

# Consultation Response

## ESMA Consultation on Guidelines to address leverage in Alternative Investment Funds (AIFs)



### 1. Introduction

The Standards Board for Alternative Investments (SBAI) welcomes the opportunity to respond to the ESMA Consultation on guidelines to address leverage risk in Alternative Investment Funds (AIFs).<sup>1</sup> The SBAI has responded to past consultations on financial stability issues and leverage and held financial stability workshops with central banks and securities regulators.<sup>2</sup> The SBAI also actively contributes to the global debate on financial stability through its participation in IOSCO as an Affiliate Member.

This consultation response contains

- important high-level observations on the proposed approach (2.),
- the responses to the consultation questions (3.),
- an overview of the illustrative “systemic risk dashboard” developed by the SBAI, showcasing drill-down analyses authorities can undertake with existing AIFM-D Annex IV data (Appendix A), and
- an overview of the Open Protocol Risk Reporting Methodology (available in the SBAI Toolbox), which provides more detailed exposure reporting in combination with a broad range of risk metrics, facilitating meaningful “systemic risk” analyses (Appendix B).

### 2. High-Level Observations

#### **Currently used leverage measures are not meaningful to make well informed judgements on the contribution of “leverage” to systemic risk**

Classic financial leverage measures have been useful in comparing and aggregating the riskiness of banks, in particular when they have relatively homogenous and comparable balance sheets and the value of the assets (consumer loans, mortgages and corporate loans) are affected by similar underlying risk factors (such as loan default rates). In such instances, leverage is sometimes used as a proxy for “risk”.

Financial leverage is also a useful tool in the financial analysis and comparison of companies within specific sectors (where the underlying company assets exhibit similar risk characteristics, e.g. airlines with fleets of aircraft). It is less meaningful for “comparing risk” between different industry sectors where the underlying risk characteristics of the assets are very different (e.g., an airline company versus a real estate firm).

In alternative asset management, leverage can take many forms, including financial leverage (usually low) as well as “synthetic” leverage through derivative positions. The following aspects illustrate why leverage is not as straight forward in asset management as it may be in other areas of financial activity:

- High leverage does not necessarily equal high risk in the underlying portfolio. Leverage is therefore not useful as a stand-alone risk measure (at the fund or systemic level) and is in fact often not

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<sup>1</sup> [https://www.esma.europa.eu/sites/default/files/library/esma34-39-967\\_consultation\\_paper\\_on\\_guidelines\\_on\\_art\\_25\\_aifmd.pdf](https://www.esma.europa.eu/sites/default/files/library/esma34-39-967_consultation_paper_on_guidelines_on_art_25_aifmd.pdf)

<sup>2</sup> See consultation responses here: <http://www.hfsb.org/regulatory-engagement/financial-stability/>

correlated with risk (leverage often arises when placing hedging transactions, which reduce the portfolio risk, but can increase regulatory leverage measures)

- Current leverage measures do not contain information on the type and directionality of underlying (derivative) exposures and thereby provide no information on the impact at times of distressed selling
- Options and other non-linear positions are not adequately considered in the Gross and Commitment Methods – the maximum loss from (long) option positions is limited to the value of the option (which is usually much lower than the delta adjusted gross notional)
- Leverage is essential to many strategies and levels of leverage can vary widely across these strategies. They cannot be easily compared across different strategies and need to be interpreted in the context of both the strategy and the underlying assets
- Gross versus net measures provide different types of information, for example, the gross notional exposure is a footprint measure (measuring interconnectivity)<sup>3</sup>, not a portfolio risk measure and therefore would best be interpreted in the context of the relevant underlying market size

The above aspects highlight that the leverage measures currently collected via Annex IV might not be meaningful to make well informed judgements on the contribution of leverage to systemic risk. As highlighted in the SBAI Consultation Response to the IOSCO Report CR08/2018: “Leverage”<sup>4</sup>, the approach proposed by IOSCO to provide more granular reporting of leverage by asset class (as well as long and short exposure) could be a useful step towards a better understanding of leverage in different strategies (and in the context of the overall market) and enable more granular assessments and comparisons.

In this context, **the SBAI would like to highlight the Open Protocol (OP) Risk reporting framework** (<https://www.sbai.org/toolbox/open-protocol-op-risk-reporting/>) provided in the SBAI Toolbox, which provides a detailed perspective on netted and non-netted long and short exposure of a fund by exposure class (Equity, Sovereign, & Interest Rate, Credit (excluding corporate bonds), Convertible Bonds, Currency, Real Asset & Commodities), The data allows to calculate aggregate leverage measures, but importantly, allows to analyse exposures in specific underlying markets on a per fund level. The OP methodology provides this data broken down further, e.g. by sectors, regions, etc. This exposure data is complemented by various other risk measures such as VaR, Sensitivity, Stress Test and Counterparty Exposure. **This type of data would enable National Competent Authorities (NCAs) to conduct meaningful analyses by exposure type across funds as well as consistent aggregation.**

Global managers accounting for over USD 1tn in AUM currently provide OP data to their investors.

See Appendix B for more details on the Open Protocol Framework, including exposures by risk type and other risk metrics included in the framework.

#### **Recommendation 1:**

The current data collection efforts via Annex IV should be enhanced in line with the IOSCO proposal (CR08/2018). SBAI also encourages ESMA to look at the Open Protocol Methodology in more detail. This will then allow for the development of a more meaningful assessment framework and enable well-informed decisions on the need for/scope of any macroprudential leverage limits.

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<sup>3</sup> The UK FCA highlighted in its 2015 hedge fund survey that gross notional exposure (GNE) “does not directly represent an amount of money (or value) that is at risk of being lost” but, instead, represents the gross size of positions taken in the market. The Survey also acknowledged “that hedge funds use risk management techniques to net out directional exposures”. Therefore, the UK FCA also refers to the “**market footprint**” in the context of GNE.

<sup>4</sup> See <https://www.sbai.org/regulatory-engagement/financial-stability/>

## Sequencing of work steps

The Guidelines set out in this consultation address the recommendations by the European Systemic Risk Board (ESRB) [April 2018] to:

1. Give guidance on the framework to assess the extent to which the use of leverage within the AIF sector contributes to the build-up of systemic risk in the financial system [“ESRB Recommendation E(1): Assessment of leverage-related systemic risk”]
2. Give guidance on the design, calibration and implementation of macroprudential leverage limits [“ESRB Recommendation E(2): Macroprudential leverage limits”]

The SBAI agrees that a thorough analysis of the extent to which the use of leverage within the AIF sector contributes to the build-up of systemic risk is needed. However, the results of this assessment should form the basis for the second phase.

### Recommendation 2:

The framework for assessment of leverage-related systemic risk (1. above) should be developed first to assess the extent to which the use of leverage actually contributes to the build-up of systemic risk in the financial system. Depending on the outcomes of this assessment (i.e. evidence for contribution of leverage to systemic risk), the second phase should be undertaken. This will ensure that the macroprudential leverage limit framework is fit for purpose and addresses the policy objectives.

## Overall relevance of the framework for systemic risk purposes

The scope of the ESRB recommendations is limited to AIFs. Given that AIFs will only constitute a very small percentage of overall managed fund assets under management in the European Union (EU) [in particular following the departure of the UK from the EU], it is likely that the aggregate size of leveraged AIF will not be material (Source: [ESMA Annual Statistical Report, EU Alternative Investment Funds 2019](#)):

Total AIF AUM (2017):	EUR 4.9 tn
<b>Of which Hedge Funds (5%):</b>	<b>EUR 264bn (incl. UK)</b>
[Of which non-UK Hedge Funds (20%):	EUR 52.8bn <sup>5</sup> ]

For comparison, the overall size of the EU asset management sector is EUR 23.8tn<sup>6</sup> (2017).

### Recommendation 3:

An overall materiality assessment of AIFs in the context of the size of the European asset management sector and overall EU capital markets should be undertaken first to assess the overall relevance of the proposed framework and approach.

## Clarification of distinction between market risk and systemic risk

We would also like to highlight an important additional aspect. The introduction to the consultation paper highlights concerns in relation to fire sales and potential amplified downward re-pricing of assets, which could arise in situations where many investors simultaneously attempt to exit these assets. This “concept” of self-reinforcing downward spirals in markets has been mentioned in past consultation papers on financial stability (including the [FSB consultation on Assessment Methodologies for Identifying NBNI G-SIFIS](#)).

Notwithstanding the above, the SBAI believes it is important to distinguish between market risk that investors face and systemic risk. A significant drop in prices for an asset, asset class or all assets (including situations where many investors seek to sell a particular asset) does not automatically mean

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<sup>5</sup> Note: not all Hedge Funds will be “highly leveraged”

<sup>6</sup> [ESMA Annual Statistical Report, EU Alternative Investment Funds 2019](#) p. 11

that the market-based mechanisms of (i) price discovery, (ii) balancing of supply and demand and (iii) competition are not working. As seen in many past crises and shocks, markets ultimately find a new equilibrium price where buyers are prepared to enter the market. Some investors might incur significant losses (e.g. “dotcom bubble”), while others might find opportunities to buy assets at significantly lower prices, in each case not necessarily causing any systemic concerns.

#### **Recommendation 4:**

A clearer distinction is needed between rare market risk events (which are bound to happen from time to time) and actual “systemic risk” events, with widespread disruption of the provision of financial services (bank closures etc.). We also need a better understanding of how and why a severe price shock to the capital markets potentially could translate into such a systemic crisis.

Finally, as with all regulatory intervention in risk taking in markets, it is important that ESMA/NCAs undertake an assessment of potential unintended consequences/negative externalities, including to what extent “hard wired” regulatory leverage limits could actually trigger fire sales/forced unwinding of portfolios when these limits are breached (potentially inflicting losses on investors) in situations when funds would otherwise be prepared to hold on to these positions.

### **3. Consultation Responses**

#### **Q1 What are your views on the frequency at which the risk assessments should be performed by NCAs?**

The frequency of the assessment should be informed by the investment horizon of underlying strategies. Short term strategies with more variation of leverage over time might require a higher frequency of assessment than strategies with a longer time horizon. To calibrate the frequency of assessment (e.g. ranging from monthly to annually), the SBAI recommends establishing the assessment framework/methodology first and conducting the relevant analyses on actual data. (see Recommendation 1).

ESMA should also take account of current reporting frequencies set out in Commission Delegated Regulation (EU) No 231/2013/Article 110):

- a on a half-yearly basis by AIFMs managing portfolios of AIFs whose assets under management calculated in accordance with Article 2 in total exceed the threshold of either EUR 100 million or EUR 500 million laid down in points (a) and (b) respectively of Article 3(2) of Directive 2011/61/EU but do not exceed EUR 1 billion, for each of the EU AIFs they manage and for each of the AIFs they market in the Union*
- b on a **quarterly** basis by AIFMs managing portfolios of AIFs whose assets under management calculated in accordance with Article 2 in total exceed EUR 1 billion, for each of the EU AIFs they manage, and for each of the AIFs they market in the Union*
- c on a **quarterly** basis by AIFMs which are subject to the requirements referred to in point (a) of this paragraph, for each AIF whose assets under management, including any assets acquired through use of leverage, in total exceed EUR 500 million, in respect of that AIF*
- d on an **annual** basis by AIFMs in respect of each unleveraged AIF under their management which, in accordance with its core investment policy, invests in non-listed companies and issuers in order to acquire control*

#### **Q2 What are your views on the sample of funds to be included under Step 1?**

**Do you agree in including in the risk assessment not only substantially leveraged funds but also funds not employing leverage on a substantial basis which may pose financial stability risks?**

Neither existing regulatory leverage measures nor AUM are meaningful stand-alone measures of (systemic) risk.

Leverage varies widely by strategy, for example, the strategy implementations for Fixed Income Arbitrage and Global Macro Strategies require much higher levels of leverage to capture small differentials in interest rates but are not actually “high risk” in nature (e.g. short positions merely hedge risks embedded in long positions, “cash like” characteristics of short term interest rate exposures).

Therefore (and notwithstanding the initial comment), a uniform leverage threshold of 3x<sup>7</sup> across all strategies does not provide a meaningful metric and should be further differentiated (by strategy/asset type). Also, current leverage measures do not provide sufficient detail about the sources of leverage to make well informed judgements about (systemic) risk.

For this reason, a framework that assesses an AIF’s market footprint in a specific market segment based on the enhanced reporting framework recommended by IOSCO (IOSCO Consultation Report (CR08/2018)) will provide a more meaningful perspective.

In addition, NCAs might wish to look at leverage in conjunction with other risk factors, such as liquidity mismatches, counterparty concentrations, etc.

As indicated above, the SBAI provides the Open Protocol framework through its Toolbox (see Appendix B), which provides a template to collect risk data from investment managers and allows to analyse the components used to calculate leverage (among other metrics) in more detail, differentiated by strategy, asset class, long vs. short position as well as gross versus netted exposure. We would like to encourage ESMA to review the Open Protocol methodology and would be delighted to discuss its capabilities for systemic risk assessment in more detail.

**Q3 Do you agree with the proposed threshold identified under Step 1? Would you set the same threshold for all AIFs, or would you be in favour of setting different thresholds based for different types of AIFs (e.g.: real estate, hedge funds, private equity etc) or sub-types of AIFs (please specify) based on a statistical analysis (e.g. percentile)? Should you prefer the latter option, please provide proposals and detailed arguments and justification supporting them.**

Notwithstanding the observation that current leverage measures and AUM are not meaningful stand-alone measures of a fund’s contribution to systemic risk, the setting of actual thresholds is best undertaken on the basis of the underlying data (e.g. distribution of a fund’s gross and net (long/short) exposure by strategy/asset class) to come up with meaningful differentiated thresholds (e.g. combination of AUM, differentiated exposure/footprint metrics) [please also further detail in response to question 2].

**Q4 Would you identify other relevant transmission channels?**

Appendix A contains the SBAI’s systemic risk dashboard which looks at the interplay of different sources of risk, transmission mechanisms (e.g. bank/broker dealer counterparty risk transmission channel), in combination with an analysis of relevant mitigants (margin requirements (and other prudential requirements), haircuts, central clearing, fund investor liquidity restrictions, unencumbered cash levels, etc.).

**Q5 What are your views on using not only leverage indicators, but also other types of indicator such as those indicated under Table 2 of the draft Guidelines? Do you agree with the list of indicators provided?**

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<sup>7</sup> Article 111(1) of Commission Delegated Regulation (EU) 231/2013: Use of leverage on a substantial basis: Leverage shall be considered to be employed on a substantial basis for the purposes of Article 24(4) of Directive 2011/61/EU when the exposure of an AIF as calculated according to the commitment method under Article 8 of this Regulation exceeds three times its net asset value.

The SBAI agrees that broadening the assessment will provide better insight into the risk profile of AIFs. Open Protocol provides a broad range of risk metrics that can be assessed in conjunction with asset class specific leverage/exposure measures.

**Q6 What are your views on using not only AIFMD data but also other external data sources to perform the assessment? Which types of external data sources would you consider more useful for the purpose of performing the assessment under Step 2, other than those already identified in Annex of to the draft Guidelines?**

Once the framework in step 1 is developed, there will be more clarity about the metrics/data needed for the assessment under step 2.

**Q7 Which other restrictions would you consider as appropriate?**

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**Q8 What are your views on the application of the leverage limits? Should those be applied only on the single fund or, where appropriate, limits should also be applied on group of funds? In this case, how would you identify the group of funds?**

The SBAI disagrees with the proposed application of leverage limits. As set out in this consultation response, current leverage measures are not a useful stand-alone measure of (systemic) risk. A meaningful assessment to address systemic concerns needs to be based on a more extensive analytical framework and better data (see (IOSCO Consultation Report (CR08/2018) and Open Protocol).

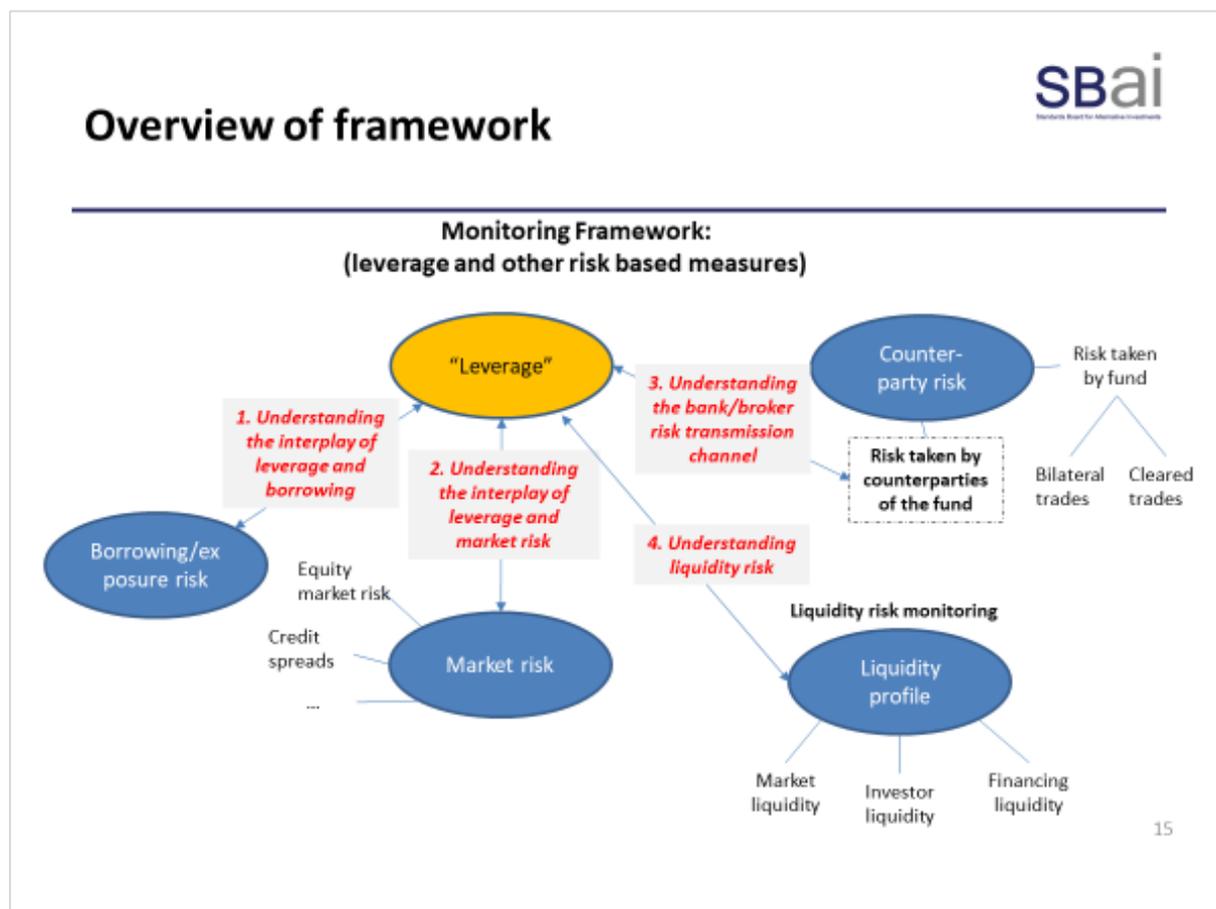
Also, as highlighted in recommendation 2. the framework for assessment should be developed first to assess the extent to which the use of leverage actually contributes to the build-up of systemic risk in the financial system.

**Q9 How would you assess the efficiency of leverage limits in mitigating excessive leverage?**

Given the imprecise nature of current leverage metrics as a measure for (systemic) risk, it will be difficult to establish what constitutes “excessive leverage”. There is also a risk that the leverage limits could limit AIFs ability to manage risk (i.e. hedge) or build the type of portfolios needed to generate returns in the first place, and thereby increase risk taking (for the sake of meeting regulatory leverage limits).

## Appendix A Illustrative Systemic Risk Dashboard

- Financial regulators already collect a vast amount of data from investment funds (e.g. AIFM-D Annex IV, Form PF) which allows monitoring for financial stability purposes
- While there are no singular indicators for “financial stability risk” in asset management, there are a number of analyses to assess the asset management sector that can be conducted with existing data



The following illustrations show hypothetical analyses authorities can undertake on the basis of existing data in order to map out the asset management risk landscape, test hypotheses (e.g. risk versus leverage analysis) and drill down techniques to understand particular data segments.

Notes: SBAI has not conducted these analyses on actual data, however, some charts have been sourced from regulatory analyses.

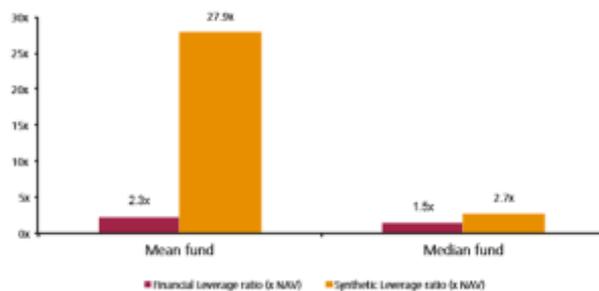
# 1. Analysis of leverage and borrowing

- A fund can employ leverage through various mechanisms, including outright borrowing (financial leverage) and by using derivatives (synthetic leverage)
- **Approach:** assesses the sources of funds' leverage

AIFM-D Annex IV data used:

- Leverage measures: Gross Method and the Commitment Method
- Cash borrowing and exposure risk (AIF24(2)C [#281-289])

**SAMPLE ANALYSIS: Leverage by source\***



\*Source: FCA UK Hedge Fund Survey

Note: Only 8% of the funds in the UK FCA HF Survey rely on unsecured borrowing. Those that rely on collateralised borrowings use mainly Prime Brokers as their source.

**(Potential) conclusion:**

- Comparatively low use of financial leverage compared to synthetic leverage

**Observation:**

- AIFM-D leverage methods are not measures of risk!
- Both Gross and Commitment Method get dominated by low risk/high exposure Interest Rate Derivatives, can be adjusted by using 10 year target duration equivalent.

# 2. Analysis of interplay of market risk and leverage

**ILLUSTRATION**

- Different types of funds exhibit different levels of leverage and market risk
- **Approach:** Plot leverage versus market\* risk to ...
  - assess interplay between them
  - monitor evolution of chart over time
  - analyse outliers

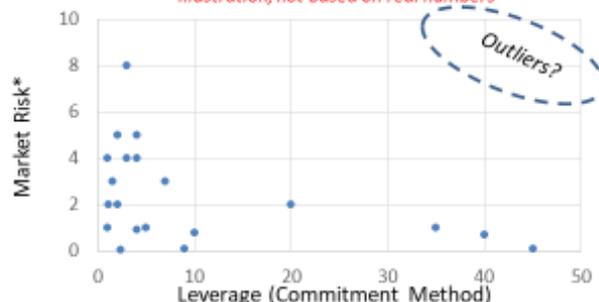
AIFM-D Annex IV data used:\*\*

- Gross Method and Commitment Method Leverage
- Net equity delta [change in value for a 1% change in equity market prices]
- Net DV\_01 (by maturity bucket) [change in value for a 1bps parallel shift in yield curve]
- Net CS\_01 (by maturity bucket) [change in value for a 1bps change in credit spreads]

\*\* Recommended optional fields in AIFM-D Annex IV: Net FX Delta, Net Commodity Delta, Vega Exposure

**Risk versus leverage\***

*Illustration, not based on real numbers*



\*This analysis can be conducted separately for different market risk types, i.e. relative Net Equity Delta, Net DV\_01, Net CV\_01 (# 139-142). For Net DV\_01 and Net CV\_01, the analysis can be carried out per individual maturity bucket or aggregated across maturity bucket (?).

**Potential conclusions:**

- No positive correlation between leverage and risk: In fact: Funds with high levels of leverage usually exhibit very low levels of market risk

### 3. Understanding the counterparty risk transmission channel

**Starting point:** When assessing the ct'party risk transmission channel, regulators are interested in the risk emanating from funds (not the counterparty exposure the fund has)

- Assess counterparty exposure emanating from funds
- **Approach:** Calculate aggregate exposure of counterparties to funds and rank counterparties by size, potentially distinguish between cleared and bilateral trades

AIFM-D Annex IV data used:\*\*

- All prime brokers of funds (AIF 24.1G)
- Top five counterparties that have the greatest mark-to-market net counterparty credit exposure to the AIF, measured as a percentage of the NAV of the AIF.

#### Ranking of Counterparties\*

Name	Aggregate exposure (bn €)*	Equity Long Bias	Equity Long/Short	...
1. XY Bank	35	5	10	
2. YZ Prime	25			
3. ABC Securities	10			
...				

Breakdown of aggregate exposure by strategy type (AIF 24.1H)

**Potential conclusions:**

- Assess risk taking of counterparties (banks, etc.) vis-à-vis fund sector (compared to other areas of finance / economic activity)

Or is there an easier way to collect this?

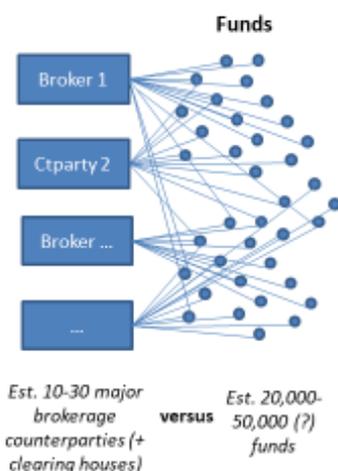
\* Only based on top 5 counterparties per fund, so number will underestimate total exposure. Depending on the type of strategy, firms might anyway have less than 5 relationships.

\*\*Note: US Form PF (US Private Funds) also provides information on top 5 counterparties (both positive and negative mark-to-market) [Q22-23] [exclude collateral, but requested in Q 43 and 45]

### 3. Understanding the counterparty risk transmission channel

FOR DISCUSSION

#### Counterparty risk channel



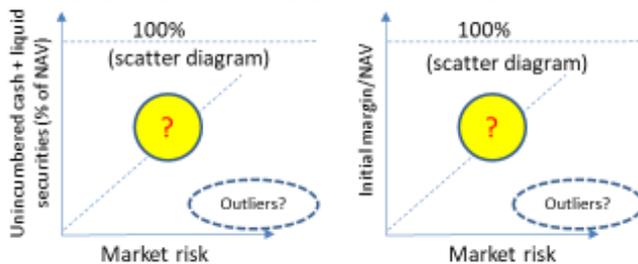
- (Banking) counterparties have to assess their risk taking vis-à-vis their fund counterparties (as part of capital frameworks etc.)
- A small number (~10-30) entities will hold bulk of risk

**For discussion:**

- Would it be easier to collect counterparty risk information from these regulated entities, which ...
  - are regulated in major financial jurisdiction
  - have existing capital frameworks in place
- ... versus trying to collect the data from possibly 10,000s of funds across all types of jurisdictions?

### 3. Understanding the counterparty risk transmission channel

- Strategies that deal extensively in derivative/future markets (e.g. macro strategies, CTA, etc.) will post initial margin to counterparties and hold unencumbered cash
  - Initial margin\* protects counterparties against losses, reflects risk
  - Unencumbered cash serves as buffer to accommodate margin calls, redemptions etc.
- For discussion: How to use this information?**



**AIFM-D Annex IV data used:**

- Value of collateral posted by an AIF to all counterparties (AIF 24(2)c 157-159)
- Cash and cash equivalents
- Other securities
- Letters of credit (and similar)
- Unencumbered cash (24(2)C 185)
- Market risk measures: relative Net Equity Delta, Net DV\_01, Net CV\_01 (# 139-142)

**It would be useful to conduct these (and other) analyses with existing data to test the underlying hypotheses and refine them, before formulating additional data requirements.**

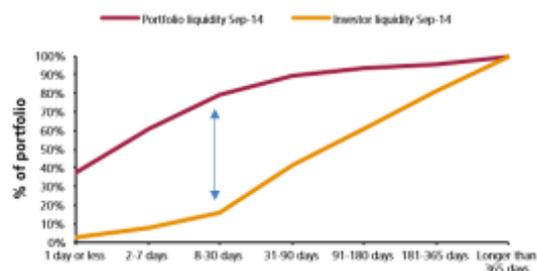
\* AIFM-D collects value of collateral posted (which will also include variation margin?), not initial margin

### 4. Understanding liquidity risk: Liquidity profile analysis

- Liquidity risk is a measure of a fund's ability to transact in a timely fashion without causing major market impact and meet its cash requirements.
- AIFMD-Annex 4 collects information on the liquidity of a fund's assets, investor liquidity profile and additional information\*:

	PORTFOLIO LIQUIDITY*** % of portfolio capable of liquidated within...	INVESTOR LIQUIDITY % of investor cash that can be redeemed within ...	FINANCING LIQUIDITY % of total fin. liq. by term
1 day or less			
2 - 7 days			
8 - 30 days			
31 - 90 days			
91 - 180 days			
181 - 365 days			
> 365 days			

**SAMPLE ANALYSIS: Aggregate liquidity profile per fund\*\***



\* Additional information collected: Unencumbered cash, frequency of investor redemptions, notice period, lock up period, type of special arrangements

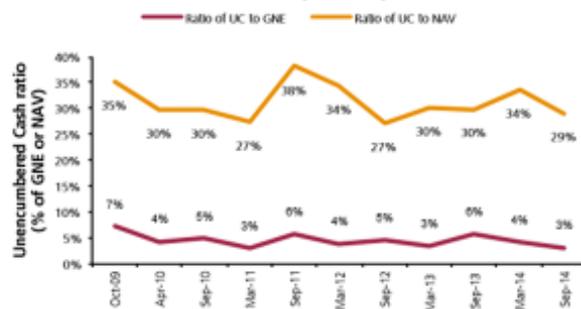
\*\* Source: FCA Hedge Fund Survey June 2015 (<https://www.fca.org.uk/publication/data/hedge-fund-survey.pdf>) p. 25

\*\*\* Reflecting normal market conditions

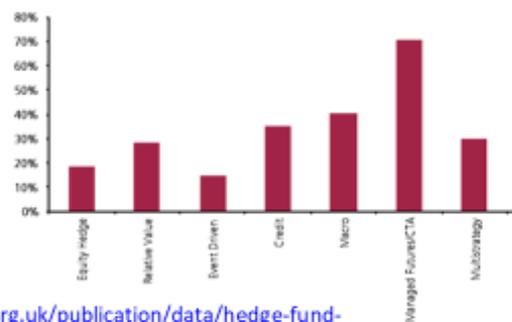
## 4. Understanding liquidity risk: Liquidity profile analysis (cont'd)

- For investment strategies mainly using derivatives and synthetic exposures, “unencumbered cash” (AIF 24 (2) C; #185) is an important metric:
  - Refers to cash and securities of the fund that do not serve as collateral
  - Measures the ability of a fund to meet its variation margin calls and fund redemption requests

**SAMPLE ANALYSIS: Unencumbered cash ratio per fund (median)\***



**SAMPLE ANALYSIS: Median fund unencumbered cash to NAV ratio by strategy\***



Source: FCA Hedge Fund Survey June 2015 (<https://www.fca.org.uk/publication/data/hedge-fund-survey.pdf>) p. 26-27

## Appendix B

### Open Protocol Methodology

#### Overview Open Protocol

Better risk disclosure by investment funds has been a priority for both investors and regulators in recent years. Investors are increasingly seeking to aggregate risk information about their investments to improve overall portfolio risk management, while regulators have started to collect data to assess potential systemic risk concerns.

The Open Protocol (OP) and Insurance Open Protocol (IOP) templates address this by standardising the collection, collation and representation of risk information of alternative investment funds and other types of investment funds. This provides a uniform framework with consistent data inputs, standard calculation methodologies and regular and timely reporting. Where available, OP and IOP use commonly accepted standards and protocols.

#### Rationale for standardised risk reporting

- Investors can easily harness the standardised data and aggregate exposures to monitor and manage risk at portfolio level and make better investment decisions
- Managers can streamline their reporting by producing one generally accepted standard risk report rather than data for many disparate templates, thereby ensuring that all clients are treated equally
- OP framework helps produce various regulatory reporting templates (Form PF, AIFMD Annex 4 etc.)

#### Key characteristics

- OP covers exposure information on all major asset classes that hedge funds and other (alternative) instrument funds may trade as well as counterparty risk and investor breakdown
- IOP covers insurance exposures and risk information applicable to dedicated insurance strategies, as well as multi-strategy managers that have some exposure to insurance
- It is structured in 3 Grades such that managers can provide the information at different levels of granularity (depending on their preference/comfort level)

The Open Protocol (OP) template and manual were first launched in August 2011. An updated version was released in August 2016 following the addition of Real Estate to GICS. The Insurance Open Protocol (IOP) template and manual were released in June 2017.

- **Open Protocol Overview:** <https://www.sbai.org/toolbox/open-protocol-op-risk-reporting/>
- **Open Protocol Methodology in Excel:** <https://www.sbai.org/wp-content/uploads/2017/05/Open-Protocol-Template-I-Revised-Oct-2018-FINAL.xlsx>

**Example:** Equity Exposure Data in Open Protocol  
(at Grade 1, more detail available at Grade 2 and 3)

	A	B	C	D	E	F	G	H	I	J	K
1	<b>2. Equity Exposure</b>										
2											
3	<b>2.1 Total exposure to Equities</b>					<b>Non Netted</b>		<b>Netted</b>			
4											
5					Values	Exposure % of AUM	Exposure % of AUM	# of Issuers			
6	Top	Grade 1	Grade 2	Grade 3		Long	Short	Long	Short	Long	Short
7	<b>2.2 Percentage of Portfolio</b>										
8	<b>2.3 Aggregate Number of Issuers</b>										
9											
10	<b>2.4 Sectors</b>										
11	Materials										
35	Industrials										
76	Consumer Discretionary										
118	Consumer Staples										
138	Health Care										
156	Financials										
182	Information Technology										
203	Communication Services										
220	Energy										
231	Utilities										
244	Real Estate										
260	Conglomerates										
261	Broad Market Indices										
262	Other										
263											
264											
265	<b>2.5 Region</b>										
266	Global										
269	Europe										
310	North America										
326	Asia and Oceania										
364	South America and Africa										
390	Other										
393											
394											
395	<b>2.6 Instruments</b>										
396	Equity (single stock)										
410	Equity Indices										
422	Non listed										
427	Other										
428											
429	<b>2.7 Market Capital Exposure</b>										
430	Mega Cap (More than \$25 billion)										
431	Large Cap (More than \$10 billion to less than or equal to \$25 billion)										
432	Mid Cap (More than \$2 billion to less than or equal to \$10 billion)										
433	Small Cap (More than \$250 million to less than or equal to \$2 billion)										
434	Micro Cap (Less than or equal to \$250 million)										
435	Indices and Baskets										
436	Other										
437											
438	<b>2.8 Instrument Liquidity</b>										
439	Exchange Traded										
452	Non Exchange Traded										
453	Private										
454											

The above shows the Equity Exposure tab in Open Protocol, additional perspectives include:

- Sovereign and Interest Rate Exposure
- Credit Exposure (excluding Convertible Bonds)
- Convertible Bond Exposure
- Currency Exposure
- Real Asset & Commodity Exposure

Separate risk-based perspectives include VaR (by asset class, region, sector), Sensitivities, Stress tests and Counterparty risk.