

EFFICIENT STRESS TESTING : THE NEED FOR A GLOBAL CODE OF PRACTICES

BNP Paribas' views

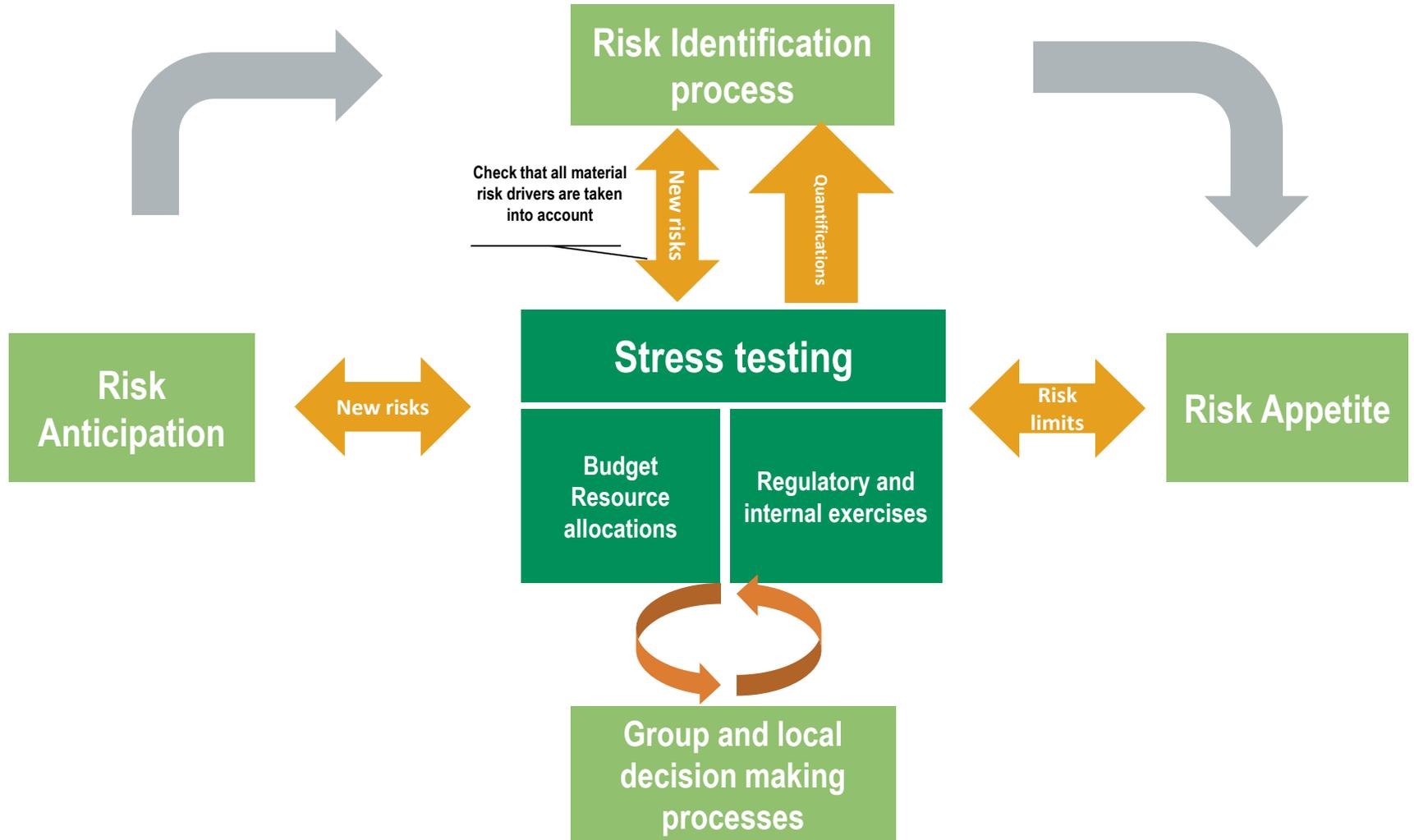
STRESS TESTING & FINANCIAL SYNTHESIS
DECEMBER 14TH 2018



BNP PARIBAS

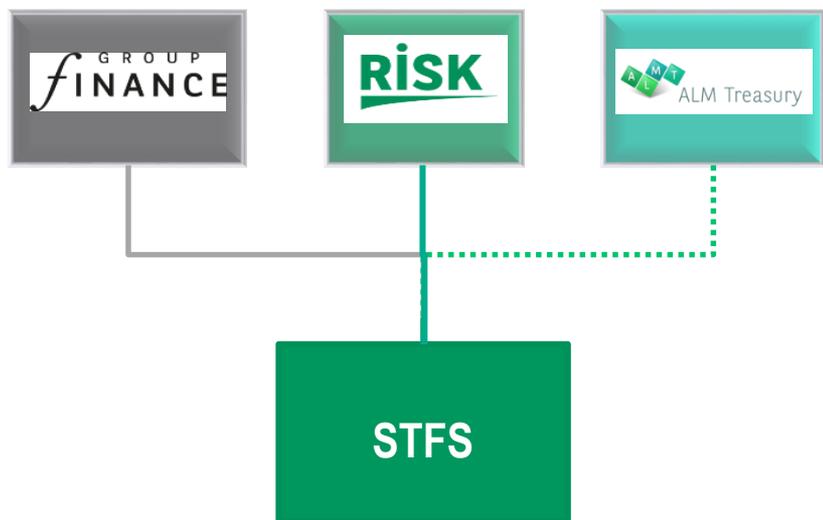
The bank for a changing world

Stress Testing is becoming central in the steering of the Bank

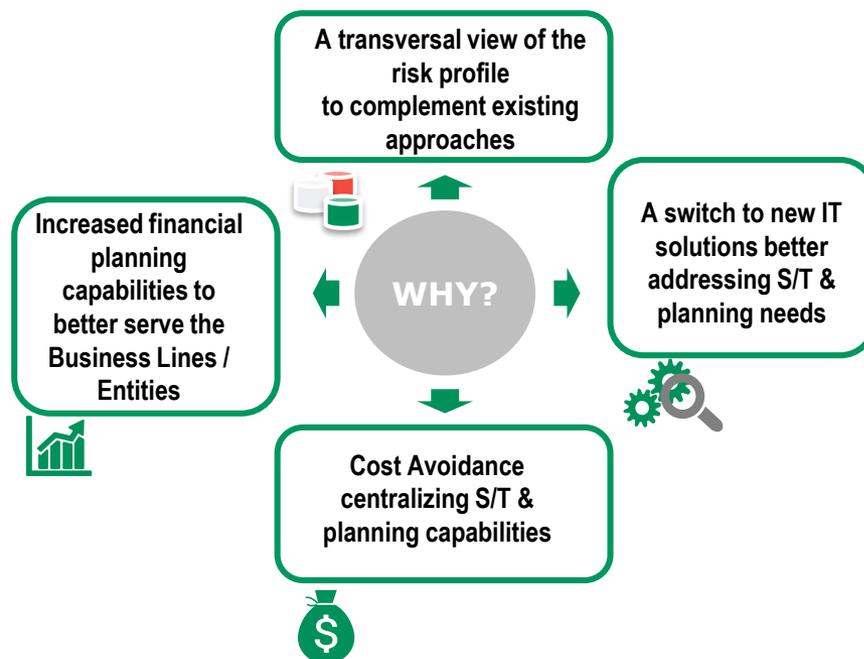


BNP Paribas invests on its stress testing & planning platform

STFS (Stress Testing and Financial Synthesis) Team launched early 2017



STEP (Stress Testing and Extended Planning) Program launched mid 2017



An uplift of stress testing requirements results from both a higher frequency of requests and more risk factors to be covered

- **A large number of regulatory stress tests has to be performed every year and the number keeps on increasing (68 at this stage for BNPP).**
- Most of the requests are focusing on credit risk but operational risk appears to be a growing attention point for supervisors.
- **Seven supervisors (CCAR, BRSA, CBRC, HFSA CAMSA, BNB, FINMA) ask for two or more adverse scenarios.**
- The number of reverse stress tests also increased since last year from 4 to 7.
- In addition, the overall complexity of supervisory demands increases significantly in terms of **audit trail, data granularity, data quality and models documentation.**
- Many small entities are now submitted to supervisory stress test exercises.



Stress testing is becoming the key capital and liquidity adequacy tool for supervisors that are relevant for BNP Paribas, with huge discrepancies in requirements

						
Regulator	EBA/ECB	BoE/PRA	FED	HKMA	FINMA	MAS
Coverage	Largest Eurozone(~48 Banks)	Largest UK banks & building societies	BHC & FB06; assets >10bn(DFAST), \$50bn(CCAR)	Locally-incorporated Als	All banks	All banks and FI's
Data Requirements/Reporting	Historical	FDSF4- Historical, Year-End Data & P&L Projections	FRY Reports-A/Q/M Data, P/L Projections	Projections required to be reported on HKMA-generated templates	Free format that needs to fulfill FINMA quantitative and qualitative requirements	No details available
Modelling Approach	Bottom-Up& Challenger/Top down; Firm's own models	Bottom-up/Granular; Firm's own models	Bottom-up; Firm's own models; Dynamic projections	Bottom-up; Firm's Own models, Static balance sheet assumption	Open	Bottom-up
Scenarios	Regulatory baseline, stress scenario	Common stress, Bespoke firm stress, common baseline	Baseline, Adverse, Severely Adverse, Firm's Scenarios	Single scenario. Has been based on China hard-landing for past 3 years	Baseline and severely adverse	Scenario analysis(Adverse)
Disclosure	Public disclosure of results by EBA	Public disclosure of results	Public disclosure of results	Disclosures made on risk basis	Only to FINMA	Shared with participating FI's(Does not disclose publically)
Frequency	Based on market developments (annual in principle)	Annual	Annual(Regulator-led), Semi annual(bank-led)	Annual (Feb. – May)	Annual	Annual



Ensuring coordination across jurisdictions with regards to local stress testing approaches is vital to limit pillar 2 inconsistencies and costs

- **As of today, heterogeneous stress testing frameworks between the various key regulations hamper:**
 - The consistency for international institutions between local stress testing and consolidated stress testing generating capital / liquidity add-ons and inability to integrate operationally in the steering of the Banks
 - The inability for home / host supervisors to capture a consistent understanding of how a banking group would react to a severe crisis and a limitation in the quality of information sharable around the stress testing of a given institution
 - A cost burden due to inefficiencies both in banking institutions and in local / group supervisions
- **Working on a convergence of regulatory stress testing would foster the value addition of the exercises both for the banks and for the supervisors, while enabling greater efficiencies to free the means to work on new risks.**
- **A first step could be to define common methodological approaches for regulatory stress testing and common reporting templates. Scenario building and integration to supervisory decisions could be managed later on.**



BNPP's views on the 2018 EBA stress test: efficiency could be improved (1/2)

- **Increasingly constrained / less risk-sensitive exercise**

- The combination of floors (market, fees and commissions) and adjustments required by ECB based on its own models or analysis, which are either top-down challenger models or bank benchmarks (e.g. credit bundled flags), has resulted in a final outcome that reflects less than in previous exercises the Bank's perception of risks. There is limited transparency on ECB models.
- The **static balance sheet assumption** is generally not representative of banks' models and particularly damaging for short term credit exposures, as cost of risk and NPL generation assume permanent rolling and migration of exposures over years of projection.
- In this year's exercise, **the approach can be characterized as hybrid between a top-down (ECB-led) and bottom-up (bank-led) exercises, which raises principle questions** (banks required to sign-off on projections partially generated by ECB models).and **limiting the operational insertion of the outcome of the stress test.**

- **Workload associated with the exercise**

- The exercise has been longer than previous ones and has been prolonged by an extended quality assurance process where the ECB has pushed for multiple add-ons.
- The exercise also involves an inflation of deliverables, such as AQI templates (model inventory, market risk information) or additional market risk templates, including requirement for de-facto second run on market risk stress test.



▪ Process issues

- Due to the increasing complexity of the EBA methodology, notably on IFRS9-related credit methodologies, the execution was tainted with **multiple operational problems**. Mistakes were identified by banks in templates (such as an error in the credit template identified by BNP Paribas upon first submission), which triggered 5 versions of the template to be issued.
- Some EBA templates were not well designed to allow the quality assurance work to be performed by the ECB, in particular on market risk (reconciliation of Full Reval and sensitivities). In the case of market risk, banks got penalized on data quality due to the inability of the ECB to conduct quality assurance.
- The ECB developed a Star portal which worked quite well but included template checks which were for some of them difficult to understand or incorrect. **Correcting these data quality flags happened to be a very time-consuming process.**
- **The complexity of the EBA methodology also led to multiple questions by banks (FAQ process).** Some FAQs with meaningful impact (NII, MDA, reserves) were issued late in the process.

▪ Communication issues

- Ongoing dialogue with the JST has been useful, in particular to explain choices made by the Bank. However, the **communication within the ECB, i.e. the articulation between the JST and the DG IV, was sometimes difficult.**
- The **communication between the ECB and the EBA** also leaves room for improvement. On some topics like the double taxation of investments in subsidiaries, it was apparent that both institutions had a different view and a lot of effort was spent obtaining a common view.



Propositions that can be made to enhance the EBA stress test results and process

Results & methodology

- **Credit risk:** Review the EBA methodology regarding the static balance sheet hypothesis which is not representative of banks' models and particularly damaging for short term credit exposures, as cost of risk and NPL generation assume permanent rolling and migration of exposures over years of projection.
- **NII/credit consistency:** Opt for a reporting by the "booking entity" and not by the "residence of the counterparty" for "Assets".
- **Fees & commissions:** Understand ECB's expectations on modelling.
- **Market risk:**
 - Overall dialogue on size of market risk shock vs other activities, which overly penalizes global markets activities;
 - Discussion on specific methodological aspects (CVA, VaR multiplier, Floor approach, and full reval multiples);
 - Understanding of data expected in market risk templates.
- **Macro economic scenario:** Adapt the calibration of the ESRB adverse macro-economic scenario to the predefined shock expected for the European Banking System.
- **Income from subsidiaries:** Avoid double taxation on revenues from investments in subsidiaries was obtained but should be cleared earlier for the next exercise.
- **Operational risk:** Avoid material conduct floor and quantification of unknown events.

Process

- **Template design & testing:** Volunteer to assist in the design & testing of the EBA templates notably on market risk templates to be more risk management oriented and to help the **Quality Assurance work** conducted by the ECB.
- **Comply flags:** Large comply flags **issued too late in the process** should also be avoided and **set-up an upstream dialogue** for with the ECB on that topic. Transparency on the controls would ease that dialogue.
- **QA process:** A clearer and more formalised process with explicit objectives and precise deadlines such as ECB Guidance and EBA FAQs should be sent to banks at least 20 days before different submission dates.

