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November 8, 2017

VIA ELECTRONIC SUBMISSION

rule-comments@sec.gov
Brent J. Fields, Secretary
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, DC 2549-1090

Re: File No. S7-16-15
Supplemental Comments on Investment Company Liquidity Risk Management Programs
Request for Delay

Dear Mr. Fields:

Invesco Advisers, Inc. ("Invesco") is providing additional commentary in support of the Investment Company Institute's ("ICI") letter to the Securities and Exchange Commission ("Commission") dated November 3, 2017 requesting a delay in the compliance date of the liquidity risk management rule (the "Rule"). Invesco, together with its affiliates, is a leading independent global investment manager with approximately \$917.5 billion in assets under management ("AUM") as of September 30, 2017.

Invesco echoes the ICI's request to delay the compliance date of the Rule and its asset classification and related requirements in particular. Our letter focuses primarily on the interdependence of vendors and investment managers that makes it challenging to meaningfully comply with the Rule by December 1, 2018. Invesco has reviewed the capabilities of several vendors that intend to provide solutions for the Rule's asset classification requirements, by far the most complex aspects of the Rule. These vendors are referred to herein collectively as "Vendor" for confidentiality purposes. The examples provided below are based on Invesco's actual experiences and observations with several Vendors. Invesco's primary concerns begin with Vendor readiness and the sequence of events that follow selection of a Vendor(s). We have set out a timeline of these events below, including an estimate of the time required for each step in the process.

- 1. Vendor readiness.** Invesco has several concerns regarding Vendor readiness. The liquidity risk management program ("LRMP") established for each fund entails, among other things, measuring the time to liquidate each position considering a number of complex factors such as the resulting impact on the market value of the investment and reasonably anticipated trading sizes for a particular fund. These factors need to be applied for each position in every portfolio and therefore suitable liquidity coverage needs to be available for each asset class. For example, while the Vendor is currently able to cover exchange traded equities and fixed income

instruments, there are still significant gaps in its coverage of OTC derivatives that are not expected to be filled until Q1-Q2 2018. The Vendor has recently added revised models for certain asset classes; while these models will ultimately provide richer market data, they require further enhancements by the Vendor and testing and validation by Invesco. Regarding each position's reasonably anticipated trading size, this factor will need to be analyzed on a fund-by-fund and position-by-position level; while this analysis can be supported currently by the Vendor, the actual operational implementation of this analysis is not streamlined nor integrated into Invesco's systems. In addition, when assessing the impact on an investment's market value, the Vendor needs to enhance the transparency related to transaction costs, providing the ability to measure the impact related to individual transactions. These examples are a sampling of the complex issues related to the liquidity factors that must be integrated into the Vendors' products.

- 2. Validation.** Once the Vendors have demonstrated the readiness of their platforms to accommodate the applicable requirements of the LRMP (and the asset classification requirements in particular), the product(s) will require extensive validation and testing by Invesco as an end user. To comply with the Rule, Invesco will need to be in a position to process approximately 100,000 positions on a daily basis for asset classification. The overall liquidity profile for a fund as well as the specific position-level classifications will need to be validated by internal subject matter experts. We expect that the validation process will require several iterations with the Vendor, as Invesco tests pilot funds and gradually expands the scope of testing. Assessing the diverse liquidity profiles in both normal and reasonably stressed conditions for each fund in scope makes this particularly challenging for large fund complexes such as Invesco, who serves as investment adviser for open-end funds, ETFs and UITs. Assuming Vendor readiness in Q2 2018 as described above, Invesco will have only one to three months to conduct the in-depth analysis and validation process that we believe is required. Ideally, we would seek six to twelve months to conduct a validation process for a volume of data this large.
- 3. Post-processing.** Following the initial validation process, the asset classification processes referenced above will have to be supported by an extensive post-processing infrastructure in order to appropriately cope with exceptions, overrides, errors and other aspects of data management. Work on establishing these post-processing capabilities can start in parallel with the validation exercise referred to above but it alone is a substantial endeavor and it is estimated to take four to five months to complete.
- 4. Liquidity risk limits monitoring.** The ongoing collection of the liquidity data for each fund, including tracking of the asset classifications and related factors, will need to be monitored by various key stakeholders within Invesco (Compliance, Investments, Trading, Risk, etc.). A technology framework must be established to ensure the complex array of data is translated and presented in a format that is comprehensible and suitable for the needs of the stakeholders. The work on building this framework can only start after the post-processing infrastructure has been established and will require an effort of several months. In addition to the pure technical and operational aspects of building these business processes, policies and procedures will have to be established and approved for ongoing monitoring of the tremendous amounts of incoming liquidity data.

- 5. Final implementation of the asset classification and setting the Highly Liquid Investment Minimum ("HLIM").** Once the above steps have been completed, real-time implementation of the LRMP will begin. The liquidity "buckets" will need to be assessed and a HLIM established and confirmed for each fund in scope. The results of these assessments, however, will have to be validated by the key Invesco stakeholders referenced above and integrated into the final version of each fund's LRMP. It is likely that several rounds of review will be required for these stakeholders to agree on and approve the final versions of these processes, including the final approval of each fund's board of trustees. This step would be expected to take three to four months, however, given the current compliance date, this will have to be compressed and accomplished in one to two months.
- 6. Test run.** Setting up a liquidity risk management infrastructure is a complex endeavor entailing a mix of technology and business processes, as detailed above. In order to ensure an effective operation on Day 1, Invesco highly recommends a "dry-run" period of at least six months in order to ensure that the LRMP system is working as intended for each fund, as well as to provide an opportunity to address issues associated with the implementation of multiple complex operations. Given the current compliance date, this period must be drastically reduced to no more than one to two months.

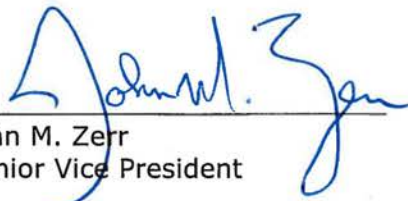
In conclusion, we stress the interdependencies between fund assessment and Vendor support and the sequential nature of our LRMP implementation plan. Given the broad scope and prescriptive nature of the Rule, and the relative immaturity of the Vendor platforms and sophistication of models, Invesco recommends erring on the side of caution and rolling out the LRMP over a more extended period of time. More time will allow us to better ensure the establishment of comprehensive and effective programs that provide the Commission with constructive data regarding fund liquidity. The need for adequate time to test and validate the market impact models which are foundational to any LRMP should not be underestimated.

Invesco remains focused on the current implementation deadline, however, we believe the industry and we would benefit from any delay in the ultimate compliance date because it would help us gain a better understanding of the underlying components of our LRMP and allow us to make changes where necessary in an environment that would not have the same consequences associated with live compliance.

Thank you for the opportunity to submit this letter and for your consideration of these comments. Questions regarding these comments may be directed to me at [REDACTED] or Elizabeth Nelson, Assistant General Counsel at [REDACTED].

Sincerely,

Invesco Advisers, Inc.

By 
John M. Zerr
Senior Vice President

cc: The Honorable Jay Clayton, Chairman
The Honorable Kara M. Stein, Commissioner
The Honorable Michael S. Piwowar, Commissioner
John Cook, Senior Advisor to the Chairman
Dalia Blass, Director, Division of Investment Management