

STRESS TESTING IN GREECE

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Stress testing for credit risk

General stress testing processes involve identifying possible changes in economic conditions that could have unfavorable effects on credit exposures and assessing the bank's ability to withstand them.

- Downturns
- Mild- recessions
- Recessions



Credit risk stress testing challenges

- Stress testing in **trading book instruments** is relatively straightforward (credit spreads)
- Stress testing of **loan books is more difficult** and involves stressing a number of variables, such as probabilities of default, recovery rates, collateral values, rating migration probabilities and internal ratings assigned to borrowers.



Credit risk stress testing challenges

This raises a number of issues:

- Internal data is often limited.
- Data for stress testing loan books is typically not marked to market.
- The stress testing of loan books is often underpinned by macro-economic shocks, which add an extra layer of complexity.

As a consequence, stress testing of loan books is less frequent, more complicated and less reliable than stress testing of credit spreads in the trading book.



Stress Events

Two words define a stress event:

- **exceptional**
- **plausible**

Stress-testing assesses effects of only **exceptional** (low probability) but **plausible** events

The *lack of plausibility* can *limit the importance* given to the results of tests



Exceptional Events

What is exceptional or extreme? ...

What is plausible?

- *There is no Canonical Answer*
- Distinctions are derived from everyday life; however as no consensus can be reached:
- They are meaningless in a quantitative context



Stress testing techniques

The most common stress-testing techniques involve:

- the determination of the impact on the portfolio of a business unit of a move in a particular risk factor (**a simple sensitivity test**)
- the determination of the impact on the portfolio of a business unit of a simultaneous move in a number of risk factors (**scenario analysis**)



Common stress testing scenarios

| | (for) Domestic Portfolio | (for) Foreign Subsidiaries | |
|----------------|--------------------------------|--|--|
| Credit Risk | +60% increase in PDS | +100% increase in Non Performing Loans | 1 & 2 notches downgrading of Credit Rating |



LGDs ?

for Domestic Portfolio

| | stressed PD | LGD |
|--|--|-----------------------|
| Credit Risk by category | | |
| <i>α. Corporate Loans & SMEs</i> <i>b. Consumer Loans</i> <i>c. Mortgage Loans</i> | Increased by 60% the estimated PD of each category | 45% 80% 35% |
| Credit Risk by economic sector | | |
| <i>α. Shipping</i> <i>b. Textile</i> <i>c. Constructions</i> | Increased by 90% the estimated PD of each sector | 45% 45% 45% |



Qualitative standards

- Independent risk management unit
- Oversight by the Board of Directors
- Stress testing program
- Compliance process
- Independent review
- Integration into decision making



Thank you !

