors relevant to the specific CIS when determining the stress testing frequency. These factors include the size, investment strategy, underlying assets and investor profile of the CIS; and the nature, complexity and resources required of the stress testing

- Stress testing based on backward-looking scenarios constructed using statistical methods is often a mechanical process and should thus be performed more frequently
- The liquidity profile and risk of a fund will likely be more volatile if it has a more rapidly changing portfolio or investor base, or if the market of its underlying assets is more volatile. Stress testing should be performed more frequently for such funds

- On the other hand, stress testing based on forward-looking hypothetical scenarios may require more extensive analysis, as well as inputs from multiple business functions and senior management. Such stress testing may thus be performed less frequently.

Survey Questions

14.1 Please generally describe the responsible entity's use of ongoing liquidity assessments (including stress testing) of CIS, including the frequency of testing, types of scenarios used and conditions that require increased testing.

Liquidity analyses are systematically carried out under normal and stressed conditions. These analyses are carried out regularly (quarterly for instance) and much more frequently when a crisis occurs.

A crisis is simulated by applying very unfavorable assumptions on selling volumes.

Please describe the governance arrangements in place for liquidity assessment processes including: (i) how the performance and oversight of liquidity assessments are carried out in a manner that provides sufficient independence from the portfolio management function, and (ii) the measures taken to ensure appropriate documentation of is maintained.

Generally, the monitoring of liquidity risk is carried out by an independent function (eg risk management). Portfolio Management is nonetheless a stakeholder in setting liquidity assumptions by sharing their experience with volumes that can be handled in times of crisis.

14.2 How do you use feedback from experiences to improve the quality of output from future stress testing?

Feedback experiences are used to upgrade the quality of AFG members' stress-tests, by incorporating actual experiences observed. In addition, there is regular interaction with the trading team.

14.3 Please explain how the responsible entity determines the parameters to use for the liquidity assessment?

The liquidity assumptions are regularly challenged and are the results of discussions between the trading desk, management and risk analysts teams. Lastly, very often it is the risk who validates the assumptions made.

14.4 If applicable, please provide examples of measures that could be taken following a liquidity assessment.

For instance, our members quote : implementation of swing price or gates, soft or even hard close of a strategy ...

Recommendation 16: *The responsible entity should put in place and periodically test contingency plans with an aim to ensure that any applicable liquidity management tools can be used where necessary, and if being activated, can be exercised in a prompt and orderly manner.*

Means of Implementation

The testing of operational capacity should be such that to the extent possible and on a reasonable basis, the CIS can use all available liquidity management tools, including in stressed market conditions, that will allow for the continued orderly management of the CIS and maintain investor confidence in the management of the CIS.

Having included the appropriate mechanisms in the design of the CIS, the responsible entities should engage in sufficient contingency planning to ensure that any additional liquidity management tool that the CIS can use under applicable law and regulation can be exercised in a prompt and orderly manner. To this end, the responsible entities should plan for such events having regard to whether:

- a) the operational capacity exists to implement and unwind any such tools in a transparent, fair and orderly manner in the best interest of investors;
- b) in those jurisdictions where relevant, the operational capacity continues to exist to exercise such tools at short notice if required by a relevant authority to do so;
- c) the legal basis for the exercise of every tool disclosed in the CIS documentation continues to be assured by the responsible entity to the satisfaction of the relevant decision makers of the responsible entity;
- d) the escalation process for the implementation of any such tools can be conducted in a prompt and orderly manner;
- e) there continues to be procedural clarity as to who is responsible for initiating consideration of and deciding on the exercise any such tools;
- f) there are policies in place as to when the tools will be actively considered and that these policies are documented, clear, accessible to relevant responsible entity decision makers, continue to be aligned with the nature of the CIS and to be understood clearly by relevant decision makers. These policies should take into account applicable law and regulation and be sufficiently detailed to make the governance of and responsibility for the relevant decisions clear;
- g) the capacity exists to keep investors and relevant authorities informed promptly of developments and, if needed in that jurisdiction, all necessary information should be provided at short notice to seek consent from relevant authorities for the use of such tools.

Through such a procedure, responsible entities will establish a reasonable level of internal assurance regarding the policies and procedures in place for triggering and applying such additional liquidity management tools.

Related Good Practices

The use of a mechanism that affects redemption rights is only justified in open-ended funds in exceptional circumstances. Generally, they should be used sparingly and be temporary in nature. Moreover, exceptional circumstances are rare, such as where a fair and robust valuation of the assets (e.g. because of lacking liquidity in the market place which could include certain forced asset sale scenarios), in which the fund is invested is difficult or impossible to carry out, or where redemption demands are so large/exceptional that liquidity cannot be raised in the timescales required to meet the demands...

Suspension of redemptions is used to prevent a run on a fund in times of market stress, when the valuation of the portfolio cannot be properly performed, when the market trading the underlying assets is closed, to prevent a sudden outflow of capital, which may have further adverse consequences for the fund...

Generally considered to be a last resort tool that is only activated when no other option is available...

It may be perceived by investors to indicate significant or even unresolvable problems in the fund and the prospect of substantial falls in the value of the fund's assets...

A fund should ensure that the degree of liquidity in the fund allows it to meet redemption obligations and other liabilities. As such, suspension of redemptions should not be a solution to poor liquidity management within a fund...

Suspension of redemptions is normally at the discretion of the fund manager. In some instances, suspension of redemptions can be invoked when the daily redemption requests of a fund exceed a predefined threshold as a percentage of assets under management...

Redemption Gates are an accepted common market practice in some jurisdictions and can be used in normal market conditions and should not automatically be considered as a crisis-type policy option...

Redemption gates are defined in the fund prospectus...

The calibration is crucial in order to avoid any first-mover advantage which might lead to runs by investors and reinforce the crisis instead of smoothing the fund's asset sale...

Redemptions In-kind are not suitable for every investor category. Specifically, it is more appropriate for an institutional investor rather than retail investors...

It is not a tool that lends itself to fund strategies that trade in less fungible securities...

The practice can, in some circumstances, be considered discriminatory where thresholds are involved that trigger automatic in-kind redemptions...

A transfer of securities to an investor who will sell them on the market anyway may adversely impact the value for the remaining investors if such a sale had significant market impacts consequences...

Side pockets are often used to hold illiquid securities and are used in times of uncertainty where fair valuation of an asset is temporarily very difficult or impossible. They are most often used in funds investing in less liquid assets, such as private equity, venture capital or hedge funds...

It is essential that a robust framework for how and when side pockets can be used is disclosed to investors (e.g. via the prospectus and additional disclosure). Fund documents may specifically permit the use of side pockets and the scenarios under which they can be enacted.

Notice periods are often used in conjunction with redemption periods and lock-ups to manage liquidity needs in the hedge funds industry, but there are also some examples of this mechanism being used with open-ended mutual funds.

Survey Questions

16.1 Please briefly describe the responsible entity's contingency plans for the CIS's use of available liquidity management tools in stressed market conditions and any operational testing of these processes. For example, do the plans address the issues identified in (a) through (g) of the Means of Implementation?

One member explains to us having developed a matrix so that the triggering of a gate can be performed if necessary as soon as possible and efficiently (the suspension of NAV is not the subject of such a matrix)

Recommendation 17: *The responsible entity should consider the implementation of additional liquidity management tools to the extent allowed by local law and regulation, in order to protect investors from unfair treatment, amongst other things, or prevent the CIS from diverging significantly from its investment strategy.*

Means of Implementation

Additional liquidity risk management tools, provided that such tools are permitted in the relevant jurisdiction and contained within the CIS constitutional document, can provide valuable assistance in the management of stressed market conditions. There are a number of considerations, related to the specific market conditions and the characteristics of the fund and its investors, to be taken into account when assessing whether to use these tools.

In-kind redemptions and in-specie redemptions facilitate the exit of investors from the CIS without the responsible entity having to liquidate the assets or to deplete cash held by the CIS in order to fulfil their redemptions. A key issue when assessing the use of these tools is the nature of the investors in the CIS, e.g., whether the investors are retail or institutional. The use of in-kind redemptions and in-specie redemptions may not be practical or appropriate for retail investors, especially if the assets are considered relatively illiquid (e.g. real estate, infrastructure).

Anti-dilution levies and swing pricing, where they are available under local law also aim to ensure that investors remaining in the CIS do not incur the costs of redeeming investors. These tools may be considered particularly appropriate where the fund invests in assets where investors may perceive an advantage in redeeming first. By ensuring that costs of transactions required to meet redemption requests are borne by the redeeming investors, these tools provide assurance to remaining investors and remove a potential incentive for investors to redeem. There are a number of factors which the responsible entity should be mindful of in relation to these tools: what the disclosure should be to investors of the conditions which would trigger the use of such tools; the complexities in producing a calculation mechanism; the difficulties in accurately providing for anti-dilution levies to reflect the market impact of the redemption in the redemption price.

Several additional liquidity management tools have the effect of slowing down the rate at which requests for redemption are paid and providing flexibility for responsible entities to complete portfolio sales required to meet these requests. Assessment of which additional tools are suitable and effective entails consideration of the specific scenario that has led to stressed market conditions, the degree of visibility the responsible entity has on the time required to liquidate assets and whether use of the tool is permitted by local law and regulation. Where the responsible entity

is confident that required asset sales can be completed within a set timeframe, the implementation of extended notice/settlement periods and variable notice periods could be considered. Redemption gates and limits on withdrawals have a similar effect of slowing down the rate of redemptions, while retaining a commitment to meet redemption requests within a certain timeframe. In cases where stressed markets have resulted in illiquidity and valuation concerns in specific portfolio assets (e.g. a specific asset class), side-pockets could be implemented to transfer those assets from the CIS portfolio, although they may not always be suitable for use in CIS targeting retail investors. Suspension of redemptions is a tool that provides for a delay in paying out redemptions and limits a run on the CIS. Suspension can be particularly useful in cases where the responsible entity requires an extended period to liquidate assets or has limited visibility on the timing of asset sales or is reluctant to accept a significant discount to normal market prices. Redemption gates and limits on withdrawals can also be considered for use in these cases.

Related Good Practices

The use of such extraordinary tools must be in the best interest of the fund investors collectively. The fund should only use such tools when it is in the interest of investors and when the fair and equal treatment of incoming, ongoing and outgoing investors is maintained. Firms should always consider what is best for investors (new and old) when making the decision to implement such tools and not for the asset management firm's personal franchise reputation.

Swing Pricing is appropriate where there is a material cost for accessing liquidity...

Beyond the fund prospectus, it is advisable that an asset manager has in place further swing pricing policy documents to highlight a number of other characteristics and parameters of the swing pricing mechanism...

The swing pricing policy defining parameters (swing factor, swing threshold) and the scope of funds it will be applied to should be clearly defined ex ante and communicated to those administering the swing price policy...

The swing pricing policy should be applied consistently and systematically.

Anti-Dilution Levies are solely applied to protect the value interest of remaining fund investors from any dilution through large transactions...

It is more flexible than swing pricing and can be adapted to the specific stressed situation.

Valuation according to bid or ask prices...

In a situation with neutral investor activity in fixed income markets, i.e. without significant net inflows or outflows, funds usually value their assets using market mid-prices. Switching valuation to ask (if net inflows) or to bid (if net outflows) prices allows a an adjustment in NAV calculation

Survey Questions

17.1 Please describe tools (e.g., swing pricing, anti-dilution levies, redemption fees, notice periods) aimed at treating redeeming and remaining investors fairly that are available in your jurisdiction, whether you have implemented any of the tools, and what factors you consider in implementing the tools, including any market impact/financial stability considerations.

For instance, for the principles of swing pricing and gates :

The swing pricing parameters are directly linked to the liquidity conditions of the underlying assets measured by the bid / ask ranges

Gates are used when the underlying asset class of the strategy in question is deemed structurally less liquid (credit, high yield, small cap and convertibles)

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III. Joint IOSCO-FSB Analysis of OEF Liquidity during the Market Stresses of 2020

As previously discussed, these questions are designed to elicit targeted responses from Responsible Entities—on a voluntary basis—with respect to liquidity risk management practices and experiences during the 2020 market turmoil related to COVID-19 (March and April). Note that each question includes a parenthetical reference to a related Assessed Recommendation. For the purposes of this section of the questionnaire, please exclude MMFs and ETFs from your responses.

Survey Questions

1. (Recommendation 1) Have you updated (or are you planning to update) your liquidity risk management processes (e.g., applicable liquid and illiquid instrument thresholds, portfolio analysis, monitoring) since the onset of the COVID-19 crisis? If yes, which areas of your liquidity risk management processes were updated, and were the changes due to your experiences in March and April?

AFG believes that recent compliance with ESMA liquidity stress tests guidelines provides a satisfactory level of control.

2. (Recommendation 3) For each of the primary investment strategies or asset classes of the funds you manage (e.g. large/small cap equity, investment grade/high yield corporate/emerging market/municipal/government bonds, absolute return), what is the dealing frequency of those funds?

Usually, per se the type of assets leads to different dealing frequencies: for listed assets, the usual dealing frequency is daily; for funds investing in loans or real assets, the usual dealing frequency is lower.

However, it is difficult to give a systematic dealing frequency by type of investment strategy or type of asset class, as we said above: dealing frequency has to be combined with all the other criteria of a given fund (e.g. asset profile; investor profile; risk profile; etc.). The full meaningfulness of the dealing frequency of a given fund has therefore to take into account the whole combination of those multiple criteria.

3. (Recommendation 3) Did you change or are you currently planning to change the dealing frequency of certain funds (e.g., certain investment strategies or asset classes) due to the market events in March and April (or thereafter)? If yes, can you please provide more detail on why, including the newly implemented approaches?

No, our members did/do not. There is no issue with dealing frequencies, they are thoroughly calibrated by the fund manager.

4. (Recommendation 12) Please describe the process by which you estimate future redemption demand and use these estimates to adjust a fund's level of cash and cash-equivalent holdings.

Generally, the more cash funds keep, the less they are able to respect the fund investment strategy (as usually a fund is not dedicated to be invested in cash).

Regarding future redemptions, the actual risk is to anticipate the investors' behaviour, in particular to anticipate the potentiality of large redemptions. To tackle this, you have to look at the composition of the investor basis.

We understand that for some members Twoinputs are mainly used: on the one hand, a qualitative input from the sales teams who try to best anticipate the outputs of the main investors. On the other hand, risk managers may calculate a VaR and a CVaR on the investors' side.

Some other members explained using a multicriteria scoring of investors depending on their sector of activity as well as the concentration score of the the largest investors.

Our memebtrs would like to recall that the industry urges regulators to oblige fund distributors and intermediaries to provide them with the most granular and updated profile of investors' typologies for each fund, that they have but do not provide. This typology should be provided on a free-charge basis to fund managers. This more granular typology of fund end-investors would strongly facilitate their fine-tuned anticipation of redemptions in case of market stresses.

5. (Recommendation 12) During the market events in March and April, please describe whether funds experienced large redemptions or net cashflow pressures and if so, what types of funds (e.g., certain investment strategies or asset classes) experienced the greatest pressures.
 - a) What were the main drivers of those pressures?
 - b) Did redemption pressures differ between funds that are open only to (i) institutional or (ii) retail investors?

Very often, funds are mixed by investor types in France.

- c) For funds that are open to both groups of investors:
 - Which group redeemed more shares as a proportion of shares outstanding?

Even within one type of investors, e.g. Institutional investors, you have very diverse sub-groups with different perspectives and motivations: some of them are usually long-term investors by nature (e.g. Insurers and pension funds) while others may be shorter-term minded (e.g. Corporates, funds of funds).

- Which group redeemed more shares as a proportion of shares owned by the group?
6. (Recommendation 12) What liquidation approach(es) did you apply to honour larger redemptions (pro-rata allocation, liquidation waterfalls, using cash buffers, combination of approaches (and which, if so))? In what ways, if any, did market conditions (including the actions of other fund managers) change your approach to liquidating assets or alter your planned liquidity waterfall?

It depends on the manager and on the fund's situation. The principle is to use the most appropriate method in the best interest of investors.

7. (Recommendation 12) What steps did you take, if any, to alter fund allocations to cash with a view to meeting future cash flow needs?

It should be recalled that cash is not a goal as such, except for margining, monitored on an ongoing basis. Sterilizing investment portfolios with cash buffers is not desirable. In case of anticipated redemptions, the cash buffer might increase, but AFG members aim to avoiding unnecessary distorting of the fund profile.

8. (Recommendation 12) Do the funds you manage take positions in derivatives? If so:
- How do you estimate the size of potential margin calls during stressed market conditions? What information do you use to do this?

Yes, French managers make use of derivatives in their strategies. We understand that our members anticipate and estimate the size of potential margin calls by anticipation through the use of information from collateral margining on OTC side and listed derivatives. They also use actual cashflows to monitor funds.

Specific stress test scenarios combining market and liquidity stress are applied to those types of funds to ensure that they have sufficient cash or liquid assets to assume margin calls generated by those market stress.

- What liquid assets do you use to meet potential margin calls? What liquidation waterfall do you use to meet margin calls if liquid assets are insufficient?

Generally, AFG members don't use high leverage. The liquidity risk linked to margin calls is in these cases very low (even in stressed conditions).

For liquid assets we consider : cash, money market funds (MMFs) and govies (or assimilated bonds)

9. (Recommendation 16) Did you apply contingency plans due to the market events in March and April? Do you have a structure/ set a sequence for the implementation of liquidity risk management tools, or do you analyse the appropriateness of tools case-by-case depending on the specific circumstances?

Depending on our members and their specific situation, either continuation of the global monitoring or enhanced monitoring, or crisis committees, etc

10. (Recommendation 17) Please describe the liquidity management tools¹³ (i) that were available to your funds during March and April (or thereafter) and (ii) (a) that were activated during the market events in March and April and (b) the length of time during which they applied. Please specify in your response which tools were available and activated by fund type and asset class, if applicable. Also, briefly describe what motivated your decision to act and what factors influenced your choice of which tool(s) to activate. If

¹³ Liquidity management tools could include, for example, suspensions of redemptions, swing pricing, lines of credit, inter-fund lending arrangements, anti-dilution levies, side pockets, redemption fees, redemption gates, and redemptions in-kind, among others. For further examples, see the Good Practices, available at <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD591.pdf>.

you did not activate a liquidity management tool, can you briefly describe why not (e.g., ordinary fund liquidity management practices were sufficient, competitive pressures discouraged activation, operational challenges made activation difficult).

We understand that the swing pricing mechanism was the most used among our members and was triggered when substantial redemptions occurred. In general, the crisis did not last until to generate additional liquidity difficulties and portfolios remained sufficiently liquid during the crisis and needed no additional arrangements.

Were any liquidity management tools used during the ordinary course of business as opposed to solely during stressed market conditions? If so, please specify the liquidity management tool, explain the reasons why, and identify any operational challenges you may have encountered.

Normally, swing pricing is implemented on asset classes deemed a priori less liquid (credit, HY, small cap, convertibles)
They are activated when redemptions are above the set thresholds.

11. (Recommendation 17) Based on your experience in March and April, to what extent did the application of liquidity risk management tools have a deterring effect, if any, on the investors' intention to redeem?

In particular:

- a) Was there a reduction in redemption requests as a result of utilising a liquidity management tool (i.e., was a tool useful in discouraging an increase in investor redemptions)? Please be as specific as possible in terms of the impact of the individual tools (e.g., implementing swing pricing reduced redemption requests) and why you believe it may have been effective;

The swing pricing had a spreading effect of redemptions allowing better management of liquidity

b) Were investors notified of a liquidity risk management tool being activated (and if so, in what way);

c) Did the use of liquidity management tools such as swing pricing or anti-dilution levies prevent the use of more prescriptive tools such as gating or suspensions;

No

d) Specifically, if you implemented swing pricing during the market events in March and April, did you encounter any operational challenges when activating this tool? If yes, what were these challenges and how did you overcome them? and

Very often, swing pricing was already implemented

e) Did you observe any unanticipated effects of applying a particular tool (either positive (e.g., mitigating liquidity demands at affiliated funds) or negative (e.g., exacerbating liquidity demands or otherwise causing the fund to incur costs))?

12. (Recommendation 17) During the market events in March and April, did you encounter any difficulties regarding valuation of the underlying assets of your funds related to your

liquidity risk management processes to help ensure that investors redeem at a price that does not harm remaining investors?

No

Did you amend any applicable valuation methods (e.g., from mark-to-market to fair valuation or from mid-market to bid-market pricing)? Please briefly describe any difficulties and amendments, including whether such items were more applicable to any specific asset class. Do the same valuation policies/methodology apply among funds managed by your firm and that invest in similar asset classes?

No

13. (Recommendation 17) Did stressed market conditions in March and April give reason to change policies regarding liquidity risk management tools (e.g., swing pricing, anti-dilution levies, redemption fees, notice periods) aimed at treating redeeming and remaining investors fairly?

No. However, some members say this helped with the awareness on the usefulness of gates.

If yes, please briefly describe what policies and/or tools were adjusted and what the adjustment was.

14. (Recommendation 17) Would you consider, based on your experience from the COVID-crisis, the necessity for further guidance from authorities on liquidity management tools and their usage? If yes, on what specific aspects would you like to have further guidance?

No, the current regulations in Europe already provide a very robust framework for controlling liquidity risk. ESMA's liquidity stress tests guidance is recent.

15. (Recommendation 17) In what ways, if any, did the events and policy responses in March and April 2020 change your assumptions about the likelihood of central bank support in future periods of stress?

No, the events did not change our assumptions and it does not create any moral hazard. The markets general assumption is that in case of high risk of financial stability in the markets, where the orderly functioning of markets is threatened, central banks are the stability guarantor (as this role is part of their public mission).

It was indeed the case in March and April 2020, when central banks intervened on the financial markets to keep general opinion's confidence in the financial markets, financial sector and the economy more widely. Why would the market change that assumption? The credibility of the central bank restoring confidence in markets was preserved.