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The way forward for EU-wide stress tests

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EU-wide stress tests have constituted a very useful supervisory tool for increasing the resilience of the EU banking sector. This policy brief claims that the current EU-wide stress tests could benefit from the incorporation of some changes: implement a predominantly top-down approach, allow for dynamic balance sheets, foster the integration in the supervisory process (SREP, ICAAP, recovery plans), develop more than one adverse scenarios, reintroduce binding hurdles, and last but not least move to a full ownership of the exercise by the supervisor.

[1] This policy brief should not be reported as representing the views of Banco de Portugal. The opinions and conclusions expressed in this article are those of the author and do not necessarily reflect those of Banco de Portugal or the Eurosystem.

Introduction

Stress testing gained renewed relevance since the beginning of the Global Financial Crisis. The EU-wide stress tests, in particular, have contributed to a more resilient banking sector, through the resulting increases in the solvency levels. This policy brief is a contribution to the ongoing discussion on the future changes of the EU-wide stress test launched in the Discussion Paper of the EBA[2] by suggesting some possible improvements in the current design of EU-wide stress tests[3].

The proposed way-forward is characterized by a two-leg approach, but in a different way than the one proposed in the Discussion paper. At a first stage, banks develop the bank leg incorporating a very complete set of managerial decisions, respecting general rules defined by the supervisor. The bank leg opens new possibilities for improving bank capacities in risk management and strategic planning, adopting a comprehensive forward-looking approach. At a second stage, and benefiting from the assessment of the projections submitted by banks, the supervisory leg should play a prominent role in stress testing leading to the definition of Pillar 2 capital guidance, and, in very restricted cases, to immediate capital requirements.

Possible improvements in the EU-side stress tests

This policy brief puts forward a set of 10 suggestions, which also address the main points raised by the European Court of Auditors[4] concerning necessary improvements in the current design of stress testing.

Suggestion 1: Move to full ownership of the exercise by the supervisor

The ownership of the EU-wide Stress Test is now somewhat hybrid. Banks provide their estimated impacts relying on their internal models and static balance sheets. Supervisors do a very thorough quality assurance in a situation of significant information asymmetries, but at the end do not take the results as their own assessment. This is probably the most distinctive difference between, on one side, the US and UK exercises, where the supervisor owns the final results, and, on the other side, the EU one, where basically no one is willing to take full responsibility of the final results.

The final result of the stress test should be seen as the final word of the supervisor, translated in possible capital and/or risk mitigation measures. The supervisor should have full ownership of the exercise and correspondingly to be fully accountable for the results. A single disclosure outcome should be preserved and therefore only the supervisory leg should be released in the EBA website.

Suggestion 2: Move to top-down stress tests

Supervisors should develop a full top-down approach, relying on supervisory micro-macro models that combine bank reaction functions with a detailed modelling of their balance sheets and profit and loss accounts. To set the final baseline and stressed projections supervisors should make use of the available range of analytical tools, like detailed bank-specific elements, a set of rules and benchmarks to challenge the plausibility of the results, and

[2] European Banking Authority, (2020), "Discussion Paper on the future changes to the EU-wide stress test".

[3] This policy brief is based on "An Encompassing Forward-Looking Approach to Increase Resilience in the Banking Sector: A second life for EU Stress Tests", Neves, P.D. European Banking Institute Discussion Paper, No.1, September 2020.

[4] European Court of Auditor (2019), "EU-wide stress tests for banks: unparalleled amount of information on banks provided but greater coordination and focus needed", Special report.

competing modelling tools. Supervisors should also benefit from the submission by banks of their own baseline and stressed projections, to be taken as a reference (see suggestions 3 and 4 below).

To bring realism to the exercise supervisors should incorporate a series of spillover and feedback effects, like the interactions of the banking sector with the real economy, interconnectedness between the banking sector and the non-banking sector, or amplification channels under stress. This is one of the distinctive advantages of a top-down modelling framework compared with the bottom-up approach, where those elements cannot be captured.

Suggestion 3: Move to dynamic balance sheets

In spite of ensuring simplicity and comparability, the static balance sheet assumption does not provide a realistic picture of the bank´s balance sheet over the time horizon of the exercise. In particular, it does not provide any relevant indication on bank's expected strategies and actions for the years ahead and in particular on how the management is expected to act on future solvency, future liquidity and future profitability; i.e. that projection is basically uninformative on how the institution is supposed to perform over the exercise horizon. In addition, static balance sheets limit the realism of the exercise as it does not account for possible managerial responses under the baseline or/and the stress scenarios.

The stress test exercise should rely on dynamic balance sheets accounting for a fairly complete set of managerial decisions like business model adjustments, cost-efficiency measures, income diversification, and remedy measures under stress. This approach would be much more realistic than the static balance sheet one and, therefore, much more useful as a risk management tool and as a forward-looking planning exercise. The supervisor should define guiding principles to ensure full credibility of the exercise.

Suggestion 4: Integrate banks' projections in the supervisory process

Banks' projections, in particular under a common baseline, should constitute a key element for the SREP exercise as they would provide, in a perfectly comparable way across the participating institutions, the basis for the supervisor's assessment of liquidity, capital and sustainability of the business model. Given their unconstrained nature, other than the reliance on the common baseline scenario, the unconstrained projections (based on a dynamic balance sheet) would provide two distinctive advantages: (a) the possibility to assess the viability and sustainability of the business model; (b) the possibility to assess the consistency of the strategy of the bank, as ex-post evolutions would be confronted with the submitted projections, providing a straightforward quantitative basis for supervisors to penalize institutions with more deficient planning outcomes.

Suggestion 5: Integrate ICAAP in the stress testing process

The identification of truly idiosyncratic vulnerabilities of individual firms, not perfectly captured under common scenarios, should be done under ICAAP. ICAAP processes, when adequately challenged by supervisors, are particularly suited to bringing the point of view of the bank in a structured way. Incorporating management decisions over the horizon of the exercise make ICAAP projections, under the baseline and under stress, a much more integrated tool in stress testing.

The reinforced integration of ICAAP´s projections and stress testing would address a shortcoming of the current stress testing framework, which is the fact that EU-wide stress testing is not seen by banks as an adequate risk management tool. The ICAAP gives banks the possibility of identifying alternative shocks of relevance, with some bank-specific variations in relation the common stress test, and the identification of the corresponding mitigating actions. This information is also of the upmost relevance for the supervisory process.

Suggestion 6: Reinforce the holistic approach to capital measurement

The current EU stress tests rely excessively on internal models, therefore displaying a persistent unwarranted variability in Risk Weighted Assets, possibly damaging the transparency and even the level playing field of the exercise. The EU-wide stress tests also rely very much on the CET1 ratio and other risk-weighted measures, relegating the leverage ratio for a secondary role, given its limited information content under the static balance sheet assumption.

A more robust approach should rely on a broader range of capital metrics - unstressed vs stressed, risk-weighted vs non risk-weighted capital measures – and attaching a strengthened role to the full implementation of the December 2017 Basel agreement. Different capital metrics – risk-weighted capital requirements, leverage ratio and output floor – are complementary and mutually reinforcing as each one of those different standards constitutes a binding restriction for different banks. The complementarity between output floors (which retain a high degree of risk sensitivity but are subject to model risk) and the leverage ratio (largely free of modelling assumptions) constitute a determinant contribution for a more robust capital framework. In addition, the dynamic structure of balance sheets makes much informative the time path for the set of capital measures (in both the baseline and in the stressed projection).

Suggestion 7: Consider more than one adverse scenario

The current nature of the exercise restricts the attention to a single adverse scenario. It is easily understandable that a bank may perform very well in the specific scenario considered just because its particular fragilities are not affected under that scenario, whereas it would be much severely affected in alternative and as relevant stress scenarios. Therefore, focusing on a single fixed stress scenario does not provide robust information about an individual bank, just because a single scenario will not be equally stressful for all banks. This can be implemented through different degrees of relative intensity of shocks (to the real economy, financial markets, and asset prices) or featuring alternative scenarios, as climate change stress testing.

Suggestion 8: Move to a more balanced capital adequacy-profitability focus

Stress tests could also focus in a more balanced way on capital adequacy and profitability. Solvency levels are much higher than they were 10 years ago, but profitability is well below pre-crisis levels. In 2019, just before the Covid-19 outbreak, more than 80% of large euro area financial institutions had a return on equity below 8%. Rather than focusing mainly on solvency levels, it is important to give more consideration to current and future profitability, assessing sustainability under normal as well as stress conditions: Will banks manage to close the gap between return and cost on equity through credible cost reduction measures, efficiency gains, income diversification and business model adjustments? Are they in a position to raise capital through profits? A move to a more balanced capital adequacy-profitability focus with, as mentioned in suggestion 4, a stronger use of the baseline projections is an avenue that should be explored in future stress testing exercises.

Suggestion 9: Reintroduce binding hurdles

Stress tests should have consequences if circumstances justify. The reintroduction of minimum capital hurdles under stress, defined both in terms of the risk-weighted CET1 and the leverage ratio, would make clear that stress tests can have immediate consequences if capital levels are sufficiently reduced under stress. Those hurdles should incorporate buffers to capture global systemic importance.

Suggestion 10: Further integrate the stress testing exercise in the supervisory framework

The stress testing exercise could benefit from further integration in the supervisory process, as outlined in some of the recommendations above. In particular, the information contained in the recovery plans – bearing in mind the highly bank-specific nature of the possible measures and their obvious use in a dynamic balance-sheet context – could foster bank risk management and inform the supervisor on possible mitigating measures under adverse conditions; ICAAP projections under baseline and under stress could also be fully integrated in the stress testing procedure, providing more bank-specific information on possible vulnerabilities and corresponding mitigating management decisions, under a common macro set of assumptions; finally, baseline projections, under a dynamic balance sheet, should also be very informative on the prospective evolution of profitability and, therefore, on the SREP assessment.

Concluding remarks about the future of EU-wide stress tests

EU-wide stress tests have constituted a very useful supervisory tool for increasing the resilience of the EU banking sector. This policy brief provides a set of 10 suggestions that could be incorporated in the future design of EU-wide stress testing allowing, simultaneously, for a reinforced integration in the supervisory process.

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