COMMENT LETTER

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ICI Files Comment Letter on IOSCO Leverage Consultation (pdf)

1 February 2019 Submitted electronically to consultation-08-2018@iosco.org Dr. Shane Worner International Organization of Securities Commissions Calle Oquendo 12 28006 Madrid Spain Re: Public Comment on IOSCO Report: Leverage Dear Dr. Worner: ICI1 appreciates the opportunity to comment on IOSCO's consultation paper on leverage, 2 which seeks to provide a framework that could assist regulators in calculating and analyzing investment fund leverage for financial stability purposes in a sufficiently consistent manner.3 ICI has 1 The Investment Company Institute ("ICI") is the leading association representing regulated funds globally, including mutual funds, exchange-traded funds, closed-end funds, and unit investment trusts in the United States, and similar funds offered to investors in jurisdictions worldwide. ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers. ICI's members manage total assets of US\$20.7 trillion in the United States, serving more than 100 million US shareholders, and US\$7.0 trillion in assets in other jurisdictions. ICI carries out its international work through ICI Global, with offices in London, Hong Kong, and Washington, DC. 2 See IOSCO Report: Leverage Consultation Paper (November 2018) ("consultation"), available at https://www.iosco.org/library/pubdocs/pdf/IOSCOPD615.pdf. 3 IOSCO's consultation specifically responds to Recommendation 10 of the Financial Stability Board ("FSB") report on structural vulnerabilities from asset management activities. See Policy Recommendations to Address Structural Vulnerabilities from Asset Management Activities (12 January 2017) ("FSB Asset Management Report"), available at http://www.fsb.org/wp-content/uploads/FSB-Policy-Recommendations-on-Asset-Managemen t-Structural- Vulnerabilities.pdf. Recommendation 10 asks IOSCO to "identify and or develop consistent measures of leverage in funds to facilitate more meaningful monitoring of leverage for financial stability purposes, and help enable direct comparisons across funds at a global level." It further states that "IOSCO should also consider identifying and/or developing more risk-based measure(s) to complement the initial measures with a view to enhance authorities' continued Dr. Shane Worner International Organization of Securities Commissions 1 February 2019 Page 2 of 18 a keen interest in ensuring that financial regulators have the ability to monitor for and address potential risks to financial system stability.4 Our members, regulated funds that are comprehensively regulated and eligible for public sale, are significant investors and participants in the global markets.5 We therefore strongly support the goal of facilitating more meaningful monitoring of leverage for financial stability purposes, as described in the FSB Asset Management Report and in the consultation.6 IOSCO's proposed approach would contribute significantly to the ability of regulators to monitor these potential risks. Deriving a consistent measure of fund

leverage that is useful for monitoring financial stability is a challenging and unenviable task, and we appreciate IOSCO's thoughtful approach to the issue. A wide range of investment funds employ instruments, such as derivatives, that arguably could create leverage in a variety of ways.7 Some uses may create leverage within a fund's portfolio, while others may reduce or offset existing portfolio leverage. In addition, as the consultation highlights, measures of fund leverage appropriate for one type of fund or strategy may be uninformative, less appropriate, or inappropriate, if applied to another fund or strategy.8 To further complicate things, different jurisdictions have different levels of experience with respect to collecting and analyzing leverage- understanding and monitoring of risks that leverage in funds may create. In both cases, IOSCO should consider appropriate netting and hedging assumptions and where relevant build on existing measures." 4 As we have noted previously, virtually all past systemic crises have arisen when financial institutions have taken on excessive leverage. See, e.g., Letter to the Financial Stability Board from Paul Schott Stevens, President & CEO, ICI, dated 21 September 2016 ("2016 ICI Letter"), available at https://www.ici.org/pdf/16 ici fsb ltr.pdf; Letter to the Financial Stability Board from Paul Schott Stevens, President & CEO, ICI, dated 29 May 2015, available at https://www.ici.org/pdf/15 ici fsb comment.pdf; Letter to the Financial Stability Board from Paul Schott Stevens, President & CEO, dated 7 April 2014, available at https://www.ici.org/pdf/14 ici fsb gsifi ltr.pdf; Letter to Financial Stability Oversight Council from Paul Schott Stevens, President & CEO, ICI, dated 5 November 2010, available at https://www.ici.org/pdf/24696.pdf. None of these past systemic crises have stemmed from regulated funds' use of leverage. 5 For purposes of this letter, we focus on regulated stock and bond funds but not regulated money market funds, which typically do not use leverage. 6 See FSB Asset Management Report at pages 27-28. Improving leverage monitoring is consistent with the priorities IOSCO set forth in its June 2016 statement on addressing data gaps in asset management. See Gaps in the Asset Management Industry (media release, 22 June 2016) (noting that a key IOSCO priority is to encourage IOSCO members to collect data, including with respect to funds' use of leverage, with a view to better identify systemic risk), available at

https://www.iosco.org/library/pubdocs/pdf/IOSCOPD533.pdf. 7 For example, regulated funds may use instruments that may create leverage (e.g., derivatives) to, among other things, hedge positions, equitize cash, adjust portfolio duration, and generally manage their portfolios in accordance with the investment objectives stated in their prospectuses. 8 See consultation at page 3. Dr. Shane Worner International Organization of Securities Commissions 1 February 2019 Page 3 of 18 related data. In light of these many challenges, we applaud IOSCO for crafting a proposed approach that appears to be workable and would yield valuable information about potential financial stability risks associated with leverage. IOSCO envisions that this proposed approach would apply to all investment funds, including regulated funds. In this regard, we agree with the FSB's observation that "regulated funds currently have legal and regulatory limitations on their ability to use leverage (either balance-sheet leverage or synthetic leverage)."9 These limitations, together with other structural and regulatory features, make it unlikely that a regulated fund would transmit leverage-related risks to its counterparties or the financial system at large.10 Consequently, while many regulated funds in fact utilize little or no leverage, even those that do are unlikely to pose risks to financial stability. We begin this letter with general observations in strong support of the consultation (Section I). We then present our specific comments on proposed Step 1 and Step 2 of the proposed two-step approach (Sections II and III, respectively). I. Strongly Support Most Aspects of IOSCO's Proposed Approach We strongly support most aspects of IOSCO's consultation, including its proposed two-step approach and the general flexibility that it would provide each national securities regulator to determine what information should be calculated, collected, and analyzed. Permitting

securities regulators to tailor their approach would appropriately assign responsibility for the analysis of fund leverage to the regulators that have the requisite expertise and experience with the specific characteristics of a particular jurisdiction's investment fund sector and capital markets.11 In the subsections that follow, we elaborate on the two-step approach and the regulatory flexibility it would afford. 9 See Consultative Document (2nd), Assessment Methodologies for Identifying Non-Bank Non-Issuer Global Systemically Important Financial Institutions: Proposed High-Level Framework and Specific Methodologies (4 March 2015) at 32 and note 45. 10 For example, any losses that regulated funds suffer would be absorbed by their investors. In addition, regulated funds are subject to borrowing restrictions, limits on their investments in derivatives, established guidelines on securities lending activities, collateralization requirements, disclosure and regulatory reporting requirements, central clearing of derivatives, and margin requirements for noncentrally cleared derivatives. Regulators continue to examine and strengthen these requirements on an ongoing basis. 11 It also is consistent with our long-held and previously expressed views that national securities regulators should oversee fund use of leverage. See, e.g., 2016 ICI Letter. Dr. Shane Worner International Organization of Securities Commissions 1 February 2019 Page 4 of 18 A. Two-Step Approach The consultation proposes a flexible two-step approach in which, under Step 1, national securities regulators would apply certain metrics to measure leverage within funds in their respective jurisdictions. The goal of Step 1 is to serve as a screening tool that excludes from any further consideration funds that are unlikely to pose risks to the financial system. Step 2 would involve further analysis of the remaining subset of funds. In suggesting the two-step approach, the consultation details the challenges of measuring leverage. It also describes the tension between deriving a leverage metric that provides accurate and precise information and the need for the measurement to be as clear and comparable as possible.12 It concludes that there is no single measure that can capture the leverage exposure of all types of funds.13 We agree. As we previously stated, a single measure simply cannot reflect the extent of leverage of all types of funds in a manner appropriate for regulatory monitoring.14 Measures, such as certain of the ones contemplated in Step 1, may be useful for initial screening purposes but, as the consultation points out, they have known shortcomings and are not appropriate to use in isolation. Therefore, we agree with the merits of a multi-step approach in which regulators can use certain measures to exclude a large number of funds from a more detailed review. Bifurcating the analysis as proposed would make each step a useful one that could yield clear and comparable information about funds at the national level through Step 1 and more accurate and precise information on potential financial stability risks through Step 2. In this regard, however, IOSCO should be precise in characterizing the goal of Step 1 in the final consultation. We agree with IOSCO's stated goal, as noted above, that the Step 1 analysis is intended as an efficient way to exclude funds that are unlikely to pose risks to the financial system.15 In other instances, IOSCO imprecisely describes the goal of Step 1 as a way of identifying funds or groups of funds (i.e., those requiring further analysis under Step 2) that "potentially pos[e] a risk to financial stability."16 We do not believe these statements accurately reflect IOSCO's objectives for Step 1 and may be misconstrued. Though the proposed Step 1 measures can identify funds that clearly do not pose a risk to financial stability, such measures alone, or even in combination, do not 12 See consultation at pages 3-4. 13 See consultation at page 17. The FSB appears to acknowledge that there is not one measure that can appropriately assess leverage risk by recognizing, in Recommendation 10, that there can be more than one measure of leverage. 14 See, e.g., 2016 ICI Letter at page 30. 15 See, e.g., consultation at page 1. 16 See, e.g., consultation at page 19. Dr. Shane Worner International Organization of Securities Commissions 1 February 2019 Page 5 of 18 provide meaningful insight as to whether the remaining funds do pose risks to

financial stability. As the consultation recognizes, the Step 1 screening metrics are blunt and overinclusive. We thus urge IOSCO to clarify in any final consultation that Step 1 serves only as a screening tool to exclude funds that clearly do not create financial stability risks, not to identify funds that do pose risks to financial stability. Further, to assist regulators meaningfully in their evaluation of financial stability risks, any measure of leverage must focus on risk. Each measure should incorporate some form of risk assessment or risk adjustment or the intended goal of Step 1 - to exclude efficiently funds that are unlikely to pose risks to the financial system - will not be achieved.17 Risk assessments and adjustments may be imperfect and may continue to overstate a portfolio's true risk,18 but ensuring that each measure considers some element of risk would reduce the likelihood that funds would be subject unnecessarily to the Step 2 analysis. B. Regulatory Flexibility The consultation proposes providing each national securities regulator flexibility in determining which funds to analyze as part of Step 2 (e.g., by permitting them to determine what supplementary data points to consider as part of Step 1) and which Step 2 analyses to perform.19 We support this proposed flexibility. As the consultation notes, some jurisdictions already receive detailed reporting on leverage metrics, including portfolio-level data sufficient to calculate leverage metrics and other information that could be used as supplementary data points.20 Given the differences in data collection, national securities regulators should tailor their regulatory frameworks appropriately. These regulators are in the best position to assess fund leverage within their jurisdiction to determine what, if any, additional analyses should be performed to identify potential risks to financial stability. 17 For example, as discussed further in Section II.A.1 below, IOSCO should not recommend using unadjusted gross notional exposure, which provides no indication of risk, as a leverage metric. 18 See, e.g., consultation at page 7 (noting that risk adjustments still could overstate exposure but to a lesser extent than using unadjusted gross notional exposure). 19 See consultation at page 19 ("Regulators will exercise their judgment when determining which funds to analyse in [S]tep 2 and which analyses to perform."). 20 See consultation at page 3. See also infra note 43. Dr. Shane Worner International Organization of Securities Commissions 1 February 2019 Page 6 of 18 As the consultation notes, even though this leverage metric data may not be identical among jurisdictions, there is substantial overlap in the types of information covered.21 Thus, even with the flexibility given to national securities regulators, any data regulators collect still will be enormously useful for analyzing potential financial stability risks across jurisdictions. II. Recommend Modifications to Make Step 1 Analysis More Useful for Regulators To be effective, Step 1 should meaningfully narrow the group of funds that will be subject to more in-depth regulatory analysis. In this section, we provide detailed comments to hone Step 1 to help regulators more effectively evaluate funds. First, we recommend eliminating the gross notional exposure metric, allowing duration adjustments to a ten-year bond equivalent, and clearly defining permitted netting and hedging arrangements. Next, we suggest modifications to IOSCO's proposed asset classification table that would remove the "Totals" row and "Percent of NAV" columns, which could be misleading. Finally, we propose including as many of the supplementary data points as possible in Step 1, while encouraging securities regulators to eschew the temptation of placing too much emphasis on any one data point. A. Leverage Metrics The consultation identifies three criteria that IOSCO believed were important in determining which leverage metrics to propose. It states that the metrics should, as far as possible: • be able to be applied across all strategies and methods of leverage used by funds across jurisdictions; • avoid model risk; and • facilitate the identification of funds which may pose financial stability risks.22 It then proposes three separate metrics for the Step 1 analysis: gross notional exposure without adjustment ("GNE"); adjusted gross notional exposure ("Adjusted GNE"); and net notional exposure ("NNE"). The consultation adds that each of these proposed metrics, when used in isolation, does not necessarily

provide all the information necessary to allow a securities regulator to filter funds.23 Instead, it suggests that the metrics may prove more meaningful when used together.24 21 See consultation at pages 3-4. 22 See consultation at page 5. 23 Id. 24 Id. Dr. Shane Worner International Organization of Securities Commissions 1 February 2019 Page 7 of 18 We support IOSCO's proposed approach of using easy-to-calculate metrics as a starting point but believe that some modifications are needed to ensure that national securities regulators can effectively use these metrics to exclude funds that clearly do not pose financial stability risks. First, GNE should not be a leverage metric. Second, any Adjusted GNE measure should include duration adjustments for interest rate derivatives based on ten-year bond equivalents. Third, IOSCO should define clearly netting arrangements and permit netting of close-out and offsetting transactions and transactions based on duration equivalency. IOSCO also should define clearly certain hedging arrangements and allow for the exclusion of direct hedging transactions. We elaborate on each of these recommendations below. 1. Eliminate GNE as a Leverage Metric The consultation offers GNE as a potential Step 1 metric, noting its ease of calculation and its indication of a fund's market footprint. At the same time, the consultation acknowledges the metric's numerous limitations. These limitations include that GNE does not reflect hedging or netting transactions, that it could overstate a fund's exposure, and that, when aggregated across asset classes within a fund, may present an incomplete and potentially misleading view of a fund's overall market exposure. We believe that the limitations of using GNE far outweigh any benefits and recommend eliminating GNE as a potential leverage metric. As we have stated on numerous occasions, GNE is not a good indicator of a fund's overall economic risk or degree of leverage.25 Given the metric's significant inherent limitations, utilizing GNE would not meet IOSCO's criteria that any potential leverage metric should facilitate the identification of funds that may pose financial stability risks. A screening process that relies on GNE (even in part) would be contrary to IOSCO's purpose of assisting national securities regulators efficiently narrow the scope of funds identified for a more in- depth Step 2 review because the measure neither indicates risk of a fund's derivatives nor the effects of those derivatives within the fund's portfolio. 25 See, e.g., Letter to Ashley Alder, Chief Executive Officer, Securities and Futures Commission, from Dan Waters, Managing Director, ICI Global, dated 18 March 2018, available at https://www.iciglobal.org/pdf/31143a.pdf; Letter to Brent J. Fields, Secretary, Securities and Exchange Commission, from David W. Blass, General Counsel, Investment Company Institute, dated 28 March 2016, available at https://www.sec.gov/comments/s7-24-15/s72415-114.pdf. See also US Commodity Futures Trading Commission Chief Economist Bruce Tuckman, et al., Introducing ENNs: A Measure of the Size of Interest Rate Swap Markets (January 2018) ("CFTC Staff Interest Rate Swap Study") at page 1, available at https://www.cftc.gov/sites/default/files/idc/groups/public/@economicanalysis/documents/file /oce enns0118.pdf (stating that GNE is not a good indicator of the magnitude of risk transfer for interest rate derivatives because it does not reflect the short-term nature of the derivatives or account for offsetting positions); Office of Financial Research, 2015 Financial Stability Report (15 December 2015) at page 38, available at https://financialresearch.gov/financial-stability-reports/files/OFR 2015-Financial-Stability-Report 12-15-2015.pdf (expressing two primary concerns with GNE that: (i) different position types may present different risks; and (ii) GNE does not account for netted positions). Dr. Shane Worner International Organization of Securities Commissions 1 February 2019 Page 8 of 18 In fact, as the consultation notes, utilizing a GNE metric inappropriately could push many "plain vanilla" bond funds toward a Step 2 review.26 For example, a bond fund may have a high GNE attributable to short-term interest rate derivatives (e.g., eurodollar futures or interest rate swaps) it uses to adjust the duration of

the fund's cash portfolio. Given the low risk of the short-term interest rate derivatives and

the fact that the fund would never be obligated to pay an amount equal to the full GNE of the interest rate derivatives, the use of derivatives in these instances would bring little additional risk to the fund or financial markets.27 Basing determinations on GNE under these circumstances, nonetheless, would lead to the mistaken conclusion and misleading perception that these types of funds warrant further review. 2. Adjust Interest Rate Derivatives to Ten-Year Bond Equivalents The consultation proposes utilizing an Adjusted GNE metric, which would adjust the GNE for interest rate derivatives and options to address concerns that the GNE for those instruments overstates risk.28 It proposes two alternative methods of adjusting interest rate derivatives for duration: adjusting the duration of interest rate derivatives in terms of ten-year bond equivalents; and adjusting the fund's interest rate derivatives relative to the fund's target duration. It also proposes delta adjusting options to better reflect the exposure that an option creates to its underlying reference asset.29 We support the proposed duration and delta adjustments, as they would better reflect the risk of the derivatives and, accordingly, enable regulators to better assess leverage-related risks. As noted above, notional-based tests are problematic because they do not provide a good indication of economic risk or degree of leverage. The use of duration adjustments would scale GNE and partially allay those concerns by adjusting different interest rate derivative exposures for risk using either a common reference point (for adjustments to a ten-year bond equivalent) or relative to a fund's target 26 See consultation at page 6 (noting that GNE "[c]an overstate exposure, particularly [for] shortdated interest rate derivatives and options"). 27 For certain instruments, such as interest rate swaps, GNE simply serves as a reference point, rather than as the obligation of a party to pay. A fund that enters into interest rate swaps, for example, is obligated to make only interest payments based on the GNE of the contract, not payments equal to the GNE of the contract. 28 See consultation at pages 7-8. 29 The consultation provides an example of delta adjusting an option in which a fund sells an at-the-money call option on a security with a notional amount of \$100. If the delta of the option is -0.5, then the delta-adjusted notional would be \$50, producing a figure designed to better reflect the exposure the option creates to the underlying security. See consultation at note 10. Dr. Shane Worner International Organization of Securities Commissions 1 February 2019 Page 9 of 18 duration (for adjustments to a target duration). The use of delta adjustments would adjust options exposures for risk, basing them on the degree to which an option's value shifts in relation to changes in the price of its underlying asset. Although not perfect, these types of adjustments would better reflect the derivatives' risk without the more pronounced overstatement associated with unadjusted GNE measures. Of the two proposed alternatives for duration adjustments, we strongly support the use of ten-year bond equivalents.30 Under a ten-year bond equivalent duration adjustment, an interest rate derivative with a reference asset having a ten-year duration would count 100 percent of its GNE, while derivatives with shorter durations would be scaled in common terms, as interest rate risk frequently is compared against ten-year bond equivalents.31 Adjusting interest rate derivatives relative to a ten-year bond equivalent would provide a uniform and practical way to better compare interest rate derivatives to other derivatives. In addition, all funds could utilize the ten-year bond equivalent adjustment for each of their interest rate derivatives. The alternative proposed adjustment relative to a fund's target duration is practically difficult to implement and would primarily benefit bond funds, which generally have a specified target duration versus other funds (such as equity or balanced funds) that also may hold interest rate derivatives but do not specify a target duration. 30 This approach, when coupled with netting, also is consistent with recommendations in the CFTC Staff Interest Rate Swap Study. While notional values provide an indication of the overall level of activity in interest rate swaps markets, they are a poor indicator of risk transfer in this market for two reasons: 1. A sum of notional amounts implies that each new contract

adds risk to the market, but entities regularly create new swaps contracts to offset, or reduce, their existing risk; and 2. A significant portion of the interest rate swaps market has a short duration with lower risk characteristics than longer-duration contracts. However, the notional amount does not recognize that long-term swaps have significantly more interest rate risk than short-term swaps. Therefore, the notional amount metric tends to exaggerate the magnitude of interest rate risk transfer. Given these limitations of the notional measure, CFTC staff recently developed a new metric called Entity Netted Notionals (ENNs). This new metric: 1. Expresses the notional amount of each swap in 5-year risk equivalents; and 2. For every pair of counterparties, nets positions that receive fixed against positions that pay fixed in the same currency See Financial Stability Oversight Council, 2018 Annual Report (December 2018) at page 50, available at

https://home.treasury.gov/system/files/261/FSOC2018AnnualReport.pdf (citing the CFTC Staff Interest Rate Swap Study). 31 For example, as shown in Appendix A of the consultation, a derivative on a reference asset with a 5.7-year duration has 65 percent the duration of a ten-year bond. Thus, it would count only 65 percent of its GNE, reflecting the derivative's lower sensitivity to interest rate changes than a ten-year bond. See consultation at Appendix A. Dr. Shane Worner International Organization of Securities Commissions 1 February 2019 Page 10 of 18 3. Permit Netting of Close-Out and Offsetting Transactions and Netting Based on Duration; Exclude Direct Hedging Transactions The consultation reviews netting and hedging transactions together and proposes two approaches to address netting transactions.32 First, it proposes specifically defining the circumstances under which positions will be netted. Alternatively, it proposes identifying information for regulators to consider that indicates possible netting (or hedging) relationships among a fund's positions without rules that specify what trades can be netted. In netting interest rate derivatives, the consultation further proposes permitting netting based on maturity buckets or using duration equivalency. For hedging transactions, the consultation notes that, given changing correlations that could break down in times of market stress, it would be difficult for regulators to decide which positions should be regarded as hedges. Instead, it suggests that each jurisdiction should define specific hedges that are most important to the jurisdiction and seeks feedback on certain proposed currency hedging arrangements. We provide our recommendations below. a. Define Permissible Netting Arrangements and Permit Netting of Close-Out and Offsetting Transactions We believe that clearly identifying and defining the circumstances in Step 1 under which funds could net positions would produce more consistent and comparable results. IOSCO could define permissible netting arrangements that would ensure that the netted positions taken truly offset the positions they are intended to offset. Moreover, national securities regulators, if they believe appropriate, could permit netting of additional types of arrangements as part of a more comprehensive Step 2 review. If the final consultation takes this approach (of clearly identifying and defining netting arrangements in Step 1), then we agree with the consultation's determination that regulators should permit netting of all derivatives and/or securities positions referring to the same underlying assets with the result that they: 32 The consultation appears to define "netting arrangements" as those combinations of trades on derivatives and/or securities positions "referring to the same underlying assets with the result that [they]: • eliminate[] all or part of the risks linked to such portfolio positions netted-off, in proportion of the trades' combinations. • offset[] the economic exposure of the portfolio with regards to the same underlying asset and regardless of transacting counterparties." (emphasis added.) See consultation at Appendix B. The consultation defines "hedging arrangements" as those arrangements in which "combinations of trades on derivatives or securities positions which do not necessarily refer to the same underlying assets but nonetheless are concluded with the aim of reducing the risks of the trade in other derivatives or securities positions."

(emphasis added.) See consultation at page 9. Dr. Shane Worner International Organization of Securities Commissions 1 February 2019 Page 11 of 18 • eliminate all or part of the risks linked to such portfolio positions netted off, in proportion of the trades' combinations; and • offset the economic exposure of the portfolio with regards to the same underlying asset and regardless of transacting counterparties.33 Under this approach, the positions would offset economic exposures to ensure that any residual basis risk between the derivative and its netted position is eliminated, even when there are larger market movements in the underlying asset. Similarly, utilizing netting on derivatives and/or securities positions referring to the same underlying assets would appropriately exclude transactions in which funds close out or offset positions because those transactions do not increase leverage but offset it. For example, a fund that wants to eliminate its exposure in a long position in a derivative sometimes may do so by taking an equivalent, offsetting short position in the derivative. In that circumstance, IOSCO should permit netting of the long and short positions to reflect the true economic exposure in the portfolio. b. Permit Netting Using a Duration Equivalency Model In addition to supporting a defined netting approach, we recommend permitting netting of exposures using a duration equivalency model, as opposed to the maturity buckets model.34 As the consultation details, netting based on a duration equivalency model generally would require scaling GNE for each interest rate derivative by a ten-year bond equivalent (as described above), summing the long (positive) and short (negative) adjusted GNE for positions with the same underlying asset (i.e., netting), and then multiplying the sum of all the adjusted GNE netted interest rate derivatives by a convexity coefficient (IOSCO uses 85 percent). Netting based on a maturity buckets model generally would require allocation of interest rate derivatives to one of four buckets.35 For long (positive) and short (negative) positions on the same underlying asset within each bucket, the gross notional amounts are summed (netted). If the fund is invested in the same underlying asset with 33 See consultation at Appendix A. 34 Id. 35 The buckets for the maturity buckets model are set forth below: Bucket Maturities Range 1 0-2 Years 2 2-7 Years 3 7-15 Years 4 > 15 Years See consultation at Appendix A. Dr. Shane Worner International Organization of Securities Commissions 1 February 2019 Page 12 of 18 netted positions across different maturity buckets, these netted exposures are further adjusted using a "correlation factor" determined by the proximity of the buckets.36 We believe that there are a few distinct advantages to permitting netting based on duration equivalency over netting based on maturity buckets. First, it would be consistent with our recommendation to permit duration adjustments based on ten-year bond equivalents.37 Second, netting using duration equivalency would provide a much simpler and more exact way of netting than using maturity buckets because of the more precise duration sensitivity of the adjustments (as opposed to grouping the interest rate derivatives by broad maturity ranges). We understand that the netting based on maturity buckets approach is derived mainly from EU regulations for UCITS funds and European alternative investment funds ("AIFs"). We understand, however, that many UCITS and AIFs do not utilize that netting approach due to the burdensome requirement to group continuously interest rate derivatives into specific maturity buckets and the complexity of the calculations stemming from the correlation structure of the netted exposures' proximity to each other. For these reasons, we believe IOSCO should permit national securities regulators to net interest rate derivatives based on duration equivalency, c. Define Permissible Hedging Arrangements and Exclude "Direct Hedging" Arrangements We agree with IOSCO's recommendation that national securities regulators should define specific hedges. In addition, IOSCO should consider excluding certain types of "direct hedging" arrangements in which transactions in derivatives or securities positions clearly are concluded to reduce or eliminate the risks of the trade in other derivatives or securities positions, including the exclusion of the proposed currency hedging positions as outlined in the consultation.38 36 The maturity

bucket correlations are as follows: • 0 percent of the netted position for each bucket; • 40 percent of the netted position between two adjoining buckets; • 75 percent of the netted positions between two buckets separated by another one. • The remaining is considered for 100 percent of the exposure. See consultation at Appendix A. 37 If IOSCO utilizes an Adjusted GNE based on ten-year bond equivalents, we suggest that it similarly permit netting duration based on ten-year bond equivalents. 38 The consultation proposes to permit excluding currency hedging arrangements where some or all of the following conditions are met: • The currency hedging policy is pre-disclosed to regulators; • Total notional amounts (in the fund's base currency) do not exceed the portfolio's net asset value ("NAV"); continued Dr. Shane Worner International Organization of Securities Commissions 1 February 2019 Page 13 of 18 As with defining netting arrangements, defining certain hedging arrangements would lead to more consistent and comparable data within, and across, jurisdictions. These should include "direct hedging" arrangements, such as written call options on securities in the fund's portfolio and purchased single-name credit default swaps that provide credit protection on the issuer of a security held by the fund (so long as the notional exposure for the credit default swap does not exceed the principal amount of the security). Funds purchase single-name credit default swaps to be entitled to receive a payout when there is a credit event that occurs with an underlying security. If a fund also directly holds the underlying security in an amount equal to the protection afforded by a credit default swap, then the credit default swap would hedge the performance of the security. These types of direct hedges are akin to offsets that reduce or eliminate fund exposures and excluding them would better reflect the true economic exposure of the portfolio. B. Asset Classification Table The consultation explains why an analysis by asset class is so important for regulators to meaningfully compare exposures across funds. In doing so, it provides an example of an asset classification table that regulators could compile that would separate investments by asset class and long and short positions.39 Specifically, the table would have columns for investment type (asset class) and long and short market exposures in both currency amounts and percent of NAV.40 In addition, the table would have rows for each asset class along with a "Totals" row that would aggregate exposures for the entire portfolio. We strongly support the use of such a table and believe it is integral as a means of better informing national securities regulators about a fund's leverage-related risks. Aggregating market • Maturity is equal or shorter than the maturity of the fund or the hedged assets, whichever is shorter; and • One leg of the currency pair is the base currency of the fund or the hedged share class or classes. See consultation at pages 9-10. 39 See consultation at page 10-11. The proposed asset classes would include: Equity securities; Equity derivatives; Fixed income securities; Credit derivatives; Non-base currency holdings; Foreign exchange derivatives; High-quality sovereign bonds; Interest rate derivatives; Commodities; Commodity derivatives; Cash and cash equivalents; and Other. 40 The table would look similar to the sample provided below: Market Exposure Investment Type Position (base currency) % NAV Long Short Long Short Asset Class Asset Class Totals See consultation at page 11. Dr. Shane Worner International Organization of Securities Commissions 1 February 2019 Page 14 of 18 exposures across different asset classes and long and short positions (without netting) would provide near meaningless information that could distort the view of a fund's true economic risk and leverage. For example, two funds that have the same aggregate market exposure could have two completely different risk profiles if the first fund, Fund A, invests mainly in short-term interest rate derivatives to hedge against the interest rate risk of its cash portfolio and the second fund, Fund B, invests mainly in derivatives based on equity market volatility to get exposure. Under those circumstances, simply looking at total market exposure across asset classes may imply that both funds have similar risk profiles, though most would view Fund A's investments as having much lower volatility and risk under normal market conditions.

Separating fund holdings by asset class therefore is crucial because different asset classes have differing levels of risk. Grouping assets with similar risk characteristics provides a better picture of the fund's overall risk. Similarly, further separating asset class exposures by long and short positions reflects the fund's true position in an asset class, allowing regulators to better understand a fund's leverage exposure and how the fund might react when different market stresses occur. The table thus is an essential element of the consultation that would enable regulators to aggregate information compiled from the Step 1 analysis, by asset class, in a straightforward and meaningful way to more easily evaluate financial stability risks. We agree with the consultation's proposed asset classes and do not think that additional asset classes need to be added to account for more granular distinctions. The broad categories allow for easy and streamlined bucketing and cover all major asset categories. This less granular approach also keeps the categorizations simple, robust, and less ambiguous, while reducing the need for continuous updating. We recommend that IOSCO eliminate the aggregate "Totals" row from the table. As noted above, aggregating notional exposures among different asset classes would provide little useful information and could be misleading when taken out of context. There is no need to provide the total when more detailed information by asset class is provided. We also recommend that IOSCO eliminate the "Percent of NAV" column. The column suggests that there exists a meaningful measure of leverage relative to NAV that reflects the risks with which the FSB and IOSCO are concerned. We strongly disagree with this suggestion, which could be misleading, as it is unclear what meaningful information leverage relative to NAV provides with respect to financial stability risks.41 41 This is especially misleading when derivative values are not linearly related to the values of the underlying assets, which often may be the case. Dr. Shane Worner International Organization of Securities Commissions 1 February 2019 Page 15 of 18 In addition to the substance of the table, we also strongly support IOSCO's indication that national securities regulators could compile and organize the information in the table.42 In many instances, particularly in developed markets, regulated funds already report data sufficient for regulators to populate this type of table.43 C. Step 1 Supplementary Data Points The consultation provides a long list of potential supplementary data points that regulators can use during the Step 1 analysis. IOSCO's list appears to include certain relevant information that regulators should consider, if available, to make more informed determinations regarding which funds should be subject to further analysis in Step 2. National securities regulators should aim to factor in as many pieces of relevant available information as possible as part of the Step 1 analysis to help exclude from Step 2 funds that do not warrant a more extensive risk-based analysis.44 In particular, it is important for regulators to consider carefully the availability of assets funds have to meet calls for margin or collateral, the frequency at which margin is exchanged, and whether funds or their counterparties can rehypothecate or reuse assets posted or set aside as collateral for derivatives transactions.45 In many jurisdictions, regulated funds already are required to set aside on a daily basis assets representing at least the market value of their derivatives obligations to ensure that 42 See consultation at page 11 ("Below, we present an example of how a regulator, in lieu of or in combination with an aggregated figure, might organise information that it collects on a fund's market exposure when allocated across asset classes.") (emphasis added.) 43 In the United States, for example, the US Securities and Exchange Commission ("SEC") soon will collect very detailed portfolio-level holdings data from regulated funds on a monthly basis. This information includes, among other things, a description and the value of each instrument, holdings identifiers for each instrument (e.g., if available, CUSIP numbers, legal entity identifiers), fund-determined liquidity classifications of each instrument (in one of four liquidity categories), risk metric information, counterparty information for derivatives (including any central counterparties), and the amount of highly liquid assets (those assets

the fund reasonably expects to be convertible into cash in current market conditions in three business days or less without the conversion significantly changing the market value of the investment) the fund has segregated to cover or pledged to satisfy margin requirements in connection with derivatives transactions that are not highly liquid assets. See Form N-PORT, available at https://www.sec.gov/files/formn-port.pdf. 44 For example, in the United States, the SEC could determine to apply more supplementary data point screens as part of the Step 1 analysis in order to limit appropriately the number of funds recommended for the Step 2 analysis based on the detailed and readily available portfoliolevel information it will receive on Form N-PORT. See, e.g., supra note 43 (detailing some of the portfolio-level information US regulated funds will report to the SEC on Form N-PORT). 45 See consultation at page 12. The consultation also provides additional information on assets available for margin or collateral calls and whether funds can rehypothecate or reuse assets in its discussion of possible supplementary data points for Step 2. See consultation at Appendix C (discussing initial margin posted, value of cash/unencumbered cash, and value of collateral posted/received (absolute amounts)). Dr. Shane Worner International Organization of Securities Commissions 1 February 2019 Page 16 of 18 the funds can meet their obligations under such contracts.46 This asset segregation scheme works well to reduce risks to regulated fund counterparties and should be an important consideration when determining risks to overall financial stability. Likewise, many regulated funds must exchange variation margin with their counterparties on a daily basis, either because of regulatory requirements or contractual provisions. The requirement to exchange margin on a daily basis limits potential losses to those occurring during the period between margin exchanges (e.g., intraday) and substantially reduces the likelihood that a regulated fund or its counterparty will default on its obligations. Regulated funds also effectively are restricted from rehypothecating or reusing assets posted or set aside as collateral for their uncleared derivatives transactions. Similarly, counterparties typically are prohibited from rehypothecating or reusing regulated fund assets posted or set aside for their derivatives transactions. These restrictions provided a sharp distinction between US regulated funds and hedge funds during the financial crisis when US funds were able to more easily retrieve their posted collateral from defaulting counterparties in bankruptcy proceedings.47 IOSCO should caution regulators, however, not to place too much emphasis or weight on any one data point. For example, the consultation lists size of a fund as a supplementary data point. For regulated funds, however, size has little bearing on whether a fund may present leverage-related risks. Indeed, many of the largest regulated funds use very little leverage. III. Recommend Additional Measures for Step 2 Analysis In this section, we provide comments on the consultation's proposed Step 2 analysis. We first express our general support for the list of potential Step 2 metrics that IOSCO proposes and recommend that IOSCO affirmatively consider adding a stress-based loss/worst loss measure as part of those metrics. We then similarly express support for IOSCO's non-exhaustive list of supplementary data points and its approach to including overlapping data points with those set forth in Step 1. A. Risk-Based Measures As the consultation makes clear, Step 2 is "designed to mitigate the inherent limitation in [S]tep 1 metrics." 48 The consultation provides examples of certain risk-based measures that regulators could employ to further evaluate potential risks to financial stability, including particularly market 46 Often, regulated funds hold supplemental cash reserves in addition to those assets. 47 As a related matter, IOSCO should suggest that regulators consider, as part of the Step 1 analysis, whether a fund is required to adhere to regulatory restrictions on leverage. 48 See consultation at page 19. Dr. Shane Worner International Organization of Securities Commissions 1 February 2019 Page 17 of 18 and counterparty risk. The examples include using various value-at-risk tests, stress tests or market factor/portfolio sensitivity tests to evaluate a fund's market risk and include using either an asset-class based potential loss

estimation or a whole netted portfolio approach to evaluate a fund's counterparty risk.49 The consultation adds that certain types of risk-based measures may only be necessary and/or appropriate for certain types of investment funds. National securities regulators would determine which funds to analyze in Step 2 and which Step 2 analyses to perform. We agree with the Step 2 approach and generally agree with the suggested risk-based measures. Risk-based analyses are vital to assessing leverage-related risks, and the ones suggested to monitor market risk and counterparty risk could provide insightful information to these risks. We further agree that both the proposed value-at-risk tests and market factor/portfolio sensitivity tests are common methods used to determine market risk. In addition, we agree with IOSCO's determination that certain types of risk-based measures may only be necessary and/or appropriate for certain types of investment funds. As noted above, national securities regulators are in the best position to determine how and what Step 2 analyses to perform and on which funds.50 Another important measure that regulators could employ as part of the Step 2 analysis is the stress-based leverage/worstloss metric.51 The consultation describes the metric as one that focuses on the absolute value of the maximum economic loss the fund could suffer from the most adverse market move and highlights both positives and negatives of the metric. In lieu of maximum economic loss, however, we recommend that regulators compare funds using shocks and market losses that reflect stressed but plausible market conditions. These shocks and losses could be standardized to demonstrate at a high level how a fund's portfolio might react under common market stress events and thus may shed valuable light on the fund's expected resilience in stressed markets. B. Step 2 Supplementary Data Points As with Step 1, the consultation provides a non-exhaustive list of supplementary data points that regulators could consider in conjunction with their Step 2 analysis.52 We agree that each of these data points appears to provide further useful information to regulators when evaluating leverage- related risks. Several of these data points overlap with those suggested for the Step 1 analysis, such as 49 See consultation at Appendix C. 50 See, e.g., Section I.B. 51 See consultation at Appendix B. It appears that IOSCO considered the metric as part of the Step 1 screening process but ultimately chose not to recommend it. The consultation does not explain clearly why the measure was excluded from consideration. 52 See consultation at pages 19-20 and Appendix C. Dr. Shane Worner International Organization of Securities Commissions 1 February 2019 Page 18 of 18 looking at posted collateral (including initial margin), holding of cash or cash equivalents available for margin, and the amount of exchange-traded and over-the-counter derivatives a fund holds. We believe such overlap would allow a securities regulator that does not employ a supplementary data point as part of Step 1 to consider it for Step 2. * * * * * We thank you for the opportunity to comment on the consultation. If you have any questions regarding our comments or would like additional information, please contact me directly at +1 (202) 326-5901 or paul.stevens@ici.org, Susan M. Olson, General Counsel, at +1 (202) 326-5813 or susan.olson@ici.org, Jennifer S. Choi, Chief Counsel, ICI Global, at +1 (202) 326-5876 or jennifer.choi@ici.org, or Kenneth C. Fang, Assistant General Counsel, at +1 (202) 371-5430 or kenneth.fang@ici.org. Sincerely, /s/ Paul Schott Stevens Paul Schott Stevens President & **CEO Investment Company Institute**