Risk ID, Scenario Generation and Loss Estimation

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Enterprise Risk Management Framework

- Risk Identification
- Risk Catalog
- Risk Measurement
- Risk Reporting

BAU risk ID tools
- Risk ID discussions at the LOB/risk function level
- Forum for aggregated view

LOB3 routine
- Identification of risks in BAU & stress
- Qualitative assessment and prioritization (materiality threshold)

LOB2 routine
- Review and Challenge
- Final approval of risk catalogue
- Approval of Material Risks

LOB1 routine
- Objectives
- Analysis
- Development
- Variables & narratives
- Set Objectives based on recent analysis. Design scenarios inclusive of necessary features and linkage to estimation approaches
- Hold scenario customization meetings to ensure objectives are achieved and key risks are captured

Scenario Objectives
- Scenario design: overall
- Scenario customization by LOB/risk function
- Review & challenge and scenario selection

LOB3
- Key aspects of narrative
- Idiosyncratic risks
- Assess scenarios and ensure all materials risks are considered in Capital Planning

LOB2
- Non Model
- Model / Model family
- Mapping of risks to forecast items & models
- Identify key variables risks are sensitive to

LOB1
- Ensure Models appropriately capture key risks including idiosyncratic risks

Ongoing assessment and development of Estimation Methodologies

- Explicit process to link the Risk ID process & forecasting methodologies (mapping, assessment and linkage to standards for estimation method development)
TD's Risk Identification, Catalog, Materiality, and Measurement (RICMM) methodology covers the processes, tools and governance with respect to the identification, cataloging, assessment of materiality of, and measurement of the impact of risk events across the Company for (1) inclusion in the capital management and stress testing scenarios and (2) reporting of top and emerging risks.

RICMM methodology draws from existing risk identification sources and is comprised of five major steps. These steps are as follows:

1) **Identify and Compile Risks**: Compile risks from documented risk identification tools & methods.

2) **Review and Catalog Risks**: Evaluate each risk for inclusion in the Risk Catalog. This includes adding details to make the risks specific and filters out items that do not represent relevant risk events (e.g., no uncertainty, no residual impact).

3) **Assess Materiality**: Assess materiality of each risk based on the materiality scale (i.e., likelihood and impact).

4) **Measure Impacts of Material Risks**: Measure the material risks to inform the Capital Adequacy Planning Process (CAPP).

5) **Report Risks**: Update the Risk Catalog with measurements, finalize/approve reporting for CCAR and BAU purposes and utilized in Scenario Development.
Risk Identification integrated into Capital Planning

**Estimation Approach Coverage and Development**
- All key and material risks are mapped to estimation approaches (Model and Non Model)
- Ensure models capture key risks and are sufficiently sensitive. Weaknesses are identified and enhancements prioritized.
- Sensitivity analysis is conducted to identify key variables that should be stressed.

**Risk Identification and Reporting**
- All Risks are identified, Significant risks measured and reported
- New and emerging risks are identified on a quarterly basis
- Material Risks are reassessed on regular basis
- Risks are assessed against thresholds and limits

**Capital Planning**

**Scenario Design & Generation**
- Multiple scenarios are designed to capture all unique and material risks
- Scenarios are generated with consideration of how risks are estimated (modeled and non modeled)

**Stress Testing Results**
- Stress Testing Results are assessed against Risk and Capital Thresholds and Limits
- Inform limits and key risk indicators