

Luxembourg, 29 May 2015

## **Response to the FSB and IOSCO Consultative Document (2<sup>nd</sup>) “Assessment methodologies for identifying non-bank non-insurer global systemically important financial institutions” (4 March 2015) (the “Consultation”)**

### **Introduction**

The Association of the Luxembourg Fund Industry (ALFI) is the representative body of the Luxembourg investment fund community. Created in 1988, the Association today represents over 1,300 Luxembourg domiciled investment funds, asset management companies and a wide range of service providers such as custodian banks, fund administrators, transfer agents, distributors, legal firms, consultants, tax experts, auditors and accountants, specialist IT providers and communication companies.

There are 1,891 UCITS domiciled in Luxembourg with a further 1,997 funds which could be considered as AIFs in Luxembourg each of which offers underlying sub-funds to investors (source: CSSF as at 31<sup>st</sup> March 2015).

The Luxembourg Fund Industry is the largest fund domicile in Europe (funds totalling in excess of €3,500 billion as at 31<sup>st</sup> March 2015) and a worldwide leader in cross-border distribution of funds. Luxembourg-domiciled investment structures are distributed on a global basis in more than 70 countries with a particular focus on Europe, Asia, Latin America and the Middle East.

We thank the FSB and IOSCO for the opportunity to participate in this Consultation.

We support the submission of the European Fund and Asset Management Association (EFAMA).

### **General remarks**

We support efforts to promote resilient and transparent financial markets and we appreciate the opportunity to engage with regulators on potential risks to the financial ecosystem.

We welcome that the FSB and IOSCO have in this Consultation placed more emphasis on leverage because size alone is not an indicator of or cause of systemic risk.

In general, we consider that highly regulated funds such as UCITS or regulated Alternative Investment Funds (AIFs) that comply with detailed diversification rules and are not highly leveraged are not systemically important and do not cause systemic risk.

In addition, we believe asset managers are not a source of systemic risk. They are not the counterparty to trades they conduct on behalf of their clients. Neither are they responsible for

the allocation by clients of their assets. Managers act as agents for their clients. Many funds and asset managers exit the business every year, without giving rise to systemic risk.

As further explained in our response to this Consultation, we consider it more appropriate to focus on market activities, such as the use of high leverage and derivatives that may cause systemic risk to the financial system.

As the FSB and IOSCO pointed out in their first consultation, funds contain characteristics that differentiate them from banks and insurers. In particular fund investors share in the risks and rewards of fund performance i.e. they are knowingly exposed to the potential gains and losses of a fund's invested portfolio and knowingly take on investment risk. Investors benefit from the gains but also absorb the negative effects that might be caused by the distress or even default of a fund thereby mitigating any eventual contagion effects on the broader financial system. We do not believe that the proposed methodologies for investment funds and asset managers should maintain broad consistency with the existing assessment methodologies for global systemically important banks and insurers.

We also note that a number of regulatory initiatives have both taken place and been initiated since the start of the recent financial crisis (e.g. AIFMD reporting, Solvency II, UCITS IV and V, MiFID II, Money Market Funds regulation) dealing with

- i) Transparency of information
- ii) Supervision of the asset management industry

Whilst they are in their infancy and it is too early to assess their impact, it would be helpful to understand how the FSB and IOSCO believe all of these initiatives will fit together and fit into the FSB's systemic risk remit.

In terms of method, we would like to make the point that it is rather difficult to assess the appropriateness of the proposed methodologies and to make detailed comments on the proposed indicators of systemic relevance without having any clear view on what the implications of a designation as G-SIFI would concretely be for the financial entities concerned. Against this background, we believe that it will be extremely important that any measures or potential remedies to be applied to systemically important financial entities will be subject to a robust public consultation process (as is the case for the definition of the methodologies leading to a potential G-SIFI designation).

We note that the European Union ("EU") is undertaking a "Capital Markets Union" initiative, which seeks to develop capital markets such that European companies are no longer so reliant on banks. Various European governments have also put in place schemes which are designed to direct financing to small and medium sized businesses. Investment funds play a part in directing finance to such companies, thereby creating liquidity and diversifying the recipient's sources of lending. Moreover, detailed rules on risk management, ring-fencing of assets etc. ensure a higher level of investor protection if investment funds are used.

There is clearly a desire for the asset management industry to play a greater role in terms of capital-raising and providing benefits to the wider economy which will see the industry grow in importance. We understand the need to mitigate systemic risk in financial services and markets, but we believe a focus on investment activities rather than size is the best way to achieve this.

For a glossary of commonly used abbreviations and terms, please refer to **Appendix 1**.

## Response to the consultation

### Definition of NBNI financial entities

*Q2-1. In your view, is the exclusion of (i) public financial institutions, (ii) sovereign wealth funds or (iii) pension funds from the definition of NBNI financial entities appropriate? If so, please explain the rationale.*

We do not believe that the exclusion of such schemes from the definition of NBNI is appropriate.

From a systemic risk perspective, there is no difference between pension funds, sovereign wealth funds and many other funds (in particular UCITS and regulated but not highly leveraged AIFs) as they undertake similar activities and can potentially transmit the same risks throughout the financial system. The size, activities and potential risk transmission mechanisms of such investment structures such as public financial institutions, sovereign wealth funds and pension funds should therefore be considered equally alongside those of other investment structures.

*Q2-2. Please explain any potential systemic risks associated with failure or financial distress of (i) public financial institutions, (ii) sovereign wealth funds or (iii) pension funds that, in your view, warrant their inclusion in the definition of NBNI financial entities so that NBNI G-SIFI methodologies would apply.*

As explained in our answer to Q2-1, public financial institutions, sovereign wealth funds and pension funds may employ similar investment strategies, investment techniques and own the same assets as investment funds. From an investment industry perspective, public financial institutions, sovereign wealth funds and pension funds are not different to investment funds. Such schemes should therefore be subject to the same oversight as investment funds. It should be the activity which is most relevant concerning the classification of NBNI G-SIFI, not the type of fund.

*Q2-3. Please explain any other NBNI financial entity types that should be excluded from the definition of NBNI financial entities so that NBNI G-SIFI methodologies would not apply and their rationale.*

We do not believe that asset managers should be considered NBNI G-SIFIs. We believe that such entities should be excluded from the definition for the reasons outlined in the section “General remarks” namely; asset managers are not responsible for the allocation by clients of their assets and asset managers perform primarily an agency role. These views are expanded upon in our response to section 7 below.

We consider that not all investment funds are alike. The majority of them are not highly leveraged and are not systemically important or cause systemic risk. It is important to note that they are less likely to “fail” as they are financed by a variety of investors, who knowingly take-on the investment risk and accept the losses that may take place. Accordingly, there is a strong case to exclude:

- Regulated funds such as UCITS and regulated AIFs that already have a strong focus on diversification and are not highly leveraged.
- Funds that invest into liquid investments and employ mechanisms to protect shareholder value as identified in the IOSCO Principles of Liquidity Risk Management for Collective Investment Schemes.

- Regulated money market funds where there are parallel regulatory developments. Should money market funds be included in the scope of this FSB and IOSCO consultation there is a possibility that the previously mentioned Capital Markets Union initiative may be reduced in effectiveness.

### Sector-specific methodologies for investment funds

*Q6-1. Please explain any potential systemic risks associated with the financial distress or disorderly liquidation of an investment fund at the global level that are, in your view, not appropriately captured in the above description of each risk transmission channel? Are there elements that have not been adequately captured? Please explain for each of the relevant channels separately.*

The definition of investment funds is important. In our view, the FSB and IOSCO's reference to private funds (a term not used in Europe) through the use of examples is not explicit enough. It is also unclear whether the classification applies at the level of the umbrella structure or the sub-fund. In our view consideration must be at sub fund level which aligns to limitation of liability at sub fund level.

We agree with the FSB and IOSCO's observation that leverage is a better measure for screening funds that may be the source of systemic risk. Those funds which are highly leveraged should then be subjected to a more detailed review. Additional factors such as stability of funding sources, and concentrations of illiquid assets would also be considered.

In our view regulated funds such as UCITS and AIFs are not highly leveraged and are subject to regulatory approved levels of leverage as follows:

- UCITS can have permitted leverage of 2x net assets, relying on the commitment approach.
- AIFs can leverage to 3x but after that specific reporting requirements come into play at the regulator. In a duration hedged share class it would be straightforward to achieve this level of leverage via efficient portfolio management techniques

For the purpose of this paper leverage = borrowing.

The above are not highly leveraged. Highly leveraged is borrowings significantly more than the above.

The terms "leverage" / "highly leveraged" must be consistently defined in order to prevent confusion or regulatory arbitrage.

We believe a certain amount of leverage used for both hedging and investment purposes is acceptable on condition that it is disclosed properly to investors (e.g. in a fund's prospectus) and reported to regulators. In Europe, the rules on transparency provided by the UCITS and AIFMD Directives ensure that leverage is not hidden, but rather supervised and disclosed.

High leverage entails enhanced reporting obligations. Regulators have intervention rights in case fund managers inappropriately employ (excessive) leverage.

Use of derivatives can also create leverage. Whilst there is only a proportion of derivatives that are centrally-cleared the positive trend and goal of currently regulatory developments such as EMIR and Dodd Frank is for all or substantially all derivatives to be centrally cleared. This resolves counterparty management challenges but replaces it with transparency and capital concerns and in short, poses the question: who backstops the central counterparties? Central

Clearing Counterparties (“CCPs”) are not necessarily highly capitalised and in our view, regulators should implement safeguards against a CCP failure, by ensuring that they have:

- Adequate financial resources such as capital;
- Robust risk management procedures;
- Business continuity and disaster recovery planning;
- Transparent default waterfalls.

*Q6-2. For the asset liquidation / market channel, to what extent is the potential for risk transmission heightened with respect to an individual fund that is a dominant player (e.g. its asset holdings or trading activities are significant relative to the market segment) in less liquid markets?*

We agree with the observations of FSB and IOSCO that many public funds are subject to legal and regulatory limitations on borrowing and leverage (Consultation, page 32) and as evidenced above. In accordance with the guidance issued by the Luxembourg regulator CSSF on 17 July 2009 a UCITS cannot use its borrowing entitlement to finance additional investments or for investment purposes.

We question the comment on the same page that “...private funds, which generally are not subject to regulatory leverage limits, have the potential to become highly leveraged or concentrated, and could give rise to such systemic risk”. Private funds are not defined by FSB and IOSCO but examples are provided, such as “...hedge funds, private equity funds and venture capital funds” (page 31). In the EU such funds are classified as AIFs. The amount of leverage such funds can acquire is three times their NAV. We are of the opinion that investment funds with such limits would not be considered as “highly leveraged” or cause the widespread financial distress to other market participants as envisaged by the FSB and IOSCO (Consultation, page 33).

If investors are independently making similar investment decisions to invest or disinvest into a common asset class there is not a great difference between whether this is achieved via one large investment fund or via a handful of smaller funds if the outcome is the same. We believe that the term “dominant player” could be flawed as it may lead to larger funds being penalised on the basis of their size, which we do not consider to be an indicator or cause of systemic risk.

Asset managers, particularly of open ended funds, are very familiar with liquidity management. There are indeed many techniques available in regulated fund prospectuses to assist fund liquidity as already outlined in the IOSCO Principles of Liquidity Risk Management for Collective Investment Schemes such as:

- Price Swinging (see example of dilution protection via Price Swinging in **Appendix 2**)
- Redemption accepted but payment deferred (probably using fair valuation)
- Gates (see example in **Appendix 3**)
- Side pockets, in certain circumstances (see example in **Appendix 4**)
- Redemptions in kind
- Suspension of NAV calculation, resulting in no shareholder subscriptions & redemptions

The techniques above are commonly available used when appropriate and can be considered a ‘tool box’ where, depending upon the individual circumstances at hand, certain techniques may be more important than others. We believe that their sometimes infrequent use is not a reason for ignoring such concepts which have worked well when required. Price swinging is the most prevalent example used by the majority of Luxembourg domiciled funds on a very regular basis.

Generally, asset managers have a commercial and regulatory incentive to manage liquidity appropriately.

Should substantial and immediate liquidations be required due to a concentration of redemptions and security selling to finance such liquidations when a fund has a concentration, for example, a large investment in a single country, it is the fund investors that are impacted in terms of value or liquidity. Such risks are part of the investment strategy and communicated to and accepted by the investor upon initial investment and through on-going periodic financial statements and marketing literature. Fund investors absorb the negative effects that might be caused by the distress or even the default of a fund, thereby mitigating any eventual contagion effects in the broader financial system.

UCITS are required to invest into a portfolio of generally liquid investments, such as transferable securities (e.g. liquid equities and bonds), money market instruments, other collective investment schemes, cash and deposits and financial derivative instruments. Investments that are not liquid or readily realisable are limited to a maximum of 10% of the sub-fund's NAV, although such investments generally constitute a smaller proportion of the sub-fund.

AIFs that invest into less liquid assets do not have such limits as they are designed for "well informed investors" that accept and understand the risks which go with such products. Such schemes will have to match their investment strategy to the liquidity of the underlying portfolio and are unlikely to offer daily shareholder dealing as found in UCITS, monthly or quarterly redemptions being more likely.

Both UCITS and AIFs are subject to a regulatory requirement to maintain a robust risk management framework, managing liquidity of assets and liabilities with supervisory and regulatory required reporting to ensure that investor redemptions may be honoured.

*Q6-3. Under what conditions might the asset liquidation / market channel apply to an individual fund in ways that are distinct from industry-wide behaviours in contributing to broader market contagion?*

As far as techniques available in regulated fund prospectuses to assist fund liquidity are concerned, we refer to our answer to Q6-2 and suggest that the following aspects could contribute to broader market contagion:

- High Leverage
- Counterparty management (e.g. whether concerning securities lending or use of derivatives).

We are unaware of an individual fund that could have an impact on the wider industry and we note that no sources are cited for this assertion in the Consultation. We refer to our response to Q6.2 above where we summarise the liquidity controls that are in place on UCITS and AIFs.

In section 6.2.2 "Asset liquidation/Market channel" FSB and IOSCO advance certain theories which in their view could contribute to or amplify forced asset sales of one fund leading to self-reinforcing movements on other funds. We do not believe that this would happen. However, in the event that it did, it would be the investors in the other funds which would knowingly bear the losses but there is a high degree of substitutability enabling investors to change fund, fund manager, asset class if they so wish

- Scenario (i): the loss of investor confidence in a specific asset class as a result of the distress of one particular fund leading to “runs” on other funds presenting similar features or conducting a similar investment strategy;  
In this event those investors would sell. UCITS and AIFs honour redemptions generally on a forward price basis, that is, shareholder deals are accepted prior to the assets being valued. As explained in our response to Q6.2, the fund and its investors would absorb the losses thereby mitigating the eventual contagion to other market participants.
- Scenario (ii): the distress of a highly leveraged investment fund attempting to meet margin requirements;  
We refer to our response to Q6.1 above whereby leverage is limited to three times NAV for AIFs, and highly leveraged is in our view borrowings significantly more than this. We also refer to our response to Q6.2 which requires both UCITS and AIFs to monitor liquidity risk together with the mechanisms used under the IOSCO Principles of Liquidity Risk Management for Collective Investment Schemes.  
The distress of one investment fund would not be expected to have a contagion impact on other funds. In fact depending on the circumstances other funds may successfully grow their market share and take advantage of another’s distress due to the high degree of substitutability in the industry.
- Scenario (iii): a sudden large termination of securities loans that requires an investment fund that was a significant vehicle for cash collateral reinvestment from securities lending transactions to repay the cash collateral

We are unaware of funds engaging in such activities to such an extent that would cause systemic risk. We note however, that collateral is required to be liquid and readily realisable, with a focus of cash and liquid, developed market government debt which would potentially reduce the risks to the fund and its investor.

- Scenario (iv): reputational risk caused by a fund manager’s distress or liquidation, which may similarly be transmitted to market participants through forced asset sales if redemptions cannot be met in a timely manner.  
If there were reputational risk concerning one particular asset manager, we do not believe those concerns would spread to investment funds which are not managed by that manager. If redemptions to that investment fund could not be honoured we do not see how such failings would affect other unrelated investment firms

An asset manager’s financial distress does not directly impact fund shareholders or competitor asset managers and given the high degree of competition and substitutability in the industry a challenge to one manager would probably lead to other competitors successfully gaining business. In this regard, we note the observations found in the IMF’s Global Financial Stability Report (Chapter 3 The asset management industry and financial stability) (“The IMF Report”) which states “The realization of brand risk and redemptions from PIMCO funds in September 2014 did not result in major disruptive market movements because, overall, bond funds continued to receive net inflows” (page 99).

*Q6-4. Is the proposed threshold defined for private funds appropriately calibrated? If not, please explain the possible alternative level (e.g. USD 200 billion of GNE) that could be adopted with clear rationale for adoption and quantitative data to back-up such proposed level?*

Regarding the proposed categorisation and thresholds, we reiterate our request to clearly define both “private funds” and “leverage” (see our answer to Q6-1). There should also be

clarity whether the limits apply at an umbrella or sub fund level. Our recommendation is that limits only make sense at sub fund level.

Regardless we do not believe that the determination based on fund size is appropriate when it is the activity that should be the critical criteria. We also note that the IMF Report echoes this sentiment “Funds’ contribution to systemic risk depend relatively more on their investment focus than on their size” (page 111).

*Q6-5. In your view, which option for the proposed threshold applied to traditional investment funds is the most appropriate initial filter to capture the relevant funds for detailed assessment and why? Also, are they appropriately calibrated? Please provide evidence (data or studies) to support your argument. If you prefer Option 2, please provide a practical definition of a dominant market player that can be applied in a consistent manner.*

We do not think that large funds are as such systemically important and that their inclusion is not a good measure of systemic importance when it is the activity that should be the critical criteria.

The FSB and IOSCO should also bear in mind that UCITS IV introduced in 2009 several innovations, such as cross-border mergers and master-feeder structures, leading to bigger funds, and as a consequence, to economies of scale which are beneficial for the fund managers and ultimately the investors they serve. However, compared to the US, European funds are still much smaller in size. We also refer to the European Commission’s latest initiative on building a Capital Markets Union (see our response to Q2.3).

As mentioned in our answer to Q6-8, we do not consider that size is a key criteria for SIFI designation and given the regulatory environment and regulation concerning diversification and risk it would be more appropriate to focus on the fund’s activities, such as its use of high leverage, or to regularly conduct liquidity stress tests such as those which are undertaken by UCITS and AIFs.

*Q6-6. In addition to the two options for traditional investment funds, the FSB and IOSCO also considered a simplified version of Option 2 using GAUM (e.g. USD 200 billion) with no dominant player filters. Please provide your views if any on this as a potential threshold with the rationale (especially compared to the proposed two options above).*

We refer to our answer to Q6-5.

*Q6-7. Please explain any proposed revised indicators set out above that, in your view, are not appropriate for assessing the relevant impact factors and its reasoning.*

- Size - No

Indicators 1-1 and 1-2: (net AuM or NAV for the fund, alternatively Gross Notional Exposure (“GNE”) for hedge funds)

We consider that using size to screen funds will generate false positive indicators and false negative indicators. A large well diversified vehicle with little leverage, such as an index fund, is unlikely to pose systemic risk issues. Conversely, the Reserve Primary Fund would not have met the proposed size thresholds. However with respect to activity and in particular high leverage, the scale of that activity may have a relevance to systemic risk.

- Interconnectedness – Yes (for the most part)

We agree that interconnectedness is an adequate criterion to determine systemic importance, especially the use of leverage.

- Indicator 2-1: Balance sheet financial leverage of the investment fund – Yes
- Indicator 2-2: Leverage ratio of the investment fund – Yes  
Leverage is a better measure for screening funds. Those funds with high leverage (unlike UCITS) should then be subjected to a more detailed review.
- Indicator 2-3: Ratio of GNE to the NAV for the investment fund – Yes
- Indicator 2-4: Ratio of collateral posted by the investment fund to its NAV – Yes  
We agree that this is an appropriate indicator to measure systemic risk.
- Indicator 2-5: Counterparty credit exposure to the investment fund – Yes  
We agree that this is an appropriate indicator to measure systemic risk.
- Indicator 2-6: Intra-financial system liabilities to G-SIFIs – Yes  
We agree that this is an appropriate indicator to measure systemic risk.
- Indicator 2-7: Nature of investors of the funds – Yes  
In Europe there are already legislative safeguards ensuring transparency, introduced e.g. by the Basel II or Solvency II framework. Any doubling of requirements should in our view be avoided.  
Moreover, liquidity issues can be managed by using techniques such as gates, see our response to Q6-2.
- Substitutability – No
- Indicator 3-1: Daily trading volume of certain asset classes of the fund compared to the overall daily trading volume of the same market segment – No
- Indicator 3-2: Fund holdings per certain asset classes compared to the overall daily trading volume of the same asset class – No
- Indicator 3-3: NAV of the fund compared to the size of the underlying market – No

We do not consider the principle of substitutability as an indicator to adequately capture how failure of NBNI financial entities could cause significant disruption to the wider financial system and economic activity. The assessment of a particular fund's substitutability would require a case by case analysis of the fund's specific features. In our view, a fund's failure may at the most have a relevant impact on certain asset classes, but not on the economy of a country as such.

- Complexity – Somewhat Yes

Considering certain investment strategies, we agree on the criterion of complexity, but it would be incorrect to consider that a given quantitative increase in activity encompassed an equivalent or indeed any higher level of complexity.

- Indicator 4-1: Non-centrally cleared derivatives trade volumes of the fund / total trade volumes of the fund – Yes

We agree that this could be an appropriate indicator to measure systemic risk and the impact on other counterparties. Robust rules ensuring adequate collateral management and counterparty management are needed.

- Indicator 4-2: Ratio (%) of collateral posted by counterparties that has been re-used by the fund – Yes  
We agree that this is an appropriate indicator to measure systemic risk.
- Indicator 4-3: Proportion of an investment fund's portfolio using High Frequency Trading strategies – No  
'High frequency trading' is not defined in the Consultation and there are difficulties in agreeing a common definition. High frequency trading could be an indicator of systemic risk but this does not necessarily follow and individual fund circumstances must be examined e.g. a money market fund may have a high level of trading but this does not necessarily mean that it is creating systemic risk. We think high frequency trading has no impact on operational risk, and therefore we see no particular issue in terms of complexity. The factors as such are the same.
- Indicator 4-4: Investment fund liquidity profile – Yes  
We agree that this is an appropriate indicator to measure systemic risk.
- Indicator 4-5: For leveraged funds, ratio of unencumbered cash to GNE – Yes  
We agree that this is an appropriate indicator to measure systemic risk of highly leveraged funds.
- Indicator 4-6: Ratio of unencumbered cash to the NAV of the investment fund – No  
In the context of complexity, we do not think that this is an appropriate indicator to measure systemic risk.
- Indicator 4-7: Amount of less liquid assets – No  
We do not believe that these are appropriate indicators to determine systemic risk. Investment funds in Europe must employ appropriate and robust risk management procedures which also consider liquidity. Moreover, investors absorb the negative effects that might be caused by the distress or even default of a fund thereby mitigating any eventual contagion effects on the broader financial system.
- Global activities (cross jurisdictional activities) – No

Regarding the cross-jurisdictional presence, one has to bear in mind that investment funds are domiciled in only one jurisdiction, from which they can be distributed to other countries. This is not comparable to the situation of banks which may have subsidiaries in different jurisdictions. If a fund's investment strategy fails, this will concern the fund legal entity in the jurisdiction in which the fund is domiciled as well as the distribution to other countries, but not to other legal entities abroad.

- Indicator 5-1: Number of jurisdictions in which a fund invests – No  
We disagree because many funds such as UCITS or regulated AIFs in Europe must meet detailed diversification rules to comply with the principle of risk spreading. This diversification occurs at an issuer and or group level but also at a sector/country/regional level. These characteristics apply across similar funds. The number of jurisdictions in which a fund invests is therefore not an indicator of systemic importance or risk and if anything, an increase in jurisdictions should reduce any systemic risk.

- Indicator 5-2: Number of jurisdictions in which the fund is sold / listed – No  
We disagree because an increase in jurisdictions in which the fund is sold / listed creates a diversified investor base. The number of jurisdictions in which a fund's investors are based is therefore not an indicator of systemic importance or risk and in fact diversification of investor base must decrease systemic risk as not all investors (whether retail or institutional) are likely to act in the same manner at the same time.
- Indicator 5-3: Number of jurisdictions where the fund has counterparties – No  
We disagree because an increase in counterparties creates diversification and reduces the risks to a mutual fund. The location of a fund's counterparties is not an indicator of systemic importance or risk. We also note that UCITS funds are required to observe maximum counterparty limitations which are further enhanced through the use of a robust risk management process.

*Q6-8. What alternative indicators should be added and why would they be more appropriate? For example, do you see any benefits in adding price-based indicators? If so, please explain the rationale for inclusion and possible definitions of such indicators.*

We believe that the investment fund's activities are more important in determining potential systemic importance, rather than its size. This sentiment was also echoed in the IMF Report:

*"For a given fund size, the systemic risk contribution bears little relation to the size of a fund's AMC (Figure 3.16, panel 2). The average contribution to systemic risk does not increase with a fund's AMC's size (the picture looks the same when the investment focus of funds is controlled for), at least not for the top asset managers considered here. Although this exercise only examines one segment of the broad asset management industry and CoVaR is only one of the many possible systemic risk measures, it highlights the importance of incorporating product-line and investment-focus perspectives, in addition to mere size, when discussing the designation of AMCs and funds as SIFIs".*

Leverage meaning borrowing should be considered as a better measure for screening funds. Those funds with high leverage should then be subjected to a more detailed review. Additional factors such as stability of funding sources, and concentrations of illiquid assets could also be considered.

In our "General remarks" we asked what the implications would be for an investment fund that is designated as a G-SIFI. We have stated our view that high leverage could be the source of systemic risk if not managed correctly. However, we are concerned that additional controls could impact on the investor who is the end user of the investment fund.

The focus on fund size may yield a small number of funds and the systemic importance of them is questionable when compared to the size and impact of banks and insurers. If such funds are targeted and subject to additional controls, such as restrictions on sales during times of market volatility, limitations on investments in certain systemically important banks or insurers or holding of capital against such volatility, there is the possibility that the investors will simply transfer their investment to a less constrained fund or another financial product to meet their investment needs.

There also needs to be an understanding of the potential impacts such controls on larger funds would have on other financial participants in providing services to investment funds and their investors. Restricting an investment fund's ability to buy and sell based on the asset manager's decisions could distort the price discovery mechanism and exacerbate, rather than mitigate, liquidity risk management issues. Such controls could also lead to accusations that the investment fund, its board of directors and asset managers, are not working for the benefit of

the end investor and are in breach of their fiduciary duties. It is for such reasons that, we would wish to see more information on the potential outcomes for investment funds that are designated as G-SIFIs before we make additional comments on what controls should be added.

*Q6-9. What are the practical difficulties (e.g. data availability, comparability) if any with collecting data related to these indicators? Please clarify which items, the practical problems, and possible proxies that could be collected or provided instead.*

Form PF in the USA and AIFMD reporting to in country regulators in Europe from July 2014 add improved transparency and provide information concerning the identity and exposure to counterparties, the extent of the purposes to which leverage is used as well as the liquidity of the fund's portfolio. Such reporting must improve global information and transparency better enabling regulators to have a comprehensive data set with which to measure potential build of systemic risk.

We fear that the costs of additional data collection could be substantial and should be estimated as they are not readily available.

*Q6-10. For "size", should GNE be adjusted? If so, please explain how GNE should be adjusted and the practicality of such adjustment (e.g. data availability).*

GNE does not take hedges or offsetting positions into account and thereby can be inaccurate and misleading as a measure of size or leverage. The commitment approach may be more accurate and therefore a better measure than GNE as funds report leverage after limited netting of matching positions and it is also being used under AIFMD reporting.

The netting of matching positions for UCITS is subject to a number of conditions which are documented in CESR (now ESMA) "Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS" (CESR /10-788b). These guidelines also require that where Efficient Portfolio Management transactions (such as stock lending) are not collateralised using risk free assets, the position is treated as leverage and added to the fund's global exposure.

*Q6-11. For "interconnectedness", should financial leverage measured separately from synthetic leverage?*

High Leverage meaning borrowing can be a potential source of risk. The question is how this risk can best be quantified and how it can be mitigated.

In Europe, financial leverage and synthetic leverage are recorded separately. But as they are considered together, we see no concern with respect to interconnectedness.

UCITS are required to have coverage for all derivative contracts – either through holding the asset in the portfolio or through liquid assets after the application of haircuts. UCITS are also required to use a diversified number of counterparties for transactions.

A fund's board of directors may activate a fair valuation process but security pricing is not a service conducted by an asset manager in this context.

## Sector-specific methodologies for asset managers

*Q7-1. Please describe any activities or services conducted by asset managers other than described above. In particular, please explain any other activities that, in your view, should be included in the scope.*

Proprietary trading and securities lending are other activities conducted by asset managers.

Should an asset manager become insolvent due to proprietary trading, which is generally undertaken to a very limited extent, then the high degree of substitutability in the global asset management industry is key.

Concerning securities lending risks are mitigated by a secured collateral management process and daily mark to market. Risks resulting from the balance sheet of lending agents must be addressed separately.

In those circumstances where the asset manager is the lending agent and if the asset manager has given an indemnity to the lender, in practice risks are limited to intraday movement and mitigated by

- i) Strict counterparty risk management practices
- ii) Collateral management practices requiring acceptable liquid collateral, haircuts and daily movement of collateral.
- iii) Any indemnity should be seen in the context of appropriate only in the last resource after other options have been exhausted and with very minor risk to the asset manager's balance sheet.

*Q7-2. Please explain any potential systemic risks associated with the financial distress or default of an asset manager at the global level that are, in your view, not appropriately captured in the above description of each risk transmission channel. Are there elements of the relevant channel that have not been adequately captured? Please explain for the relevant channel separately.*

Asset managers are not a source of systemic risk. They are not the counterparty to trades they conduct on behalf of their clients. Neither are they responsible for the allocation by clients of their assets. Managers act as agents for their clients' investments. Moreover, asset managers do not employ leverage to the same extent as banks. Therefore, we do not believe that the proposed methodologies for investment funds and asset managers should maintain broad consistency with the existing assessment methodologies for global systemically important banks or insurers.

It is important to note that the investments managed by asset managers on behalf of the clients are separate from those of the asset management firm. In the case of a UCITS or an AIF, the fund board appoints the investment manager to manage its investments. Separately the fund board will appoint a custodian / depositary that is independent of the asset manager. In the event of the asset managers default the investment funds assets will continue to be held by the custodian / depositary for the benefit of the fund and its investors. They will not be devalued as a result of the asset manager's distress.

The soon to be implemented UCITS V directive also will see a strengthening of the role of the custodian / depositary in the EU. The UCITS V measures mirror those of the AIFMD and require that "financial instruments" owned by an investment fund are segregated from its assets while also requiring verification by the depositary of "other assets". In the event that these

financial instruments are lost the depositary faces a strictly liability regime which requires that the value of the assets be restored without loss to the investment fund.

Substitutability is less likely a cause of systemic risk, because asset managers act as agents for their clients and there is considerable competition. Investors can always make a free choice to move to a different asset manager, to a different investment strategy or to a different fund vehicle. In a dynamic industry, new asset managers can be created and can create new services and build new market share as opportunities present themselves.

In light of the foregoing we believe there should be little distress to the wider financial system in the event of the distress or default of an individual asset manager given the high degree of competition and substitutability within this sector. The IMF report confirms this view by saying that “larger funds and funds managed by larger asset management companies do not necessarily contribute more to systemic risk: the investment focus appears to be relatively more important for their contribution to systemic risk” (summary and pages 97, 121).

In light of the foregoing we believe there should be little distress to the wider financial system in the event of the distress or default of an individual asset manager given the high degree of competition and substitutability within this sector. **Appendix 5** supports the view that the global asset management industry is highly competitive, in that investors around the world have hundreds of asset managers from which to choose from; whereby nearly 95% of total global assets under management are managed by 250 asset managers.

*Q7-3. For the exposure / counterparty channel, to what extent does the assessment adequately describe the types of risks posed by asset managers’ activities, such as securities lending, distinct from individual funds? Are there other activities that warrant further assessment?*

In those circumstances where asset managers act as securities lending agents and where they conduct proprietary trading, we refer to our answer to Q7-1.

We also refer to the FSB and IOSCO consultation of 8 January 2014, which explained your focus on funds as opposed to asset managers because:

- *“Economic exposures are created at the fund level as they emanate from the underlying asset portfolio held by the fund. It is therefore the portfolio of assets that creates the respective exposures to the financial system.”<sup>36</sup>*

Footnote 36 states that “... any interconnectedness does not emanate from the manager’s balance sheet, but is the consequence of the manager’s activities in relation to the management of assets held in the portfolio”

- *A fund is typically organised as a corporation or business trust under national law, and, as such, is a separate legal entity from its manager. The assets of a fund are separated and distinct from those of the asset manager and as a result, the assets of a fund are not available to claims by general creditors of the asset manager”.*

We are uncertain as to why this view has changed and the reasons for considering whether asset managers should be designated as a G-SIFI.

In this Consultation (page 48 and 49) you note that “...asset managers tend to have small balance sheets and the forced liquidation of their own assets would not generally create market disruptions.

*However, the distress or failure of an asset manager may still create or amplify potential market distress through its off-balance sheet activities (e.g. provision of indemnification and guarantees) or through its reputational/operational risks". We do not believe this is the case as asset managers generally do not highly leverage their balance sheets.*

As explained above the assets of an investment fund are held separately from that of an asset manager. Therefore, there should be no material distress to the wider financial system in the event of the financial distress or default of an asset manager and the high degree of substitutability within this sector.

While asset managers may engage in proprietary trading and stock lending on their own behalf we wish to point out that, in Europe, such activities are already restricted through CRD IV and Basel III. Similarly, reputable asset managers who engage in stock lending are likely to do so under programs which require such positions to be collateralised or subject to similar risk mitigation techniques and continuous oversight both by the asset manager themselves and their external auditor. In light of the foregoing we believe that the risks may be overstated.

*Q7-4. For the asset liquidation / market channel, to what extent and under what circumstances might reputational or operational risks of the asset manager impact the entity's individual funds, contributing to high redemptions? How might it impact the transfer of SMAs?*

Asset management entities are exposed to operational and reputational risks but these will be specific to each entity and unlikely to be systemic in nature.

Asset managers maintain and test business continuity plans to ensure that their activities can continue in light of operational problems arising from a variety of issues from temporary power outages to terrorist incidents. Senior management are responsible for identifying, controlling and testing the operational risks that they face and the responses to them. These controls are also subject to external review by the asset manager's external auditor.

An asset manager's response to operational risks is varied and wide-ranging and range from minor software upgrades through to the redeployment to an external disaster recovery site in the worst case scenario. Regardless of the operational risks faced by an asset manager it is important to note that the investors assets are held separately at the custodian and that an operational impact at the asset manager will not lead to the loss of those assets.

When operational problems affect the fund or its service providers these are generally remedied with minimal disruption to investors. In the event that an operational risk leads to a client loss, the asset managers processes are designed to put the client into the situation that they would have been had that operational risk not occurred and to ensure that cost or loss is not borne by the investor.

Moreover, one should bear in mind that the funds' investment strategies as such do not change directly as a result of a reputational or operational risk.

With regard to the "reputational" aspect of this question, the response depends upon the nature of the issue.

In the event that an asset manager is subject to minor administrative sanction by a regulator for say, late filing of a report, the reputational damage to the asset manager is likely to be minimal and unlikely to damage the interests of a particular investment fund, its shareholders or the perceived competency or integrity of the asset manager itself and is less likely to lead to redemptions by investors. However, where this is not the case and there is evidence of criminal wrongdoing then there is the possibility that investors will withdraw money. We would point out that in such cases, financial sector regulators may take action to protect investors, such as

suspending the fund's activities or that the liquidity management techniques mentioned in the IOSCO Principles of Liquidity Risk Management for CIS will be used. It should be noted that the alleged criminality does not always have a direct impact on the underlying value of the fund's assets.

In the event of a change of an individual portfolio manager, the asset manager is likely to communicate this to impacted parties once the manager signals their intention to move. This will include the reasons for an asset manager's departure, their replacement and any changes to strategy / investment process – the latter is less likely to happen as investors often have a longer time horizon and any change in individual portfolio manager does not immediately signal a change in investor choice as far as investment strategy. Substitutability is key both for investment funds and for segregated accounts/SMAs.

It should be noted that asset management individuals change frequently and that not all fund managers control the assets under management that Bill Gross managed at PIMCO. However, as noted in our response to Q 6.3 his departure did not result in major disruptive market movements. In the case of long serving asset managers or those who manage large mandates, "key man" risk assessments and succession planning are likely to have been put in place by the asset management firm as this would be part of their overall risk management processes.

*Q7-5. For the critical function / substitutability channel, are there any emerging activities that might be critical to a portion of financial clients that might in turn impair market functioning or risk management if no longer provided? Other than managing assets as an agent (i.e. core function), to what extent do asset managers engage in activities that may be relied upon by investors, financial institutions and corporations, and which are difficult to readily substitute?*

In our view, emerging activities represent by definition a smaller portion of both funds and assets under management which should not be able to have the consequences described in question 7-5.

*Q7-6. Please explain any practical difficulties in applying the above proposed thresholds for an initial filter of the asset manager universe and limiting the pool of asset managers for which more detailed data will be collected and to which the sector-specific methodology (set out in Section 7.4) will be applied.*

Asset managers are not a source of systemic risk. They are not the counterparty to trades they conduct on behalf of their clients. Neither are they responsible for the allocation by clients of their assets. Managers act as agents for their clients. We consider it more appropriate to focus on the market activities of asset managers that may give rise to such systemic risk issues, not on size as the assets under management belong to the clients not the asset manager.

We also wish to point out that, from a global perspective, the impacted number of asset managers is small. Currently 15 asset managers would fall within the envisaged thresholds (source: Committee on Capital Markets Regulation: Nothing but the facts: FSB-IOSCO proposal for SIFI Designation). This is a small number and given the majority of their investment funds are not highly leveraged or cause systemic risk we are uncertain of the benefits of such a classification and whether it reduces systemic risk to financial markets, its counterparties and investors.

*Q7-7. Please provide alternative proposals, if any, for a more appropriate initial filter (with the rationale for adoption and quantitative data to back-up such proposals).*

We consider it more appropriate to focus on market activities that may give risk to or cause systemic risk such as investment funds that are highly leveraged and / or the use of derivatives.

We believe that the cumulative evidence provided by respondents to the first consultation shows that investment funds generally are not a source of systemic risk if they are liquid, diversified and do not engage in high leverage. We cannot provide alternative proposals because we have the same opinion on asset managers in that they are not systemically important in the way a large bank or insurer is as they do not substantially leverage their balance sheet.

*Q7-8. Please explain any proposed indicators set out above that, in your view, are not appropriate for assessing the relevant impact factors and its reasoning. What alternative indicators should be added and why would they be more appropriate?*

- Size – No

We refer to our answer to Q7-6.

- Indicator 1-1: Net assets under management (Net AuM)
- Indicator 1-2: Balance sheet assets  
It is important to note that the clients' investments which are entrusted to asset managers are not the asset manager's property and are held separately from the asset manager's balance sheet. Asset management entities do not invest with their own balance sheets by engaging in principal trades with clients.
- Interconnectedness – No
- Indicator 2-1: Leverage ratio – No
- Indicator 2-2: Guarantees and other off-balance sheet exposures – No  
Asset management entities do not employ balance sheet leverage.

We do not think that interconnectedness is an adequate criterion to determine systemic importance of asset managers.

- Substitutability – No

We refer to our answers to Q7-1 and Q7-2. We do not consider the principle of substitutability as an indicator to adequately capture how failure of NBNI financial entities could cause significant disruption to the wider financial system and economic activity. Asset managers act as agents for their clients and there is considerable competition. Investors can always make a free choice to move to a different asset manager, or to a different investment strategy or to a different fund vehicle.

- Indicator 3-1: Substitutability, measured by a percentage of the asset manager's revenues as compared to the total revenues attributable to the relevant business – No
- Indicator 3-2: Market share, measured by a percentage of the asset managers' AuM in a particular strategy as compared to the total AuM invested in the same strategy for all managers – No

- Complexity – Somewhat Yes
  - Indicator 4-1: Impact of the organisational structure
  - Indicator 4-2: Difficulty in resolving a firm
 

As mentioned before, there is a high degree of substitutability enabling investors to change fund managers. Moreover, the clients' investments which are entrusted to asset managers are held separately from the asset manager's balance sheet. As such they are protected against any creditors of the asset manager. Acting as agents for their clients, asset managers are also not the counterparty to trades they conduct on behalf of their clients.
- Cross-jurisdictional activities (global activity) – No
  - Indicator 5-1: Number of jurisdictions in which an asset manager has a presence – No
 

We believe the diversity of the shareholder base should be considered as a strength.

*Q7-9. What are the practical difficulties (e.g. data availability, comparability) if any with collecting data related to these indicators? Please clarify which items, the practical problems, and possible proxies that could be collected or provided instead.*

As mentioned in our response to Q7-7., we consider it more appropriate to focus on market activities across the fund industry (i.e. including pension funds and sovereign wealth funds). The quantification of the latter is admittedly not obvious, but activity based reporting as mentioned in our response to Q6-9. provides in country regulators already with much useful information.

*Q7-10. Which of the proposed indicators set out above, in your view, should be prioritised in assessing the systemic importance of an asset manager?*

Asset managers are not a source of systemic risk. They are not the counterparty to trades they conduct on behalf of their clients. Neither are they responsible for the allocation by clients of their assets. Managers act as agents for their clients. We consider it more appropriate to focus on reporting of market activities of asset managers that may give rise to such systemic risk issues, such as high leverage, not on size as the assets under management belong to the clients not the asset manager.

## Appendix 1: Glossary of commonly used abbreviations and terms

AIF	Alternative Investment Fund, a fund constituted in accordance with Directive 2011/61/EU on Alternative Investment Fund Managers (“AIFMD”) and its supporting delegated regulations.
AIFM	Alternative Investment Fund Manager, the manager of an AIF.
CMU	Capital Markets Union, is a plan of the European Commission that aims to create deeper and more integrated capital markets in the 28 Member States of the EU. With the CMU, the Commission will explore ways of reducing fragmentation in financial markets, diversifying financing sources, strengthening cross border capital flows and improving access to finance for businesses, particularly SMEs.
CSSF	<i>Commission de Surveillance du Secteur Financier</i> (Luxembourg commission for the supervision of the financial sector).
ESMA	European Securities and Markets Authority.
MiFID	Markets in financial instruments directive, the directive governs the provision of investment services in financial instruments by banks and investment firms and the operation of traditional stock exchanges and alternative trading venues. It has been in force since November 2007. In October 2011, the European Commission tabled proposals to revise the Markets in Financial Instruments Directive (MiFID II) with the aim of making financial markets more efficient, resilient and transparent, and to strengthen the protection of investors.
Solvency II	<p>Directive 2009/138/EC whose aim is to ensure the financial soundness of insurance undertakings, and in particular to ensure that they can survive difficult periods. This is to protect policyholders (consumers, businesses) and the stability of the financial system as a whole.</p> <p>Solvency rules stipulate the minimum amounts of financial resources that insurers and reinsurers must have in order to cover the risks to which they are exposed. Equally importantly, the rules also lay down the principles that should guide insurers' overall risk management so that they can better anticipate any adverse events and better handle such situations.</p>
UCITS	Undertaking for Collective Investment in Transferable Securities, a fund constituted in accordance with Directive 2009/65/EC (“UCITS IV”), which will be amended with Directive 2014/91/EU (“UCITS V”).

**Appendix 2:** Example of dilution protection via Price Swinging

Table 3.2.1. Comparison of Fund Pricing Rules (USD million)	
Transactions	UCITS Swing Pricing
Beginning NAV	100
Net flows	-15
Purchases	+5
Redemptions	-20
Total Costs of Selling Assets (0.1 percent, including bid-ask spread)	0.015
Transaction Costs Incurred by Investors Purchasing Fund Shares <sup>(1)</sup>	-0.005
Transaction Costs Incurred by Investors Redeeming Fund Shares	0.020
Transaction Costs Incurred by Fund and Remaining Investors	0
Ending NAV	85
Memo	Estimated transaction costs borne by trading investors

<sup>(1)</sup> Because fund NAV has swung to the bid price because of net redemptions, purchasing investors benefit to the extent that they purchase units that are cheaper than preswung NAV. This benefit is offset by the costs paid by redeeming clients.

## Appendix 3:

### Gate Example

	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Total
Fund Performance		1%	-5%	-5%	-5%	-5%	-5%	
A NAV/share	100	101	96	91	87	82	78	
<u>Net Flow Requested (N1):</u>								
B Investor's Shares	100	-10	-18	-14	-3	-3	0	-48
C % Of Overall Fund NAV		-10%	-20%	-20%	-5%	-5%	0%	
Proceeds If Gate Was Not Applied [A*B]		1010	1727	1313	249	225	0	4524
<u>Net Flows Allowed (10% Gate)</u>								
<u>Gate Brought Forward (b/f):</u>								
E % Of Fund				-5%	-10%	-5%	0%	
F Investor's Shares				-4	-7	-3	0	
<u>Gated Flows Approved For Redemption (N2):</u>								
G % Of Fund		-10%	-15%	-15%	-10%	-10%	0%	
Investor's Shares [F+((G-E)/C)*B]		-10	-14	-12	-7	-6	0	-48
<u>Gate Carried Forward (c/f):</u>								
% Of Fund		0%	-5%	-10%	-5%	0%	0%	
Investor's Shares			-4	-7	-3			
Actual Proceeds Received		1010	1295	1066	623	462	0	4456
Proceeds Foregone As A Result Of The Gate "Delay" Mechanism		0	-432	-247	374	237	0	-68
Investor Performance Lost								-1.50%

▶ Investor impact due to inability to redeem full request each day. Assuming future NAVs drop in value, this lower NAV is then applied to any shares c/f in the gate mechanism

▶ Since the investor cannot redeem everything he/she wants to, when he/she wants to (due to the gate), the investor effectively loses 1.5% in total performance because the NAV drops -5% every day, so gated deals therefore get a lower NAV.

(N1): Scenario involves a daily dealing UCITS and assumes same the investor submits separate redemption requests on 5 consecutive dealing days. The gate model is described in the fund prospectus, including threshold at which it becomes effective. It gives the power to defer redemption requests to future dealing dates, with gated deals b/f then being typically FIFO prioritised over new requested received on later days. Proceeds are paid pro-rata from available portfolio proceeds [see (N2)]

(N2): Ability to accept redemption requests is determined by the fund's ability to redeem a proportionate, representative portion ("slice") of fund portfolio. Only a representative slice is acceptable otherwise remaining investors could be left with a more illiquid profile of portfolio from which to realise their redemption proceeds. This protects investors against a first-mover advantage

## Appendix 4:

### Side Pocket ("SP") Example

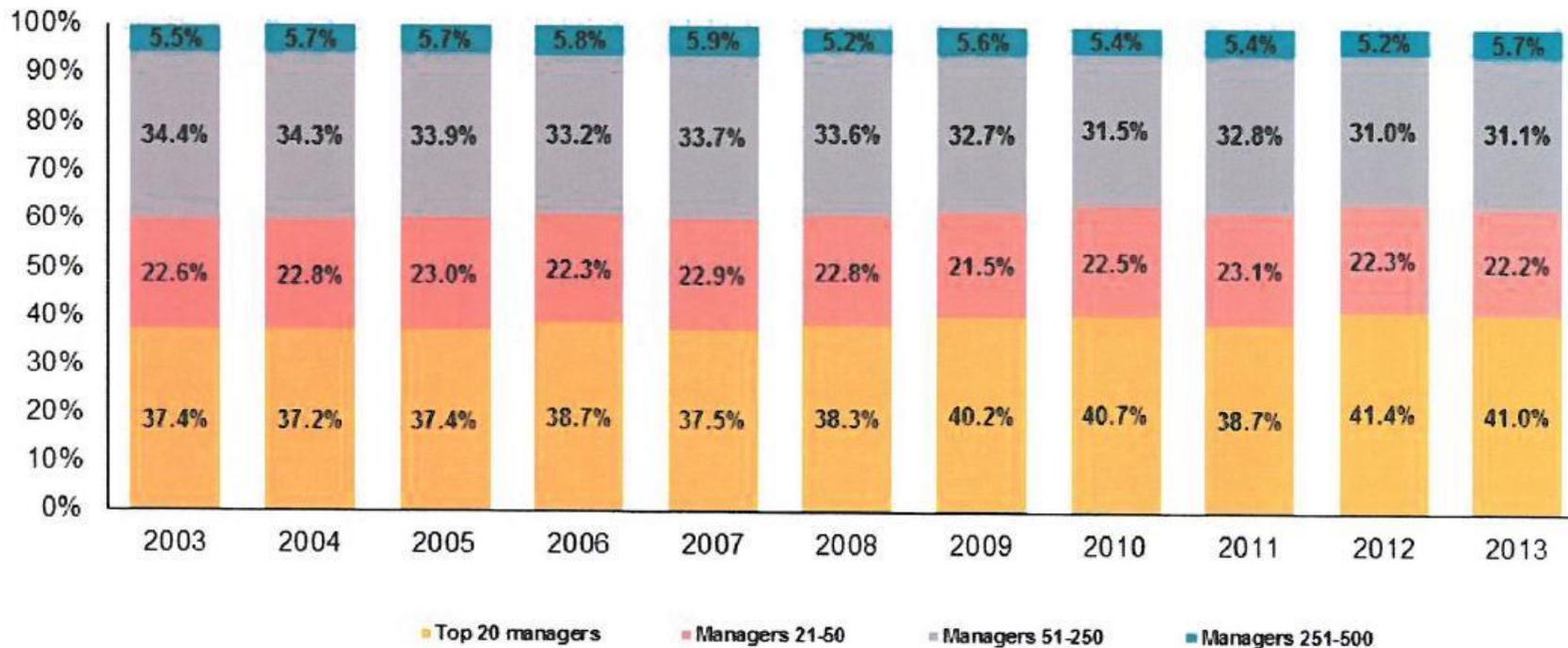
	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 10	Liquidation	Total
Fund Performance		1%	-5%	-5%				-14%	
NAV/share	100	101	96	91				79	
<u>Net Flow Requested:</u>									
% of Fund NAV		-10%	-20%	-20%					
Shares Subscribed/(Redeemed)		-10	-18	-14					
Share Roll	100	90	72	58					
Investor Equity		9090	6908	5250					
<u>SP Re-organization:</u>									
<u>Non-SP (75%)</u>									
Net Flow Requested: % of Fund NAV (N1)					-10%	5%	-5%		
Shares Subscribed/(Redeemed)					-4	2	-2		
Non-SP Portfolio Performance									
NAV/share				91	-8%	-4%	5%	-2%	
Share Roll				43	84	81	85	79	
Investor Equity				3938	39	41	39	41	
					3260	3287	3278	3221	
<u>SP (25%):</u>									
Net Flow Requested: % of Fund NAV (N2)									
Shares Redeemed									
SP Portfolio Performance									
NAV/share (N3)				100	-40%	-45%	10%	95%	
Share Roll				13	60	33	36	71	
Investor Equity				1313	13	13	13	13	
					788	433	476	929	
Total Investor Equity (SP & Non-SP)					4048	3720	3755	4150	
<u>Investor Impacts:</u>									
If no SP re-organization: no cash back until liquidation date								4528	4528
Under SP re-organization: non-SP investor liquidity continues (N4)					362	-157	173	4150	4528

► Maintaining long-term illiquid assets in the SP allows investors to still subscribe/redeem in the liquid part of the strategy. This is not otherwise possible if the overall fund needed to be suspended until liquidation date.

(N1): From a LIFO viewpoint, the fact that shares can continue to be subscribed (Day 5) & redeemed (Day 10) shows that gains can still be made due to the non-SP fund being open  
(N2): Although not reflected in the example, SP pro-rata redemptions and/or distributions could be made on a periodic basis to shareholders on the sale of previously illiquid assets  
(N3): On Day 3 when the SP is created, 25% of fund equity (ie. illiquid assets) is allocated to a newly created SP share class, with shares allocated pro-rata to existing investors  
(N4): Continuous liquidity is a fundamental requirement of UCITS investors, with SP enabling this for a large part of the portfolio. For simplicity, the scenario concludes with a full liquidation of both SP and non-SP portfolios, although not necessary for the non-SP. Maintaining the SP shows that the manager was able to take time in finding a best outcome

Appendix 5

## Total value of assets managed Split by segment



- The bottom 250 managers increased their proportion of assets at the expense of the top 50 managers' share of assets

Source: © Towers Watson, 2014