

STRESS TESTS - BANKING SECTOR



Context & challenges

Introduction

Stress tests are **forward-looking exercises** that aim to evaluate the impact of severe but plausible adverse scenarios on the resilience of financial institutions.

According to several different states of the world, it is possible to evaluate the deformations of the balance sheet, the income statement, and the risk profile but also the impacts in terms of financial resources like solvency and liquidity.

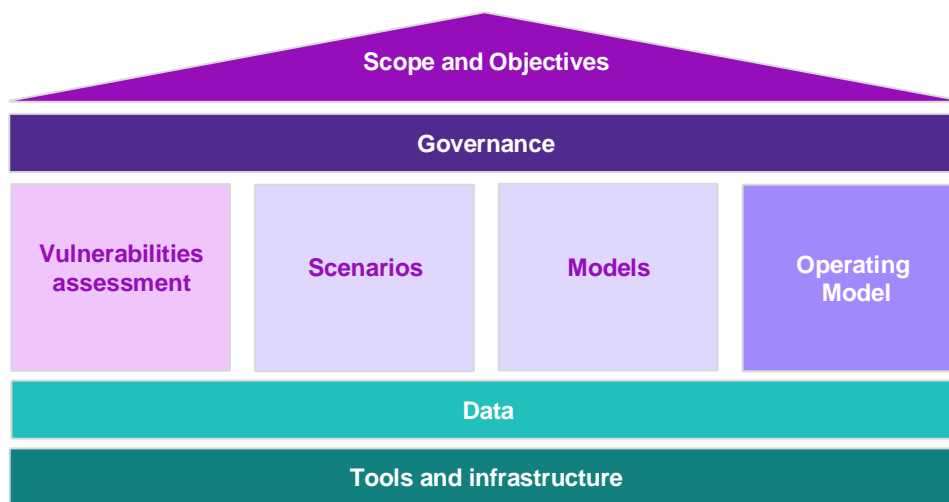
Main channels for the use of stress tests

 <p>“ Stress tests promote stability in the financial system ”</p>	<p><u>Core supervisory tool for banking supervisors and macroprudential authorities</u></p> <p>Large-scale financial health check of banks that help supervisors identify banks' vulnerabilities and address through appropriate policy responses. Promotes confidence in the financial sector.</p>
 <p>“ Stress tests enable an effective risk management ”</p>	<p><u>Critical element for an effective risk management</u></p> <p>Forces banks to improve their risk management frameworks and serves as an input for their internal processes (risk identification, RAF, ICAAP, ILAAP, RRP...) and their risk model's review.</p>
 <p>“ Stress tests are a key input for the bank's financial planning ”</p>	<p><u>Critical element for the business strategic planning</u></p> <p>Inform banks' management on the potential impacts of scenarios on the forecasted profitability and business strategy. Provide insights on risk/reward, enabling informed business' decisions.</p>
 <p>“ Stress tests are fitting for crisis management ”</p>	<p><u>Alerts supervisory authorities</u></p> <p>Of unexpected adverse outcomes arising from a wide range of risks, and provides an indication of the financial resources that might be needed to absorb losses should those shocks occur.</p>

STRESS TESTS - BANKING SECTOR

Our service offer – Key building blocks of stress testing frameworks

- Our service offering covers the **key components of a stress testing framework**.
- **Through our practical experience acquired within large French and European banks, we have developed tailor-made and flexible approaches to support you on one of these themes.**



- Ensure **clear and consistent role for Stress Testing in core management processes**
- Adequacy, integration and operational as core defined objectives

- **Formal/ frequent challenge of approaches and results (Board engagement)**
- Articulated role for ST in the **three lines of defense model and Model risk mgt**

- **Scenario designing process linked to Risk ID and the BMA**
- Design of a **proper reverse stress testing process**

- Scenario design integrates P&L, solvency and liquidity perspectives
- Design and implementation of **standard financial risks methodologies**
- SME support to **quantify/qualify new/ non-financial risks**

- SME support to implement “Bottom-up” and “top-down” balanced and automated processes fully linked to business and risk mgmt.
- Bring smart PMO team to foster collaboration across teams and provides overall coordination and content challenge
- Sustainable resource quantum and skills

- Support to design and implement data model addressing group, subsidiary, divisional, needs
- Providing formal data quality assessment and assurance framework
- Alignment with other needs (BCBS239, IFRS9, COREP, etc.)

- All scenario-based processes (business, internal, regulatory) within the same infrastructure (robust, inter-connected solutions)
- Component based infrastructure (i.e. modular by risk type) with adequate interfaces across each solution

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A large number of projects to design, reshape or steer supervisory and/or internal stress tests

Assistance of the EBA/ECB EU-wide stress test

Smart PMOs, Subject matter expert



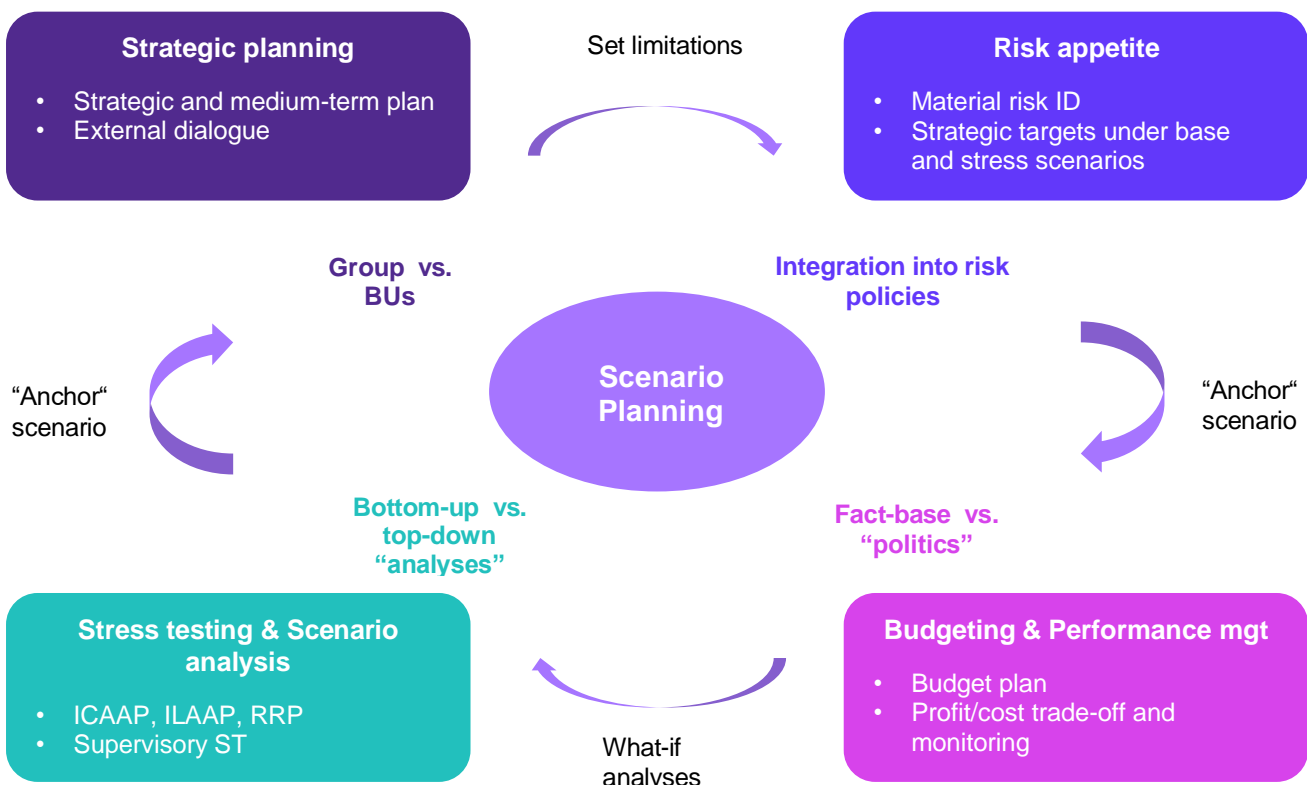
- Coordination and project management of previous EBA / ECB stress test exercises.
- Methodological support and operational implementation on the market credit risk and operational risk modules, RNI (projections), other P&L and capital.
- Advanced data collection /data crunching
- Submission process
- Documentation package

Design/Reshaping of internal stress tests (solvency, liquidity, crisis)

Smart PMOs, Subject matter expert



- Risk factors identification and analysis (BS analysis, sensitivity analysis, historical analysis).
- Definition and calibration of multi-stress scenarios: idiosyncratic, market, combined, reverse
- Development of an integrated tool,
- Simulation of impacts by scenarios and consistency of results
- Definition and application of management actions by scenarios
- Definition and calibration of risk appetite measures in line with the results of stress tests

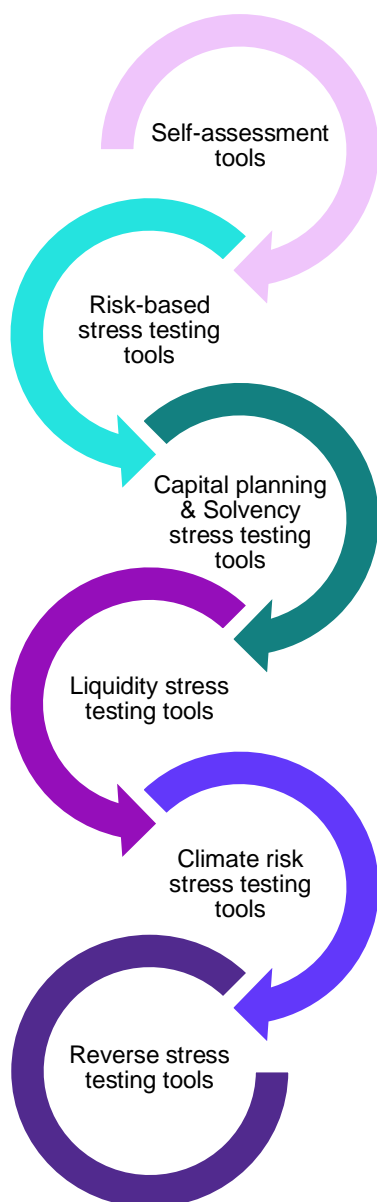


STRESS TESTS - BANKING SECTOR

Our acceleration tools provide concrete and easy to use tactical stress testing tools to our clients

Leveraging on its experience and in line with market practices, Avantage Reply, has developed flexible and easy-to-use tools.

Below are described the main stress testing tools related:



- Interactive and practical, our self-assessment tools **cover the key building blocks of Solvency & Liquidity Stress Test frameworks**
- Questionnaires address a number of relevant questions per block
- It provides an overview that will help benchmark existing framework in place in relation to supervisory expectations and best practices

- Leveraging on our experiences, we propose **several tactical modeling tools covering risk quantification and associated stress tests**
- Flexible and easy to use, it provides financial institutions with a toolkit which allows them to easily perform risk assessment and quantification of Pillar 1 and 2 risks and integrate outcomes into decision-making

- Leveraging on our experience and in line with market practices, Avantage Reply has developed a **Capital planning tool**.
- Flexible and easy to use, it provides financial institutions with a **tactical tool allowing to perform capital simulations under different scenarios** and integrate key outcomes into capital management and decision-making

- Leveraging on its experience and in line with market practices, Avantage Reply has developed a **Liquidity Stress Testing model**
- Flexible and easy to use, it provides financial institutions with a **LST toolkit allowing to deploy multi-scenario, multi-horizon and multi-propagation speed to stress key liquidity metrics**

- Leveraging on emerging market practice, Avantage Reply has developed **easy and simple climate risk stress testing tactical tools**
- It allows to conduct number of sensitivity analysis **to assess banks' portfolios' exposure to transition or physical risks**

- Leveraging on its experience and in line with market practices, Avantage Reply has developed a **Reverse Testing model**
- This tool allows **to deploy a full-fledge reverse stress testing process** (point of failure, vulnerability analysis, macroeconomic variables identification, scenario design and parametrization, mgt actions...)