EFAMA Risk Management Position Paper

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I. Definitions

- Board of Directors: either the Board of Directors of a self-managed investment company or the Board of Directors of a management company.
- Company: either the designated UCITS III management company or the self-managed investment company.
- Front Office: unit in charge of taking investment decisions.
- Risk limits: decomposing the aggregate risk of a portfolio into its constituents (risk factors or drivers) and setting limits for each asset class (or even for single assets).
- Risk Controlling: the term shall refer to risk identification, risk measurement and risk monitoring.
- Risk Manager: the term shall refer to the person or team in charge of risk control function: risk controlling.
- Risk Management: the term shall refer to risk identification, risk assessment, risk measurement, risk monitoring and risk controls.
- Risk Management Process: encompasses organization, policies and procedures used to manage risk.
- Risk Profile or Risk Budget: the sum of all soft or hard investment risk limitations defined for a specific fund.
- Senior Management: the person or persons who effectively direct the business of the company according to Article 5a 1(b) of the UCITS Directive.
- Supervisory Function: the function within the company responsible for the supervision of the adequacy and effectiveness of the Risk Management Process.
- Outsourcee: a third party to which a company may delegate the performance of risk management activities.

II. Risk management as part of an efficient UCITS governance structure

Today’s business environment requires investment firms to make sure sound risk principles and oversight mechanisms are in place. Besides fostering a risk awareness culture, risk governance is an important component of effective risk management as it ensures that fundamental risk principles result in the creation of elementary checks and balances. The segregation of functions is one of the elementary principles. It is manifest not only in the typical front and back office segregation of duties, but more essentially in the lines of defence companies have put in place today between manufacturing (Front Office), oversight (governance structure including risk control function) and control (internal and external audits).

The Risk Management Process as well as its documentation, formalisation and traceability should be proportionate to the nature, scale and complexity of the management company’s or self-managed Investment Company’s activities in order to avoid undue burden on small and middle-sized companies.
In practice, the fund industry agrees with CESR\(^1\) that the UCITS governance responsibility lies with the Board of Directors, in particular with regard to the review of the adequacy of the Risk Management Process and its organisation.

III. The organization and responsibilities of the risk management function in the European fund industry

1. General principles

In the absence of very prescriptive laws and regulations, the large majority of the fund industry developed its own approach to risk management depending on the UCITS and the management company’s size, expertise, complexity of investment strategies and funds under management. Despite the variety of possible organisations, CESR’s consultation on risk management principles and two EFAMA surveys conducted amongst its corporate members all revealed that there is a common understanding in the European fund industry of the need for an independent risk management function. In EFAMA’s 2008 survey the definition of risk management was largely agreed by all participants. In the second survey (2009) this view was strongly confirmed.

Regardless of the structure of any particular formal reporting line, a mechanism whereby the opinions of the risk managers can be freely and directly communicated to senior management is a necessary component of effective risk management. The importance of independent controls and segregation of duties is best implemented by establishing an independent risk function which reports periodically and directly to senior management and the Board of Directors. The independence should increase the responsiveness (to be pro-active) of the risk control function rather than fulfilling a “fait accompli police role”. Many companies have implemented the independence of risk discipline with a formal representation of the Chief Risk Officer on the company board. The Board of Directors retains ultimate responsibility for the risk management function, regardless of the position of the Chief Risk Officer within the organization.

An efficient risk control function requires adequate means and organisation. In particular, the risk control function should have the necessary personnel, with the skills, knowledge and expertise needed to perform their duties. For that purpose, all persons involved in the Risk Management Process should employ sound processes, professional expertise and adequate techniques and risk management systems.

\(^1\) http://www.cesr.eu/index.php?docid=5620
2. **Roles and responsibilities**

While the Front Office is responsible for the investment decisions within a predefined risk budget, the risk control function should be responsible for the identification, assessment, measurement and monitoring of risks. To this end, the risk control function should implement processes and draft the related documentation.

The risk control function should also be responsible for the analysis of the measures, their validation with the Front Office and the escalation to senior management and the Board of Directors.

Ultimately, the risk control function should provide reports to senior management and the Board of Directors, which should enable them to assess the adequacy of the overall Risk Management Process and the fund specific risk profiles. However, it should not be the function of the Board of Directors to manage risk.

Whether or not the risk control function reports directly or indirectly to the Board of Directors shall be appreciated in accordance with business size, expertise, complexity of investment strategies and funds under management. The level of possible independence of the risk control function from the operation of UCITS could also be assessed on the basis of these factors.

While the Front Office should be responsible for taking investment decisions within specified limits and managing consequences, the Front Office should not in its own capacity review or change the specific risk parameters, limits or the overall risk limit system. Notwithstanding this principle of separation of functions, the Risk Management Process should operate in parallel with, and should be intrinsically tied to, the investment process.

In some cases the risk management responsibility is split between the Chief Investment Officer and the Chief Risk Officer. The CIO is in general responsible for ensuring that the UCITS operates within the defined investment risk appetite, while the chief risk officer is responsible for the independent oversight and challenge of these investment risks, undertaking further work on a risk prioritised basis to ensure that we operate within risk appetite. This model is mainly used in the UK.

3. **Outsourcing**

A company may outsource the computation of risk measures or even the entire performance of risk management activities to a third party ("Outsourcer") by written agreement to external parties or within its own group. The main reasons for outsourcing are cost-benefit considerations and harmonisation of risk control standards within larger corporations. The Board of Directors is deemed to remain ultimately responsible for the Risk Management Process. Therefore the outsourcing of risk management activities should not impair the effectiveness and appropriateness of the Risk Management Process. The Board of Directors should in any event take reasonable measures:

- to assess the qualification, organisation and reliability of the Outsourcer,
- assess if any conflict of interest may arise, ensure that its representatives and the fund's auditors obtain access to the documentation, data and systems of the Outsourcer when required,
- maintain the documentation describing how the Outsourcer performs its duty,
• determine at which frequency the Outsourcee should be reassessed,
• supervise the carrying out of the outsourced activities, and
• ensure the continuity of the Risk Management Process in case of interruption to the outsourced risk control activities (e.g. unexpected breaches of the contract, an urgent need to revoke the mandate, major infringements by the Outsourcee etc...).

4. Risk management procedures

The Board of Directors should approve the risk profile of each UCITS managed by the Company. In the initial approval of the risk profile of the UCITS, or in the event of its subsequent revision, the Board of Directors should be advised by the risk management function.

The risk profile of the UCITS should reflect the identified relevant risks that arise from its investment strategy, as well as their interaction and concentration at portfolio level.

The Risk Management Process should ensure that the actual level of the risks incurred by the UCITS remains consistent with its risk profile as approved by the Board of Directors. Risk management procedures can be understood as the set of actions aimed at:

− identifying and measuring the relevant risks;
− assessing their consistency with the UCITS’ risk profile;
− fostering through the appropriate reporting channels the adoption of remedial measures in case of deficiencies; and
− monitoring the efficacy of the action taken.

5. Risk limits system

The risk management policy of the company should provide for each UCITS measures used to monitor and control the relevant risks. The self-defined risk limit system provides for an appropriate way to manage and control risk and should be respected as part of the ongoing Risk Management Process. The company should ensure that every transaction is taken into account as soon as possible in the calculation of the corresponding limits. The limit system should be clearly documented. Records should also be kept of cases in which the limits are exceeded and whether or not an action was taken.

The Risk Management Process should be designed to trigger a prompt reaction from Front Office if the UCITS’s target risk limit is breached.

6. Investment risk profiling and budgeting

The risk tolerance at company level as a whole is reviewed and approved by the Board of Directors. It consists of two elements: risk management for the company itself, and risk management of the funds. Stemming from the company’s risk appetite and desired risk profile, risk activities are formulated and
deployed consistent with the UCITS’s investment strategy, legal, contractual and other internal limits, the universe of instruments and techniques used, tolerance regarding leverage, inclusion of derivatives and investment behaviour/ approach, concentration of instruments, liquidity and evaluation practices.

The limits should not only be agreed between the Front Office and the risk control function, but certain limits within the risk budget should also be reviewed and agreed with operational and administrative units given that the investment process depends on their support.

The Board of Directors should agree the overall structure and the top-level limits, not the full set of detailed parameters and limits. These should be managed by the risk control function. The Board of Directors should only be informed if the overall risk profile approved previously is likely to be inappropriate or breached.

7. **Reporting to the Board of Directors and Senior Management**

Companies should implement and maintain efficient internal reporting by the risk control function. The terms, contents and frequency of this reporting should be defined by the risk management policy.

The risk control function should report regularly to the senior management and, if necessary, to the heads of the different operational departments, highlighting the current level of the risks relevant to the UCITS, and outlining any actual breaches or warning to their limits to ensure appropriate action is taken in the best interest of the unit and shareholders.

The Board of Directors should be informed regularly, through a formalised periodic reporting process, of the actual level of risk incurred by the UCITS. If the risk management function reports evidence that the risk profile of the UCITS needs to be updated, the Board of Directors should do so in consultation with the risk control function and the Front Office.

The risk management function should periodically report to the senior management the results of monitoring the controls regarding the risk profile of the funds, the overall adequacy of the risk management and the measures taken to address any deficiencies.
IV. Best practices of the industry and the broad variety of solutions

The review of the industry’s replies to the PwC study carried out in 2007\(^2\), to CESR’s consultations and to EFAMA’s surveys show that Companies have similar, although not harmonised approaches with regard to risk management. Based on this feedback, the following principles have been elaborated to reflect best practices.

8. Investment risk identification

The primary responsibility for assessing the risks material to the UCITS should be with the risk control function, but it should work closely with the Front Office to exchange views and information. The Risk Management Process should regard as relevant the material risks that stem from the investment strategy and profile of the UCITS and the valuation process. This risk identification process should not be a static exercise but, on the contrary, should be periodically revised or adapted in periods of increased market turbulences. If UCITS invest in structured products, their multiple risk components should be appropriately identified and managed.

9. Investment risk measurement and monitoring

Investment firms should employ Risk Management Processes that enable them to monitor and measure at any time the risk of the UCITS’s positions and their contribution to the overall risk profile of the portfolio. In particular, they should monitor in accordance with the detailed rules and policies the types of derivative instruments, their underlying risks, the quantitative limits and the methods chosen in order to estimate the risk associated with transactions in derivative instruments. In relation to over-the-counter-derivatives, firms should employ dedicated processes to establish an independent assessment of the value of such derivative instruments as required by the UCITS legislation.

Investment risk monitoring frameworks typically consist of the following elements:
- Establishing and monitoring the desired risk profile of the UCITS’s portfolio. This relates typically to the determination and monitoring of market risk.
- Determination and monitoring of the counterparty risk as a result of (OTC) derivative exposure. This is best monitored at portfolio AND on aggregate level.
- Determination of and/or monitoring of concentration\(\text{\textbullet}\)issuer risk. This is best monitored at portfolio AND aggregate level.
- Monitoring and control of liabilities arising from the use of (OTC) derivatives, including risk arising or associated with mitigating measures such as netting and collateralization.
- Paying special attention to the risks arising from securities lending activities and deposit placing.
- Monitoring and control of the valuations in general and (OTC) derivatives specifically. For (OTC) derivatives one should not be dependent on the valuation of the counterparty, and as such close alignment of risk management practices and asset valuations is required.

– Paying special attention to not relying on one single way of modelling risk and giving special care to the interrelations of different risk types (liquidity, market and credit risk). Investment risks should be monitored on a consolidated basis rather than following a silo approach. Following good industry practices and deploying most suitable risk measurement / management techniques should be fostered.

The investment risk monitoring principles relate to the need for various controls at portfolio and enterprise level. It addresses market risk, liquidity risk, leverage, valuations and other aspects of investment risk. This also holds for monitoring compliance with investment restrictions as to ensure the portfolio is in line with client’s risk appetite and investment constraints. Some of these risks (notably counterparty and issuer concentration) are monitored at an aggregate level, which means across single portfolios. Companies also employ stricter internal limits serving as soft breaches (early warnings) within the boundaries of external hard regulatory or client limits.

The risk control function should specify in a document the techniques and tools that are deemed suitable to measure the relevant risk factors attached to the investment strategies and management styles adopted for each UCITS.

When quantitative measurement of the effects of some risk factors is not possible, or produces unreliable results, companies may consider integrating and adjusting their figures with elements drawn from a variety of sources, in order to obtain a comprehensive evaluation and appraisal of the risks incurred by the UCITS. This approach is also likely to apply to the assessment of non-quantifiable risks. For the purpose of this paper, these risks should be taken into account only in so far as they have a direct impact on the interest of UCITS investors.

Consequently, while the choice of the risk measurement framework should depend primarily on the characteristics of the investment strategies of the UCITS under management, this may also partly reflect the diversity in size and complexity of the business and organisation of the companies. However, companies should employ sufficiently advanced risk measurement techniques, being expected to keep up to date with good industry practices.

10. Management of model risk concerning the risk measurement framework

Companies should deal appropriately with the possible vulnerability of their risk measurement techniques and models (model risk). The risk model employed to measure risks should be proportionate to the complexity of the UCITS. Still, whatever its level of complexity, the risk measurement framework in place needs to be demonstrably re-assessed whenever needed.

The quality of risk model-based forecasts should be demonstrably assessed. Where appropriate, the risk management function should run documented tests to verify that model-based forecasts and estimates correspond, with the appropriate confidence level, to the actual values of the relevant risk measures (back-testing). Tests should be run prior to inception (model calibration and internal validation) and, subsequently, on an ongoing basis to check how the model’s viability and robustness hold up over time.

Companies should also assess in advance the validity range, market conditions and any inherent or assumed limits of their risk measurements, which generally result from the assumptions underlying the
models or the estimation of their parameters. This assessment should be carried out, if needed, through additional diligences, which could include stress tests.

Stress tests are usually meant to capture the possibility of rare and severe losses which could occur during market shocks, and which are unlikely to be measured by the models as they tend to follow structural breaks in the functional relationships between market variables (sudden shifts of crucial model parameters).

Stress tests should cover all quantifiable risks which affect, to a material degree, the value of the UCITS, with particular attention given to those risks which are not represented with sufficient accuracy by the risk models used. Such risks might include, for example, unexpected changes to price correlations or to asset (or even market) liquidity.

Stress tests may reflect subjective scenario hypotheses based on evidence concerning trading and market conditions (that may relate to either specific securities or an entire portfolio) or reflect historical scenarios. When the investment strategy of the UCITS is based on specific trading or portfolio models and algorithms, the risk control function should be adequate to assess and control their use.

11. The link between risk measurement and asset valuation

Risk measures should be computed having regard to sound and reliable data. If robust market prices are available, the risk measures should be computed relying on a complete and adequate time series of marked-to-market values. However, when measuring risks of illiquid assets, the risk control function should thoroughly check the robustness of their estimates, questioning the data used for the computation.

For that purpose, the risk control function should participate for instance in the management company’s valuation committee to understand the valuation process, but not for imposing its pricing assumptions and models on the valuation function.

The valuation function should exercise its activities independently of the risk monitoring function, and should be responsible for choosing the most appropriate pricing source or valuation model. Risk measurement should not be the only factor in the choices regarding valuation.

At the same time, the risk monitoring/measurement function should use prices selected on the basis of the criteria set by the valuation function, so as to maintain consistence within the company.

12. Operational Risk Monitoring

Typical risks at company level are operational risks like IT-systems, connectivity with data providers as well as valuation issues. These risks should also be captured in the company’s operational risk monitoring framework and be addressed at company level, at least as far as they are relevant for the investor. Not all operational risks qualify to be relevant in this sense.

The operational risk monitoring framework typically consists of the following elements. The examples given may differ depending on the business model, the size and nature of activities:
– Measurement, analysis and monitoring of operational risks and (potential) losses. It requires the monitoring of corporate losses or near losses and the registration and analysis of those incidents.

– Monitoring systems and business processes with key performance indicators and the development and testing of key controls

– Firms invest in adequate backup (redundancy in systems and data, as well in relation to effective records management) and disaster recovery / business continuity.

– Effective system security as to protect the interest of clients and employees

– Outsourcing to sub-advisers, custodians and other service providers does not relieve the Board of Directors from their regulatory and fiduciary responsibility, rather it requires relationships and output levels to be closely managed.

13. Risk reporting and escalation

The Risk Management Process should allow warnings to be generated so that appropriate corrective measures may be taken on a timely basis. The risk management policy should define procedures ensuring that, in the event of breaches, portfolio positions are corrected in the best interests of the unit or shareholders. While in the case of regulatory or contractual breaches the portfolio must be promptly corrected, where internal limits are exceeded, these may be reviewed and recalibrated without leading to a modification of the portfolio, or the portfolio can be modified over a longer time period.

14. Additional measurements for risk management purposes

Managers also use additional measurements for risk purposes. These may include according to responses in the surveys:

– limit setting such as stop-loss

– volatility for total return funds,

– tracking error relative to benchmark, absolute volatility or VAR depending on the return distribution, taking into account skewness and kurtosis,

– performance measures such as Sharpe ratio, information ratio,

– concentration, liquidity risk control.

15. Liquidity risk

Operating open-ended funds requires the manager to manage closely and effectively the liquidity of the portfolio. Besides redemption management rules in the fund rules/prospectus, there are several practices concerning liquidity risk management as detailed in the EFAMA surveys conducted in 2008 and 2009 (see appendices). Different techniques for liquidity risk assessment are employed by the risk control functions depending mainly on the nature of the assets held in the portfolio, the dealing frequency in the capital of the UCITS, the investor concentration and, to a lower extent, on the market conditions (e.g. stressed market conditions as opposed to normal market conditions). In all of these assessments, consideration should be
given to the ongoing portfolio structure ensuring that not all of the higher quality assets are liquidated to meet redemptions and thereby materially downgrading the average quality of the portfolio for remaining investors.
V. Different approaches for investment risk calculation methodologies for sophisticated/ non-sophisticated funds, as well as for UCITS and non-UCITS

16. Commitment approach

The commitment approach is one solution to quantify the amount of leverage a fund is exposed to when using Financial Derivative Instruments (FDIs). Each Financial Derivative Instrument (FDI) is converted into its underlying exposures. Regulation requires that the measure of the global exposure of the scheme should not exceed 200%.

However, as the commitment approach is not risk sensitive, some managers use – in addition to or instead of the commitment approach – a number of different risk measures depending on the UCITS’s risk profile, such as:

− Volatility and Tracking Error Volatility
− Tracking error analysis
− Value at Risk and expected shortfall computations
− Stress tests and scenario analysis
− Performance attribution and contribution analysis
− Analysis of ratios, such as Information ratio, sharp ratio, etc...
− Asset/sector/geographical exposure analysis based on qualitative and quantitative data.

17. The Value at Risk (VaR) approach

The VaR approach is a technique used to estimate the probability of portfolio losses based on the statistical analysis of historical price trends and volatilities.

CESR, as well as EFAMA, envisage VaR as a suitable methodology for assessing risk and future market movements and that it should be used where the manager thinks the UCITS’s risk profile requires it to do so. Factors that may require the use of VaR are:

− When the UCITS global exposure is likely to be much higher than 100% of the fund’s NAV;
− The use of derivatives forms a fundamental part of the fund’s investment objective and would be expected to be used in all market conditions;
− The performance of the derivative is non-linear in relation to the underlying assets or the performance is based on a reasonably complex mathematical formula;
− The use of cover for the derivative position that is different from the underlying of the derivative;
− The use of OTC derivatives might indicate the fund is more sophisticated, but the complexity of the transactions should also be considered.

The list above is indicative and the points should be considered cumulatively, rather than any one point in isolation, in deciding whether the VaR approach is appropriate (or required by national regulation).
The aim of the VaR model approach is to provide an estimate of the worst expected loss on a derivative position resulting from market movements over a period of time with a given confidence level and under normal market conditions. There are a number of methodologies for calculating VaR. These include historical simulation, variance-covariance, Monte Carlo or a hybrid of these.

**Historical Simulation**
This is seen as the simplest method for calculating VaR. The process requires historic returns, daily or weekly, to be reorganised from worst to best. It assumes that history will repeat itself and therefore enable prediction of the probability that a certain loss will reoccur with a certain level of confidence.

**Variance – Covariance method (also known as the Delta Normal Approach)**
This method assumes that returns are normally distributed. It requires an estimated average, or expected return, and standard deviation/portfolio volatility. 2.33 standard deviations give a confidence level of 99% and 1.65 standard deviations give a confidence level of 95%.

**Monte Carlo Simulation**
This method is considered by many to be the most complex and is certainly data intensive. By creating random outcomes it aims to support the future prediction of VaR by increasing the number of simulated returns used. It is not uncommon for the simulation to reflect tens of thousands of returns. The results from the simulated returns are used in the same way as the two other models by predicting a VaR with a certain confidence level.

**Back Testing**
Whether evaluating a new model or assessing the accuracy of an existing model, a VaR back-testing policy should be adopted to compare realised derivative positions with model-generated risk measures. The most straightforward way to back-test is to plot the appropriate P&L against the predicted VaR and to monitor the number of departures from the agreed confidence band. Steps should be taken to identify the source of error if departures are outside the confidence band expectations.

**Stress testing and scenario analysis**
This is appropriate for sophisticated funds and considers possible future events. This should ensure that the exposure consequences of extreme market shocks can be measured against the current market volatility, thus providing a benchmark for measurement. It is important that an AFM understands the effects on a fund of sudden market changes (e.g. in price, volatility, liquidity) that are outside the norm. It should therefore:

– analyse each fund’s situation in the event of sudden or unpredictable changes;
– put in place policies and procedures for reacting to such situations, including trigger points at which risk must be actively reduced and/or senior management should become more closely involved.

Exposure should at all times remain in line with each fund’s investment objectives, together with any regulatory requirements.

The senior management should ensure that stress testing and scenario analysis is carried out with such regularity that is appropriate to the overall exposure of each fund, and the impact upon it of meeting any additional margin calls.
To be meaningful, stress testing and scenario analysis should be performed at multiple levels and tie back into the decision-making process. It should be discussed in regular forum by risk monitors, senior management and investment managers. The results should guide the manager towards considering each fund’s future appetite for risk taking or they may trigger discussions on how best to unwind or hedge a position. As derivative positions become more complex, VaR analysis in isolation may not be sufficient for the responsible parties to understand fully the potential for losses. Robust stress testing should go hand in hand with VaR model analysis.

VI. The importance of appropriate and consistent regulatory requirements

To ensure that the risks within UCITS are properly measured and managed in a cost-effective manner, it is important that there is adequate consultation with the industry prior to implementation of regulation. Regulations need to be specific to the risks associated with UCITS and not derived from bank regulation.

The industry requires clear regulatory principles for risk management that are consistently interpreted across jurisdictions, particularly with the introduction of UCITS IV rules which provide powers in relation to this area to both the home State regulator of the UCITS management company and the home State regulator of the UCITS being managed\(^3\). The primary principle should be that the UCITS and/or management company are responsible for applying RM processes that ensure the fund is managed in accordance with the mandate and UCITS regulations.

Taking the approach of principles, rather than rules based regulation, allows the UCITS to determine the most appropriate risk management approach to be used. This will vary for specific fund types as well as instruments, and will allow the UCITS and/or management company to build cost efficient risk models and to respond quickly to the launch of new funds or the introduction of new instruments into the funds. The same principles should be applied as much as possible to all types of funds.

The industry maintains internal limits, which are typically significantly lower than those set by regulation, and these form the basis for the risk management of the funds. Some home country regulators are requesting to be advised of these limits prior to approving the registration of a fund. The regulations should maintain the principle that it is the responsibility of the UCITS/management company to set internal limits that are appropriate to the risk profile of the fund, and these should not be subject to regulatory supervision.

The market events that have occurred since the summer of 2007 have caused regulators to request significant reporting of funds data by the UCITS/management company. This has been on an ad hoc basis and has been costly to produce. Regulations should clearly state the reporting that the supervisory authority requires in order to fulfil its supervisory oversight function and ad hoc requests should be limited.

\(^3\) Home State responsibilities as per Article 51 (1) of Directive 2009/65/EC, UCITS home State responsibilities as per Article 19 (3) (c).
During the same period the industry has reported many cases of regulators applying a stricter interpretation of rules and a lesser number of regulators introducing new rules. This reaction to market events is understood by the industry, but the interpretation of rules should not change because of such events. The principles of risk management do not change unless regulators introduce new rules on, for example, valuation methodology or regulatory VaR limits. The industry needs to be engaged in these discussions to ensure that the intended result of managing risk for the end-investors in funds is likely to be achieved.

While current regulation focuses on the risk management of UCITS, it is not unusual for industry members who predominantly manage UCITS to apply, to the extent possible, the same standards of risk management and risk monitoring to any non-UCITS that they manage.
VII. Annexes

Annexe 1

Risk Management Procedures Survey

Summary of Results

EFAMA

April 2010

Countries of respondents

- UK (3)
- Italy (2)
- Luxembourg (6)
- Spain
- Ireland
- Germany (5)
- Netherlands
- Belgium
I. Definitions

Risk Management is seen as a complex process. Independent parties are involved in different steps:

1. Setting:
   - Risk tolerance for the company
   - Risk tolerance for a specific fund or mandate

2. Responses:
   - Setting limits
   - Reduction or hedging
   - Risk spreading
   - Risk acceptance

3. Taking:
   - Portfolio Management has to decide about risk positions within defined limits or bands. They take responsibility for risks and returns.

4. Measuring
   - Risk Controller identifies, assesses, monitors and reports risk at the fund level.
   - Measurement comprises methodologies, stress and back-testing etc.

II. Regulatory framework

- In the large majority of cases (90%), regulators distinguish between different roles in a risk management organisation and between UCITS and non-UCITS (100%)

- Among the greatest challenges in implementing national regulation on risk management and control, respondents quoted:
  - Rules are unclear (over 50%)
  - Differences between fund types (over 50%)
  - Implementation of systems and costs (over 60%)

II. Regulatory framework

- Most respondents (over 80%) are facing new regulatory requirements in the near future, in particular for their new funds, eligible assets, customer protection or new risk limit types
  - Respondents feel regulation overall too rule-based.
  - Although privileged by regulators, VaR is not considered as the only or best tool by risk managers in asset management companies.
  - Imposed rules are often derived from bank regulation.
  - A lack of sufficient consultation with the industry before implementation regulation is criticised.
  - Rules in Germany are described as too detailed.
  - New laws create uncertainty, particularly in Germany and Luxembourg.
  - In Italy no regulatory framework has been adopted.
  - In the UK, FSA SYSC Handbook describes requirements. Retail funds are split in two categories.
II. Regulatory framework

- Some specific reactions on new investment vehicles like REITS or closed end funds are seen from respondents.
- For hedge fund of funds and certificates, 60% report new supervisory rules.
- Regulators respond to market events like subprime crisis.
- On the supervision of risk management systems by regulators, we had a mixed picture: a high proportion of documentation and on-site visits are reported, and quality is essentially monitored through external auditors.
- In Luxembourg on site regulatory visits are reported to be rare. It is mentioned that audited Long-form reports in Luxembourg require detailed description of risk management systems and controls.
- For UK, additionally to IMA guidance risk management systems must be reported to the regulator and material changes have to be notified.

III. Organisational requirements

- In general, respondents agree it is feasible to delegate risk management (risk measurement or risk control) to a third party.
  - Around 50% delegate Risk Management within their own group. Some also delegate to specialised providers externally.
  - Delegation is mostly deemed feasible with a specialised third party, but responsibility cannot be delegated.
  - Efficiency gains, limited resources and harmonisation of standards are major reasons for outsourcing
  - Fund managers usually use the same systems as risk managers. Participants report that risk units are strictly separated from investment departments, but some tools and some projects are shared, e.g. for data, benchmarks and holdings of securities.

- Risk management is highly involved in other activities such as product development, pricing, performance analysis and new instruments, normally through committees.
IV. Scope and understanding

- The majority of respondents sets additional internal limits or procedures for all risk types
- Examples given:
  - Market risk: Net and Gross Exposure limits well below 200%, limits on IPOs, limits on short positions, ...
  - Credit risk: Rating limits.
  - Liquidity risk: e.g. Minimum liquidity (cash), limitation or exclusion of less liquid markets or instruments.
  - Currency risk: Limits on active currency bets.
  - Active risk: Tracking Errors, Relative VaR limits.
  - Counterparty risk: Exposure limit per counterparty (e.g. 5%).
  - Others: Limits on instrument type usage.
  - Budget for active risk (tracking error) is agreed in advance between PM and risk management.


V. Practices

On average, respondents have 70% of their UCITS funds categorised as non-sophisticated. Simpler risk methods could therefore be used for the majority of funds on average.

- Some respondents had less than 20% categorised as non-sophisticated funds.
- Most respondents have 80-100% funds categorised as “non-sophisticated.

In practice non-sophisticated funds are often treated with sophisticated methods and procedures as well as sophisticated funds.

V. Practices

- Only few UCITS funds (2.5%) use leverage above 150%.
- On average, only 12.5% of funds use leverage between 100-120%.
- On average, more than 75% of all funds do not use any leverage.
- Some respondents do not use leverage at all.

V. Practices

- Data for leverage of non-UCITS is limited.
- One manager reported 40% of non-UCITS with leverage above 150%.
- Average of UCITS with leverage over 120% is 28% (high spread).
VI. Interpretations

• Majority finds national rules for differentiation between sophisticated and non-sophisticated funds appropriate.
• Most agree on rules for achieving short positions, but some practical problems are reported. One participant would welcome possibility of physical short selling.
• Most respondents recognise the national interpretations of leverage are suitable for their investment strategies, but in some cases rules are still missing (Italy) or in discussion (Luxembourg). (1)
• Most respondents observe convergence across Member States concerning risk management, but the process is very slow.

1) After completion of this survey, the CSSF released its Circular 07/308 ([http://www.cssf.lu/uploads/media/cssf07_308eng_01.pdf](http://www.cssf.lu/uploads/media/cssf07_308eng_01.pdf))

VI. Interpretations

• The existing differences between fund domiciles are not only marginal and therefore of no importance for the majority of respondents. Only three respondents mention making active use of different interpretations for certain products.
• Differences in limitations are seen not to be relevant because of narrower internal limits.
• Most participants harmonise internal rules and systems.
• Differences are mostly important for non-UCITS
Risk Management Procedures Survey
Part 2 (2009)

Summary of Results

EFAMA

April 2010

Countries of respondents

- Belgium (1)
- France (1)
- Germany (2)
- Italy (6)
- Luxembourg (1)
- Norway (1)
- Turkey (1)
- UK (3)
I. Definitions

• No need for changes of the definitions for risk management because of the financial crisis.

• A number of respondents (40%) see the need for structural changes of the risk management function due to the financial crisis, in particular
  – Increased levels of independent risk control / monitoring.
  – More concern about liquidity, counterparty and systemic risk.

II. Regulatory framework

Regulator’s response regarding risk management during the financial crisis

- Only 25% of the participating firms confirm that new rules have been introduced during the financial crisis.
- A stricter interpretation of rules by the regulator has been reported from roughly half of the participants (44%).
- The principle-based approach of regulators regarding risk management has been maintained.
- Cases of direct reporting of some fund data (flows, liquidity) to the regulator have been reported from 81%.
- Furthermore, some questions by regulators have been reported concerning valuation issues, increased level of “close and continuous” communications, selective questions on and reporting of funds’ exposure to specific issuers.
II. Regulatory framework

Future outlook
- 38% of the respondents are facing new regulatory requirements in the near future. In particular customer protection and new risk limit types are mentioned in the context of new regulatory requirements. Individual capital adequacy and hedge funds are also mentioned.

Classification as sophisticated vs. non sophisticated funds
- 50% report getting guidance by their national regulator on classifying funds as sophisticated - therefore 63% wish defined elements for classification in sophisticated / non sophisticated to be established.
- 69% also wish certain investment strategies or investment instruments to be defined, so that funds using them would be classified as sophisticated.

Role of the depositary
- 100% of the respondents believe that the role of the depositary has not changed during the financial crisis.

III. Scope and Practices

Determination of sophisticated/ non-sophisticated funds by Asset Management
- In general, the main criteria for classifying funds into sophisticated/ non-sophisticated are the complexity of investment strategies (94%), leverage and the type of derivatives used (88%) and volume of derivatives used (75%).
- Furthermore, client requirements for VaR information and the classification of all UCITS III funds as sophisticated have been mentioned as further possible solutions by the respondents.

Use of VaR in risk monitoring
- 63% use VaR for risk-monitoring in their fund regardless of classification as sophisticated or not.
- The same percentage sees VaR as an adequate risk management methodology for their sophisticated funds.
- The majority of the other respondents uses additionally along with VaR other types of limits/rules, like e.g. stress testing, scenario analysis, additional limits/rules (rating, sensitivity, liquidity), stop loss.
Other measurements besides VaR for risk monitoring

- Besides VaR, respondents mention stress testing (94%) volatility (73%) and tracking error (69%) in order to monitor sophisticated funds.

- For non-sophisticated funds, in addition to the commitment approach most respondents use VaR as well besides several further risk measurements like tracking error, stress tests or volatility. Some respondents chose the measurements depending on the asset class, some use additional methods, some make no difference between sophisticated or non-sophisticated funds.

Monitoring liquidity risk

- Risk monitoring approach to assess liquidity risk
  - Some report monitoring procedures by fund managers or investment directors.
  - One reports the use of liquidity stress testing or time to liquidity.
  - Many report comparing expected redemptions with the liquidity structure.
  - Others differentiate regarding the depth of the analysis (asset types, Funds).
  - One respondent reflects changing liquidity and changing liquidity costs through swing pricing.

Other types and modifications

- Respondents have modified the types of risks for which they set additional internal limits or procedures due to the financial crisis. The main examples of additional internal limits are:
  - Credit Risk
  - Liquidity Risk
  - Counterparty Risk

- No major changes are reported for market and currency risks
III. Scope and Practices

Examples for additional internal limits in connection with the financial crisis:

- leverage decrease
- restriction in purchasing certain asset types; product types
- stricter controls
- cash holdings
- stop-list for certain issuer

Calculation of funds exposure for derivatives under the commitment approach

- The calculation of funds exposure for derivatives under the commitment is mainly delta-weighted or based on regulatory definitions. 76% of the respondents state that the way of calculating the funds exposure for derivatives is defined by their regulator.
- Only 29% of the respondents confirm that the Member States where the funds are set up allow for a reduction of the fund exposure to a counterparty once the quality of the counterparty has been assessed.

IV. Risk Inventory

- The majority of respondents has done a risk inventory for the overall evaluation of risks which is regularly updated (83%). During the last 12 months, half of the respondents have had additions to the risk inventory. First of all the credit, counterparty and liquidity risks have been specified during last year.
- 60% of the respondents have found further risk categories where actually exposure can not be fully measured and/or limits set.

Main examples given:
- Maturity extension (ABS)
- Operational risk
- Liquidity risk – limits to be implemented/should be measured and maintained in fund management.
- Reputational risk – has not yet been included into operational risk/ is always hard to quantify.