

Stress tests: a key tool of banking supervision

Stress tests are an important supervisory tool used by FINMA to measure banks' resilience in simulated, extreme situations. The test results imply findings which permit timely intervention if required.

FINMA uses stress tests as a tool of banking supervision. Stress tests, which are conducted regularly and systematically by FINMA, replicate the impact of extreme scenarios on individual institutions.

Large institutions tested more frequently

Under FINMA's risk-based approach, large institutions, such as systemically important banks, are stress-tested more regularly and intensively than smaller ones. Since 2011, however, stress tests have also been carried out regularly at medium-sized and smaller institutions.

There are various types of stress tests, all sharing the same objective: to identify an institution's resilience in extreme situations. FINMA uses the following typical stress test analyses:

– **Loss potential analyses** measure the extent of

losses a supervised institution could incur given a significant deterioration in the general economic environment. Such analyses are carried out group-wide, mainly at big or systemically important banks, to provide transparency on capital ratios and leverage ratios following a stress event.

- Regular **mortgage stress tests** at selected banks identify the risks in their mortgage lending portfolios (see box).
- FINMA also conducts **stress tests for interest rate risks**, as well as combined stress tests for mortgage and interest rate risks at selected banks.

Stress tests are used in a similar way in the supervision of insurance companies, for example to simulate a property price slump and its influence on solvency capital, or to calculate the impact of possible legislative changes on the Swiss insurance market.

Stress tests are model calculations

Tests are conducted using hypothetical or historical scenarios defined by FINMA, where appropriate in consultation with the Swiss National Bank. In general, institutions calculate the impact of the prescribed scenario themselves and report the results to FINMA.

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Stress tests are normally carried out at a number of supervised institutions simultaneously. This allows FINMA to draw comparisons, thus obtaining valuable insights into the risk profile of institutions operating in the financial market.

FINMA does not publish stress test results for individual institutions. Some of the tests replicate extreme and highly improbable scenarios. Publication of the results could give rise to misinterpretations and undesired market reactions. It would also give banks an incentive to influence the test results.

Example: focus on the mortgage portfolio

Since 2011, FINMA has conducted stress tests specifically targeting banks' mortgage portfolios. The aim is to calculate potential losses given a strong adverse change in key economic parameters such as interest rates, unemployment, property prices or GDP. To ensure the scenarios are realistic, they are compared with previous crises in and outside Switzerland.

Banks use their own model to calculate the results of the stress test scenarios. They can then compare them with the figures generated by the FINMA model. This process sometimes reveals substantial differences and raises banks' awareness of the relevant issues.

Stress tests form the basis for targeted measures

The stress test results can highlight potential weaknesses in a bank's resilience. For this reason, they are discussed in detail with the institution concerned. If the shortcomings identified are confirmed, FINMA orders targeted measures under its supervision. The goal in every case is to protect creditors and investors, and ensure that financial markets continue to function efficiently.

Possible measures are as follows:

- FINMA, or a third party mandated by it, may carry out additional, in-depth analyses and enquiries.
- An institution may be required to adjust its risk profile.
- FINMA can impose higher capital or liquidity requirements for the portfolio concerned or the institution as a whole.
- FINMA can impose general capital measures, for example influencing dividend policy.

Other countries also conduct stress tests

In many countries, stress tests are a central supervisory tool or are used to calculate quantitative or qualitative capital or liquidity requirements. Prominent examples include the US regulator's Comprehensive Capital Analysis and Review (CCAR) and the EU Stress Test. The latter has been used for a number of years to regularly review the resilience of banks' capital as part of the Single Supervisory Mechanism.