



01 April 2019

European Securities and Markets Authority
103 Rue de Grenelle
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France

Via online submission: www.esma.europa.eu

Re: ESMA consultation paper on guidelines on liquidity stress testing in UCITS and AIFs

State Street Corporation ('State Street') welcomes the opportunity to provide comments on the European Securities and Markets Authority (ESMA) consultation paper on the proposed guidelines on liquidity stress testing (LST) in Undertakings for Collective Investments in Transferable Securities (UCITS) and Alternative Investment Funds (AIFs). State Street is one of the world's leading providers of financial services to institutional investors, including investment servicing, investment management and investment research and trading. With \$31.62 trillion in assets under custody and administration and \$2.51 trillion¹ in assets under management as of December 31, 2018, State Street operates in more than 100 geographic markets worldwide, including the US, Canada, Europe, the Middle East and Asia.

State Street recognizes the benefits of LST, which can be an important element of an effective liquidity risk management framework. The aim of stress testing is to improve risk analysis and to highlight any potential limitations, or 'blind spots', of risk measurement and the related management strategies. It is therefore most effective when used in combination with liquidity management tools and broader contingency planning, and also when applied to both asset and funding liquidity risk. When used in this way, LST can help to identify potential liquidity issues or shortfalls, enabling fund managers to choose the best course of action during market liquidity stress events.

We first make a number of general remarks and provide more detailed comments on the specific questions further below.

¹ This figure is presented as of December 31, 2018 and includes approximately \$32.44 billion of assets with respect to SPDR products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Global Advisors are affiliated.

We believe that ESMA's guidelines should be principles-based and be applied at the individual fund level. This would permit managers the necessary flexibility to apply LST in the most relevant manner, taking into account the specific characteristics (e.g. assets, client profile) of the fund. Adopting an approach that is either overly-prescriptive or designed as 'one-size-fits-all' could diminish the value of LST to fund managers, as such an approach could inhibit their ability to respond to often rapidly changing market developments. We welcome ESMA's intention to keep the guidelines high-level and principles based, and hope this is reflected in all elements of the final guidelines, including any explanatory notes and any reporting obligations.

We appreciate that ESMA, in developing the guidelines, will be faced with the trade-off between simplicity (i.e. having the rules apply to all funds) and targeting those that genuinely present a risk. One option that ESMA may want to consider is to differentiate the frequency with which stress tests would need to be performed. For example, blue-chip equity funds are at much smaller risk of encountering liquidity issues in stressed market conditions compared to, for example, certain credit funds. This would also enable managers to focus more time and effort on those funds that are most at risk.

Furthermore, we would discourage the adoption of bank-like stress testing for investment funds. Unlike a bank, which conducts financial activity on its balance sheet, asset managers act on behalf of clients in a fiduciary capacity. Similarly, the risks associated with liquidity differ between investment funds and banks. For example, run risk in a bank is not the same as run (redemption) risk in a fund. Investment funds will have extensive liquidity management procedures to ensure they are able to cover expected redemptions, including in extreme market conditions. Given their inherently different characteristics, imposing bank-like stress-testing on investment funds would be operationally extremely burdensome, while offering little benefit to investors and fund managers, or any additional insight to regulators.

With regards to scope, we broadly support the approach proposed by ESMA and believe it is appropriate to extend the guidelines to exchange-traded funds (ETFs), given they are generally structured as UCITS and are regulated in the EU under the UCITS framework. Notwithstanding this view, we believe that ESMA should highlight and recognize the different liquidity characteristics of ETFs relative to other types of mutual funds.

Comments on Specific Questions in the Consultation Paper

Q1. What additional costs and benefits would compliance with the proposed Guidelines bring to the stakeholder(s) you represent? Please provide quantitative figures, where available.

No comment.

Q2. Do you agree with the scope of these Guidelines? Should certain types of funds be explicitly excluded from these Guidelines? Should MMFs remain in-scope of these Guidelines?

We are generally supportive of the approach taken by ESMA on the scope of the Guidelines. However, we would add two important caveats.

With regards to money market funds (MMFs), we are of the view that they should be out of scope of these Guidelines. While MMFs may be structured as UCITS or AIFs, in the EU, they operate under a separate legislative framework, which takes into account their specific characteristics. As part of this, ESMA has published prescriptive and highly detailed guidelines in relation to the stress-testing of MMFs. We see little rationale or value in supplementing these detailed rules with additional guidelines. In addition, we note that MMFs were excluded from policy recommendations of the Financial Stability Board (FSB) on structural vulnerabilities from asset management activities².

Separately, we would emphasise the need to take into account the specific characteristics of ETFs, which differ significantly relative to other open-ended mutual funds. As such, not all of the Guidelines may be explicitly relevant for ETFs and, as a result, we believe they may warrant a proportionate approach.

Q3. Is additional clarity required regarding the scope of these Guidelines? Is additional clarity required regarding the meaning of ‘nature, scale and complexity’ of a fund? Are there circumstances in which it would, in your view, be inappropriate for a UCITS to undertake LST?

Regarding scope, please refer to our comments to Question 2. We do not see a need for ESMA to further clarify ‘nature, scale and complexity’.

Q4. What are your views on when the Guidelines should become applicable? How much time would managers require to operationalise the requirements of these Guidelines?

While LST is widely-used in the industry, making substantive changes to current operational practices can be complex and resource intensive. Therefore, we believe an 18 to 24 months implementation period would be appropriate. For clarity and ease of understanding, ESMA may want to consider an application date of 1 January 2021. This should provide sufficient time for industry as a whole and not prejudice large or small managers unnecessarily.

Q5. Do you agree with the proposed approach of setting out a list of Guidelines all funds should follow, and the provision of explanatory considerations to help managers comply with those overarching Guidelines? Do you see merit in including some of the explanatory considerations in the final Guidelines?

² <http://www.fsb.org/wp-content/uploads/FSB-Policy-Recommendations-on-Asset-Management-Structural-Vulnerabilities.pdf>

We are generally supportive of ESMA's approach of setting out a list of Guidelines that all funds should follow. As noted previously, we are of the view that the Guidelines should be principles-based and avoid being overly-prescriptive.

We would welcome more clarity from ESMA on which explanatory considerations could be included, as the use of the word "some" in the question implies not all will be included. While including the explanatory considerations could be helpful, we recommend that they themselves are not considered to constitute the final Guidelines.

Q6. Do you agree with the proposed Guidelines? What amendments, if any, should ESMA make to its proposed Guidelines?

We are generally supportive of the proposed Guidelines and the approach taken by ESMA. Nevertheless, we do believe that ESMA should consider a number of amendments, which will help to provide more clarity and ensure there is proportionality.

With regards to the specific Guidelines:

- **Guideline 2:** We see little value in the need to document the LST process multiple times. For asset managers that operate in multiple jurisdictions, the LST policy is likely to be developed on a global basis and applicable to all open-ended funds (whether UCITS or AIFs). We believe that a more proportionate approach will be to document a single LST policy and then cross-reference this in any other documents describing risk-management process, e.g. UCITS and the AIFM RMP. In cases where the LST is required to be submitted for review by a national competent authority (NCA), as part of the approval of a new fund, we believe that such review should be limited to the applicability of the new fund and not a re-review of previously agreed content. This is because self-managed investment funds and/or management companies would prefer to maintain either a general Liquidity Stress Testing document covering all of their funds (or at least at the umbrella level).
- **Guideline 3:** While we understand the rationale behind this, we believe the guideline as currently draft is subjective and could be open to different interpretations. In order to ensure clarity, we would like to propose alternative wording, to the effect of:

"LST should demonstrate a manager has a strong risk management process, enabling effective oversight of the liquidity risks arising from the assets and liabilities on the fund's balance sheet, and its overall liquidity profile."
- **Guideline 5:** The current drafting of point (c) could imply that LST should be a necessary consideration in the investment decision-making process. We do not believe this is the intention of

ESMA and would welcome clarification. Separately, we believe that point (b) should be expanded so that it also addresses strengthening the ability of managers to meet redemptions in an orderly manner with minimal dilution of remaining shareholders, while maintaining the fund's liquidity and investment profile.

- Guideline 7: While we appreciate the flexibility inherent in this particular Guideline, we do have concerns on point (b), in relation to “investor behaviour”, which is subject to data limitations and is also difficult to model. To ensure that the assumptions are reasonably informed and not arbitrary, we believe the current drafting should be amended to provide further direction on how to incorporate assumptions relating to investor behavior, possibly through reference to expected redemptions based on historical patterns or investor concentration – for example:

b. Assumptions regarding investor behaviour (based on, for example, estimated redemptions based on historical patterns or investor concentration, where available) the method of redemption used by the fund and asset liquidation.

We believe there should also be reference in Guideline 7 to the method of redemption used by the fund. This is to acknowledge that funds, including ETFs, can offer in-kind redemptions, which may help to alleviate liquidity pressures on fund managers in stressed conditions, as it reduces the need to sell assets at ‘fire-sale’ prices in order to meet cash redemptions. We expand on this further in our response to Q13.

- Guideline 8: We are of the view that reverse stress testing should not apply on a mandatory basis and should rather be an optional tool, and would suggest the current drafting is amended to reflect this. We expand further on this point in our response to Question 8.
- Guideline 9: We welcome ESMA's recognition of the problem of availability of data, which we believe will present a significant obstacle. However, we question whether there is a direct link between the availability of data and point (a), which relates to “unjustifiably optimistic assumptions”. We believe that a possible solution would be incorporate point (a) into point (a) of Guideline 7.
- Guideline 10 and 12: In relation to these two Guidelines, we appreciate the need for LST to provide as comprehensive a picture as possible. However, we have strong reservations over whether the considerations set out by ESMA could be effectively modeled. In addition, these elements may be subject to the data limitations, as flagged previously.

Q7. Do you agree with the proposed explanatory considerations regarding LST of fund assets?

We broadly agree with the explanatory considerations in relation to LST of fund assets. We have one suggestion regarding “hypothetical scenarios”. While we appreciate that the examples given do not

constitute an exhaustive list, we believe it may be helpful to include additional reference to other elements in the context of hypothetical scenarios, such as stressing bid-ask spreads, or similar liquidity costs, and trading volumes.

Q8. What are your views on the requirement to undertake reverse stress testing, and the use of this tool?

As flagged previously, we believe that reverse stress testing should not be made a mandatory requirement and should rather be an optional tool used at the discretion and judgment of fund managers. In our view, reverse stress testing may not be appropriate for all funds.

We also have operational concerns over potential mandatory reverse stress testing. While fund managers exercise due consideration over maintaining sufficient liquidity, it is not always easy to *ex-ante* define and model the precise point at which redemption requests could no longer be honored. In addition, given reverse stress testing involves specifying a pre-determined outcome and then essentially ‘working backwards’ to determine what could have caused such an outcome, including the market scenario, and effectively specify a market impact limit from that event. As such, funds may get implausible results that either over- or under-estimate what will happen in reality. Furthermore, due consideration should be afforded to the operational burden that would be involved with mandatory reverse stress testing, particularly if applied to all funds.

Q9. Do you see merit in providing further considerations for managers on the use of data relevant to asset liquidity, particularly in circumstances when data is scarce?

No comment.

Q10. Do you agree with ESMA’s wording regarding the asset liquidation method used in the LST model? How would you describe the asset liquidation method used by you or the managers you represent?

We strongly disagree with the current wording relating to the asset liquidation method. It is not always possible to predict, or model analytically with a sufficient degree of accuracy, how a manager would liquidate the fund in stressed conditions and under various stressed market scenarios. As such, we would suggest that the “always accurately” language in paragraph 32 should be deleted. We would also like to flag the difficulty in accurately and reliably measuring compliance with the obligation to maintain the risk profile, in conjunction with carrying out stress tests.

We believe it may be useful to consider the approach taken by the US Securities and Exchange Commission (SEC). While the SEC’s original rule required funds to attempt to identify the portion of assets they reasonably expected to trade in order to meet redemptions, industry feedback indicated that

in practical terms, it is very difficult to implement in systematic scalable manner. This was taken into account and addressed in the subsequent SEC FAQ on liquidity risk management programs³.

In terms of specific wording, we understand the use of “pro-rata” and “waterfall approach” were introduced in response to practical considerations. Consequently, we believe reference to these in the guidelines would be appropriate.

Q11. Do you agree with ESMA’s wording regarding ‘second round effects’? What is your current practice regarding modelling ‘second round effects’?

In our view, the modelling of “second round effects” as part of LST is extremely difficult, if not practically impossible, from the perspective of a single asset manager. This is due to the difficulty for one fund to predict the possible behavior of other market participants which could give rise to downward price spirals or other similar second round effects.

We believe the wording used by ESMA in paragraph 37 should be softened to take into account these practical difficulties.

Q12. What are your views on the considerations on difficult to model parameters, such as price uncertainty? What is your current practice concerning this issue?

No comment.

Q13. Do you agree with ESMA’s considerations on LST in funds investing in less liquid assets? What amendments should be made to the proposed wording? Do you think that ESMA should outline additional and/or specific Guidelines to be made in any other fund or asset types, such as ETFs?

As flagged previously, ESMA should recognize the different liquidity characteristics of ETFs. For example, in relation to an ETF which redeems units in-kind for authorized participants (APs), the concerns related to on-demand liquidity, first-mover advantage, and imposition of transaction costs on non-redeeming shareholders are less prominent, relative to other types of open-ended funds.

Expanding on this further, under an in-kind redemption mechanism, investors would receive a representative basket of the securities held by the fund. This can reduce any potential need to liquidate securities at prices that differ from the official closing prices reflected in the fund’s net-asset-value (NAV). As a result, there would be no need to impose variable fees, such as an anti-dilution levy, to protect remaining investors from potential dilution.

³ <https://www.sec.gov/investment/investment-company-liquidity-risk-management-programs-faq>

As such, the proposed Guidelines should be amended to take into account a number of elements when designing LST to apply to ETFs, including:

- recognition that redemption risk for ETFs can be lower compared to other types of investment funds;
- ETFs issue and redeem their shares only in transactions with APs through primary market activity / dealing and the majority of ETFs offer in-kind redemption, which doesn't require liquidation of underlying securities by the ETF sponsor; and
- The presence of a secondary market could satisfy investors' liquidity needs, further decreasing pressure on primary market redemptions and market liquidity.

It should be noted that, in exceptional circumstances, secondary market investors may be able to apply directly to the ETF provider to be registered as the owner of the ETF shares purchased on the secondary market, and thereby access the primary market redemption facility. This is in line with previously issued guidelines from ESMA. However, to date, State Street has not received such requests from secondary market investors.

We also believe the above elements of ETFs, which enhance their resilience to liquidity risks, should be reflected in the explanatory considerations. A possible suggestion would be in Section 6, which relates to LST on the asset side of the balance sheet. The current drafting of these explanatory considerations appears to be focused on the sale of assets in adverse market conditions. However, as noted above, this is not particularly relevant for an ETF which can effect in-kind distribution. We would suggest including language that encourages managers to adapt their LST modelling to take into account such significant differences. For example, at the end of paragraph 22 in Section 6 of the explanatory considerations, ESMA could include the following:

".... Additionally, the modeling of LST should take into account alternatives to asset sales, such as in-kind redemptions."

Separately, the explanatory considerations have specific text relating to fund of funds (FoF), in light of their specific structure. The current drafting appears to imply the requirement for "look-through" provisions. However, this may not be important for all types of investments.

Q14. Do you agree with the considerations regarding LST on items on the liabilities side of a fund's balance sheet?

We broadly agree with the considerations regarding LST on liabilities.

Q15. Do you agree with the considerations specifying the LST of redemptions and other types of liabilities may need to be considered distinctly, given a fund could potentially limit redemptions but not other sources of liquidity drain?

State Street agrees, in principle, with the distinction between LST on redemptions and other types of liabilities, where they are relevant from a liquidity perspective. However, we would again highlight the data related challenges and limitations, which could be significant when trying to incorporate other types of liabilities into LST based on historical and hypothetical scenarios.

Q16. Do you agree with the requirement to reverse stress test items on the liabilities side of the fund balance sheet?

Please refer to our previous response on reverse stress testing.

Q17. Do you agree with the requirement to incorporate investor behavior considerations into the LST model ‘where appropriate’? Are there cases which you believe it would not be appropriate, and should these be detailed in these Guidelines?

State Street recognises that incorporating investor behaviour considerations as part of LST would be a desirable objective. However, we believe it will be very challenging to obtain the necessary data and it would also be practically difficult to model in a LST program. Without sufficient data, considerations regarding investor behaviour may prove to be of little value, as they would be entirely hypothetical and based on the assumptions of individual fund managers.

Q18. What do you think about ESMA’s Guideline stating that managers should combine LST results on both sides of the balance sheet?

State Street agrees with the recommended approach in the explanatory considerations that managers should combine LST results on both sides of the balance sheet. If the ultimate objective of LST is to measure the ability of a fund to meet redemptions, we believe it is appropriate to measure the impact on both assets and liabilities. This is because the impact of liquidity events and risks in the market are rarely confined to one side of the balance sheet only. Indeed, the most significant market event, which would be captured under the definition of an extreme but plausible scenario, will almost certainly have an impact on both the assets and liabilities of the fund.

In terms of the various approaches listed by ESMA to combine LST on both the assets and liabilities sides of the balance sheet, we believe that the redemption coverage ratio (RCR) is a particularly useful tool when estimating whether an open-end fund has adequate sources of liquidity (assets) to cover liquidity needs (liabilities), in normal or stressed market conditions.

Q19. What are your views on ESMA's Guideline that aggregated LST should be undertaken where deemed appropriate by the manager?

Please refer to our comments to Question 20 where we have combined our experience and views on performing aggregated LST.

Q20. What is your experience of performing aggregated LST and how useful are the results?

In our experience, performing liquidity stress testing on more than one fund with similar strategies or exposures can be beneficial, for example in considering second round effects. However, we believe that ESMA should exercise caution, as the results could imply correlation between the behaviour of investors across different funds which does not correspond to the practical realities.

In our view, the performance of aggregated LST should be optional and limited to where funds exhibit similar characteristics, such as investment strategy, domicile, regulatory framework or investor profile. This would mitigate the risks noted above and allow the more precise modelling of investor behaviour and correlation of fund flows.

Q21. What are your views on ESMA's considerations concerning the use of LST during a fund's lifecycle?

No comment.

Q22. What is your experience of the use of LST in determining appropriate investments of a fund?

No comment.

Q23. In your view, has ESMA omitted any key uses of LST?

No comment.

Q24 Do you agree with ESMA's Guideline that LST should be undertaken in all cases annually, but that it is recommended to undertake it at least quarterly, unless a different frequency can be justified? What is the range of frequency of LST applied on funds managed by stakeholder(s) you represent?

We are supportive of the proportionate approach taken by ESMA and the flexibility given to fund managers to determine the most appropriate frequency with which LST should be conducted. Similarly, we welcome the consistency with the UCITS Directive and AIFMD, which both require LST to be performed at least annually.

However, we are concerned with the apparent inconsistency between the language stated in the Guidelines and the language in other parts of the consultation, including the explanatory

considerations. For example, we note that there is a discrepancy with the Guidelines and the language used to frame this particular question. Guideline 4 states that “...flexibility is allowed for on this issue dependent on the nature, scale and complexity of the fund and its liquidity profile.” However, Question 24 implies that LST should be undertaken quarterly “...unless a different frequency can be justified.” The latter implies a much higher burden on the manager. We would encourage ESMA in its final Guidelines to ensure the use of consistent language which reflects the flexibility and proportionality currently provided for in Guideline 4.

Q25. Should ESMA provide more prescriptive Guidelines on the circumstances which can justify a more/less frequent employment of LST?

We do not foresee the need for more prescriptive Guidelines, although additional guidance may be useful. In our view, we believe that it may be helpful to outline example scenarios where e.g. higher frequency of LST may be appropriate. This could include the following instances:

- where the fund has invested in more volatile assets
- where the fund manager employs strategies involving higher investment turn-over
- where the fund holds less liquid assets
- where the fund employs complex derivative strategies
- where the fund makes use of higher leverage
- as a result of unexpected but material market events

Q26. Do you agree that LST should be employed outside its scheduled frequency (ad hoc) where justified by an emerging/imminent risk to fund liquidity?

No comment.

Q27. What are your views on the governance requirements regarding LST?

No comment.

Q28. Should more information be included in the UCITS RMP and AIF RMP?

We do not believe that ESMA should specify further information to be included in the UCITS RMP or the AIF RMP.

Furthermore, we note that the explanatory considerations include reference to back-testing. It is worth noting that the back-testing of liquidity metrics remains an imprecise endeavour. We would therefore encourage ESMA to adopt a more proportionate approach in this regard.

Unlike back-testing in the context of market risk, which is well established, a similar approach does not readily work for measuring liquidity. For example, one of the most important analytics tools for liquidity is estimating market depth i.e. measuring the amount of an asset which can be traded with minimal market impact. It is difficult to back-test for market depth as it is often very difficult to determine whether any perceived lack of liquidity can be ascribed to supply-side issue or a demand-side issue. Similarly, in addition, there are plenty of assets, particularly within the fixed income space, that are traded sporadically but are also very liquid. Back-testing performed for such assets can result in misleading results.

We believe that a more suitable approach for back-testing a liquidity model would be to test its ability to predict relative liquidity of securities within an asset class. For instance, liquidity analytics produced by a liquidity model could be used to stratify securities within an asset class into various liquidity categories (or scores) and these predictions could be back-tested during the upcoming month or week(s) to see if the model was able to segregate the securities into liquidity categories as confirmed by actual trading in the future.

Q29. Do you have any views on how managers which delegate portfolio management can undertake robust LST, independently of the portfolio manager, particularly when the manager does not face the market?

We do not foresee any substantive issues, with regards to LST, arising from a manager which delegates portfolio management. This will of course be contingent on a high-degree of communication between the portfolio managers and the function carrying out the LST. In practice, there should be regular risk review meetings with the portfolio manager where LST assumptions and results are discussed.

The delegation of portfolio management may also present broader benefits. For example, fund managers who delegate the portfolio management activities could benefit from getting independent estimates of liquidity risk on their portfolio using independent sources of market data. This can often be more informative than simply discussing liquidity reports compiled by the portfolio manager. Furthermore, having access to independent information could enable the fund manager to conduct a wider range of plausible market stress.

Q30. Do you agree with the proposed Guideline for depositaries on carrying out their duties regarding LST?

The depositary's duty should be to ensure that the Manager has a LST in place and should be able to rely on confirmation of the same by the Manager.

Q31. In your experience do depositaries review the UCITS RMP and AIF RMP as a matter of course?

Whereas the RMPs are typically requested, they are not always provided to depositaries. The Primary intention of this request is to evidence the existence of the RMP rather than perform a detailed review of its content.

Q32. Do you see merit in ESMA publishing further guidance on the reporting of results of liquidity stress tests? If so, in your view how should ESMA require that results be reported?

State Street does not see merit in ESMA attempting to further prescribe the format that LST results should be reported. We believe this is consistent with ESMA's stated intention to have the Guidelines as high-level and principles-based and believe that specifying the reporting format could lead to a departure from this.

We draw on recent experience in the context of stress-testing guidelines under the EU MMF Regulation, which were overly-prescriptive. While this may ultimately be manageable in the context of MMFs, which represent a small sub-set of the EU funds landscape, we do not believe it would be appropriate to apply a similar approach to UCITS and AIFs more broadly. An overly-prescriptive approach may reduce the value of LST, as it will inhibit the flexibility to adopt the approach that is most suitable based on the specificities of the fund. Similarly, rather than being used as a tool to meaningfully monitor and manage liquidity risks, it could result in the adoption of various approaches to simply satisfy reporting obligations.

We welcome ESMA's continued engagement on this important topic. Please feel free to contact Sven Kasper or Greg Hartch should you wish to discuss State Street's submission in further detail.

Yours sincerely,



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