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*Delivered to:*

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*Dear Sirs/Mesdames:*

*Re: Canadian Securities Administrators ("CSA") Notice and Request for  
Comment - Modernization of Investment Fund Product Regulation -  
Alternative Funds (the "Proposed Amendments")*

This comment letter is submitted on behalf of the Canadian section ("AIMA Canada") of the Alternative Investment Management Association ("AIMA") and its members to provide our comments to you on the legislation referred to above.



## About AIMA

AIMA was established in 1990 as a direct result of the growing importance of alternative investments in global investment management. AIMA is a not-for-profit international educational and research body that represents practitioners in alternative investment fund, futures fund and currency fund management - whether managing money or providing a service such as prime brokerage, administration, legal or accounting.

AIMA's global membership comprises over 1,700 corporate members in more than 50 countries, including many leading investment managers, professional advisers and institutional investors. AIMA Canada, established in 2003, now has more than 130 corporate members.

The objectives of AIMA are to provide an interactive and professional forum for our membership and act as a catalyst for the industry's future development; to provide leadership to the industry and be its pre-eminent voice; and to develop sound practices, enhance industry transparency and education, and to liaise with the wider financial community, institutional investors, the media, regulators, governments and other policy makers.

The majority of AIMA Canada members are managers of alternative investment funds and fund of funds. Most are small businesses with fewer than 20 employees and \$50 million or less in assets under management. The majority of assets under management are from high net worth investors and are typically invested in pooled funds managed by the member. Investments in these pooled funds are sold under exemptions from the prospectus requirements, mainly the accredited investor and minimum amount exemptions. Manager members also have multiple registrations with the securities regulatory authorities: as Portfolio Managers, Investment Fund Managers and in many cases as Exempt Market Dealers. AIMA Canada's membership also includes accountancy and law firms with practices focused on the alternative investments sector.

This comment letter is the product of a working group of AIMA Canada members representing a broad cross-section of the alternative funds industry comprised of a cross-section of large and small fund managers who employ a variety of alternative investment strategies (some of whom currently have publicly offered investment fund products) and service providers such as accounting firms, investment dealers (prime brokers) and law firms.

For more information about AIMA Canada and AIMA, please visit our web sites at [canada.aima.org](http://canada.aima.org) and [www.aima.org](http://www.aima.org).

## Comments

Set out below are our comments on the Proposed Amendments, broken down by the broad categories set out in the Notice and Request for Comment. Where relevant, we have also responded to the specific questions posed by the Notice and Request for Comment, which have been replicated in each section for ease of reference.

### 1. General Comments

AIMA Canada strongly supports the initiative to make alternative funds available to retail investors in Canada under National Instrument 81-102 Investment Funds (“NI 81-102” or the “Instrument”) and we feel that, overall, the CSA have made a highly commendable effort in striking the appropriate balance amongst the investment restrictions, disclosure requirements and proposed distribution channels for alternative funds. However, we believe that there are several modifications to the Proposed Amendments and some additional amendments which, if adopted, will assist in fully realizing the goal of modernizing the existing commodity pool regime and providing Canadian retail investors with access to more innovative investment strategies in a manner which is efficient as well as appropriate from a risk perspective.

In considering comments received and potential changes to the Proposed Amendments, we urge the CSA to keep in mind the impact of any new requirements or regulations on the structuring and operating costs of smaller investment managers who may wish to offer investment products under NI 81-102. If the bar to entry is set too high, it would be prohibitive for the majority of the smaller investment managers to contemplate providing alternative funds to retail investors in Canada and only the largest institutions, such as Canadian banks and large mutual fund companies that have the resources and existing distribution networks would end up benefiting from the Proposed Amendments.

### 2. CSA Questions

#### Definition of “Alternative Fund”

*1) Under the Proposed Amendments, we are seeking to replace the term “commodity pool” with “alternative fund” in NI 81-102. We seek feedback on whether the term “alternative fund” best reflects the funds that are to be subject to the Proposed Amendments. If not, please propose other terms that may better reflect these types of funds. For example, would the term “nonconventional mutual fund” better reflect these types of funds?*



## Response:

AIMA Canada agrees with the replacement of the term “commodity pool” with “alternative fund” and with the use of the term “alternative fund” in NI 81-102. The term “alternative fund” and the associated definition of this term in the Proposed Amendments is more representative of the various types of investment strategies that can be implemented in this category of investment funds.

Under the Proposed Amendments the CSA has proposed to adopt a similar approach to the definition of “alternative fund” in NI 81-102 as is currently used to define a “commodity pool” in NI 81-104. We would recommend that the definition of “alternative fund” be slightly modified as follows to more closely parallel the stated approach of the Proposed Amendments and account for the operational distinctions between alternative funds and conventional mutual funds:

“alternative fund means a mutual fund, ~~other than a precious metals fund,~~ that has adopted fundamental investment objectives that permit it to invest in asset classes, ~~or adopt use~~ investment strategies ~~or implement operational features that are not permitted by this Instrument that are otherwise prohibited~~ but for certain prescribed exemptions ~~from Part 2 of contained in~~ this Instrument;”

We would also like to bring the CSA’s attention the fact that there are a number of conventional mutual funds that are currently offered that incorporate the terms “Alternative” or “Liquid Alternative” in the name of the fund. As part of the Proposed Amendments, we would expect that guidance on this point would be included in the Companion Policy to NI 81-102 that these funds would either have to convert to an alternative fund or be required to change their fund names to remove these references in order to avoid potential confusion with new alternative funds among investors. Similarly, new investment funds offered under NI 81-102 should not be permitted to use the word “alternative” in their fund name in a manner that suggests that they are an alternative fund in order to prevent confusion in the market.

## Investment Restrictions

### Asset Classes

*2) We are seeking feedback on whether there are particular asset classes common under typical “alternative” investment strategies, but have not been contemplated for alternative funds under the Proposed Amendments, that we should be considering, and why.*



**Response:**

Generally speaking, we believe that most traditional alternative investment strategies currently offered on a private placement basis to high net worth investors would be permitted (in some cases with minor modifications) under the definition of “alternative fund” and the investment restrictions contained in the Proposed Amendments. However, we note that the leverage limits on alternative funds in section 2.9.1 of the Proposed Amendments will negatively impact the ability of managed futures, relative value and global macro strategies to operate efficiently. In addition, as discussed in more detail below, the ability to offer market neutral strategies would be severely impacted and the single issuer shorting restrictions will significantly hamper alternative strategies that hedge risk through the use of instruments such as government securities and index participation units.

*(a) Market Neutral Strategies Should be Eligible to be Offered as Alternative Funds*

While not a separate asset class, market neutral is a common investment strategy that will be particularly affected for alternative funds under the Proposed Amendments.

The investment objective of a market neutral strategy is to remove market risk (i.e. the risks of significant swings in the market) by balancing long and short positions in an effort to provide returns in all market conditions. A market neutral strategy can provide true diversification in an investment portfolio as it is intended to be uncorrelated to the market. However, in order to employ a true market neutral strategy, a fund must be permitted have short and long positions of up to 100% of net asset value (“NAV”). Given the maximum short position limit of 50% of NAV for alternative funds in Section 2.6.1(c)(v) of NI 81-102, it would be practically impossible for a true market neutral investment strategy to be offered as an alternative fund.

Although it may be technically possible for an alternative fund to replicate a market neutral strategy under the Proposed Amendments through a combination of short-selling and specified derivatives, such an approach would be inefficient and more costly to implement than a “pure” market neutral strategy.

We submit that market neutral strategies can play an important role in removing market risk in an investor’s portfolio and should be eligible to be offered as an alternative fund under the Proposed Amendments. This could be accomplished by including a definition of “market neutral fund” in the Proposed Amendments as follows:

“market neutral fund” means an alternative fund that has

adopted a fundamental investment objective of maintaining a neutral exposure to a broad group of securities identified by sector, industry, market capitalization or geographic region through the use of long positions and short positions

A corresponding exception to the 50% of NAV short sale limit could then be included for market neutral funds which would permit such funds to have short positions up to 100% of NAV.

*(b) Government Securities and IPU's Should be Exempt from Single Issuer Short Sale Limit*

At present, there are exemptions from the concentration restriction in section 2.1 of NI 81-102 for government securities, index participation units ("IPUs") issued by investment funds as well as investment funds purchased in accordance with the requirements of section 2.5 of NI 81-102 (which would include exchange traded funds that do not qualify as IPU's). There are similar exemptions from the control restriction in section 2.2 of NI 81-102.

We submit that, as is the case for long positions, government securities, IPU's and securities of other exchange traded funds should correspondingly be exempt from the single issuer concentration limit of 10% of NAV of the fund contained in subsection 2.6.1(iv) of NI 81-102. Such a change would permit a greater variety of risk-reducing hedging strategies to be offered to retail investors in alternative funds.

Concentration

*3) We are proposing to raise the concentration limit for alternative funds to 20% of NAV at the time of purchase, meaning the limit must be observed only at the time of purchasing additional securities of an issuer. Should we also consider introducing an absolute upper limit or "hard cap" on concentration, which would require a fund to begin divesting its holdings of an issuer if the hard cap is breached, even passively, which is similar to the approach taken with illiquid assets under NI 81-102? Please explain why or why not.*

**Response:**

AIMA Canada supports the concentration limit of 20% of NAV for alternative funds measured as at the time of purchase. However, we do not support the introduction of an upper limit or hard cap on concentration. The imposition of a hard cap concentration limit could result in forced sales of assets with higher transactional costs at distressed prices which would not be in the interests of



investors. We submit that not having a hard cap allows alternative funds to better manage an orderly unwind of positions in excess of the 20% concentration limit thereby maximizing disposition proceeds and contributing to a lower level of market volatility.

#### Illiquid Assets

*4) We are not proposing to raise the illiquid asset limits for alternative funds under the Proposed Amendments. Are there strategies commonly used by alternative funds for which a higher illiquid asset investment threshold would be appropriate? Please be specific.*

#### **Response:**

AIMA Canada submits that the illiquid asset limit for alternative funds be raised to 15% of NAV (with a hard cap of 20% of NAV). We believe that these increased limits are consistent with limits on illiquid assets in other jurisdictions such as the United States (15% of NAV limit) and would permit much more flexibility for alternative investment strategies and allow for exposure for retail investors to additional alternative asset classes under NI 81-102.

In connection with the Proposed Amendments, we would strongly encourage the CSA to use this opportunity to clarify the definition of “illiquid asset” in NI 81-102. The definition currently includes such terms as “readily disposed of”, “market facilities”, “public quotations” and “restricted securities” that are not defined and in respect of which there is no broad consensus within the industry. As such, the term continues to be difficult to interpret and apply in practice, particularly in respect of significant asset classes including syndicated loans, high yield debt, corporate bonds and emerging-market sovereign and quasi-sovereign bonds that trade primarily in the over-the-counter markets (“OTC”).

We submit that the CSA should amend the definition of “illiquid asset” to expressly include OTC pricing that is determined on an arm’s length basis and remove references to market facilities and public quotations to better reflect industry practices with respect to these types of securities. In the alternative, we submit that the CSA should adopt the approach taken by the United States Securities and Exchange Commission (“SEC”) for open-ended funds under Rule 22e-4 adopted by the SEC in an October 13, 2016 release [available at: <https://www.sec.gov/rules/final/2016/33-10233.pdf>]. Under Rule 22e-4, an illiquid investment is an investment that the fund reasonably expects cannot be sold in current market conditions in seven calendar days without significantly changing the market value of the investment. This definition replaces longstanding SEC guidance that a fund asset should be considered illiquid if it cannot be sold or disposed of in the ordinary course of business within seven (7) days at approximately the value ascribed to it by the fund. The two components



of the SEC liquidity test: (a) the number of days required to achieve liquidity and (b) a sale price that is not significantly different from the market value of the investment, we submit, are more relevant than the nature of the market or quotations associated with such liquidity.

*5) Should we consider how frequently an alternative fund accepts redemptions in considering an appropriate illiquid asset limit? If so, please be specific. We also seek feedback regarding whether any specific measures to mitigate the liquidity risk should be considered in those cases.*

**Response:**

We agree that the CSA should take into account redemption frequency when considering a fund's need, if any, for liquidity. Generally speaking, we submit that liquidity is of limited relevance or concern where an alternative fund or a non-redeemable investment fund have limited redemptions and of no relevance or concern where such a fund is not redeemable. Our view is consistent with the International Organization of Securities Commissions ("IOSCO") principles on liquidity. The alignment of liquidity with the redemption obligations and other liabilities of open-ended funds is a principle recommended in IOSCO's "Principles on Suspensions of Redemptions in Collective Investment Schemes" [available at <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD367.pdf>] and reiterated in a report published in March 2013 entitled "Principles of Liquidity Risk Management for Collective Investment Schemes" in which they recommended fifteen principles available at [<http://www.iosco.org/library/pubdocs/pdf/IOSCOPD405.pdf>]

*Redemptions and NAV Calculation*

We would like to bring the CSA's attention the discrepancy between the regime for purchases and redemptions of alternative funds under the Proposed Amendments and the requirements to calculate NAV. Under the current regime in Section 14.2(3) of National Instrument 81-106 Investment Fund Continuous Disclosure ("NI 81-106"), investment funds are required to calculate NAV weekly, unless they use specified derivatives or short sales, in which case they are required to calculate NAV daily. Pursuant to Section 10.3 of NI 81-102, upon redemption, the redemption price of a security must be the next NAV determined after receipt of the redemption order. When the "next NAV determined" is the NAV on the next business day (as would be the case for many alternative funds) real valuation and timing difficulties are created for funds redeemable on a weekly or monthly basis.

The Proposed Amendments (in section 10.3) adopt the carve-out for alternative funds currently available to commodity pools, which allows the redemption price of a security to be the NAV determined on the first or second business day after

receipt of the redemption order. However, while this may slightly lessen the problem for weekly alternative funds, it by no means solves it.

A similar disconnect will exist for purchases of securities of an alternative fund under the Proposed Amendments. Pursuant to Section 9.3 of NI 81-102, the issue price of a security of a mutual fund must also be the next NAV determined after receiving the purchase order. In this case however, the carve-out for the first or second business day provided for redemptions described above does not exist.

While we acknowledge that the Proposed Amendments do not prescribe any particular redemption frequency for alternative funds, the obvious problem for alternative funds offering weekly or even monthly purchases and redemptions as of a specific day (“Dealing Days”) is that they will have multiple issue and redemption prices on any particular single Dealing Day as they will be required to calculate NAV on a daily basis and could potentially receive (purchase and/or redemption) orders each day of the week. Taken to its extreme, an alternative fund with a monthly Dealing Day may be required to issue securities at up to 30 different NAVs on the same Dealing Day.

If this issue is not addressed, the mismatching of the issue and redemption prices with the NAV on the particular Dealing Day will result in significant operational inefficiencies and confusion. Accordingly, we strongly encourage the CSA to correct this inconsistency. One possible solution is to revise Section 10.3(5) of the Proposed Amendments to NI 81-102 as follows:

“(5) Despite subsection (1) an alternative fund may implement a policy that a person or company making a redemption order for securities of the alternative fund will receive the net asset value for those securities determined, as provided in the policy, on the next redemption date of the alternative fund ~~first or 2nd business day~~ after the date of receipt by the alternative fund of the redemption order.

A corresponding provision should be added to Section 9.3 of NI 81-102 to address purchases. The purchase terms for securities of alternative funds should be consistent with the redemption terms for such funds.

We would encourage the CSA to adopt a consistent approach for the purchase and redemption of securities of alternative funds similar to the approach to the payment of incentive fees in the Proposed Amendments (Section 7.1(2)). Specifically, an alternative fund should be required to describe its purchase and redemption procedure in its simplified prospectus (including details relating to the frequency of purchases and redemptions).

Another example of the problem would be for alternative funds that adopt a



“fund of funds” investment strategy as permitted under NI 81-102 and allocate all or a significant portion of the fund’s investment portfolio to non-redeemable investment funds. It would be nearly impossible for such a fund to comply with the next NAV redemption requirements that would be applicable to alternative funds under the Proposed Amendments because of the infrequent redemption schedule of non-redeemable investment funds and the trading price (usually at a discount to NAV) being the only source of liquidity. Alternative funds would be better able to manage their redemption schedule if the redemption price payable is permitted to be based on the NAV at the regularly predetermined Dealing Day.

*6) We are also proposing to cap the amount of illiquid assets held by a non-redeemable investment fund, at 20% of NAV at the time of purchase, with a hard cap of 25% of NAV. We seek feedback on whether this limit is appropriate for most nonredeemable investment funds. In particular, we seek feedback on whether there are any specific types or categories of nonredeemable investment funds, or strategies employed by those funds, that may be particularly impacted by this proposed restriction and what a more appropriate limit, or provisions governing investment in illiquid assets might be in those circumstances. In particular, we seek comments relating to non-redeemable investment funds which may, by design or structure, have a significant proportion of illiquid assets, such as “labour sponsored or venture capital funds” (as that term is defined in NI 81-106) or “pooled MIEs” (as that term was defined in CSA Staff Notice 31-323 Guidance Relating to the Registration Obligations of Mortgage Investment Entities).*

**Response:**

AIMA Canada does not express any view or opinion at this time with respect to the proposed cap on the amount of illiquid assets held by a non-redeemable investment fund as our membership is composed primarily of managers of hedge funds, fund of funds and service providers with businesses and practices focused on the alternative investment sector (but focused less on non-redeemable investment funds).

*7) Although non-redeemable investment funds typically have a feature allowing securities to be redeemable at NAV once a year, we also seek feedback on whether a different limit on illiquid assets should apply in circumstances where a non-redeemable investment fund does not allow securities to be redeemed at NAV.*

**Response:**

For the reasons mentioned in our response to Question 6 above, AIMA Canada does not express any view or opinion at this time with respect to whether a



different limit on illiquid assets should apply in circumstances where a non-redeemable investment fund does not allow its securities to be redeemed at NAV.

#### Borrowing

*8) Should alternative funds and non-redeemable investment funds be permitted to borrow from entities other than those that meet the definition of a custodian for investment fund assets in Canada? Will this requirement unduly limit the access to borrowing for investment funds? If so, please explain why.*

#### **Response:**

Under the Proposed Amendments alternative funds would only be permitted to borrow cash from entities that qualify as investment fund custodians under Section 6.2 of NI 81-102 which would restrict borrowing from Canadian banks and trust companies and their dealer affiliates.

#### *(a) Prime Brokers*

We acknowledge that the Proposed Amendments are intended to permit alternative funds to borrow from dealers that act as prime brokers in Canada. However, it is important to note that while the equity of most bank affiliated dealers exceeds \$10,000,000, they do not prepare separate financial statements that are “made public” as contemplated by Section 6.2(3)(a) of NI 81-102. This was acknowledged as part of the definition of “Canadian custodian” in the recent proposed amendments to National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations* (“NI 31-103”), which adopted the definition from Section 6.2 of NI 81-102 but removed the language “that have been made public”.

To give effect to the stated intention of permitting alternative funds to borrow from dealers that act as prime brokers in Canada we recommend that, for the purposes of borrowing the requirement under Section 6.2(3)(a) of NI 81-102 that the dealers’ financial statements have been made public should be removed, which would be consistent with the proposed changes NI 31-103.

We further submit that the alternative qualification requirement in Section 6.2(3)(b) of NI 81-102 that the bank has assumed responsibility for all of the custodial obligations of the dealer should remain unchanged.

In addition, the Proposed Amendments would prohibit alternative funds from borrowing from investment dealers that are not affiliated with a bank. While most dealers that act as prime brokers in Canada are affiliated with banks, the Proposed Amendments would necessarily exclude independent investment

dealers from this market. In this regard, we refer to the proposed amendments to NI 31-103 discussed above and the inclusion of an investment dealer that is a member of the Investment Industry Regulatory Organization of Canada (“IIROC”) in the definition of “Canadian custodian”. We submit that, for the purposes of borrowing, consideration should be given to permitting alternative funds to borrow from an investment dealer that is a member of IIROC, consistent with the definition of “Canadian custodian” in the proposed amendments to NI 31-103.

(b) *Foreign Lenders*

The ability to borrow from foreign lenders is important to many alternative funds. Alternative funds should be permitted to borrow from foreign financial institutions as this will increase available sources of funding (especially for alternative funds trading in U.S. dollars) and may result in better terms of borrowing for alternative funds. Many alternative funds that trade U.S. securities borrow from U.S. banks and dealers to increase efficiency. We submit that the borrowing requirements should be expanded to include non-Canadian banks and dealers in order to allow alternative funds to make use of both Canadian and non-Canadian lenders in furtherance of their investment strategies, subject to such entities meeting applicable qualification criteria for foreign investment fund sub-custodians under NI 81-102.

We recommend that Section 2.6(2)(a) of the Proposed Amendments to NI 81-102 be slightly modified as follows:

“(a) the alternative fund or non-redeemable investment fund may only borrow from an entity described in section 6.2 or 6.3;”

(c) *Netting of Cash and Cash Equivalents*

We recommend that the proposed cash borrowing limit of 50% of NAV under the Proposed Amendments should be calculated net of any cash and cash equivalents held in the same account.

Total Leverage Limit

9) *Are there specific types of funds, or strategies currently employed by commodity pools or non-redeemable investment funds that will be particularly impacted by the proposed 3 times leverage limit? Please be specific.*

**Response:**

There are no limitations on the aggregate notional exposure under specified derivative transactions under the current regime applicable to commodity pools. We understand that many existing commodity pools may not be able to comply



with the 300% leverage limit on the notional value of derivatives used by the pool. As the investment strategies of these existing funds were established to comply with the current regime, we recommend that these commodity pools be grandfathered in and permitted to continue to operate under an exemption from the 300% leverage limit in the Proposed Amendments subject to complying with the other requirements applicable to alternative funds under NI 81-102. We submit that, in many cases, to require existing commodity pools to reduce the level of leverage used through specified derivatives will result in the investment strategy used by the pool becoming wholly ineffective and requiring such commodity pools to cease operations.

*10) The method for calculating total leverage proposed under the Proposed Amendments contemplates measuring the aggregate notional amount under a fund's use of specified derivatives. Should we consider allowing a fund to include offsetting or hedging transactions to reduce its calculated leveraged exposure? Should we exclude certain types of specified derivatives that generally are not expected to help create leverage? If so, does the current definition of "hedging" adequately describe the types of transactions that can reasonably be seen as reducing a fund's net exposure to leverage?*

#### **Response:**

AIMA Canada has significant concerns at a global level regarding the proposal to restrict total exposure for alternative funds through borrowing, short selling or the use of specified derivatives to the proposed limit of 300% of the fund's NAV in section 2.9.1 of NI 81-102. As currently proposed to be calculated and coupled with a ceiling of 300% of NAV, the leverage limit not only would have a disastrous impact on some existing commodity pools, it would also have a significant negative impact on the ability to offer effective managed futures, relative value, market neutral and global macro alternative investment strategies.

We would encourage the CSA to consider removing the hard leverage limit of 300% of NAV from section 2.9.1 and to instead require disclosure of the maximum amount of leverage the alternative fund may use and the method for calculating leverage by the alternative fund. Removal of the 300% leverage limit would permit existing commodity pools to continue to operate and would broaden the types of alternative strategies that could be made available to retail investors under NI 81-102.

There are generally recognized industry standards in Canada, the U.S. and other jurisdictions to determine the notional amount of exposure under a specified derivative that are used by investment fund managers for risk management, reporting and other purposes. We believe that the approach adopted under the Proposed Amendments should allow alternative funds to use these industry



standard calculation methods for the purposes of calculating the fund's exposure under the Proposed Amendments. This preferred approach will permit alternative funds to apply the same methodology consistently when calculating their aggregate gross exposure as well as calculating their NAV.

For the information of the CSA, we attach as Appendix "A" to this Comment Letter an AIMA White Paper comparing leverage measures for investment funds between the United States and the United Kingdom.

Notwithstanding the above, if the CSA decide to retain the 300% of NAV total leverage limit in the Proposed Amendments we submit that alternative funds should be able to subtract or disregard certain offsetting transactions and positions in specified derivatives that do not create leverage to reduce their calculated leveraged exposure.

We acknowledge the CSA position that hedging transactions do not necessarily fully offset the risk of any particular position and disregarding the notional value of all hedging transactions from the calculation of aggregate gross exposure may misstate a fund's true leverage position. At this time, we would not propose a change to the definition of "hedging" under NI 81-102 or to exclude all hedging transactions from the calculation of total leverage. Although, certain offsetting transactions described below should be specifically excluded

We recommend that immediate offsetting transactions in fungible securities that do not create any additional leverage or exposure and should be disregarded for the purposes of the calculation. By way of example, we note that IROC Rule 100.4 addresses a variety of offsetting positions which are generally not included in the calculating leverage. The essential features of these transactions is that the long position is fungible into the short position and is convertible (however, any costs of converting the offsetting position would be included in the leverage calculation).

We also recommend that alternative funds, in determining the aggregate gross exposure, be permitted to net any directly offsetting specified derivatives transactions that are the same type of instrument and have the same underlying reference asset, maturity and other material terms. This carve-out would apply to specified derivatives transactions for which an alternative fund would use an offsetting transaction to effectively settle all or a portion of the transaction prior to expiration or maturity, such as certain futures and forward transactions. It would also apply to situations in which a fund seeks to reduce or eliminate its economic exposure under a specified derivatives transaction without terminating the transaction.

In addition, we recommend that the Proposed Amendments include a carve-out provision that would permit an alternative fund, in determining aggregate gross

exposure, to disregard any specified derivatives entered into for the purpose of specifically offsetting: (i) foreign currency exposure; (ii) interest rate exposure; and (iii) single-name credit exposure, as these transactions are entered into to eliminate economic exposure in whole or in part. The carve-out provision would permit an alternative fund to exclude from its aggregate gross exposure the notional amounts associated with specified derivative transactions that are entered into by the alternative fund to specifically offset foreign currency exposure or interest rate risk of the fund's portfolio assets, as well as single-name credit default swaps to offset the credit risk of fixed income securities issued by a single debt issuer.

A fund that wants to fully or partially neutralize the foreign currency, interest rate or credit exposure of specific investments by entering into a specified derivative should be able to disregard the notional amount of the offsetting transaction for the purposes of the fund's overall leverage limit.

Our proposed carve-out for these offsetting transactions is not designed to enable a fund to disregard the notional amount of all specified derivative transactions involving foreign currency, interest rates or credit exposure. Rather, the provision would only apply to specified derivative transactions that directly offset or reduce risks associated with all or a portion of an existing investment or position of the alternative fund. These types of transactions do not create leverage or increase a fund's net exposure to leverage and are some of the most common specified derivative transactions entered into for the purposes of managing risk.

*11) We note that the proposed leverage calculation method has its limits and its applicability through different type of derivatives transactions may vary. We also acknowledge that the notional amount doesn't necessarily act as a measure of the potential risk exposure (e.g. interest rate swaps, credit default swaps) or is not a representative metric of the potential losses (e.g. short position on a futures), from leverage transactions. Are there leverage measurement methods that we should consider, that may better reflect the amount of and potential risk to a fund from leverage? If so, please explain and please consider how such methods would provide investors with a better understanding of the amount of leverage used.*

#### **Response:**

Generally speaking we agree that the notional amount of a specified derivative does not always reflect the way in which the fund uses the derivative and that it is not a direct measure of risk. The obvious example being that two different specified derivatives having the same notional amount but different underlying reference assets may expose a fund to very different investment risks. AIMA's position is that there should be multiple (rather than a single) measures of



leverage used in order to address the variability of strategies in the alternative investment universe and that clear disclosure be used to outline how leverage is being used to either enhance returns, or in many cases, to combine related securities in an effort to reduce risk in the investment portfolio.

#### Interrelated Investment Restrictions

*12) We seek feedback on the other Interrelated Investment Restrictions and particularly their impact on non-redeemable investment funds. Are there any identifiable categories of non-redeemable investment funds that may be particularly impacted by any of the Interrelated Investment Restrictions? If so, please explain.*

#### **Response:**

For the reasons mentioned above, AIMA Canada does not express any view or opinion at this time with respect to whether there any identifiable categories of non-redeemable investment funds that may be particularly impacted by any of the Interrelated Investment Restrictions.

#### Disclosure

##### Fund Facts Disclosure

*13) Are there any other changes to the form requirements for Fund Facts, in addition to or instead of those proposed under the Proposed Amendments that should be incorporated for alternative funds in order to more clearly distinguish them from conventional mutual funds? We encourage commenters to consider this question in conjunction with proposals to mandate a summary disclosure document for exchange-traded mutual funds outlined in the CSA Notice and Request for Comment published on June 18, 2015.*

#### **Response:**

We submit that it may be difficult to include all of the information contemplated by the CSA for an alternative fund in the text box disclosure of the fund facts document and fit within the space constraints of the document. We suggest that it would make more sense to include a description of the asset classes and/or investment strategies used by the alternative fund that cause it to fall under the definition of “alternative fund” in NI 81-102 under the description of what the fund invests in the fund facts document and to use the text box disclosure to highlight any differences in the redemption terms for an alternative fund compared to a conventional mutual fund as well as the sources and uses of leverage any specific risk factors that an investor should consider as a result of the asset classes invested in or investment strategies utilized by the



alternative fund to either enhance returns or reduce specific risks in the fund's investment portfolio. We submit that these changes would make the fund facts document significantly more meaningful to retail investors.

AIMA Canada strongly objects to any suggestion that alternative strategies may "affect investor's chance of losing money on their investment in the alternative fund" as was commonly the case for warnings included in the prospectus of commodity pools. Each alternative fund should be evaluated on the basis of the particular investment strategies and asset classes in which it invests and clear disclosure of any risks that should be considered in conjunction with such strategies or asset class should be made in the fund's disclosure documents. We note that to require any disclosure for alternative funds but not for non-redeemable investment funds or conventional mutual funds implies that alternative funds are riskier and more likely to lose money when this is not the case. We do not consider such a distinction to be warranted or appropriate.

AIMA Canada believes that investors should be provided with all meaningful information which should be considered prior to making an investment decision. Specifically, if the changes to the Proposed Amendments suggested in this comment letter are alternative funds may have different timing for purchases, redemptions and risk methodologies which should be highlighted for investors. We suggest that it would be extremely helpful to industry participants if the CSA were to provide a pro forma alternative fund facts document for further consultation and comment prior to the final amendments coming into force.

*14) It is expected that the Fund Facts, and eventually the ETF Facts, will require the risk level of the mutual fund described in that document to be disclosed in accordance with the CSA Risk Classification Methodology (the Methodology) once it comes into effect. In the course of our consultations related to the Methodology, we have indicated our view that standard deviation can be applied to a broad range of fund types (asset class exposures, fund structures, manager strategies, etc.). However, in light of the proposed changes to the investment restrictions that are being contemplated, we seek feedback on the impact the Proposed Amendments would have on the applicability of the Methodology to alternative funds. In particular, given that alternative funds will have broadened access to certain asset classes and investment strategies, we seek feedback on what modifications might need to be made to the Methodology. For example, would the ability of alternative funds to engage in strategies involving leverage require additional factors beyond standard deviation to be taken into account?*

#### Response:

AIMA Canada believes that the Methodology should be consistent between conventional mutual funds and alternative funds. We also believe that fund

managers should have the ability to consider risk measures other than standard deviation as long as this is disclosed to the investor. We would recommend that the Methodology be revisited and adjusted in conjunction with the finalization of the Proposed Amendments as several elements of the Proposed Amendments will impact the overall risk profile of the fund.

There will likely be challenges for some alternative fund managers in complying with the new risk classification rules published in final form on December 8, 2016 and we recommend that some further consideration be given to how risk classifications will apply to alternative funds prior to the publication of the final amendments to NI 81-102 in order to ensure that alternative funds will be able to properly calculate and disclose risk to investors.

#### Point of Sale

*15) We seek feedback from fund managers regarding any specific or unique challenges or expenses that may arise with implementing point of sale disclosure for non-exchange traded alternative funds compared to other mutual funds that have already implemented a point of sale disclosure regime.*

#### **Response:**

Although smaller investment managers may initially face challenges and increased expenses (compared to existing mutual fund managers) in meeting the requirements, AIMA Canada believes that the three month transition period set out in the Proposed Amendments should generally provide an adequate amount of time to implement a point of sale disclosure regime.

#### **4. Transition**

*16) We are seeking feedback on the proposed transition periods under the Proposed Amendments and whether they are sufficient to allow existing funds to transition to the updated regulatory regime? Please be specific.*

#### **Response:**

AIMA Canada supports the proposed transition period of three months from the final publication date for alternative funds. However, we note that some existing closed end funds and commodity pools that are adversely impacted by the changes to the investment restrictions in the Proposed Amendments may require more time to bring themselves into compliance with the restrictions (assuming that they are not grandfathered).



## 5. Other Comments on the Proposed Amendments

In addition to our Responses to the specific questions posed by the CSA, AIMA Canada has the following comments on other aspects of the Proposed Amendments.

### *Counterparty Exposure Limits (Section 2.7(4))*

We do not agree with the elimination of the counterparty exposure exemption for alternative funds and non-redeemable investment funds. It is not clear that there is any risk from exposure to a single counterparty that needs to be mitigated.

The following comment has been made by others previously, including ISDA in their comment letter dated October 17, 2002 on proposed amendments to National Instrument 81-102 Mutual Funds and, in particular, on those aspects of NI 81-102 relating to swaps [available at: <http://www.isda.org/speeches/pdf/osc-com-letter101702.pdf>].

We submit that, under Section 2.7(4) of NI 81-102, the calculation of the mark-to-market value of the exposure of an investment fund to a counterparty should be net of credit support provided by the counterparty. This is because the provision of credit support eliminates the credit risk of the counterparty. We note that such credit support was provided by counterparties to non-redeemable investment funds that entered into pre-paid forward purchase and sale transactions with such counterparties.

### *Custodians of Alternative Funds (Part 6 of NI 81-102)*

Under the Proposed Amendments, alternative funds would be required to appoint a custodian for the assets of the fund in the same manner as conventional mutual funds and custodians/sub-custodians of the assets of alternative funds would be required to adhere to the same requirements as custodians/sub-custodians of conventional mutual funds.

The operational reality for most alternative funds (arising from the frequency of trading, the amount of short selling conducted and the amount of borrowing and derivatives utilized by the fund) require the alternative fund to lodge the majority of its assets with one or more prime brokers. We submit that the proposal to require a separate custodian for the portfolio assets of an alternative fund does not provide any significant additional safeguards for the portfolio assets and would result in increased costs and operational complexities for alternative funds.

Prime brokers do not typically act as custodians for conventional mutual funds

for several reasons including: (i) the qualification requirements under Section 6.2 of NI 81-102; (ii) the prohibition on custodians taking security over portfolio assets of investment funds in Section 6.4(3)(a) of NI 81-102; (iii) the prohibition on the charging of fees for the transfer of beneficial ownership of portfolio assets in Section 6.4(3)(b) of NI 81-102; and (iv) the requirements relating the segregation of assets in Section 6.5 of NI 81-102.

In addition, although not a requirement, prime brokers can offer their clients the most efficient and cost-effective services if they are able to rehypothecate the non-segregated assets held in their client accounts. This has not generally been an issue for conventional mutual funds due to restrictions on leverage in NI 81-102, but for alternative funds that will be able to borrow and short sell up to 50% of NAV, permitting rehypothecation of collateral would significantly reduce transaction costs. This may also even the playing field somewhat between alternative fund managers and larger mutual fund companies who may be able to garner preferential terms from prime brokers if rehypothecation were not permitted.

In this regard, we submit that the portfolio assets of alternative funds will not be subject to any greater level of risk of loss. Prime brokers must adhere to the requirements of IIROC relating to the taking of security (margin) and the segregation of assets and the prime brokerage relationship is governed by the terms of the prime brokerage agreement. We believe that in addition to the operational benefits and cost savings listed above there are sufficient safeguards in place to effectively protect client assets, specifically:

- Cash in a Prime Brokerage account is not segregated and may be used by the Prime Broker subject to limits set and monitored by IIROC. A Prime Broker is liable as a debtor to pay the alternative fund, as creditor, all such amounts.
- A Prime Broker holds all securities in its accounts for the alternative fund. In a cash account, all securities are fully paid for and are segregated (either in bulk with other client assets or specifically for an alternative fund if a bare trust agreement is entered into).
- In a margin account, alternative funds may borrow against portfolio securities to the extent of their margin value. The securities borrowed against, based on their margin value are not segregated by the prime broker. Short positions in the account that cannot be covered by available cash may also result in securities becoming un-segregated.
- Under IIROC rules, a prime broker may use only un-segregated securities in their business and only to the extent needed to cover a margin loan. For example, if a client has securities worth \$1,000 in its Prime



Brokerage account and owe \$100 on a margin loan, the Prime Broker would only be able to use securities having a total margin value of \$100. Prime brokers use these securities in the normal course of their business.

- IIROC regulations require firms to review its segregation at the account level each day and to correct any deficiencies (IIROC Rules 2000.4 to 2000.6). A Prime Broker must take immediate action to correct any segregation deficiency (IIROC Rules 2000.8-9).

We note that, as part of amendments proposed for NI 31-103 in July of this year, the CSA contemplated that registered investment dealers who are members of IIROC would be permitted to act as custodians in Canada for the assets of privately offered investment funds.

AIMA Canada respectfully submits that registered dealers who are members of IIROC and who otherwise meet the qualification criteria to act as a Custodian under Section 6.2 of NI 81-102 (specifically, the criteria in Section 6.2.3 (a) and (b), requiring \$10 million of equity or guarantee by the parent bank) should be permitted to act as the custodian or sub-custodian of an alternative fund. We also reiterate our comment relating to borrowing above that the requirement in Section 6.2(3)(a) of NI 81-102 that dealers' financial statements "have been made public" should be removed.

Permitting prime brokers of alternative funds to also act as custodian of the fund would save costs (by eliminating additional counterparties) and would not subject the portfolio assets of the alternative fund to any additional risk as prime brokers qualified to act as custodians will have sufficient capital and must act in accordance with IIROC rules and guidelines when taking and realizing on security or in connection with the segregation of assets.

#### *Custodial Provisions relating to Short Sales (Section 6.8.1)*

Section 6.8.1 of NI 81-102 currently permits a fund to deposit up to 10% of NAV with a borrowing agent, other than its custodian or sub-custodian, as security in connection with a short sale (the "10% of NAV Limit"). In practice, a borrowing agent generally requires that the proceeds from the short sale, plus additional collateral be held as security. Under the current NI 81-102 aggregate short sale restriction of 20% of a fund's NAV, this practice results in the need for at up to two or three dealers/borrowing agents to facilitate and permit a fund to short the maximum 20% of its NAV.

However, the Proposed Amendments will permit an alternative fund to short up to 50% of its NAV, without any change in the custodial provisions set out in Section 6.8.1 which presents both practical and operational issues for alternative funds. For example, under margin rules established by IIROC, an alternative fund entering into a short sale transaction for an equity security

eligible for reduced margin would be required to post 130% of the market value of the short position as margin (security). As a result, an alternative fund that wishes to take full advantage of the increased short sale limits (50% of NAV) would be required to deal with 7 separate borrowing agents (other than the custodian) in order to comply with the 10% of NAV Limit in Section 6.8.1. A similar situation would be experienced for other asset classes such as fixed income and FX forward transactions. This would not be practically feasible and would lead to operational and administrative inefficiencies and significantly increased costs for alternative funds including:

- the time and effort to evaluate and sign multiple prime brokerage/dealer arrangements will be significant and costly for alternative funds.
- Requirement for additional staff to manage daily operational activities such as margin, reconciliations, settlements and tax reporting
- greater costs from the fund administrator due to increased book-keeping and reconciliation requirements.
- smaller accounts would mean less leverage to negotiate favourable pricing and terms of service with prime brokers/dealers.
- the requirement to locate multiple suitable prime brokers may be challenging due to the size of the industry in Canada; and
- other solutions (such as the use of tri-party arrangements) that may allow an alternative fund to comply with the 10% of NAV requirement could be operationally challenging and add additional costs for the alternative fund.

We note that if prime brokers were permitted to act as custodians of alternative funds as we have suggested above, the current language in section 6.8.1 would function much more effectively. Notwithstanding this fact, we would submit that a 20% of NAV deposit limit with borrowing agents (other than the fund's custodian or sub-custodian) as security for short sales by alternative funds would provide alternative funds with the flexibility to engage the services of two or more prime brokers (other than their custodian or sub-custodian) in an effort to execute their investment strategies in a more efficient manner and to help alleviate potential counterparty risk.

#### *Historical Performance Record (Part 15 of NI 81-102)*

A number of AIMA members have indicated that the investment strategies utilized by their existing privately offered pooled funds could fit within the investment restrictions for alternative funds under the Proposed Amendments. In these circumstances, it may be desirable for these funds to become alternative



funds under the Proposed Amendments by filing a simplified prospectus. Although, Section 15.6(1)(a) of NI 81-102 contains a prohibition against the inclusion of performance data in sales communication for a mutual fund that has been distributing securities under a prospectus for less than 12 consecutive months.

Accordingly, an investment fund manager of an existing pooled fund with a suitable strategy that wanted to convert the existing pooled fund into an alternative fund by filing a simplified prospectus would not be able to include the historical track record of the pooled fund in the sales communications pertaining to the alternative fund.

The Proposed Amendments represent one of most significant developments in the Canadian investment industry in some time and given the unique nature of these changes we recommend that the CSA provide a limited exemption from the prohibition contained in Section 15.6(1)(a) of NI 81-102 to permit alternative funds that convert from a pooled fund to include their historical performance data in their sales communication with the appropriate qualifications. Without this information, investors will not be able to obtain a complete picture of the skill of the alternative fund manager and the behaviour of the alternative strategies employed by the fund. AIMA Canada considers this information (with the relevant caveats) to be vital for investors who will not be familiar with this space.

#### *Presentation of Financial Highlights in NI 81-106*

We have the following specific comments relating to the presentation of financial highlights by mutual funds under NI 81-106.

#### Calculation of Management Expense Ratio and Trading Expense Ratios

We submit that due to the use of short selling and/or borrowing by alternative funds, the costs associated with such alternative investment strategies will significantly impact an alternative fund's expense ratio. As there is limited guidance on the inclusion of these expenses in either Management Expense Ratio ("MER") or Trading Expense Ratio ("TER"), we are concerned that there will be inconsistent treatment resulting in less comparability across different funds. Since these expenses, including dividend and interest expense on short sales and related short sale borrowing fees, as well as borrowing interest expense costs, are incurred in the course of execution of the alternative strategy, we recommend that the CSA provide guidance that confirms these expenses should be included as part of TER. Such treatment would be in line with other transaction costs which are currently included in TER, however it would treat interest expense on borrowing as TER rather than the current practice of including this expense as part of the MER. We submit that our recommended

treatment of these expenses for alternative funds would better align costs with the execution of the strategy (i.e. transactional in nature) rather than as an operating expense of the alternative fund.

#### Total return and total annual compound return calculations

NI 81-106 currently requires returns to be bifurcated and presented separately for long and short investments during the relevant period. We submit that the requirement to bifurcate long and short returns for alternative funds be removed as the current disclosure requirement would result in misleading information for investors both as it relates to fund performance as well as providing a complete understanding of the strategy and risk of the alternative fund. For example, various alternative strategies involve the execution of long-short “paired” trades or the use of short sales to hedge an element of market or interest rate risk such that the position is only relevant when one considers the combined long and short components. One must also take into account that specified derivatives are used by some alternative investment strategies instead of short sales to achieve a similar result. Thus, presentation of performance bifurcated between long and short positions will not allow an investor to understand the performance of the fund and will only promote misunderstanding and confusion.

#### *Proficiency*

We note that the CSA intends to engage with the Mutual Fund Dealers Association (“MFDA”) in order to determine the appropriate proficiency requirements for dealing representatives of mutual fund dealers to distribute securities of alternative funds. AIMA Canada has a vast array of educational and other resources available relating to alternative investment strategies and we would be very pleased to offer our assistance to the CSA and MFDA in this regard.

#### **Conclusion**

We believe that the Proposed Amendments will usher in a new era and truly modernize Canadian investment fund product regulation. Once implemented, Canadian retail investors will have access under a prospectus for the first time to investment strategies and asset classes that can assist in both improving returns and mitigate market risk in an investment portfolio. AIMA Canada applauds the CSA for the reasoned and measured approach reflected in the Proposed Amendments. We feel that, with the additional changes suggested in our Comments and those anticipated from other market participants and stakeholders, alternative funds offered under NI 81-102 can play a meaningful role in helping Canadians realize their investment objectives.

We appreciate the opportunity to provide the CSA with our views on the



Proposed Amendments. Please do not hesitate to contact the members of AIMA set out below with any comments or questions that you might have.

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Yours truly,

**ALTERNATIVE INVESTMENT MANAGEMENT ASSOCIATION**

By:



**APPENDIX "A"**  
**AIMA WHITE PAPER**





Alternative Investment  
Management Association

# AIMA WHITE PAPER

## Comparing Measures of Leverage in Funds

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September 2016



## Introduction

There are currently several different methods of calculating leverage that are used in the fund management industry. The methods differ largely because they are used for different purposes. For many investors in alternative asset funds who want to compare leverage across funds in their portfolio and look for changes over time, for example, a more straightforward, easy-to-calculate measure may work best. For regulators concerned primarily with considering the potential impact of fund leverage on the stability of the financial system as a whole, the most relevant measure of leverage is likely to take into account current market conditions. This paper explains some of the main methods of calculating leverage that are used currently in various jurisdictions and discusses their differences, as well as their relative advantages and disadvantages.

## What is leverage?

Leverage is generally thought to mean increasing financial exposure by borrowing funds to acquire assets, but for financial firms a more precise definition is necessary. In this context, leverage is any technique that is used by investors to try to create hedges against unwanted risks or to amplify gains. Leverage can be created by borrowing money or securities directly from counterparties (sometimes called 'financial leverage') or indirectly by using derivative instruments such as options, futures or swaps (sometimes called 'synthetic leverage').<sup>1</sup>

## Why leverage?

Leverage is frequently used by both public and private companies of all sizes, various governmental entities ranging from sovereign states to municipalities as well as a variety of other investor types, even individuals and families. In a corporate context, companies raise debt through a variety of channels to fund their working capital requirements, growth initiatives or expansion plans. Most governmental agencies around the world issue debt to fund operations, build infrastructure, and provide various public services. Families borrow to purchase large assets, like homes and cars.

In the asset management industry, leverage is often incorporated as part of an investment strategy in which borrowed money is used to adjust risk exposures with the intention of multiplying gains and/or limiting losses of an investment. In an investment context, portfolio managers can borrow money or assets to create a pool of capital larger than their initial equity obtained from investors to be used for adding more risk exposure with a goal to generate higher expected returns. Leverage can also be used to purchase hedges, instruments that protect against risks in a portfolio like an unexpected change in foreign exchange or interest rates. Leverage is used as a legitimate tool for asset managers and investors to help achieve their return goals as well as offset risk.

## Measuring leverage of funds

Due to their different needs, investment managers, investors and regulators often employ different methodologies for measuring leverage. Leverage is usually calculated as a ratio of exposure/size of a portfolio of assets to the level of capital or equity that may support that. For funds, it is generally agreed that the fund's net asset value ('NAV'), which reflects the current value of the fund's investors' holdings, is the best estimate of capital or equity.

$$\text{Fund Leverage} = \frac{\text{Exposure/Size}}{\text{NAV}}$$

However, there are different methods of how to calculate exposure. These vary mainly by their approach to measuring off-balance sheet exposures obtained via the use of derivatives.

Balance sheet leverage takes into account a fund's assets compared with its equity. Where the entity's assets exceed its equity, under this method of calculating leverage, the fund would be leveraged. For example, if a fund had on-balance sheet assets worth £2 million and an NAV of £1

<sup>1</sup> See [The Leverage Ratio](#), Katia D'Hulster, The World Bank (December 2009).



million, it would be employing 2x leverage under the balance sheet calculation method. In cases where the quality of the asset pool is broadly similar across entities, balance sheet leverage can be a useful proxy for relative riskiness because the greater the size of the assets, the greater the potential variability in their value. This is why balance sheet leverage is a useful metric for simple banking entities where the assets may be loans to corporations and mortgages. A shortcoming of balance sheet leverage as a risk measure is that it does not differentiate between asset portfolios of relative riskiness. For example, a portfolio of short-term U.S. government bonds is likely to be far less risky than a portfolio of emerging market equities of the same size.

As can be seen from the observations in the table below, classic financial statement based leverage definitions do not incorporate off-balance sheet positions (for example, derivatives). Incorporating derivatives into a leverage calculation requires consideration not only of the problem of relative riskiness (which applies for example to options and bonds of different durations) but also the issues of hedging (derivative positions which are highly negatively correlated with other risks in the portfolio and therefore reduce risk) and netting (long and short derivative positions which are virtually identical and have a very small net risk). These factors mean that derivative positions can both increase and decrease leverage, and therefore it is more useful to consider risk-based measures of leverage.

Risk-based measures of leverage are more complicated than the balance sheet measure of leverage, as they try to overcome the shortcomings of classic measures by relating a risk measure (for example, market risk when using value at risk ('VaR') measures) to a fund's capacity to absorb this risk (for example, the fund's equity). More sophisticated dynamic measures of leverage incorporate a fund's ability to adjust its risk position during periods of market stress.<sup>2</sup>

### Regulatory measures of leverage

Regulators have invested considerable time in developing methods of measuring leverage, typically in order to analyse how much capital a bank or securities firm should be holding in light of the risks of their businesses. These methods take into account the risk that the value of the assets of the firm may fluctuate, which would necessitate the holding of higher capital levels, and the use of both borrowing and derivatives is incorporated into these analyses. In order to further analyse leverage arising from the use of derivatives, or synthetic leverage, many other methods may be used. These include the following:

#### (i) Gross methods

Gross methods generally take the sum of the absolute values of all long and short exposures, including those which are notional off-balance sheet exposures, and divide this by the fund's NAV. Most gross methods call for some calibration of the gross amount of derivatives, instead of using the face value of the contracts.

$$\text{Gross Leverage} = \frac{\text{long + short exposures (including off-balance sheet activities, e.g., borrowed securities and notional exposures of derivative contracts)}}{\text{NAV}}$$

#### *The gross method used by the AIFMD*

The Alternative Investment Fund Managers Directive ('AIFMD')<sup>3</sup> requires alternative investment fund managers ('AIFMs') to calculate leverage using both a gross method and a commitment method (see below). The gross method essentially adds to the balance sheet exposure measure all of the fund's off-balance sheet notional exposures gained via the use of derivatives without taking into account any netting or hedging of such absolute values.

<sup>2</sup> See Appendix E of the Hedge Fund Working Group's "[Hedge Fund Standards: Final Report](#)" (January 2008).

<sup>3</sup> Directive 2011/61/EU.

The gross method consists of calculating the absolute value of all positions of an AIF, as per the requirements for valuation. Initially this should include all short and long assets and liabilities, borrowings, derivatives (converted, as discussed above, into their equivalent underlying positions), repurchase and reverse repurchase agreements where the risks and rewards of the assets or liabilities are with the AIF and all other positions that make up the net asset value of the AIF.

Any cash and cash equivalent assets that are highly liquid and are held in the base currency of the AIF which provide no greater return than a three month high quality government bond are removed from the gross calculation because such assets are not deemed to increase exposure. This includes cash held for collateral by a counterparty. Any borrowing used to increase exposure should be excluded from the gross method calculation to avoid double counting. The exposure resulting from the reinvestment of cash borrowings should therefore be expressed as the higher of the market value of the investment realised or the total amount of the cash borrowed.

#### *Gross method proposed by FSB/IOSCO: GNE*

A variant of the gross method has also been contemplated as a useful measure both of size and leverage of the hedge fund industry in the most recent Financial Stability Board (FSB) and International Organization of Securities Commissions (IOSCO) consultation regarding the methodologies of identifying non-bank non-insurance systematically important financial institutions ('NBNI SIFIs'). This would take the absolute sum of all long and short positions, including gross notional value (delta-adjusted when applicable) for derivatives as its measure of exposure. This is called 'gross notional exposure' or 'GNE'. As noted by the UK Financial Conduct Authority:

"this measure provides a complete appreciation of all the leverage that is employed by a fund to gain market exposure, i.e. financial leverage (repos, prime broker financing, secured and unsecured lending) and synthetic leverage (exposure through derivatives, including exposure to the underlying asset or reference). GNE does not directly represent an amount of money (or value) that is at risk of being lost. It is a reference figure used to calculate profits and losses."<sup>4</sup>

#### **(ii) Commitment methods**

Some risk based measures of leverage will attempt to measure the commitments of the entity. The AIFMD and the Undertaking for Collective Investment in Transferable Securities ('UCITS') legislation both set out ways to calculate commitment measures of leverage.

#### *The commitment method used by the AIFMD*

The AIFMD not only requires that a fund's leverage be calculated using the gross method, but also mandates that a commitment method is used. The commitment method calculates the exposure of an AIF by taking the sum of the absolute values of all positions. Further detailed criteria are set out in paragraphs 2-9 of Article 8 of the AIFMD Level 2 Regulation.<sup>5</sup> The commitment method allows for the netting of exposures (which is not permitted under the gross method) as well as a limited recognition of hedging to decrease the exposure measure of the leverage ratio. Furthermore, the commitment method requires the notional amounts of interest rate derivative contracts to be adjusted to the fund's "target duration". However, it should be noted that the conditions for netting and hedging are opaque and that some arrangements that a manager employs for hedging purposes may not qualify.

Derivatives can be removed from the calculation if they swap the performance of assets held by the AIF for other reference financial assets or offset the market risk of the swapped assets held in the AIF so the performance of the AIF does not depend on the swapped assets. In these cases the derivatives are removed from the calculation because they reduce the exposure of the AIF.

<sup>4</sup> <http://www.fca.org.uk/static/documents/hedge-fund-survey.pdf>.

<sup>5</sup> Commission delegated regulation No 231/2013.



### *The commitment approach used by the UCITS legislation*

A UCITS may elect to use either: (i) the commitment approach for measuring global exposure and leverage; or (ii) an advanced risk measurement technique (e.g., VaR (see below)). Detailed methodologies to be followed by UCITS when they use the commitment or the VaR approach have been developed by the Committee of European Securities Regulators (CESR), the predecessor to the European Securities and Markets Authority (ESMA). In these guidelines, CESR states that: “It is the responsibility of the UCITS to select an appropriate methodology to calculate global exposure. More specifically, the selection should be based on the self-assessment by the UCITS of its risk profile resulting from its investment policy (including its use of financial derivative instruments).”

CESR’s guidelines state that the commitment approach is appropriate for a UCITS that does not use complex derivatives or trade derivatives extensively.<sup>6</sup> This approach is based on the market value of the asset underlying the derivative and sums up the aggregate absolute value of the underlying exposures’ notional values. For a UCITS using the commitment approach, derivatives are converted into their equivalent position in underlying assets. The exposure is then calculated following netting.

Using the commitment approach to measure global exposure, financial derivatives instrument (‘FDI’) exposure is measured as the positive market value of the equivalent underlying position.

FDI and security positions may be netted to reduce global exposure as follows:

- Between FDI, provided they refer to the same underlying asset, even if the maturity dates of the FDI are different; and
- Between FDI (whose underlying asset is a transferable security, money market instrument or a collective investment undertaking) and the same corresponding underlying asset.<sup>7</sup>

Hedging arrangements may only be taken into account when the following criteria are satisfied:

- Investment strategies that aim to generate a return should not be considered as hedging;
- There must be a verifiable reduction of risk at the UCITS level;
- The risks linked to the FDI should be offset;
- They should relate to the same asset class; and
- They should be efficient in all market conditions.

The calculation of global exposure is always presented as an absolute positive number and does not allow for the calculation of negative commitments. This calculation is used to limit overall leverage in UCITS funds so that the exposure may not exceed the NAV of the UCITS.

### **(iii) VaR methods**

Another calculation methodology that may be used under the UCITS legislation to calculate a UCITS’s global exposure, where appropriate, is one which utilises VaR. The VaR approach is a measure of the maximum potential loss due to market risk, which measures the maximum potential loss at a given confidence level (probability) over a specific time period under normal market conditions.

For example if the VaR (1 day, 99%) of a fund is £2 million, this means that, under normal market conditions, the fund can be 99% confident that a change in the value of its portfolio would not result in a decrease of more than £2 million in one day. This is also equivalent to saying that there is a 1% probability (confidence level) that the value of its portfolio could decrease by £2 million or more during one day, but the level of this amount is not specified and could be far greater than £2 million.

<sup>6</sup> See [CESR’s Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS](#).

<sup>7</sup> Id., at box 2.

The VaR approach can be further subdivided into (i) an absolute and (ii) a relative VaR approach. The maximum absolute VaR limit is set at 20% of the NAV over a 20-day holding period and based on a 99% confidence interval<sup>8</sup>. The relative VaR limit is twice the VaR of a derivative free benchmark.

A UCITS using the VaR may use absolute VaR or relative VaR. A proper VaR limit should be assigned (which is not necessarily the one allowed by regulation) where the risk/reward indicator will be at its highest level. Another set of CESR guidelines,<sup>9</sup> state that for absolute return funds, the VaR should be calculated using volatility determined by the maximum of historical volatility and the risk limit. If there is not enough historical data to compute the VaR, then it is calculated only by using the risk limit.<sup>10</sup>

Relative VaR is the VaR of a UCITS divided by the VaR of a UCITS reference portfolio. Relative VaR cannot exceed 200% or two times the VaR on a comparable benchmark portfolio or derivatives-free portfolio.

The VaR model must comply with the following requirements:

- The confidence level (one tailed) must be 99%;
- The maximum holding period is 20 days;
- The minimum historical holding period is one year;
- Stress tests should be performed monthly; and
- Back-testing should be performed monthly.

The VaR model may use a different confidence level and/or holding period, provided the confidence interval is not below 95% and the holding period does not exceed 20 days. In such instances, the VaR limit may be adjusted accordingly.

For any UCITS using the VaR approach to calculate its global exposure, ESMA also requires the UCITS to use the so-called “sum of notionals” method to calculate its leverage for disclosure purposes.<sup>11</sup> The sum of notionals method adds together all notional amounts of any derivative positions without using any netting or hedging. This method, which is similar to the gross method under AIFMD in that it provides valuation of derivatives, has the benefit of providing a common comparative standard amongst various funds, though clearly its applicability across different strategies may vary significantly.

#### (iv) Leverage calculation methodologies used by 1940 Act funds

With respect to leverage, the U.S. regulatory regime imposes implicit limits on leverage via the Section 18(f)(1) of the Investment Company Act of 1940 (the ‘1940 Act’), which generally prohibits registered open-end investment companies from issuing “senior securities”. Broadly speaking, a “senior security” is any security or obligation that creates a priority over any other class to a distribution of assets or payment of a dividend. Permissible “senior securities” include, among other things, a borrowing from a bank where the fund maintains an asset coverage ratio of at least 300% while the borrowing is outstanding. This is referred to as the 300% asset coverage requirement. For instance, a 1940 Act fund with \$100 million in assets may borrow up to \$50 million from a bank. Following the borrowing, the 1940 Act fund would have \$150 million of assets and \$50 million of borrowing and would therefore satisfy the 300% asset coverage requirement. However it is

<sup>8</sup> See [CESR’s Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS](#), at box 15.

<sup>9</sup> [CESR’s guidelines on the methodology for the calculation of the synthetic risk and reward indicator in the Key Investor Information Document](#).

<sup>10</sup> See [CESR’s Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS](#), at box 5.

<sup>11</sup> See Questions 2 of [ESMA’s Questions and Answers on Risk Measurement and Calculation of Global Exposure and Counterparty Risk for UCITS](#).



important to note that, under the current rules (which are proposed to be changed),<sup>12</sup> 1940 Act funds can potentially use some forms of leverage without requiring a 300% coverage ratio by using levered investment vehicles. In particular, cash-settled derivative contracts can be used almost without limit.

The U.S. Securities and Exchange Commission (SEC) currently limits use of leverage from short sales and derivative instruments by prohibiting complex capital structures in 1940 Act funds and the issuance of “senior securities” as defined in Section 18 of the 1940 Act. The SEC has deemed that leverage may exist when “an investor achieves the right to a return on a capital base that exceeds the investment which he has personally contributed to the entity or instrument achieving a return.”<sup>13</sup> The types of transactions explicitly identified by the SEC as potentially creating “senior securities under Section 18 include reverse repurchase agreements, written options, futures and options on futures, forward contracts on currencies or securities, firm commitment agreements, standby agreements, and short sales. Specifically, derivatives transactions that may create “senior” securities are writing call futures, writing call options or entering into swaps, because each such transaction obligates the fund to deliver a security or make a payment in the future.

To comply with Section 18(f) of the 1940 Act, a fund must “cover” the obligation (indebtedness) created by a “senior security” transaction with cash and/or liquid securities in the fund’s portfolio, provided the “cover” assets are placed in a segregated account at the custodian. Alternatively, the fund may enter into a directly offsetting transaction. Current SEC guidance permits two types of segregation: “notional” and “mark-to-market.” Futures, forwards, options and short sale contracts that on expiry require physical settlement (i.e., the delivery of the underlying security) must be “covered” by segregating the full notional amount (i.e., the full value of the potential obligation of the fund under the contract) or by entering into certain offsetting transactions. However, where the contracts are cash settled (i.e., on expiry there is no delivery of the underlying security but rather a cash payment of the net value), the “cover” requirement is limited to the fund’s daily marked-to-market obligation, i.e., the daily difference between the fund’s obligation to its counterparty and the counterparty’s obligation to the fund.

In a 1987 no-action letter,<sup>14</sup> the SEC’s Division of Investment Management clarified that covering a derivatives position with an offsetting position effectively eliminates the derivatives exposure and obviates the need to segregate assets to comply with the 300% asset coverage requirement. The SEC stated that a fund that has purchased a futures or forward contract can cover that position by purchasing a put option on the same futures or forward contract with a strike price equal to or higher than the futures or forward contract price. The no-action letter also provided that a fund that has sold a put option could cover its position by selling short the instrument or currency underlying the put option at the same or a higher price than the strike price of the original put.

While the requirements for segregation and offsets are quite complex and derived from years of interpretative positions, the table below gives at least a flavour of what is involved.

Types of Transactions	Segregation Requirement
Forward Currency Contracts	For physically settled long positions, the fund must segregate the gross settlement amount. For physically settled short positions, the fund must segregate the market value of the foreign currency that the fund has sold, marked to market daily. For cash settled long or short positions, the fund must, segregate the net settlement amount, marked to market daily. In all cases, however, the amount that the fund must segregate can be reduced in some specific circumstances if the fund has posted margin or collateral against its obligations (posting collateral is the equivalent of segregating assets) and the fund has “covered” its obligation.

<sup>12</sup>See [Use of Derivatives by Registered Investment Companies and Business Development Companies](#), Investment Company Release No. IC-31933 (11 Dec. 2015).

<sup>13</sup>See Investment Company Act Release No. 10666 (Apr. 18, 1979) 17 SEC Docket 319.

<sup>14</sup>See <https://www.sec.gov/divisions/investment/imseniorsecurities/dreyfusstrategic033087.pdf>.

Types of Transactions	Segregation Requirement
<b>Purchased Options</b>	None. Since the fund has no obligation to exercise the option, it has no payment or delivery obligation against which it must segregate any assets.
<b>Long Futures Positions and Long Written Options</b> Purchase of Futures Contract and sale of Put Option	The fund must segregate the amount of the purchase price that the fund will be required to pay on the settlement date for the futures contract or on the date that the put option is exercised. This may be limited to the net amount that fund would be required to pay if the position is cash settled. The amount that the fund must segregate is reduced by the amount of any initial or variation margin (or other collateral) that has been deposited posted with an FCM, broker or the counterparty; and to the extent that the fund has "covered" its position.
<b>Short Futures Positions and Short Written Options</b> Sale of Futures Contracts or Call Options	The fund must segregate an amount equal the current market value, marked to market daily, of the security (or index, instrument, etc.) underlying the contract. This may be limited to the net amount that fund would be required to pay if the position is cash settled. The amount that the fund must segregate is reduced by the amount of any initial or variation margin (or other collateral) that has been deposited posted with an FCM, broker or the counterparty; and to the extent that the fund has "covered" its position.
<b>Spreads and Straddles</b>	If proceeds of one leg of the transaction can be used to satisfy all or part of the fund's obligation under the other leg, the fund only needs to segregate an amount equal to its obligations (marked to market daily) under the prong providing the larger potential exposure - e.g., the written put option in a straddle, where the fund writes both a put and a call option on the same security.
<b>Swaps (Other than Credit Default Swaps)</b>	For fully cash-settled swaps, the fund must segregate the "fund out of the money amount", marked to market daily, plus the amount of any accrued but unpaid premiums or similar periodic payments, net of any accrued but unpaid periodic payment payable by the counterparty. The amount that must be segregated is reduced to the extent that the fund has posted collateral against its obligations under the swap. Special considerations apply to credit default swaps though.
<b>Reverse Repurchase Agreements</b>	The fund must segregate an amount equal to the repurchase price, marked to market daily.
<b>Short Sales</b>	The fund must segregate an amount equal to the current market value of the securities sold short. The amount that must be segregated is reduced to the extent that the fund has posted collateral - other than the proceeds of the short sale - against its obligations with respect to the short sale position. The proceeds of the short sale are not counted for purposes of satisfying a fund's segregation requirements.

#### (v) Leverage calculation methodologies used by banks

The Basel Committee on Banking Supervision (BCBS) introduced the Basel III leverage ratio in order to create "a simple, transparent, non-risk based leverage ratio to act as a credible supplementary measure to the risk-based capital requirements."<sup>15</sup> In its paper entitled 'Basel III leverage ratio framework and disclosure requirements' the BCBS stated that in their view "a simple leverage ratio framework is critical and complementary to the risk-based capital framework; and a credible

<sup>15</sup> See <http://www.bis.org/publ/bcbs270.pdf>.



leverage ratio is one that ensures broad and adequate capture of both the on- and off-balance sheet sources of banks' leverage."<sup>16</sup>

The Basel III leverage ratio is defined as the capital measure (the numerator) divided by the exposure measure (the denominator), with this ratio expressed as a percentage:

$$\text{Leverage ratio} = \text{capital measure/exposure measure}$$

The capital measure used for the leverage ratio at any particular point in time is the Tier 1 capital measure applying at that time under the risk-based framework.<sup>17</sup> In order to calculate the exposure measure, at present banks generally adopt the Current Exposure Method (CEM) to capture off-balance sheet derivatives exposures, including centrally cleared derivatives exposures. The exposure measure for the leverage ratio should generally follow the accounting value, subject to (i) on-balance sheet, non-derivative exposures are included in the exposure measure net of specific provisions or accounting valuation adjustments (e.g., accounting credit valuation adjustments); and (ii) netting of loans and deposits is not allowed. A bank's total exposure measure is the sum of the following exposures: (a) on-balance sheet exposures; (b) derivative exposures; (c) securities financing transaction exposures; and (d) off-balance sheet items.<sup>18</sup> The CEM takes the sum of the gross assets held by the fund and the adjusted GNE whereby the different derivatives asset classes are weighted by the factors indicated in Table 1 below.

**Table 1: Risk weighted factors** = from the table and we have applied the most conservative factor in each case.

Remaining Maturity	Int Rate	FX rate & Gold	Credit (Investment Grade)	Credit (non-investment grade)	Equity	Precious Metals (except Gold)	Other
<=1 year	0	0.01	0.05	0.1	0.06	0.07	0.1
>1 yr and <= 5 yrs	0.005	0.05	0.05	0.1	0.08	0.07	0.12
>5 yrs	0.015	0.075	0.05	0.1	0.1	0.08	0.15

Source: ConverseSource conversion factor matrix for OTC derivative contracts for Basel III (Basel Capital Market Risk Final Rule)

The CEM recognises legally enforceable netting arrangements and takes into account the potential future volatility in the market value of the underlying asset and the remaining maturity of derivative contracts. CEM is a more accurate representation of risk than straightforward leverage. However, the CEM has been criticised for several limitations, in particular that it does not differentiate between margined and unmargined transactions, that the supervisory add-on factor does not sufficiently capture the level of volatilities as observed over recent stress periods, and the recognition of netting benefits is too simplistic and not reflective of economically meaningful relationships between derivatives positions.

The CEM method will therefore be replaced by an updated method, the Standardised Approach (SA-CCR), in January 2017.<sup>19</sup> The SA-CCR is a method for measuring exposure at default (EAD) for counterparty credit risk (CCR) and will be used by banks in the exposure component of the 'leverage ratio' in place of the CEM. The SA-CCR provides even greater recognition of hedging and netting benefits than the CEM and differentiates between margined and unmargined trades.

<sup>16</sup>Id.

<sup>17</sup> See the Tier 1 capital of the risk-based capital framework as defined in paragraphs 49 to 96 of the Basel III framework at <http://www.bis.org/publ/bcbs128.pdf> and see <http://www.bis.org/publ/bcbs270.pdf>.

<sup>18</sup> See further <http://www.bis.org/publ/bcbs270.pdf>.

<sup>19</sup> See <http://www.bis.org/publ/bcbs279.pdf>, which explains the SA-CCR in detail.

It is worth noting that the ten largest banks in the world have an average balance sheet leverage (ratio of assets to equity) of approximately 20x but the highest derivatives leverage (ratio of derivatives gross notional to equity) exceeds 1000x even taking into account the available netting and other reductions of gross notionals permitted under the CEM. If bank leverage were measured on a gross notional exposure basis, as has been suggested for hedge funds by the IOSCO-FSB consultation papers (and as implemented under the AIFMD), that figure would be substantially higher.

#### (vi) Major Swap Participants

Historically, when people have looked at systemic importance or relative importance of certain entities within the derivatives market place, they have not used simple measures of leverage for making such determinations. One such example can be seen in the calculation methodologies in place for determining whether an entity qualifies as a major swap participant ('MSP') in one or more derivatives markets. The approach taken when assessing whether an entity is a MSP is akin to the Basel III approach to assessing derivatives holdings in as much as certain netting and discount factors are applied before reaching a relevant figure.

The Dodd-Frank Wall Street Reform and Consumer Protection Act (the 'Dodd-Frank Act') introduced a requirement that all MSPs must register with the Commodity Futures Trading Commission (CFTC). The CFTC and the SEC adopted a [final rule](#) defining, "major swap participant" as a person, other than a swap dealer, that meets any of the following three tests:

- it maintains a "substantial position" in any of the major swap categories, excluding positions held for hedging or mitigating commercial risk and positions maintained by certain employee benefit plans for hedging or mitigating risks in the operation of the plan;
- it has "substantial counterparty exposure that could have serious adverse effects on the financial stability of the U.S. Banking system or financial markets"; or
- a "financial entity" that is "highly leveraged [12 to 1] relative to the amount of capital such entity holds and that is not subject to capital requirements established by an appropriate Federal banking agency" and that maintains a "substantial position" in any of the major swap categories.

A position is a "substantial position" if it satisfies either the "uncollateralized exposure test" or the "potential future exposure test" and each of these tests apply to a person's swap positions in each of four major swap categories:

- rate swaps (any swap based on reference rates such as interest rates or currency exchange rates);
- credit swaps (any swap based on instruments of indebtedness or related indices);
- equity swaps (any swap based on equities or equity indices); and
- other commodity swaps (any swap not included in the first three categories, including any swap based on physical commodities).

The uncollateralized exposure test measures a person's current uncollateralized exposure by marking the swap positions to market using industry standard practices. This test also allows the deduction of the value of collateral that is posted with respect to the swap positions, and calculates exposure on a net basis, according to the terms of any master netting agreement that applies. The thresholds adopted for this test are the daily average current uncollateralized exposure of US\$1 billion in the applicable major category of swaps, except that the threshold for the rate swap category would be US\$3 billion.

The second substantial position test determines potential future exposure by:



- (i) multiplying the total notional principal amount of the person's swap positions by specified risk factor percentages (ranging from ½% to 15%) based on the type of swap and the duration of the position;
- (ii) discounting the amount of positions subject to master netting agreements by a factor ranging between zero and 60%, depending on the effects of the agreement; and
- (iii) if the swaps are cleared, further discounting the amount of the positions by 90% or, if the swaps are not cleared but nonetheless subject to daily mark-to-market margining, further discounting the amount of the positions by 80%.

The thresholds adopted for the second test are US\$2 billion in daily average current uncollateralized exposure plus potential future exposure in the applicable major swap category, except that the threshold for the rate swap category would be US\$6 billion.

Substantial counterparty exposure is calculated using the same method used to calculate substantial position but it is not limited to the major categories of swaps and does not exclude hedging or employee benefit plan positions. The thresholds as adopted for substantial counterparty exposure are a current uncollateralized exposure of US\$5 billion, or a sum of current uncollateralized exposure and potential future exposure of US\$8 billion, across the entirety of a person's swap positions.

An alternative to measures of leverage such as the gross methods would be to use the methodology for identifying MSPs as an initial threshold. This methodology also has the benefit of being more akin to the Basel III approach to assessing derivatives holdings in as much as certain netting and discount factors are applied before reaching a relevant figure.

## Evaluating different regulatory measures of leverage

### (i) Problems with gross measure of leverage

AIMA considers that the use of GNE as defined by FSB and IOSCO or any of the variants of the gross method is not particularly useful for funds or other financial entities, managers and investors monitoring risk or regulators looking to assess and monitor systemic risk for the following reasons:

- **Offsetting of risk:** The gross methods do not allow for the offsetting of positions that might decrease or eliminate risk in a portfolio. These leverage measures generally include all positions, even those that offset risks arising from a fund's investment portfolio. For example, these methods count the full notional value of a swap that offsets currency or interest rate risk of an equity or debt position held by a fund, despite the swap serving to decrease the exposure of the fund. Similarly, they would count twice the full notional values of two perfectly offsetting positions, even though the fund's net economic exposure would be zero;
- **Relative risk of different types of derivatives:** The gross methods do not account for the relative risk of different types of derivatives positions held by a fund. For example, in related contexts global regulators have consistently recognised that derivatives referencing short-term interest rates are less risky, given a particular amount of notional exposure, than those referencing long-term interest rates or other asset classes such as currencies, equities or commodities;
- **Nature of the risks of options:** The gross methods do not take account of the non-linear nature of the risks arising from options and other similar derivative positions. A fund whose derivative positions consist only of purchased options may have a high gross leverage, but the maximum possible loss is the current value of the options, a figure that may be orders of magnitude lower than the notional. For example, a one-month at-the-money call option on the S&P 500 index currently has a value of approximately 1% of its notional amount, so the notional is 100x greater than the maximum possible loss; and
- **The gross methods over-weight the risk of interest rate, currency or other types of derivatives relative to other assets:** The notional, or face, amounts of such contracts (rather than their market values) are required to be included in the calculations. This particularly

affects managers employing relative value, macro and managed futures strategies. Funds using these types of instruments generate leverage figures under the gross method that are not necessarily reflective of the risk of those funds. The market value or the cost to close out these contracts is a small fraction of the notional. These factors pose difficulties both for supervisory authorities when seeking to assess the build-up of systemic risk in the financial system and for investors in terms of making meaningful comparisons between different funds.

## (ii) Problems with the commitment method

The commitment method addresses some of the issues inherent in the gross method through the application of netting and hedging arrangements and the use of duration netting rules. Although this is an improvement on the gross method, the commitment method still has limitations, which include the following:

- **Intention at the time of the trade:** Under the AIFMD commitment method, netting is only permitted where “trades on derivative instruments or security positions are concluded with the sole aim of eliminating the risks linked to positions taken through the other derivative instruments or security positions.”<sup>20</sup> This is therefore dependent on the intention at the time of the trade, which is a subjective test. There has been no further guidance as to how this intention can be ascertained and determining when netting is permitted is therefore a matter of interpretation for each AIFM, which gives rise to uncertainty. It is therefore unclear what the conditions for permitted netting are;
- **Potential for excessive netting:** The commitment method also provides that netting is permitted across derivatives “which refer to the same underlying asset... irrespective of the maturity date”. This would therefore permit the netting of a very long term interest rate derivative (for example, a 30-year swap) with a short term interest rate derivative (for example, a 2-year swap), or a long-dated commodity derivative (for example, natural gas futures with 5-year maturity) with a short-dated commodity derivative (for example, Natural Gas futures for December 2014 maturity), in both cases leaving an exposure of zero. This leaves the potential for excessive netting which may mask real exposures;
- **Application of duration netting rules:** The AIFMD commitment method permits “duration netting” under certain conditions. Article 8(9) of the Level 2 Regulation provides that “AIFMs managing AIFs that, in accordance with their core investment policy, primarily invest in interest rate derivatives shall make use of specific duration netting rules in order to take into account the correlation between the maturity segments of the interest rate curve as set out in Article 11.” In relation to this provision, Article 11 provides that:

“The duration-netting rules shall not be used where they would lead to a misrepresentation of the risk profile of the AIF. AIFMs availing themselves of those netting rules shall not include other sources of risk such as volatility in their interest rate strategy. Consequently, interest rate arbitrage strategies shall not apply those netting rules... The use of those duration-netting rules shall not generate any unjustified level of leverage through investment in short-term positions. Short-dated interest rate derivatives shall not be the main source of performance for an AIF with medium duration which uses the duration netting rules.”

These tests lack clarity and determining whether duration netting rules may be applied, absent further guidance, is therefore a matter of interpretation for each AIFM, which gives rise to uncertainty; and

- **Maturity range buckets:** It may also be possible for the duration netting rules to lead to excessive netting. The duration netting rules specify that interest rate derivatives should be allocated to one of four maturity range buckets: 0-2 years, 2-7 years, 7-15 years and >15 years. Within each bucket, 100% offset is allowed. This means that under these rules, for example, a 2-year swap can be netted with a 7-year swap, leaving an exposure of zero. This leaves

<sup>20</sup>See Article 8(3)(a) of the Level 2 Regulation.



potential for excessive duration netting and can mask real exposures. The use of the four maturity range buckets and the offset percentages is also an arbitrary choice and bears no relation to risk measurement. For example, a 2-year vs 7-year offset will be fully netted, while a 1.9-year vs 7.1-year offset will only be netted 25%, despite these spreads having almost identical risk.

### (iii) Problems with the VaR method

Whereas the commitment and gross approaches principally focus on derivatives, the VaR method's principal focus is the total market risk level of the portfolio. The use of the commitment approach for market risk computation in the context of UCITS funds has clearly been imposed to limit the leverage opportunities as the commitment approach converts any derivative exposures into fully funded values.

By contrast, VaR provides the estimation of the maximum loss a portfolio will suffer during a defined future period with a defined confidence interval. The VaR computation needs to be considered as an indicator. It is most useful in evaluating portfolios of more liquid instruments and derivatives where there is ready and accurate pricing data and history. However, VaR is less useful for illiquid instruments with little price data. On the ends of the liquidity spectrum, VaR is a good measure for an equity-fund focused on large cap stocks, but relatively useless for a real estate fund and it should not be considered a guarantee of limited losses.

Although VaR can be a useful metric for certain types of investment funds, under certain types of market conditions, it is not a useful metric for all funds nor for highly stressed market conditions. The VaR approach utilises correlations which have a propensity to break down in stressed market conditions and so there may be a tendency for the calculation methodology not to work in the very conditions where a robust leverage figure may be most valuable to competent authorities and investors.<sup>21</sup> VaR measures are also reliant on historical data.

Under the right circumstances, VaR can be a strong and advanced indicator that will (as long as tools and models are properly implemented) give clear and easy to interpret information to the risk managers and any related parties of the current portfolio risk levels.

### Which methodologies are most suitable for funds?

In this paper, AIMA has sought to demonstrate the problems with the current methodologies that are used for calculating leverage in the asset management sector for regulatory purposes. We consider that more accurate, consistent and comparable methodologies should be used to measure the leverage employed by financial institutions.

Irrespective of the approaches chosen, the most important elements of any appropriate leverage measure should include the differentiation between the types of different derivatives instruments based on the manner notional exposure translates into a real economic exposure by a fund. Such a measure will recognise the fact that notional exposure means different things for different derivatives. It will also need to take appropriate account of netting and offsetting exposures. Neither one of these two core elements are present in any of the varieties of gross measures of leverage which either exist in some national regulatory regimes or have been contemplated at the global level.

In conclusion, we would like to reiterate that there is no single measure of leverage which would represent the most appropriate measure of risk for the purposes of investor disclosure or financial stability for all types of funds or all types of investment strategies. Indeed, leverage is not necessarily correlated or to be equated with a risk a particular portfolio may represent.

<sup>21</sup> See ESMA's consultation paper on draft technical advice to the European Commission on possible implementing measures of the Alternative Investment Fund Managers Directive: [http://www.esma.europa.eu/system/files/2011\\_209.pdf](http://www.esma.europa.eu/system/files/2011_209.pdf).