The Alternative Investment Standards – Risk Management

1. The Alternative Investment Standards – Risk Management

Risk management processes and controls are a vital part of the investor due diligence process and the proper functioning of an asset manager. The Standards cover portfolio risk, liquidity risk, counterparty risk and market risk. The Standards also cover the governance and disclosure of a risk framework.

The SBAI's Alternative Investment Standards ("Standards") have been developed over-time through extensive consultation with asset managers and allocators. The Standards address key issues relating to alternative investment practices covering the areas of, disclosure, valuation, risk management, fund governance and shareholders' conduct. This document contains the Standards related to Risk Management.

Note that the below are a sub-set of the full standards that are relevant to this area. A copy of the full standards that signatories are required to adopt on a comply or explain basis can be found here.

The Standards are complemented by the SBAI Toolbox ("Toolbox"). The Toolbox contains transparency tools and guidance memos; however, are not part of the standards that signatories sign up to upon joining the SBAI. These Toolbox memos are designed to provide further insight into areas including providing investors with questions to ask during investor due diligence meetings.

The following Toolbox Memos may provide additional insight into meeting these Standards:

Transparency Tools

- Open Protocol Risk Reporting

2. Introducing the Standards

The Standards encompass a wide array of functions and the standards detailed below represent those that are most applicable to Risk Management (Risk). Other parts of the Standards will be included in the companion documents covering Investment Due Diligence (IDD) and Operational Due Diligence (ODD):

	ODD	IDD	Risk
Disclosure to Investors and Counterparties [1] to [4]	✓	✓	
Valuation [5] to [8]	✓		
Risk Framework [9] to [10]			✓
Portfolio Risk [11] to [16]		✓	✓
Operational Risk [17] to [18]	✓		
Outsourcing Risk [19] to [20]	✓		
Fund Governance [21] to [22]	✓		
Prevention of Market Abuse [23] to [24]	✓		
Proxy Voting [25] to [26]	✓		
Disclosure of Derivative Positions [27]	✓		
Borrowing Stock to Vote [28]	✓		
Appendix A – Examples for Leverage		✓	
Appendix B – Examples of Functions Covered by SLAs	✓		
Appendix C – Examples of Compliance for Market Abuse	✓		
Appendix D – Examples to determine Similarity	✓		

2.1 How to read the Standards:

The Standards are set out in a consistent format in blue shaded boxes throughout this document. The formatting of the text within the boxes is differentiated to reflect the following elements:

- The Standards **(in bold)**
- Additional guidance and examples which are intended to assist and illustrate how compliance might be achieved (in normal text)
- Explanations and comments *(in italic).*
- A fund manager means an alternative investment manager that became a signatory to the Standards

Illustration

- **The Standard is set out in bold text**

- Lists of relevant sub-items which form part of the Standard are set out in bold text.

Guidance on the Standard (and references to useful additional guidance, e.g., materials published by AIMA and IOSCO) and examples of how the Standard might be complied with are set out in normal text.

Additional explanation and commentary to enhance understanding is set out in italics.

2.2 Other Considerations when Reading the Standards

When reading these standards asset managers should ensure to consider the following points:

- Some Standards may not be applicable for segregated accounts or fund of funds.
- Where the power to comply with a Standard sits with the fund governing body, the standard requires that a manager do what they reasonably can to ensure compliance.

- Marketing materials can be taken to mean all documents disclosed to investors including the Offering Memorandum and disclosures are not required in each document separately.

Further Details on the above are contained in the full Standards document

3. The Alternative Investment Standards

Note the standards and appendices below will not appear in sequential order as the numbering has been retained from the main standards document[1].

C. Risk Management [9] - [20]

Risk management is a vital aspect of the fund management process. The following aspects of risk management are addressed in this section:

- Risk Framework [9]-[10], Portfolio Risk [11]-[16], Operational Risk [17]-[18], and Outsourcing Risk [19]-[20]

Risk Framework – Governance Standards and Guidance [9]

9.1 A fund manager should put in place a risk framework which sets out the governance structure for its risk management activities and specifies the respective reporting lines, responsibilities and control mechanisms intended to ensure that risks remain within the manager's risk tolerance.

Risk tolerance is sometimes also referred to as risk appetite and describes the willingness of an organisation to assume risks. Management of the relevant organisation has to decide how much risk it is willing to take in each area of risk and then take action to manage or mitigate these risks accordingly. Therefore, for the risk manager, appetite refers to portfolio, operational and outsourcing risk.

9.2 The framework should cover all relevant categories of risk including portfolio, operational and outsourcing risks.

Risk Framework - Disclosure Standards and Guidance [10]

10.1 A fund manager should explain its approach to managing risk (its risk framework) to the fund governing body. Such risk framework should be explained to the appropriate extent, in the fund's offering documents.[2]

The following table provides an overview of the different risk categories which should be covered by the risk framework.

[1] https://www.sbai.org/standards/

[2] See introduction, chapter 2.3: The fund versus the manager.

Risk Category Overview

Category	Description	Risk for whom	Covered in Standards
Portfolio risks	Risk of losses in the investment portfolio	Direct risk for investors, indirect (reputational) risk for the manager	[11]-[16]
Operational risks	Risk of breakdowns in internal controls or systems which can lead to financial losses	Direct risk for the manager, indirect risk for investors	[17]-[18]
Outsourcing risks	Risk of failures in the delivery of services by third parties	Direct risk for the manager, indirect risk for investors	[19]-[20]

Portfolio Risk [11]-[16]

Portfolio Risk - Governance Standards and Guidance [11]

11.1 A fund manager should ensure that adequate risk management processes and resources are available and well understood by portfolio managers, traders, risk managers, senior staff and other staff related to the management of the portfolio. A fund manager should also discuss these risk management processes with the fund governing body and do what it reasonably can to assist the members of the fund governing body to understand such processes.

11.2 Potential conflicts of interests in the risk monitoring process should be managed by clearly separating the risk monitoring function from portfolio management. If a smaller or start-up manager considers it impractical to do so, this should be disclosed in the fund manager's marketing documents and in the fund's offering documents.[3]

The SBAI recognises that notwithstanding the separation of the risk monitoring and portfolio management functions, portfolio managers will typically provide input into the risk parameters to be applied to the portfolio (e.g., types of trades, degree of risk and areas of risk).

11.3 Risk monitoring reports should be made to the person or body which has ultimate responsibility for risk management (such as the manager's chief investment officer, chief executive officer or management committee).

11.4 A fund manager should put in place a written Risk Policy Document, a copy of which should be supplied to the fund governing body. This document should set out the responsibilities of and procedures to be employed by the fund manager's risk monitoring function.

The SBAI expects that in most circumstances the Risk Policy Document might, amongst other things, include:

– Guidelines for distribution of risk mandates among individual sub-portfolio managers and the setting and changing of risk limits,

– Routines for risk reporting, exceptions reporting and escalation procedures,

– Routines for reviewing and testing the risk measurement framework,

[3] See introduction, chapter 2.3: The fund versus the manager.

- Guidelines for risk monitoring and risk measurement during stressed periods, and
- Routines for communicating the above information to all relevant persons within the fund manager in a clear and understandable manner.

Liquidity Risk Management - Standards and Guidance [12]

12.1 A fund manager should develop a liquidity management framework, the primary role of which is to limit the risk that the liquidity profile of the fund's investments does not align with the fund's obligations.

This could include forecasting the liquidity position of the fund and tracking liquidity measures (e.g., ratios such as "available cash/Value-at-Risk") which allow the fund manager to assess the probable development of the fund's liquidity position relative to the portfolio's inherent risk.

The nature of this framework would depend on the categories of assets and leverage profile of the fund.

12.2 A fund manager should regularly conduct stress testing and scenario analysis of the fund's liquidity position.

Potential stress events could include:

- Margin calls due to sudden severe market shocks (e.g., significant equity price falls),
- Reduction in liquidity in certain market segments relevant to the fund,
- A sudden increase in collateral requirements for funding positions (thereby reducing assets available for sale to meet liquidity needs),
- Investor redemptions (as per the fund's redemption policies) [where relevant[4]], and
- Cancellation of credit lines (as per notice periods agreed between the fund and counterparties such as prime brokers).

The stress testing/scenario analysis should also take account of the impact of market risk stresses on the liquidity position of the fund (see following market risk management standard).

It has been widely found that in stress situations unexpected correlations can appear. Some funds have faced sudden liquidation challenges due in part or in whole to rapid market movements, for example in currencies, commodities, or equities.

Market Risk Management - Standards and Guidance [13]

13.1 A fund manager should develop measures to identify market risk in the fund's portfolio. To overcome the shortcomings of individual measures, the fund manager should rely on multiple techniques.

These could include, amongst others:

- Volatility measures,
- VaR type approaches,

[4] Will only be relevant to open-ended funds.

- Monte Carlo simulation[5],
- Stress tests/scenario analyses[6],
- Impact of leverage, and
- Portfolio concentration measures.

13.2 A fund manager should conduct regular stress testing/scenario analysis to assess the impact of extreme market occurrences on the value of the portfolio.

Extreme financial events may not receive sufficient attention when using classic risk measures such as volatility and VaR due to the scarcity of historical observations for such events. Stress testing/scenario analysis allows managers to overcome this shortcoming by accounting for the increased inter-correlation between different asset classes at times of market turmoil.[7]

Stresses could include, amongst other things, equity price drops, sudden shifts of interest rate curves and abrupt changes in foreign exchange rates. A scenario analysis would combine several of these "stresses" across markets at the same time based on extreme assumptions about correlations which may not occur in normal markets.

The analysis could include, amongst other things, scenarios based on historically observed crises (e.g., the 2000 new economy bubble burst or the sub-prime mortgage crisis in 2007) and newly developed ("made-up") scenarios to incorporate emerging correlations and new risks, and their respective impact on the portfolio.

Fund managers should also assess basis risk arising from imperfect hedging strategies[8] and incorporate resultant uncertainties into their stress testing/scenario analysis approach.

13.3 A fund manager should account for valuation sensitivities under stressed conditions in its approach to risk measurement (e.g., VaR, stress testing/scenario analysis).

In times of abrupt market fluctuations, situations can arise where market liquidity is much lower than it is usually observed, making it difficult to trade positions at observed market prices. Under such circumstances, a fund's net asset value may not only be hard to calculate, but also unattainable in the event sales are attempted. At the same time, the manager might be forced to sell positions, for example in order to meet redemption requests and/or margin calls.

The risk measurement framework should account for this, for example by applying valuation discounts for modelling purposes to positions that might have to be liquidated under stressed conditions (see Standard [12] *(Liquidity risk management)*).

13.4 A fund manager should translate the results of the analysis of market risks (stress tests/scenario analysis, etc.) into timely management action (e.g., adjustment of positions) as part of the control and risk management process.

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[5] Monte Carlo simulation: statistical evaluation of risks, where a large number of "scenarios" is generated based on random examples of uncertain underlying variables.

[6] A stress test simulates a significant market move (e.g., 30% equity price drop) and measures the impact on the fund's value. In a scenario analysis, multiple stresses are applied simultaneously (e.g., 30% equity price drop, shift in interest rates, etc.)

[7] Also sometimes referred to as "fat tails", i.e., extreme occurrences are more likely than theoretically expected.

[8] E.g., when the price of a future varies from the price of the underlying instrument as expiry approaches; the more immature the market, the more imperfect the hedging strategies are likely to be.

Counterparty Credit Risk Management - Standards and Guidance [14]

14.1 A fund manager should have a process for setting up trading relationships on behalf of the fund, including the assessment of creditworthiness and the setting of risk limits.

In setting up such trading relationships, a fund manager may, where relevant and appropriate, wish to consider putting netting agreements and appropriate collateral arrangements in place. For example, it may be possible for certain funds to agree two-way collateral posting with a trading counterparty.

14.2 Creditworthiness of the fund's trading counterparties should be monitored periodically, and risk limits adjusted, if required.

Control Processes - Standards and Guidance [15]

15.1 A fund manager should track a fund's adherence to its stated investment objectives, investment policy/strategy and investment and other restrictions and take appropriate corrective action if a breach of investment policy/strategy or of any restrictions or limits occurs.

To assist in tracking a fund's adherence to its stated investment objectives, investment policy/strategy and investment and other restrictions, fund managers should carefully consider setting internal limits and sub-limits at the outset for the aggregate portfolio and, where applicable, to all individual sub-portfolios (each of which would be subject to override by the fund manager's chief executive officer, chief investment officer, management committee or similar). These limits could include general investment restrictions (e.g., eligible asset classes, geographic location of risk) and could also encompass various categories of risk such as market risk, funding liquidity risk, counterparty credit risk and other relevant risk factors such as concentrations (e.g. in relation to single names, sectors or hard-to-value assets).

Risk reporting should be put in place so that the investment decision-makers have a daily (or more frequent if appropriate) view of the risk position of the fund and are in a position to prevent breaches of any relevant limits and restrictions. Breaches of any relevant limits or restrictions should be immediately reported to the relevant fund manager, the manager of the trading activity and the compliance officer, with escalation as needed to the manager's chief executive officer, chief investment officer, management committee or similar. A process for determining when and how breaches should be reported to the fund governing body should be put in place (a manager will want to ensure that such process takes into account insurance related considerations).

The process should be designed to ensure that, if required, the findings of the stress testing/scenario analyses are translated into mitigating portfolio risks.

Portfolio Risk - Disclosure Standards and Guidance [16]

16.1 A fund manager should disclose and explain its investment and risk management approach in its own marketing materials. Such disclosure and explanation should also be included to

the appropriate extent in the fund's offering documents.[9] **In addition to disclosure recommended in Standard [1] (*Investment policy and risk disclosure*), a summary of the risk framework (processes and risk management techniques employed) should be disclosed.**

Fund managers should also carefully consider whether it would be appropriate to disclose target ranges or averages as anticipated by the manager for specific risk parameters and how short-term deviations from such target ranges are handled and advise the fund governing body accordingly. This could include:

- Volatility of returns,
- VaR or equivalent (e.g., potential loss arising from a stress event),
- Leverage (according to the manner in which the manager measures leverage)[10], and
- Limits to the percentage of the portfolio which can be invested in non-marketable securities[11] (or another measure of liquidity).

16.2 A fund manager should ensure that the management report submitted with the audited annual accounts of the fund includes disclosures on the actual risk profile of the fund for the relevant period.

The SBAI envisages that this might include:

- The actual risk profile of the fund**,** where applicable using risk measures such as
    - Realised volatility of returns,
    - VaR type measures (actual, average, range for observation period and decomposed by, for example, risk type and market), and
    - Leverage (high, low, average for the respective observation period), if applicable.
- The percentage of the portfolio invested in what the manager considers to be hard-to-value assets (see more detailed disclosure requirements for hard-to-value assets in the Standards relating to valuation), and
- Investment instruments used during the relevant period.

Fund managers should carefully consider whether providing more frequent (e.g., quarterly) disclosure of relevant performance and risk measures to investors through a suitable medium (e.g., newsletters) would be appropriate.

The SBAI acknowledges that investors may require more frequent disclosures via newsletters than the annual disclosures set out above. However, the frequency, required content and granularity of such disclosures will be a function of the fund's strategy. For example, high turnover strategies may require more frequent disclosure than private or distressed debt strategies. Risk measures used may also differ substantially between funds. Therefore, the SBAI has not sought to be prescriptive in this area.

[9] See introduction, chapter 2.3: The fund versus the manager.

[10] See Appendix A for examples of leverage measures.

[11] Marketable Securities: Securities that can be easily liquidated, e.g., government securities, stock, bonds, notes, commercial paper, and other financial instruments that are regularly listed for sale on recognised public exchanges.

3. Appendices

Appendix A: Examples for Leverage

"Leverage is the sensitivity of the portfolio to changes in risk factors such as market prices. There are several drawbacks that complicate the use or comparison of leverage "numbers":

- There is no single agreed definition of leverage. Definitions cover a spectrum ranging from traditional balance sheet type leverage measures to risk based measures (the latter incorporating underlying risk factors such as Value-at-Risk) and dynamic leverage measures (see table below)
- Classic "financial statement based" leverage is not an independent source of risk, so additional information on the underlying risk factors is required.
- Leverage "numbers" have to be considered carefully and may not always contain meaningful information. In some instances, a risk reducing transaction can increase some leverage measures while decreasing others.

It may therefore be difficult accurately to compare leverage between different funds. However, in managing a fund and communicating with investors, fund managers should come up with a leverage definition which is meaningful in their context and track changes in leverage over time.

Classic financial statement-based leverage definitions are not stand-alone risk measures and fail to incorporate off-balance sheet positions (for example, derivatives), which could increase or decrease leverage. Risk based leverage measures try to overcome the shortcomings of classic measures by relating a risk measure (for example, market risk) to the fund's capacity to absorb this risk (for example, the fund's equity). More sophisticated dynamic measures of leverage incorporate a fund manager's ability to adjust its risk position during periods of market stress."

Examples of leverage measures:

Type of measure	Definition	Observations
Financial statement / asset based (classic)	• Gross assets/equity • Gross debt/equity	• Does not incorporate on-balance sheet hedges and off-balance sheet instruments
	• Net assets/equity • Net debt/equity	• Does incorporate on-balance sheet hedges (therefore "net"), but does not include off-balance sheet instruments
Risk based	• Portfolio volatility/equity • VAR/equity • Stress loss/equity • Other loss measure/equity	• Usually incorporates all (on- and off-balance sheet) hedge positions • But does not account for mitigating measures by manager in times of distress