

# **HIGH LEVEL RISK POLICY\***

## February 2021



<sup>\*</sup> Formerly known as, and incorporating, the High Level Principles for Risk Management



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## 1. Introduction

## 1.1. Purpose, Scope and Review

This High Level Risk Policy ('Risk Policy') sets out the main principles for the oversight of risks ('the ESM risk framework') at the European Stability Mechanism (the ESM).

The Risk Policy sets the minimum standards and does not limit the responsibility for risk management.

The Risk Policy is applicable to the Board of Directors, the Managing Director and the members of staff.

The Risk Policy is reviewed at least annually, or whenever the list of financial assistance instruments is amended in accordance with Article 19 of the Treaty. The Risk Policy and any amendments thereto are subject to approval by the Board of Directors upon recommendation by the Board Risk Committee (BRC) and are implemented by the Managing Director.

#### 1.2. ESM Risk Framework

The risk framework comprises high level principles on risk culture, risk objectives, risk appetite and risk management.

The following key ESM documents support and/or inform the risk framework:

- The Treaty Establishing the European Stability Mechanism ('the Treaty') and the By-Laws
- ESM Investment Guidelines
- ESM Borrowing Guidelines
- ESM Pricing Policy
- · ESM Guideline on Dividend Policy
- Terms and Conditions of Capital Calls for ESM
- ESM Code of Conduct
- Procedure of ESM Early Warning System
- Terms of Reference and Rules of Procedure of the BRC.

The Risk Policy is also supported by: the Annex to the Risk Policy approved by the BRC, internal risk policies approved by the Managing Director, and internal control procedures approved by the Heads of Division. These documents, for internal use, detail the implementation of the principles set out in the Risk Policy.



#### 1.2.1. Risk culture

Risk culture is the combined set of values, attitudes, competencies and behaviours that determine ESM's commitment to, and style of, risk management. Main components include:

- Staff at all levels clearly understand their responsibilities with respect to risk management.
- The ESM applies, in critical areas, the 'four eyes' principle requiring more than one person to be involved to complete a task. The ESM also adopts procedures with clearly drawn lines of authority, segregated powers and duties, and appropriate checks and balances across the organisation.
- Risk management activities across the organisation are carried out by sufficient number of qualified staff with the necessary experience, technical capabilities and adequate access to resources.
- Staff are required to report Irregularities as defined in the Code of Conduct.
- Management adheres to, and emphasises that, the highest ethical standards are expected at all levels
  and sends a consistent message to the whole organisation that is fully supportive of the risk management
  framework through its actions and words.

The ESM promotes a strong risk culture with:

- Training and development: Ensuring all staff have an adequate understanding of the risks they are
  responsible/accountable for in their day-to-day roles, and the controls, policies and tools that are
  available to them to manage these.
- Performance measurement and incentives: Individual objectives, targets and performance management
  are aligned with corporate and risk cultural values, including appropriate responses for risk or compliance
  breaches.
- Communication: Raising the awareness of the importance of risk management via consistent messaging across multiple mediums reinforcing a strong risk culture.

## 1.2.2. Risk objectives

The ESM has six principal risk management objectives - to:

- 1. Use the available lending capacity in the most efficient manner;
- 2. Provide sufficient liquidity to cover all expected and potential financing needs that might arise from time to time;
- 3. Avoid unexpected capital calls at all times;
- 4. Have adequate processes in place, whenever an unexpected event occurs (in particular: capital calls, rating migration of one or more members or the institution itself, or any other shock to the environment in which the ESM operates);
- 5. Achieve performance goals, such as a benchmark yield to feed the reserve fund and/or dividends;
- Operate in an efficient manner and manage the risks cost efficiently, for the benefit of Member States and to facilitate minimum borrowing costs for beneficiary Member States without prejudice to the pricing policy.

The Chief Risk Officer (CRO) reports annually to the Board of Directors on the achievement of these objectives.



#### 1.2.3. Risk appetite

The ESM risk appetite is the acceptable amount of risk that the ESM may pursue or retain in the execution of its mandate and the achievement of the risk objectives.

The risk appetite is set in accordance with the following guiding principles:

- To accept and tolerate risks arising from the ESM mandate. The ESM:
  - o monitors the repayment capacity of the ESM beneficiaries under financial stability support with an 'early warning system';
  - o applies strict conditionality to its lending, and manages Direct Recapitalisation Instrument (DRI) risks by undertaking DRI operations transparently and in accordance with the DRI Guideline;
  - enjoys preferred creditor status in a similar fashion to the IMF and second to the IMF, as set out in Recital 13 of the Treaty; <sup>2</sup> and
  - o does not aim to generate profit on financial support granted to beneficiary Member States.
- To have zero tolerance for default on its own debt and to maintain the highest creditworthiness. The ESM:
  - Manages risks prudently:
    - Investment and funding strategies are executed in accordance with the Investment Guidelines and Borrowing Guidelines, respectively;
    - Derivatives are only used for risk management purposes;
    - The ESM does not provide incentives for speculative exposures of its investment portfolio;
    - Operational risks and other non-financial risks are managed through adequate controls and appropriate monitoring and mitigation;
    - Risks are managed in accordance with the HLRP, Risk Appetite and internal risk policies and procedures.
  - o **Aims to maintain continuous access to market funding**. The ESM undertakes a diversified funding strategy and maintains a liquidity buffer to pre-fund liquidity needs including roll-over of ESM's debt.
  - Aims to preserve paid-in capital:
    - Paid-in capital is not used for financial stability support;
    - Capital preservation objectives are established in the Investment Guidelines.

<sup>&</sup>lt;sup>1</sup> Refer to 'Mandate Risks' and Political Risk in Chapter 4

<sup>&</sup>lt;sup>2</sup> ESM Treaty, Recital 13: Like the IMF, the ESM will provide stability support to an ESM Member when its regular access to market financing is impaired or is at risk of being impaired. Reflecting this, Heads of State or Government have stated that the ESM loans will enjoy preferred creditor status in a similar fashion to those of the IMF, while accepting preferred creditor status of the IMF over the ESM. This status will be effective as of the date of entry into force of this Treaty. In the event of ESM financial assistance in the form of ESM loans following a European financial assistance programme existing at the time of the signature of this Treaty, the ESM will enjoy the same seniority as all other loans and obligations of the beneficiary ESM Member, with the exception of the IMF loans.

#### Aims to ensure ESM's creditworthiness:

- ESM can call additional authorised unpaid capital to absorb losses<sup>3</sup>
- ESM accrues a reserves fund through retained earnings from ESM's activities subject to the Treaty and the Dividend Policy.
- Maintains liquidity of investments so ESM is able to honour obligations even under stressed conditions. Capital is invested in liquid assets in accordance with the Investment Guidelines.

#### 1.2.4. Risk management

A risk management framework is implemented to ensure the risks arising from ESM activities remain within risk appetite. The framework sets out for each risk: methodologies for measuring risk exposure, limits and key risk indicators (KRI), and monitoring and reporting requirements. The high level governance arrangements for this framework are set out in Chapter 2. The high level risk principles for this framework are set out in Chapter 4, and are detailed in internal risk policies and procedures.

**Risk limits** are established to ensure the **risk profile** – the amount of each risk type arising from ESM activities – remains within risk appetite.

A **risk report** produced by the Risk Management division ('Risk division' or 'Risk') showing the risk profile compared to risk appetite and limits, and highlighting any breaches and mitigation plans is provided regularly to ESM Internal Risk Committee (IRC) and the BRC.

The BRC provides to the Board of Directors a summary of the minutes of each of its meetings, and annually a more substantive update on the state of risk management within the ESM including the main elements of the Risk Report. The periodic risk reporting to the Board of Directors explains the risk profile evolution over the period under analysis. The risk reporting informs about risk exposures at an aggregate level, and provides a summary of breaches to the risk limits with the remedial action taken and provides assurance regarding compliance with the risk management framework.

#### 1.2.5. Continuous improvement

The ESM continuously improves the management of risk. Staff at all levels continuously seek ways to improve efficiency and quality of risk management at the ESM.

The Risk division annually conducts a review of the risk management framework in order to (re)assess the current state and progress of risk management, and to identify measures for improvement.

 $<sup>^{\</sup>rm 3}$  As described in the Terms and Conditions of Capital Calls for ESM, and the ESM Treaty



## 2. Governance and Organisational Structure

#### 2.1. Risk Governance

Risk governance is the activity related to making decisions that define expectations, grant power, or verify performance with respect to the management of risk. The ESM leverages risk assessment and monitoring skills by embedding such capabilities in its Front Office functions, whilst still ensuring that the Risk division is adequately resourced to provide robust oversight and control.

#### 2.1.1. Board of Directors

The Board of Directors is accountable for the adequacy of the ESM's risk management framework and regularly reviews the risk management tools. The Board of Directors establishes the BRC, which is a committee of the Board of Directors. The Board of Directors retains overall responsibility for risks.

#### 2.1.2. Board Risk Committee

The BRC is a permanent committee of the Board of Directors. The BRC advises the Board of Directors on the overall current and future risk appetite and assists the Board of Directors in reviewing and overseeing the definition and the implementation of the ESM risk management framework by the Managing Director.

The Terms of Reference and Rules of Procedure of the BRC are approved by the Board of Directors.

## 2.1.3. Managing Director

The Managing Director is accountable for the implementation and functioning of the risk management framework, adequate reporting to the Board of Directors and the BRC, and for further developing the risk management framework by establishing relevant internal policies. The Managing Director reports the enforcement and oversight related information to the Board of Directors.

#### 2.1.4. Internal Risk Committee

The IRC is a permanent internal committee of the ESM, directly empowered by delegated authority from the Managing Director, whose members include the Managing Director, other Management Board members or their representatives, the CRO and the Head of Risk Management ('Head of Risk'). The IRC considers and decides upon any matters of evaluating, monitoring and approving practices regarding the implementation of the ESM risk management framework and relating to the risk management of the ESM operations.

The Terms of Reference and Rules of Procedure of the IRC are approved by the Managing Director.



## 2.2. Three Lines of Defence

The ESM applies a three lines of defence model for managing risk - ensuring the appropriate segregation of powers and duties, clearly demarcated lines of authority, and distinct roles and responsibilities for the management and control of risk.

#### 2.2.1. First line of defence – Direct responsibility for management and control of risk

Departments and business functions are directly responsible for the day-to-day management of risk and for the design and operation of effective internal controls.

The first line of defence functions:

- Conduct their activities in such a manner as to meet the objectives of the ESM in line with the stated risk appetite;
- Operate in accordance with all applicable rules, in particular: the guidelines and policies approved by the Board of Directors and the BRC; the internal policies approved by the Managing Director; and the limits set by the Risk Division in consultation with other control functions (e.g. Compliance, Legal) and business areas, set in accordance with internal policies;
- Are responsible for the risks taken in performing their functions. In particular, but not only, those
  responsible for lending, funding, investment and treasury, and banking activities, are responsible for
  understanding and managing the risks assumed in their respective operations, including relevant financial
  as well as non-financial risks;
- Apply the 'four eyes' principle in critical areas defined by the Risk Division.

All members of staff are responsible for complying with the ESM Code of Conduct and ensuring that risks related to their operations are identified, understood, managed, and reported to the Risk Division. All members of staff are considered 'first line of defence' for reputational, compliance and operational risks and, where relevant, financial risks.

Breaches of limits are immediately reported according to the Limit Excess Management section of this Policy.

#### 2.2.2. Second line of defence – Independent assessment and oversight

The Board of Directors sets out the ESM's risk management framework, as follows:

- a) The Board of Directors approves the High Level Risk Policy upon proposal of the Managing Director and the CRO and following consultation and endorsement by the BRC;
- b) The BRC approves the overall risk appetite, in accordance with the risk appetite principles and assists the Board of Directors in overseeing the implementation of the risk framework, consistent with risk appetite, by the Managing Director;
- c) The Board of Directors is periodically informed on the state of the internal control framework, the state of the implementation of the risk management framework, of the aggregate figures of exposures and of violations of the risk management framework, if they occurred. Furthermore, the Board of Directors is periodically informed on the decisions and actions undertaken to mitigate risk when breaches have occurred.

The Risk Division exercises central oversight of risk and ensures the comprehensiveness and the consistent implementation of the risk management framework by all business functions. It is responsible for ensuring that risks assumed by the business functions are appropriately managed and controlled. Second line of defence tasks and activities performed by members of staff from the Risk Division are independent from the first line of defence, including independent reporting lines and the avoidance of any other activities, which present a conflict of interest with regards to their risk management responsibilities.

#### The Risk Division:

- a) is an independent function;
- b) prepares the work to facilitate the decisions of the IRC;
- c) develops and maintains an inventory of the risks borne by the ESM;
- d) identifies, assesses and proposes alternatives to mitigate the overall risks borne by the ESM;
- e) proposes guidelines, policies and limits to ensure risk-taking remains within the stated risk appetite;
- establishes monitoring approaches and associated reporting requirements to ensure risk-taking remains within the bounds of predefined limits and policies. Validates monitoring tools and methodologies and ensures their consistent implementation;
- g) establishes and maintains standards for risk identification, quantification and management;
- h) monitors the dynamics of the aggregate ESM risk profile and identifies potential for breaches of the stated risk appetite;
- i) identifies excesses and/or emerging risk exposures and reviews associated management / mitigating actions proposed by the first line of defence. Monitors the execution of such actions by the first line of defence and determines when such actions may be considered complete / sufficient;
- j) consistently assesses and reports risks, with the CRO, to the Managing Director, the BRC and the Board of Directors putting forward its own judgment;
- k) oversees an appropriate early warning system, assessment and escalation of limit breaches, and recommends countermeasures to the Managing Director and business functions, as relevant;
- I) fosters a risk culture throughout the whole organisation.

The CRO is the Management Board Member responsible for the Risk Division / function. The CRO is a direct report to the Managing Director. The CRO is responsible for informing the Managing Director on all risks to ensure enforcement and oversight. The CRO reports, and has direct access, to the Board of Directors and BRC, without impediment, and has the ability to engage with the Board of Directors beyond periodic reporting.

The Head of the Risk function ("Head of Risk") is a direct report to the CRO and is responsible for informing the CRO on all risks to ensure appropriate independent assessment and oversight. The Head of Risk:

- a) has roles and responsibilities independent of, and segregated from, other executive functions and business line responsibilities;
- b) has access to all information necessary to evaluate risk;
- c) monitors the process for decision making independently from the first line of defence;
- d) signs-off, together with other relevant Heads, on the implementation of new financial instruments, in line with the New Tools and Instruments Approval (NTIA) policy; and
- e) reports and has direct access to the Managing Director, Board of Directors and BRC, without impediment, and has the ability to engage with the Board of Directors beyond periodic reporting, representing the CRO.

The Compliance Officer is a direct report to the General Counsel and is responsible for informing the General Counsel on all compliance related matters as defined in the Compliance Charter. The Compliance Officer has direct access, without impediment, to the Managing Director and BRC.

The IRC is composed of the CRO, Managing Director, other Management Board members or their representatives, with a reasonable representation across business functions and the Head of Risk. The CRO is the chairperson of the IRC. Representatives of the ECB and the European Commission may participate in the IRC if it discusses early warning system matters, and will be invited for IRC meetings requiring key decisions in that respect or in accordance with the Terms and Conditions of Capital Calls for ESM. The IRC:

- a) members act as a risk manager in their business function;
- b) translates the risk appetite into the Annex to the Risk Policy which is approved by the BRC;
- c) assists the Board of Directors in ensuring the adequacy of the ESM's internal limit structure and limit setting, and in providing recommendations on changes to the internal limit structure;
- d) provides recommendations on identification of relevant risks, and on the suitability of methods to monitor and manage these;
- e) oversees a periodic review of the ESM risk management framework;
- f) may suggest to the Managing Director to authorise independent reviews related to risk management (including outsourced activities) through either internal or external audit teams.

In cases where second line of defence activities are performed by members of staff who also perform activities relating to the first line of defence, for example, Middle and Back Office and Asset and Liability Management (ALM), their responsibilities are clearly defined in relation to these two types of activities. In addition, the Risk Division acts as an oversight function ensuring that the required independence of the second line of defence activities is maintained.

## 2.2.3. Third line of defence - Independent assurance

Internal Audit is an independent function responsible for providing to the Board of Directors a reasonable assurance that the risk management function is operating properly and efficiently. Internal Audit reports to the Managing Director and has direct access to the Board of Auditors on issues related to risk management, among others.

#### The Internal Audit:

- Provides independent assurance of the robustness and correct application of risk management processes through the identification, assessment, monitoring and management of risk;
- Identifies operational weaknesses and areas for improvement.

The accounts of the ESM are audited in accordance with generally accepted auditing standards at least once every year by independent external auditors as set out in Article 29 of the ESM Treaty and Article 22 of the By-Laws.

The Board of Auditors is an independent oversight body of the ESM appointed by the Board of Governors. It draws up independent audits, inspects the ESM accounts, verifies that the operational accounts and balance sheet are in order, and monitors and reviews the ESM's internal and external audit processes and their results, as set out in Article 30 of the ESM Treaty and Article 24.4 of the By-Laws.



## 3. ESM activities

This Chapter summarises the ESM activities, which give rise to the risks described in the following Chapter.

In fulfilling its mandate, the ESM undertakes three core activities which are primarily governed by the terms of the Treaty and by the Board of Governors, or explicitly delegated to the Board of Directors or the Managing Director:

- Lending and Banking provision of financial assistance to Member States and eligible institutions
- Funding raising the funds required to provide this financial assistance
- Investment prudent investment of the paid-in capital, reserves, liquidity buffer, and other portfolios.

Other activities in the ESM support these core activities.

## 3.1. Lending and Banking

ESM stability support may be granted through an agreed list of instruments following the prescribed procedure for granting stability support. The agreed list of instruments, as described in Article 14-18 of the Treaty, includes: ESM precautionary financial assistance; Financial assistance for the re-capitalisation of financial institutions of an ESM Member; ESM loans; Primary market support facility; and Secondary market support facility.

In addition, the DRI may be used for certain eligible institutions in accordance with the DRI Guideline.<sup>4</sup>

In 2018, the ESM Members stated that the ESM will provide the common backstop to the Single Resolution Fund. Once this instrument becomes operational, it will replace the DRI.

## 3.2. Funding

The ESM is authorised to borrow on the capital markets from banks, financial or other institutions for the performance of its mandate. The procedures for borrowing operations are determined by the Managing Director in accordance with Borrowing Guidelines adopted by the Board of Directors.

The ESM adopts a Diversified Funding Strategy, allowing the use of a variety of instruments, maturities and, where deemed appropriate, currencies to ensure the efficiency of funding and continuous market access.<sup>5</sup> The ESM governing bodies may also approve specific funding strategies in connection with particular ESM activities. The ESM is explicitly mandated to use appropriate risk management tools, which should be regularly reviewed by the Board of Directors.<sup>6</sup>

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<sup>&</sup>lt;sup>4</sup> The circumstances under which ESM can provide financial assistance to such institutions are limited to those contained in the European Stability Mechanism Guideline on Financial Assistance for the Direct Recapitalisation of Institutions ("DRI Guideline").

<sup>&</sup>lt;sup>5</sup> ESM Diversified Funding Strategy, reviewed and approved by Board of Directors from time to time.

<sup>&</sup>lt;sup>6</sup> Treaty Article 21 (3)



#### 3.3. Investment

The ESM invests its paid-in capital, reserves, liquidity buffer and other portfolios prudently, so as to ensure its highest creditworthiness and liquidity and, subject to these objectives, achieving a return on the Investment Portfolio comparable to a benchmark constructed with similar objectives and constraints. The investment operations of the ESM are required to comply with the principles of sound financial and risk management.<sup>7</sup> All ESM portfolios are invested in accordance with Investment Guidelines approved by the Board of Directors and internal policies.

As set out in Article 22 or the ESM Treaty, the ESM is entitled to use part of the return on its investment portfolios to cover operating and administrative costs. A fees portfolio has also been established comprising proceeds from ESM stability support instruments.

#### 3.4. Other Activities

Other ESM activities are undertaken by the following ESM functions / divisions: Economic and Market Analysis; Economic Risk Assessment, Financial Sector and Market Analysis, Asset and Liability Management and Financial Structuring; Risk; Middle and Back Office; Legal and Procurement; Compliance; Finance and Control; Human Resources and Organisation; Corporate Governance and Internal Policies; Policy Strategy and Institutional Relations; IT and Facilities Management (IT&FM); and Business Strategy and Project Management. The activities of these functions / divisions usually do not directly generate financial risks but do give rise to non-financial risks, mainly operational risk, which may have a financial and/or reputational impact.

<sup>&</sup>lt;sup>7</sup> Treaty Article 22

## 4. Risk Management

## 4.1. Overview

The management of risk at the ESM follows a recurrent four step process:



## 4.1.1. Risk Identification

Risk identification is the process for ensuring the identification of:

- All material risk exposures, financial and non-financial, faced by the ESM.
- Relevant internal or external indicators that support proactive, forward-looking assessment of actual or potential changes in risk exposure.

ESM activities give rise to both financial and non-financial risks, summarised below.

Risk	cs	ESM Activities			
		Lending / Banking	Funding	Investment	Other
isks	Mandate risk Financial assistance credit risk Financial assistance market risk	<b>✓</b>			
ia R	Credit risk		✓	✓	
Financial Risks	Market risk		✓	✓	
這	Market liquidity risk			✓	
	Funding liquidity risk		✓		
	Operational risk	✓	✓	✓	✓
Risk	Information security risk	✓	✓	✓	✓
Non-financial Risk	Reputational risk	✓	✓	✓	✓
final	Legal risk	✓	✓	✓	✓
Non-	Compliance risk	✓	✓	✓	✓
_	Model risk	✓	✓	✓	✓
Balar	nce sheet risk aggregation	✓	✓	✓	✓



#### 4.1.2. Risk Assessment

Risk assessment is the process for assessing all identified risk exposures to determine their materiality.

Materiality is typically assessed on the basis of analysis and expert judgement on the probability of occurring and the consequences to the organisation in the event of occurrence in consultation with relevant internal stakeholders.

For risks that are deemed material, a risk assessment includes the definition of appropriate quantitative or qualitative risk metrics/indicators, methodologies, modelling, and infrastructure requirements to support the on-going measurement of these risk exposures.

Multiple appropriate measurements can be applied for each risk type capturing both current and forward-looking aspects in order to avoid reliance on a single measure. The development of these measures is part of the regular activity of the Risk Division.

## 4.1.3. Risk Management

This is the process of determining and executing appropriate actions, typically by the Front Office, or the implementation of specific policies to actively manage risk exposures. These management actions include:

- Elimination: The elimination or minimisation of a risk (e.g. through hedging)
- **Mitigation or Reduction**: The mitigation of a risk (e.g. through the use of credit mitigants such as collateral) or reduction through the use of limits
- **Transfer**: The transfer of a risk (e.g. through the "pass-through" of interest rate risk to borrowing countries)
- Acceptance: The decision to tolerate a risk as it stands (e.g. financial assistance default risk arising from provision of financial stability support consistent with ESM's mandate).

#### **Limit Excess Management**

A limit breach is defined as the event when an exposure exceeds the approved limit. There are three potential ways in which a limit breach can occur:

- Active limit breach: This occurs through the active taking of a new position/exposure, in violation of a set limit. Active limit breaches are to be avoided by implementing limit monitoring tools for the Front Office and by ensuring that pre-deal limit checks are performed prior to entering any transaction/position.
- Passive limit breach: This occurs through passive changes in exposures due to market factors changing (e.g. increase in the market value of exposure due to rise in the price of bonds) and/or changes in limits due to changes in the circumstances of a particular issuer or counterparty (e.g. a credit downgrade).
- **Technical limit breach**: This occurs when all limits are fully respected, however, a limit breach is reported due to limitations in the limit set-up, often system-related. The risk of technical limit breaches can be minimised through system work-arounds but often they are addressed through manual corrections after the technical breach has occurred.



When a limit breach is detected, exposures in excess of limits are promptly analysed and appropriate actions are taken to bring back the ESM's exposure within ESM's accepted risk appetite. The type of limit breach will determine the action, in accordance with the following limit breach principles:

- Active limit breaches are notified to the CRO and the Chief Financial Officer for appropriate action. They
  are also reported to the IRC, which reviews the underlying cause of the breach and the remedial action
  taken.
- Passive limit breaches are assessed according to their underlying reason. Usually, if caused by market prices, these would constitute minor breaches. When the breach occurs due to a downgrade, e.g. a bond is no longer eligible to be in the portfolio, then Front Office proposes a plan to manage the exposure. According to the Investment Guidelines (Article 3) the Managing Director, in accordance with the Board of Directors, may decide to reduce this exposure, but to do so within an appropriate timeframe and manner in order to minimise any impact on market prices. Breaches due to downgrades are discussed in the IRC and at the Investment Management Committee, to define the strategy to be communicated to the Board of Directors.
- Technical limit breaches are reported in regular risk reporting to the IRC.

#### 4.1.4. Risk Monitoring

Risk monitoring is the set of processes, procedures, responsibilities and tools needed for on-going monitoring and reporting of material risk exposures and for triggering the active management of an unacceptable risk exposure. This requires robust, auditable control processes, limit monitoring frameworks, breach escalation mechanisms, dashboards, reports and other tools to ensure appropriate risk monitoring.

#### **Limit Monitoring**

Certain financial risk exposures are monitored by setting appropriate limits on exposure. Credit limits are set against individual obligors, such as issuers or derivatives counterparties. Market risk limits are set against certain aggregated exposures such as portfolio duration, value at risk or the outcomes of stress tests. Liquidity risk limits are set against certain funding outcomes and market indicators of liquidity.

Daily monitoring of all limits takes place to help identify any exposures that may be approaching their limit. For most limits ("hard limits"), breaches are not allowed but for certain limits ("indicative limits" or "soft limits") a breach leads to increased monitoring and in some cases triggers a special report.

A limit excess is defined by the amount and time period over which an exposure remains in excess of the limit. The Risk division monitors limit excesses daily and reports and escalates (as appropriate) exposures remaining in excess beyond certain periods.

The Annex to the Risk Policy details the teams responsible for limit monitoring of each risk type.

The IRC receives a summary report at each of its meetings to indicate the extent of relevant breaches of risk appetite or limits.

#### 4.2. Mandate Risks

Mandate risks arise in the execution of ESM Mandate – the provision of financial stability support to Member States and eligible institutions, following a decision by the ESM Board of Governors. When granting financial stability support, the ESM aims fully to cover its financing and operating costs and includes an appropriate margin, consistent with the Pricing Policy.<sup>8</sup>

#### 4.2.1. Financial Assistance Credit Risk

**Identification**: Financial Assistance Credit Risk is the potential for loss arising from a beneficiary Member State or eligible institution failing to meet its obligations as they fall due as a result of significant deterioration in credit worthiness. This is a risk arising from ESM Lending and Banking (DRI).

**Assessment**: The ESM prepares a proposal for a financial assistance facility agreement which is accompanied by a memorandum of understanding (MOU) negotiated by the European Commission – in liaison with the ECB and, wherever possible, together with the IMF – detailing the conditionality attached to the financial assistance facility.

The ESM develops internal methodologies for assessing the risk of non-payment of an obligation on a loan provided by the ESM, mainly using qualitative assessment techniques to provide early warning of potential non-payment. Techniques employed aim at forecast and identify any potential significant increase in credit risk, as well as any risk of payment delay or any need for restructuring of a loan. In case a significant increase in credit risk is identified, the expected credit loss should also be assessed.

Additionally, the ESM assesses its lending exposure through accurate and comprehensive visibility of contractual repayment schedules. These also enable the ESM to manage its funding and liquidity needs, and to actively minimise the impact of non-payment by ensuring the availability of sufficient liquid assets to meet its obligations in the event of non-repayment.

The ESM also assesses the potential for early repayment of stability support loans in order to support assessment of the impact on the wider operations of the ESM. Once DRI stability support has been granted, the ESM is responsible for undertaking the relevant responsibilities contained in the DRI Guideline, including monitoring the institution's financial performance, risks and adherence to its business plan.<sup>9</sup>

**Management**: In accordance with its mandate, the ESM accepts credit risk from financial assistance to beneficiary Member States, and eligible institutions. A mitigating factor to this credit risk is the preferred creditor status, second to the IMF, as set out in Recital 13 of the Treaty (see footnote 2).

Stability support is granted in the form of a financial assistance facility agreement, accompanied by a MOU detailing the policy conditionality as well as, based on the financial assistance facility agreement, specifying the financial assistance instrument chosen and the financial conditions.

Once the lending decision has been made in principle by the Board of Governors, the ESM will mitigate Financial Assistance Credit Risk in a manner consistent with stability support objectives and within the terms agreed under a Financial Assistance Facility Agreement.

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<sup>&</sup>lt;sup>8</sup> Treaty Article 20 (1)

<sup>&</sup>lt;sup>9</sup> In formal terms, the ESM has to monitor the institution's compliance with institution specific conditions that are not related to State aid conditionality under Articles 107 and 108 of the Treaty on the Functioning of the European Union.

The ESM passes on the benefits of favourable interest rates to beneficiary Member States through low interest rates on loans. An increase in global interest rates and/or political uncertainty could place credit stresses on beneficiary Member States and increase loan repayment risk. To mitigate the risks related to an increase in global interest rates, the ESM employs a diversified funding strategy to optimise the balance between funding liquidity risk and funding costs. It seeks to ease the repayment burden for its programme countries by passing on its low funding costs and by setting loan repayments out further than other international institutions.

Once stability support has been granted, the ESM is responsible for implementing the early warning system<sup>10</sup> to facilitate receipt of payments due in a timely manner. This involves assessing that the beneficiary Member State has sufficient available liquidity to meet its obligations or by monitoring an institution's performance against its business plan.

The IRC will actively manage the implications of non-payment by providing full transparency to the Board of Directors through risk measurement and monitoring.

This will allow the Board of Directors to assess the need for making capital calls in a timely manner (Article 9(2) of the ESM Treaty).

**Monitoring**: As part of its early warning system, the ESM monitors Member State repayments and establishes appropriate systems to ensure such monitoring is performed actively. The results of the early warning system are submitted to the IRC for review.

As part of its DRI support monitoring, the ESM monitors institutions' financial performance, risks and adherence to the business plan. The results are submitted to an internal committee dealing with DRI matters ("Banking Committee"<sup>11</sup>) for review. Any risk issues arising are also discussed at the IRC.

#### 4.2.2. Financial Assistance Market Risk

**Identification**: Financial Assistance Market Risk is the potential for loss arising from changes in the price of capital instruments (e.g. Tier 1 equity or capital debt) of eligible institutions. The ESM is exposed to *Financial Assistance Market Risk* only as a result of DRI stability support, following the ESM Board of Governors decision to provide financial assistance to an eligible institution.

**Assessment and Management:** The risks arising from DRI are assessed and managed in accordance with the DRI Guideline.

IRC will actively manage the implications of this risk by providing full transparency to the Board of Directors through risk measurement and monitoring.

If any realised loss on a DRI capital instrument requires a capital call, this will be dealt with using the established procedure.

 $<sup>^{10}</sup>$  As detailed in the 'Procedure of ESM Early Warning System', approved by the Board of Directors.

<sup>&</sup>lt;sup>11</sup> The Banking Committee is an internal management committee, separate from the IRC. It assists the Managing Director by undertaking a final review of any DRI proposals to the Board of Governors and Board of Directors, and also approves periodic valuations, quarterly monitoring reports and any recommendations for impairment.

**Monitoring:** The ESM monitors institutions' financial performance, risks and adherence to the business plan. The results are submitted to the Banking Committee for review. Any risk issues arising are also discussed at the IRC.<sup>12</sup>

#### 4.3. Credit Risk

**Identification**: Credit risk is the potential for loss arising from inability of a counterparty (counterparty risk), issuer (issuer risk), insurer, or other obligor to fulfil its contractual obligations for full value when due.

Counterparty risk and issuer risk arise from ESM investment of paid-in capital, reserves, liquidity buffer and other portfolios. Counterparty risk includes potential for loss arising from default of a counterpart to derivatives contracts, which are used by both investment and funding activities for risk management.

Settlement risk is a particular form of counterparty risk. It is the potential for loss arising from the failure of one or more counterparties to settle an exchange-for-value transaction which occurs when settlement of various legs of a transaction happens at different times.

Credit concentration risk is defined as the potential for loss arising from undiversified, correlated exposure to a particular group of counterparties e.g. in a sector, region, or related country or zone of countries.

**Assessment:** The Investment Guidelines<sup>13</sup> define eligibility criteria of investments, including instrument and issuer types and minimum credit rating. The internal Credit Risk Policy defines the methodology for limit allocation per instrument and issuer type. A detailed credit assessment is performed before granting a limit to a specific issuer and instrument. In addition, as per the Investment Guidelines, all transactions must be executed with eligible counterparties.

Derivative exposures are measured by the Exposure at Default, incorporating current exposure plus potential future exposure, adjusting for collateral received / posted.

Management: The ESM actively manages Credit Risk to keep it within stated risk appetite.

Counterparty and issuer risk are managed by implementing rules, procedures and limits in respect of eligible issuers and counterparties of high credit standing.

The ESM manages its credit exposure to derivative and repo/ reverse repo counterparties through legally enforceable agreements covering collateralisation and close-out.<sup>14</sup> The ESM uses regulated exchanges/central clearing, where appropriate.

Settlement Risk is managed by applying delivery versus payment securities settlement when possible and, for FX transactions, appropriate limits on the maximum acceptable open settlement daily exposure per counterparty. In addition, any Settlement Risk associated with borrowing activities is mitigated through the use of lean and efficient processes, involving public sector agencies where possible.

<sup>&</sup>lt;sup>12</sup> See the footnotes to section 4.2.3 which also apply here.

<sup>&</sup>lt;sup>13</sup> Annex 1 and 2 of the ESM Investment Guidelines

<sup>&</sup>lt;sup>14</sup> Collateral arrangements are not necessarily entered into, and close-out triggers might not apply, with some counterparties e.g. Central Banks and International Financial Institutions, with strong creditworthiness. Close-out of positions under central clearing is governed by the rules of the relevant central clearing counterparty.

Credit concentration risk is managed by monitoring or limiting exposures using appropriate exposure categories (for instance issuer, class of issuer, sector, country, currency or similar category) for the investment of the paid-in capital, reserves and other portfolios.

**Monitoring**: The ESM has credit experts who analyse and monitor eligible counterparties and issuers, and propose maximum exposures that the ESM would be willing to take to each of these in the form of counterparty, issuer, settlement and concentration limits.<sup>15</sup> The credit quality of all issuers and counterparties is constantly monitored, and limits adjusted accordingly. These limits, as approved by the Risk Division, are set to accord with the ESM's risk appetite and the Investment Guidelines. Implementation of these limits in Front office monitoring tools and pre-deal checks are made to ensure compliance with these limits.

#### 4.4. Market Risk

**Identification**: Market risk is the potential for loss arising from adverse changes in market prices including interest rates (interest rate risk), credit spreads (spread risk), foreign currency (FX risk) and divergence in the value between an instrument and its hedge basis (basis risk). Changes in market prices gives rise to two further risks – potential for higher costs when refinancing (refinancing risks) and lower returns when reinvesting (reinvestment risk).

Market risk on Funding / Lending (ALM) activities arise from interest rate mismatches on its loans and the funding used to finance those loans, currency mismatches on euro loans and foreign currency funding. These risks are not retained by the ESM. Under the Pricing Policy, they are 'passed-through' to beneficiary Member States or, in the case of FX risk, hedged by the ESM with costs also passed on to the beneficiary Member States (see below).

*Market risk on Investment* activities arise from the investment of the paid-in capital and reserves, liquidity buffer and other portfolios; in euro and foreign currencies and related derivatives activities.

**Assessment**: For Market risk on Funding/Lending (ALM), the ESM uses some methodologies, models and tools to project future funding costs capturing the structural mismatch in the loans and related funding. These are based on an asset-liability assessment using projected cash flows, both with and without incorporating expected future funding and lending.

For Market risk on Investment activities, the majority of the ESM's investments consist of debt instruments paying a regular interest coupon or issued at a discount. The value of the investment portfolio fluctuates with the changes in interest rates. KRIs are defined to assess the interest rate risk (modified duration, price sensitivity of a portfolio to a one basis point change in the overall level of interest rates (PV01)), spread risk (the sensitivity to a one basis point change in the specific issuers credit spread (CS01)) and portfolio market risk (Value at Risk (VaR), scenario analyses and stress tests).

Foreign Exchange Risk is measured by the sensitivity of the portfolio to a one percent (1%) change in the relevant exchange rate.

For managing market risk in all activities, appropriate and consistent valuation/pricing methodologies, including the selection of appropriate curves, are used in order to assess *Basis Risk*.

<sup>&</sup>lt;sup>15</sup> Certain limits in the Investment Guidelines are based on the rating of a particular bond (issuance) rather than the underlying issuer because some bonds e.g. covered bonds, have additional credit enhancements such as collateral pools which can result in the bond being rated higher than the issuer.



#### Management:

#### Market risk on Funding / Lending (ALM)

Interest rate (general change of interest rates) and credit spread risk (change of the ESM funding curve relative to a risk free rate) arise in the context of the Diversified Funding Strategy which is used to manage Funding Liquidity Risk (see below). Under this strategy, long-term loans intended to be made using the ESM Loans instrument, as well as other ESM instruments, will necessarily be made from one of a number of specified pools of funds comprising a mix of long- and short-term funding, which requires regular rollover, prior to the maturity of the loans. In accordance with the Pricing Policy, all funding costs are passed on to beneficiary Member States. In this way, interest rate risk and credit spread risk are passed-through to the beneficiary Member States.

The ESM Board of Directors may instruct the ESM to implement a derivatives programme for a beneficiary Member State to hedge interest rate risk in respect of its ESM loans and corresponding funding. The financial impact of such hedging programmes is passed on to the relevant beneficiary Member State.

FX risk and basis risk arise when the ESM borrows in non-euro currencies and hedged back into euro consistent with the Diversified Funding Strategy and ESM risk appetite. FX risk is hedged in line with the ESM Borrowing Guidelines using a combination of foreign exchange derivatives and currency transactions, subject to liquidity requirements which ensure the cash inflows from the hedging derivative are received prior to the payment obligation from the foreign currency funding. The costs of this hedging are passed-through to beneficiary Member States.

#### Market risk on Investment

The Investment Guidelines set a risk appetite for the paid-in capital, reserves, liquidity buffer and other portfolios. This appetite is translated in policies approved by the Managing Director defining KRIs and, in the case of the Medium/Long-term tranche, a Value at Risk limit, to enable daily monitoring of risks.

For diversification purposes, the Investment portfolios can be invested in foreign currency denominated assets, provided that the FX risk is managed in accordance with ESM risk appetite. FX risk is minimised by using appropriate derivative instruments, such as FX swaps, FX forwards and Cross currency swaps. Only currencies approved by the IRC ('authorised currencies') can be used. Non-euro positions are subject to basis risk, which arises because the mark-to-market change of the underlying investment instrument price may not be exactly offset by that of the FX hedge.

FX Risk is included in the VaR exposure and controlled using the VaR limit, and by managing residual unhedged positions by currency.

#### Monitoring:

Funding / Lending (ALM): *Market risk* including projected cost of funding and profile of asset and liability mismatch are reviewed periodically by the Finance Committee.

Investment: *Market risk* limits are monitored on a daily basis. These are reviewed at least annually, and appropriately calibrated to remain within and consistent with the overall risk appetite.

## 4.5. Liquidity Risk

Liquidity risk comprises market liquidity risk and funding liquidity risk.

#### 4.5.1. Market liquidity risk

**Identification**: Market liquidity risk is the potential for loss arising from a position that cannot easily be unwound or offset at short notice without significantly negatively influencing the market price because of inadequate market depth or market disruption.

This risk arises if investment assets are insufficiently liquid. Concentration of investment in specific assets can constrain the ESM's ability to turn the assets into cash in times of illiquidity or reduced market liquidity.

**Assessment**: A number of measures of *Market Liquidity Risk* are used, in particular in relation to the maximum percentage of the issuance outstanding amount that the ESM may hold for a particular bond.

**Management**: Market liquidity risk is minimised by investing in liquid assets and ensuring that the ESM does not hold a significant proportion of a security issuance outstanding amount. The ESM ensures it has access to the repo market in order to raise liquidity from its assets if required.

**Monitoring:** Liquidity limits and KRIs are regularly monitored.

## 4.5.2. Funding liquidity risk

**Identification**: Funding liquidity risk is defined as inability to raise money in a timely manner. Due to this, the ESM could be unable to settle obligations when they are due and be held in breach of its obligations. The ESM exposure to this risk intensifies if funding roll-over needs are concentrated, access to new funding is limited or in the event of large unexpected outflows such as a significant and sudden loan disbursement or large changes in daily collateral calls on derivatives.

**Assessment**: The production of detailed cash flow projections is complemented by a set of appropriate forward-looking quantitative / qualitative indicators to flag potential increases in this risk.

**Management**: Funding liquidity risk is managed by undertaking a diversified funding strategy as prescribed in the Borrowing Guidelines and maintaining multiple credit lines.

The diversified funding strategy enables the ESM to issue in a flexible way in different markets and keep a regular presence in those markets. This allows the ESM to have access to a wide and diversified investor base. The diversified funding strategy includes the possibility to pre-fund ESM obligations and maintain liquidity buffers. The Board of Directors approves annually the size of the liquidity buffers. Any costs associated with maintaining liquidity buffers are allocated to programme countries on an annual basis based on their 'programme amount' (as defined in the Pricing Policy).

Additionally, the ESM continually monitors funding conditions and stresses its projections of asset and liability cash flows based on a number of assumptions.

In exceptional circumstances, such as loss of market access to funding, and in order to avoid or limit unexpected capital calls, the ESM may use liquidity from investment portfolios to meet its payment obligations to ESM creditors.

**Monitoring**: Appropriate *Liquidity Risk* indicators are defined to ensure adequate monitoring and early warning of *Funding Liquidity Risks* and concerns. The main active measure that is under constant review is in relation to the adequacy of the Liquidity Buffer.

## 4.6. Operational Risk

**Identification**: Operational risk is the potential loss, inability to fulfil the ESM's mandate or reputational damage resulting from inadequate or failed internal processes or systems, from human error, or from external events.

Operational Risk exists in all areas of the ESM.

Key operational risks are categorised using the following ESM Operational Risk Categories which are based on the Basel standards. All members of staff are involved in identifying Operational Risk events for their respective areas.

**Assessment**: Risk and Control Self-Assessments are conducted across the ESM annually to identify the most significant risks of the ESM that could result in a financial loss and/or the inability of the ESM to fulfil its mandate. Through the Risk and Control Self-Assessment process, a materiality assessment is made for each of the identified risks, in terms of both the likelihood of the risk materialising and the potential severity of the impact.

In addition, existing controls are also identified and assessed. Where control gaps or improvements are identified, these are documented and prioritised to be addressed. Subsequently, relevant process and procedures are updated accordingly.

**Management**: The ESM seeks to mitigate *Operational Risk* where feasible and cost effective. However, it is not possible to fully mitigate all sources of *Operational Risk* exposure. Each function is responsible for the proactive mitigation of its own *Operational Risks* and for the robustness of associated processes, in a "first-line" capacity.

Active management is required when a material increase in *Operational Risk* exposure is detected by a KRI, or if an event occurs, which may indicate the failure of the control environment. If necessary, an ex post investigation, such as a root-cause analysis, will be undertaken. Action may be taken to address the incident, which could involve senior management and, possibly, the BRC and the Board of Directors. The ESM maintains business continuity plans and dedicates resources to the oversight and management of specific types of operational risk such as fraud, risks pertaining to payment systems, and information systems security risks.

<sup>&</sup>lt;sup>16</sup> Basel Committee on Banking Supervision – "International Convergence of Capital Measurement and Capital Standard" (2005).



An important element of operational risk is the management of fraud risk. The ESM undertakes regular fraud risk assessments and maintains a fraud risk management programme. It has established a robust internal control framework, a Code of Conduct, an information barrier policy and reputational risk guidelines.

For outsourced activities, the ESM is aligned with best business practices on outsourcing within the financial sector, and implements methods and procedures compliant with those standards.

**New Tools and Instruments Approval (NTIA)**: The ESM recognises the importance of having a comprehensive understanding of all risk exposures originated as a result of introducing a new tool/instrument for funding, investment, lending, banking or material changes to related processes and systems. A comprehensive understanding of the impact on all relevant supporting teams must be achieved before approval, including an assessment of both financial and non-financial risk types.

During the NTIA process, a formal assessment of all relevant risks is conducted to ensure that the new initiative will not generate either unidentified risks, operational strain or exposures that could fall outside of the risk appetite of the ESM. A review of the existing control environment must be conducted to ensure that it can accommodate the new tool/instrument. Control environment enhancements may be stipulated as a prerequisite before "go-live".

Subsequently, the relevant internal approval body is responsible for the review and approval of the new tool/instrument for implementation, based on the recommendations of the Risk Division.

**Monitoring**: Operational risk events are reported by all members of staff according to rules set by the Operational Risk Management Policy. A central register of risks, events and associated losses is kept. Follow up of events takes place to establish causes and agree on mitigating actions. Risk events are reported to the IRC along with proposed actions. Furthermore, on a quarterly basis, a summary of operational risk events is reported to the BRC. In case of significant events, these may be escalated to the Board of Directors and the Board of Auditors.

KRIs are used, with the objective of early warning and detection of a change in materiality (i.e. probability/frequency of occurrence and/or severity of event) of the associated *Operational Risk*.

As part of its DRI support monitoring, the ESM monitors institutions' business operations, to ensure that they are conducted with reasonable skill and care. The results are submitted to the Banking Committee for review.

Any risk issues arising, which could involve financial, reputational, legal and compliance risk, are also reported to the IRC.

#### 4.7. Other non-financial risks

**Information security risk** is the probability of loss of confidentiality, integrity and availability of ESM information or information systems including through the cyber medium. The ESM manages information security risk through internal policies and procedures for the protection of the ESM information and systems, confidentiality marking and handling of information, controls on the management of information and review of incidents. The ESM conducts regular security testing of ESM's systems, phishing exercises and mandatory staff training. Information security risk is managed by IT&FM, and Risk.



**Reputational risk** is the risk of loss and/or damage arising from a deterioration in ESM's reputation, reducing its access to the market, lowering of credit rating, loss of political capital, inability to attract suitably qualified staff and other similar consequences. This risk is mitigated by ESM undertaking its mandate in accordance with the highest professional standards, by having centralised co-ordination of external official communication, by managing its risks prudently and by maintaining its high credit standing.

Reputational Risk is mitigated by adopting procedures governing external communications, supported by the Code of Conduct. These include:

- A list of which employees are authorised to represent the ESM;
- Guidance for all staff on the use of social media; and
- Procedures for the development of the communication strategy and for the approval of content of external official communications.

Reputational Risk is managed by the Managing Director, the Chief Spokesperson and Risk.

**Political risk** is the risk of loss and/or damage arising as a result of a single or multiple political events that impact the ESM's ability to perform its mandate (e.g. by reducing access to the market for funding). Political risk is managed principally by the Board of Governors and closely monitored by the Managing Director.

Legal risk is the risk of loss as a result of (a) inadequate or inefficient documentation, legal capacity, enforceability of national and international laws, (b) litigation against ESM or its assets and (c) non-compliance with the Treaty establishing the ESM, its By-Laws or any other applicable laws and contractual obligations. Legal risk is managed by obtaining review and advice from internal and external legal counsel to ensure ESM activities are in compliance with the law and supported by enforceable, robust contractual arrangements.

Compliance risk is the risk of loss and/or damage associated with the non-compliance with internal policies, procedures and guidelines as well as any external policies, regulations and directives which might be applicable to the ESM. Compliance risk is mitigated by adopting appropriate internal procedures and/or using other mitigation techniques. The Code of Conduct is approved by the Board of Directors and defines the fundamental ethical principles to which members of staff are required to adhere. The Code of Conduct is published on ESM webpage. The Compliance Charter describes the necessary controls and staff training to address the following areas:

- ethical issues and adherence to internal policies and codes;
- regulating personal investments to avoid conflicts of interest;
- the use of 'Information Barriers' which aim to prevent the flow of inside information from those that possess such information to those engaged in investment activities;
- assurance relating to ESM's market conduct and Anti-Money Laundering controls.



**Model risk**: The use of financial models for instrument pricing, exposure calculation and portfolio models (e.g. VaR) exposes an organisation to model risk.

Sources of potential model risk are identified and assessed for materiality. Specific sources of model risk identified are appropriately monitored and managed. In addition, model risk is managed by:

- Ensuring appropriate model validation has been performed prior to the deployment and use of any model;
- Appropriate on-going validation is performed to ensure the continuing appropriateness of the model;
- Where relevant, model back-testing to monitor modelled performance against actual performance is implemented;
- Similarly, mark-to-model valuations / exposures are periodically back-tested against mark-to-market based valuations / exposures, where observable market prices are available.

A register of all pricing and risk management models used within the ESM is maintained. No significant new model may be introduced without an assessment of model risk.

#### 4.8. Balance Sheet Risk

**Exposures across all risk types are regularly reported** to IRC and summarised at BRC to ensure that the ESM has full visibility of all its risks on an on-going basis.

**Stress tests and scenario analysis** are developed to evaluate the combined effects of financial and non-financial risks on utilisation of lending capacity, solvency or capital preservation, funding and operational capacity.

The scenarios developed are relevant to the nature of ESM's mandate, risk profile, and emerging and potential global developments.

Scenarios range from likely/expected ('Baseline') to extreme yet plausible future events. They recognise correlated / contagion effects across countries and markets, and the development of those effects over time.

The scenarios support proactive planning and risk mitigation by identifying the aggregated effects of correlations between different risk exposures, aiding the development of pre-emptive risk management / mitigation plans and allowing these exposures and plans to be proactively assessed and monitored. Results and conclusions of scenarios are discussed at IRC and BRC.