



# The Industrialization of Stress Tests in Banks

## Background

In response to the financial crisis, banks have had to carry out extensive stress tests, commencing in 2009 and most recently in 2014. The European Banking Authority (EBA) has scheduled the next stress test exercise for 2016. Stress tests are an **essential component of the EBA monitoring activities**, which will become increasingly significant for the internal risk management of all banks and not only for EBA stress tests participants. The importance of stress testing is also driven by the internal steering requirements from the Supervisory Review and Evaluation Process (SREP) and by new EBA guidelines on stress testing expected to become binding in 2016.

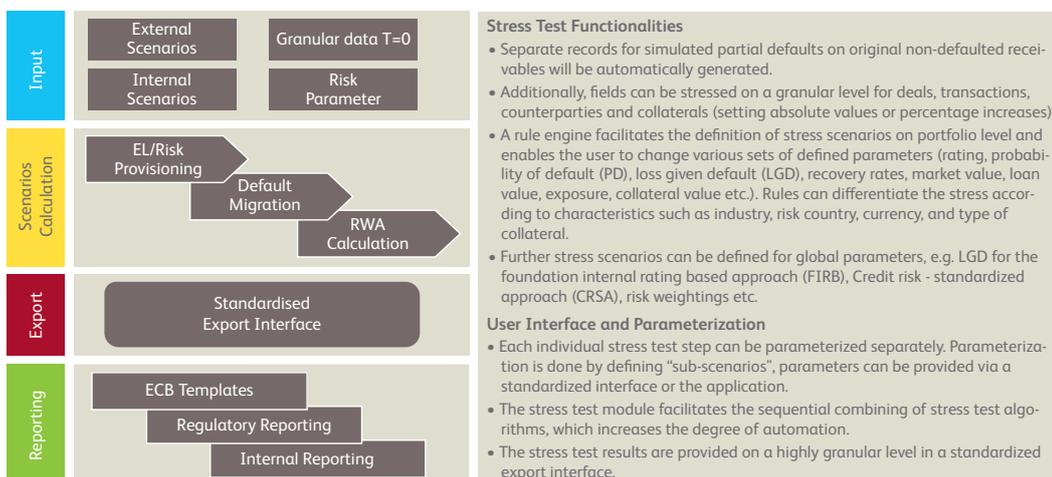
The exorbitant costs of implementing regulatory and internal stress tests can be significantly reduced by an automation of processes, methods and technical infrastructure.

Historic internal and regulatory stress test processes were often lacking in efficiency and standardization:

- The internal and external efforts required to carry out a single stress test exercise result in very high costs. The reasons for this are a **lack of automation, an inadequate technical infrastructure and data quality deficiencies**.
- The time required for the generation of the stress test results is often several weeks instead of a few hours. Stress test results that are delivered to management with a considerable time lag after the reporting date add little value for bank management.
- In some cases, stress test results have been calculated on an aggregated level and on deal/transaction level. This has led to **missed opportunities to optimize the collateral allocation** under stressed conditions, which may then result in a higher Risk-Weighted Asset (RWA) amount than a granular calculation would have provided.
- For some banks, the risk models used in stress testing **were insufficiently documented and validated**. As a result, this exacerbated the already stringent requirements on the part of the banking supervision. Additional capital charges under stressed conditions and/or more conservative approaches have caused a serious increase of stressed RWA.

## Our solution – ABACUS/DaVinci Stress Testing Module

FIGURE 1: ABACUS/DAVINCI'S STRESS TEST – ESSENTIAL FUNCTIONALITIES



## Features

As a starting base, the stress test module uses your regulatory reporting data and thus facilitates a consistent calculation of your scenarios and simulations without requiring further manual adjustments.

- Parameters, such as PD, LGD, credit conversion factor (CCF) or market values **can be modified on different dimensions** (e.g. portfolio, rating and segments, individually or in combination) via an intuitive user interface. The user determines the order of the parameters to be stressed or how the parameters shall be modified, for example, in relative shifts or absolute changes.
- The **flexible interface** enables already stressed risk parameters such as PD, LGD or exposure at default (EAD) from your existing risk control solutions to be taken into account at a granular level, such as for transactions or partners in the simulations.
- Additionally, the module provides the option of calculating default flows based on certain point-in-time parameters, such as required in the EBA stress tests.
- Moreover, a standardized export functionality can be used for further analyses and reports.

One critical aspect of the module development was to ensure that its design would be capable of facilitating all of the usual stress test functionalities for credit and counterparty risk. In doing so, the regulatory reporting requirements have been met to the greatest possible extent. However, we were equally concerned with providing our clients with the capability to customize the system to fulfil their particular requirements.

By using our solution, you can take advantage of the benefits of economies of scale and a standard software maintenance service while simultaneously using the synergies between regulatory reporting requirements and risk management to support your company's internal management and control and perform all of your regulatory requirements, internal stress tests and simulations of these effects for strategic decisions (new business transactions, portfolio reduction) in an efficient and easy way.

BearingPoint provides software solutions for **an innovative automation of stress tests** as part of the Abacus Solution Suite. In addition, our specialists, with their many years of know-how in regulatory reporting, can provide support for your specific issues within the context of your particular implementation projects.

### Benefits of a BearingPoint partnership include:

- Reducing the manual effort and costs related to the data reconciliation
- Improving the quality of stress test results, thereby avoiding additional capital charges
- Timely calculation on a granular level (businesses, partial demands) and thus higher value added for risk management
- Deep and comprehensive expertise in the area of stress testing, simulations and process optimization

## About BearingPoint

BearingPoint consultants understand that the world of business changes constantly and that the resulting complexities demand intelligent and adaptive solutions. Our clients, whether in commercial or financial industries or in government, experience real results when they work with us. We combine industry, operational and technology skills with relevant proprietary and other assets in order to tailor solutions for each client's individual challenges. This adaptive approach is at the heart of our culture and has led to long-standing relationships with many of the world's leading companies and organizations. Our global consulting network of 9,700 people serves clients in more than 70 countries and engages with them for measurable results and long-lasting success.

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