**Santander Holdings USA, Inc.**



**Risk Appetite metrics**

**glossary**

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1. Introduction
   1. Purpose of the document

The Risk Appetite Metrics Glossary (“Glossary”) details the quantitative metrics that are included in the Risk Appetite Statements (“RAS”) for Santander Holdings USA, Inc. (“SHUSA”) and their calculation methodology and the frequency (monthly, quarterly, semi-annual or annual) of calculation.

It forms part of the suite of documents that apply to Risk Appetite at SHUSA:

* *Risk Appetite Framework:* principles for the setting, testing and monitoring of Risk Appetite
* *Risk Appetite Statement:* qualitative statements and quantitative metrics
* *Risk Appetite Metrics Glossary:* calculation of quantitative metrics
* *Risk Appetite Monitoring, Reporting, Escalation and Remediation Procedure:* actions required in the event of a metric trigger or limit breach
* *RA Metrics Collection and Reporting Process:* monthly and quarterly reporting, metric collection and distribution process
* *Santander Group RAS Reporting Process:* monthly and quarterly reporting, metric collection and distribution process
  1. Scope

The Glossary applies to SHUSA RAS metrics. Legal Entities can, at their discretion, adapt this document to their own RAS. In the event of discrepancies, the SHUSA document will prevail.

* 1. Document Ownership and Maintenance

As owner, the SHUSA Director of Risk Appetite is responsible for the development and maintenance of this Glossary and holds primary responsibility for ensuring it is implemented and embedded on a day to day basis.

The Glossary must be reviewed at least annually as part of the review of the Risk Appetite Statement and updated as necessary in the event of changes to the Risk Appetite metrics or to their calculations.

1. RAS Quantitative Metrics Summary Table

|  |  |  |
| --- | --- | --- |
| **RISK TYPE** | **METRIC** | **Entity** |
| **Capital adequacy** | Common Equity Tier 1 Ratio | SHUSA |
| Total Risk-based Capital | SHUSA |
| Tier 1 Leverage | SHUSA |
| Tier 1 Risk-based Capital | SHUSA |
| PPNR Impairment (CCAR 9Q) | SHUSA |
| Loss in Stress | SHUSA |
| SC Total RWA | SC |
| **Credit risk (losses)** | Total Credit Losses (CCAR 9Q) | SHUSA |
| Net Charge-off Rate | SBNA, SC, BSPR |
| 60/61+ DPD Rate | SBNA, SC, BSPR |
| **Credit risk (concentration)** | Single Obligor Exposure (Corporates & FI) | SBNA |
| Top 20 Corporate Exposure | SBNA |
| Obligor Rating Exposure | SBNA |
| Industry Exposure | SBNA |
| Finance & Insurance Exposure | SBNA |
| Utilities | SBNA |
| CRE Exposure | SBNA |
| Multifamily Exposure | SBNA |
| Project Finance Exposure | SBNA |
| Public Sector Exposure | BSPR |
| SC Subprime Assets as % SHUSA Credit Exposure | SC |
| Total Subprime Assets as % SHUSA Credit Exposure | SHUSA |
| **Residual value risk** | Net Residual Risk/CRLIT | SC |
| **Liquidity / funding risk** | Stressed Survival Period (days) | SHUSA |
| Liquidity Coverage Ratio – EUR | SHUSA |
| Liquidity Coverage Ratio Modified – US | SHUSA |
| Structural Funding Ratio | SHUSA |
| Liquidity Horizon – Wholesale Scenario | SHUSA |
| Asset Encumbrance (%) | SHUSA |
| **Interest rate risk** | Net interest income sensitivity (+/- 100bps shock) | SHUSA |
| Market value of equity sensitivity (+/- 100 bps shock) | SHUSA |
| **MtM portfolio risk** | Mark-to-market Value at Risk (VaR) | SHUSA |
| **Operational risk** | Gross operational risk losses / gross margin | SHUSA |
| Material Operational Risk Events | SHUSA |
| **Model risk** | Legacy Tier 1 Models in Production w/o Appropriate Approval | SHUSA |
| **Compliance and reputational risk** | Open MRIAs and other equivalent matters requiring immediate attention | SHUSA |

1. Capital Adequacy metrics
   1. Common Equity Tier 1 (CET1) Ratio (baseline and stress)

|  |  |
| --- | --- |
| **DEFINITION** | The minimum ratio of CET1 to Total Risk-Weighted Assets (RWAs) required under BHC Baseline and Stressed conditions. |
| **RISK TYPE** | Capital Adequacy Risk |
| **RATIONALE** | Part of the FDIC Prompt Corrective Action (“PCA”) standards; if ratios fall below PCA adequately capitalized levels, probability is high that SHUSA would not be able to act as a financial intermediary.  Important to external stakeholders when making decisions regarding SHUSA in either normal or stressful economic environments. |
| **ENTITY** | **SHUSA** |
| **METRIC PROVIDER** | **SHUSA Director of Capital Policy** |
| **TRIGGER AND LIMIT SETTING** | The Amber trigger and Red limit for CET1 are set annually based on SHUSA’s approved CET1 Capital Policy ratios at time of RAS setting:   * BHC Baseline scenario: Trigger is ratio for “use for capital expectations”; Limit is “internal business-as-usual minimum”. * BHC Stress scenario: Trigger is ratio “internal post-stress minimum level” plus a management adjustment; Limit is “internal post-stress minimum level”. |
| **TESTING FREQUENCY** | * Annually/CCAR output: The lowest value of the 9 quarters covered by the CCAR exercise is compared to the trigger and limit derived from the application of the Capital Policy (see above). The RAS will be presented for annual review with the CCAR outputs compared to the proposed trigger and limit. * Mid-cycle: The lowest value of the 9 quarters covered by the Mid-cycle exercise is compared to the trigger and limit derived from the application of the Capital Policy * Strategic Plan (e.g. P-18): The projected capital levels from the strategic plan are compared to the RAS limits and thresholds * Monthly: On a monthly basis the actual level of the metric is compared only to the BHC Baseline scenario limit and trigger. |
| **SOURCE OF INFORMATION** | * Capital Policy levels: Capital team for SHUSA based on the capital policy in effect at the time of the RAS submission * Annual CCAR: CCAR Team. Taken from the Y14A spreadsheet * Mid-cycle: CCAR Team. Taken from the Y14A spreadsheet * Strategic Plan: Strategic and Capital planning team * The monthly values for SHUSA Capital metrics are generated by Regulatory Capital and are made available through their SharePoint site each month. |

* 1. Total Risk-Based Capital (TRBC) Ratio (baseline and stress)

|  |  |
| --- | --- |
| **DEFINITION** | The minimum ratio of TRBC to Total Risk-Weighted Assets (RWAs) under Baseline and Stressed conditions |
| **RISK TYPE** | Capital Adequacy Risk |
| **RATIONALE** | If ratios fall below PCA adequately capitalized levels, probability is high that SHUSA would not be able to act as a financial intermediary.  Important to external stakeholders when making decisions regarding SHUSA in either normal or stressful economic environments. |
| **ENTITY** | **SHUSA** |
| **METRIC PROVIDER** | **SHUSA Director of Capital Policy** |
| **TRIGGER AND LIMIT SETTING** | The Amber trigger and Red limit for TRBC are set annually based on SHUSA’s approved TRBC Capital Policy ratios at time of RAS setting:   * BHC Baseline scenario: Trigger is ratio for “use for capital expectations”; Limit is “internal business-as-usual minimum”. * BHC Stress scenario: Trigger is ratio “internal post-stress minimum level” plus a management adjustment; Limit is “internal post-stress minimum level”. |
| **TESTING FREQUENCY** | * Annually/CCAR output: The lowest value of the 9 quarters covered by the CCAR exercise is compared to the trigger and limit derived from the application of the Capital Policy (see above). The RAS will be presented for annual review with the CCAR outputs compared to the proposed trigger and limit. * Mid-cycle: The lowest value of the 9 quarters covered by the Mid-cycle exercise is compared to the trigger and limit derived from the application of the Capital Policy * Strategic Plan (e.g. P-18): The projected capital levels from the strategic plan are compared to the RAS limits and thresholds * Monthly: On a monthly basis the actual level of the metric is compared only to the BHC Baseline scenario limit and trigger. |
| **SOURCE OF INFORMATION** | * Capital Policy levels: Capital team at SHUSA, based on the capital policy in effect at the time of the RAS submission * Annual CCAR: CCAR Team. Taken from the Y14A spreadsheet * Mid-cycle: CCAR Team. Taken from the Y14A spreadsheet * Strategic Plan: Strategic and Capital planning team * The monthly values for SHUSA Capital metrics are generated by Regulatory Capital and are made available through their SharePoint site each month. |

* 1. Tier 1 Leverage (T1L) Ratio (baseline and stress)

|  |  |
| --- | --- |
| **DEFINITION** | The minimum ratio of T1L to Adjusted Average Assets under Baseline and Stressed conditions |
| **RISK TYPE** | Capital Adequacy Risk |
| **RATIONALE** | If ratios fall below PCA adequately capitalized levels, probability is high that SHUSA would not be able to act as a financial intermediary.  Important to external stakeholders when making decisions regarding SHUSA in either normal or stressful economic environments. |
| **ENTITY** | **SHUSA** |
| **METRIC PROVIDER** | **SHUSA Director of Capital Policy** |
| **TRIGGER AND LIMIT SETTING** | The Amber trigger and Red limit for T1L are set annually based on SHUSA’s approved T1L Capital Policy ratios at time of RAS setting:   * BHC Baseline scenario: Trigger is ratio for “use for capital expectations”; Limit is “internal business-as-usual minimum”. * BHC Stress scenario: Trigger is ratio “internal post-stress minimum level” plus a management adjustment; Limit is “internal post-stress minimum level”. |
| **TESTING FREQUENCY** | * Annually/CCAR output: The lowest value of the 9 quarters covered by the CCAR exercise is compared to the trigger and limit derived from the application of the Capital Policy (see above). The RAS will be presented for annual review with the CCAR outputs compared to the proposed trigger and limit. * Mid-cycle: The lowest value of the 9 quarters covered by the Mid-cycle exercise is compared to the trigger and limit derived from the application of the Capital Policy * Strategic Plan (e.g. P-18): The projected capital levels from the strategic plan are compared to the RAS limits and thresholds * Monthly: On a monthly basis the actual level of the metric is compared only to the BHC Baseline scenario limit and trigger. |
| **SOURCE OF INFORMATION** | * Capital Policy levels: Capital team for SHUSA, based on the capital policy in effect at the time of the RAS submission * Annual CCAR: CCAR Team. Taken from the Y14A spreadsheet * Mid-cycle: CCAR Team. Taken from the Y14A spreadsheet * Strategic Plan: Strategic and Capital planning team * The monthly values for SHUSA Capital metrics are generated by Regulatory Capital and are made available through their SharePoint site each month |

* 1. **Tier 1 Risk-based Capital (T1RBC) Ratio (baseline and stress)**

|  |  |
| --- | --- |
| **DEFINITION** | The minimum ratio of T1RBC to Total Risk-Weighted Assets (RWAs) under Baseline and Stressed conditions |
| **RISK TYPE** | Capital Adequacy Risk |
| **RATIONALE** | If ratios fall below PCA adequately capitalized levels, probability is high that SHUSA would not be able to act as a financial intermediary.  Important to external stakeholders when making decisions regarding SHUSA in either normal or stressful economic environments. |
| **ENTITY** | **SHUSA** |
| **METRIC PROVIDER** | **SHUSA Director of Capital Policy** |
| **TRIGGER AND LIMIT SETTING** | The Amber trigger and Red limit for T1RBC are set annually based on SHUSA’s approved T1RBC Capital Policy ratios at time of RAS setting:   * BHC Baseline scenario: Trigger is ratio for “use for capital expectations”; Limit is “internal business-as-usual minimum”. * BHC Stress scenario: Trigger is ratio “internal post-stress minimum level” plus a management adjustment; Limit is “internal post-stress minimum level”. |
| **TESTING FREQUENCY** | * Annually/CCAR output: The lowest value of the 9 quarters covered by the CCAR exercise is compared to the trigger and limit derived from the application of the Capital Policy (see above). The RAS will be presented for annual review with the CCAR outputs compared to the proposed trigger and limit. * Mid-cycle: The lowest value of the 9 quarters covered by the Mid-cycle exercise is compared to the trigger and limit derived from the application of the Capital Policy * Strategic Plan (e.g. P-18): The projected capital levels from the strategic plan are compared to the RAS limits and thresholds * Monthly: On a monthly basis the actual level of the metric is compared only to the BHC Baseline scenario limit and trigger. |
| **SOURCE OF INFORMATION** | * Capital Policy levels: Capital team for SHUSA, based on the capital policy in effect at the time of the RAS submission * Annual CCAR: CCAR Team. Taken from the Y14A spreadsheet * Mid-cycle: CCAR Team. Taken from the Y14A spreadsheet * Strategic Plan: Strategic and Capital planning team * The monthly values for SHUSA Capital metrics are generated by Regulatory Capital and are made available through their SharePoint site each month. |

* 1. Pre-provisioned net revenue (PPNR) impairment

|  |  |
| --- | --- |
| **DEFINITION** | The projected 9Q cumulative increase in PPNR impairment between the CCAR BHC Stress and BHC Baseline scenarios and any available capital surplus under the CCAR BHC Stress scenario.    Material components include:   * Total Revenue, * Expenses due to Operational Risk, * Expenses due to Residual Value Risk (has its own metric) * Non-Interest Expenses |
| **RISK TYPE** | Capital Adequacy Risk |
| **RATIONALE** | PPNR impairment metric allows comparison of projected PPNR impairment under stress against the maximum impairment the bank can afford and still pass CCAR quantitatively. |
| **ENTITY** | **SHUSA** |
| **METRIC PROVIDER** | **SHUSA Director CCAR Team** |
| **TRIGGER AND LIMIT SETTING** | The CCAR PPNR impairment loss limit and trigger is set as follows:   * Each material component is allocated its PPNR impairment and, in addition, a proportionate amount of any capital surplus that may remain between the lowest quarterly value of the Tier 1 Risk-based Capital ratio throughout the CCAR period and the amber triggers/red limit level for the ratio. * Amber trigger: is calculated as the sum of PPNR impairment + the proportionate amount of capital surplus (in dollar terms) between the CCAR output for the Tier 1 Risk-based capital ratio and the internally set post-stress minimum ratio plus management adjustment (amber level). * Red limit: is calculated as the sum of PPNR impairment + the proportionate amount of capital surplus (in dollar terms) between the CCAR output for the Tier 1 Risk-based capital ratio and the internally set post-stress minimum Tier 1 Risk-based capital ratio (red limit).   *Capital Surplus ($MM) =*  *(T1 Risk Based Capital limit – 9Q T1 Risk Based Capital in BHC Stress) \* quarter with RWA in lowest 9Q T1RBC in BHC Stress* |
| **TESTING FREQUENCY** | Annually: CCAR output. The cumulative value of PPNR impairment under CCAR is compared to the annual re-calculation of amber trigger and red limit as set out above. The RAS will be presented for annual review with the CCAR outputs compared to the new triggers and limits. |
| **SOURCE OF INFORMATION** | CCAR Results – Y14A |

* 1. Loss in stress

|  |  |
| --- | --- |
| **DEFINITION** | The impact to Profit before Tax (“PBT”) that SHUSA is willing and able to assume – expressed as the percentage of the annual PBT that would be at risk, based on an adverse stressed scenario affecting the relevant risks.  The loss in stress metric consists of the following subcomponents (some component are additional metrics located in the appendix):   * PPNR * Credit Loss Provisions * GCB Concentration Risk (additional metric) * Loss Impact on Trading Portfolio (additional metric) * Impact on CVA Stress (additional metric) * Operational Risk Stressed Loss |
| **RISK TYPE** | Capital Adequacy Risk |
| **RATIONALE** | Ensures that losses under an adverse, but plausible stress do not exceed 100% of PBT; cascaded from Group. |
| **ENTITY** | **SHUSA** |
| **METRIC PROVIDER** | **RAS Function** |
| **TRIGGER AND LIMIT SETTING** | The metric is calculated once a year, to coincide with CCAR full year. It is presented as the annualized results of the full CCAR cycle, based on the FRB Adverse scenario:     * The amber trigger is set at 100% which is the standard for the Santander Group based on their risk appetite * The red trigger is set based on the outturn of the metric calculation and the current state of the strategic plans.   The trigger and limit are reviewed by the Board at the annual setting of the RAS. |
| **TESTING FREQUENCY** | Annual  The metric calculation is described in detail in Appendix 1. |
| **SOURCE OF INFORMATION** | Set out in the appendix |

* 1. SC Total Risk Weighted Assets (RWAs)

|  |  |
| --- | --- |
| **DEFINITION** | This metric is designed to link SC’s balance sheet size to capital via the CET1 ratio (Common Equity Tier 1). |
| **RISK TYPE** | Capital Adequacy Risk |
| **RATIONALE** | This metric is designed to link SC’s balance sheet size to capital via the CET1 ratio (Common Equity Tier 1). |
| **ENTITY** | **SC** |
| **METRIC PROVIDER** | **SC COO** |
| **TRIGGER AND LIMIT SETTING** | * The trigger is set at $2BN less than the red limit (see below) as it equates to approximately 2 months of net originations by SC. This buffer was deemed sufficient by management to enable management actions should the forecast CET1 ratio not be aligned with a level of 11%. * The absolute $ limit will be set monthly, and will reflect the total RWAs that SC should have in the following month in order to meet a CET1 ratio of 11% based on the previous month’s closing CET1 levels. |
| **TESTING FREQUENCY** | Monthly  Calculation:  Risk-weighted assets before deductions for excess allowance of loan and lease losses and allocated transfer risk reserve less Excess allowance for loan and lease losses less Allocated transfer risk reserve.  Risk Weights Applicable to SC: 0% Cash, 20% cash in collection, 100% loans/ intangibles, 150% exposures past 90 days or on nonaccrual |
| **SOURCE OF INFORMATION** | The metric is owned by the COO. External Reporting calculates and reports RWA in the excel file, “FR Y 9C SCH HC-R”. |

1. Credit risk metrics
   1. Total Credit Losses (CCAR 9Q)

|  |  |
| --- | --- |
| **DEFINITION** | SHUSA’s 9Q stressed cumulative credit losses and any available capital surplus under the CCAR BHC Stress scenario are allocated by material portfolio, then aggregated to the entity level for the SHUSA RAS.  Material portfolios are defined as:   * SBNA Total (Retail, Business Banking, CRE, C&I, Global Corporate Banking (GCB) – Large Corporates, GCB - MRG) * SC Auto (SHUSA Auto + SC Fleet loans) * BSPR   *This metric is displayed in the SHUSA RAS as a consolidated SHUSA figure only; the aforementioned portfolios are listed to illustrate how the losses are allocated* |
| **RISK TYPE** | Credit Risk |
| **RATIONALE** | RAS is tied to the objective of quantitatively passing CCAR; CCAR loss budgets allow comparison of projected losses under stress against the maximum losses the bank can afford to lose and pass CCAR.  SHUSA must not suffer more losses than would cause it to drop below internal capital ratio minima under stressed scenario. |
| **ENTITY** | **SHUSA** |
| **METRIC PROVIDER** | **SHUSA Director of CCAR Team** |
| **TRIGGER AND LIMIT SETTING** | The CCAR Stressed projected credit losses triggers and limits are set as follows:   * Each material portfolio is allocated its CCAR stressed cumulative credit losses and, in addition, a proportionate amount of any capital surplus that may remain between the lowest stressed quarterly value of the Tier 1 Risk-based Capital ratio throughout the CCAR period and the stressed amber triggers/red limit level for the ratio. * Amber trigger: is calculated as the sum of the portfolio’s stressed cumulative credit losses + the proportionate amount of capital surplus (in dollar terms) between the stressed CCAR output for the Tier 1 Risk-based capital ratio and the internally set post-stress minimum ratio plus management adjustment (amber trigger). * Red limit: is calculated as the sum of the portfolio’s stressed cumulative credit losses + the proportionate amount of capital surplus (in dollar terms) between the stressed CCAR output for the Tier 1 Risk-based capital ratio and the internally set post-stress minimum Tier 1 Risk-based capital ratio (red limit).   The capital surplus is calculated as follows[[1]](#footnote-1):  *Capital Surplus ($MM) =*  *(T1 Risk Based Capital limit – 9Q T1 Risk Based Capital in BHC Stress) \* quarter with RWA in lowest 9Q T1RBC in BHC Stress* |
| **TESTING FREQUENCY** | Annually: CCAR output. The stressed cumulative values of credit losses under CCAR are compared to the annual re-calculation of amber trigger and red limit as set out above. The RAS will be presented for annual review with the CCAR outputs compared to the new triggers and limits and the previous RAS levels. |
| **SOURCE OF INFORMATION** | Provided by the CCAR team:   * Cumulative stressed credit losses by portfolio: CCAR Y14 A * Capital Surplus as per calculation above |

* 1. Net charge-off rate

|  |  |
| --- | --- |
| **DEFINITION** | The twelve month trailing total of monthly net charge-offs (NCOs) as a percentage of average twelve month trailing outstanding balances, by material portfolio. These metrics are calibrated by portfolio and then aggregated to the entity level for presentation in the SHUSA RAS.  Material portfolios represented in the SHUSA RAS are:   * SC Auto * SBNA Total (Retail, Business Banking, CRE, C&I, Global Corporate Banking (GCB) – Large Corporates, GCB - MRG) * BSPR (Commercial & Other, Personal Loans, Mortgages, Credit Cards) |
| **RISK TYPE** | Credit Risk |
| **RATIONALE** | Projected stressed losses are only projected annually; SHUSA will want a BAU metric to monitor more frequently. These metrics serve as early warning indicators of exceeding the CCAR loss budget. |
| **ENTITY** | **SBNA, SC, BSPR** |
| **METRIC PROVIDER** | **SHUSA Credit Risk manager, SBNA Heads of Business, SC COO, BSPR Credit Risk** |
| **TRIGGER AND LIMIT SETTING** | Net charge off (NCO) triggers and limits are established annually through a calibration process. Each material portfolio is analyzed as follows:   1. **Calibration of loss scalars:** 2. Stress scalars are defined by dividing the average loss rates in stress conditions by the average in normal conditions. 3. Starting CCAR stress scalars are calculated based on the most recent CCAR average stressed loss rates in BHC Stress compared to the loss rates in the Base scenario. 4. Comparison benchmarks are calculated using internal and external historical data, where the average NCO rates in crisis and normal conditions are calculated for the entities and the regulated banks. 5. Based on the benchmark data points and the expert judgment of senior management, stress scalars are adjusted to arrive at a stress scalar used for setting each portfolio’s NCO limits. |
|  | 1. **Setting of triggers and limits for NCOs:** 2. Using the stressed CCAR projected credit losses by material portfolio defined for the amber trigger and the red limit in the previous metric, the cumulative 9Q losses are annualized ((losses/9)\*4) 3. The annualized stressed losses are divided by the stress scalar arrived at in step A) above to back out implied annualized baseline losses 4. The NCO rate is calculated based on implied annualized baseline losses and the portfolio’s average outstanding balances over the period of losses observed (9Q of BHC Stress). 5. The portfolio-level NCO rate limits are then aggregated to an entity-level (SBNA, SC, BSPR) NCO rate limit using a weighted-average. 6. The analysis is reviewed by internal experts and senior management, who adjust the NCOs if required 7. The agreed NCO rates are back tested against the historical time-series and forecasted rates (strategic budget and CCAR forecasts, as available) to observe the number of breaches expected over time, thus checking that the limits are appropriate and reasonable.  * Amber trigger: is set based on the amber CCAR projected annualized credit losses amount * Red Limit: is set based on the red CCAR projected annualized credit losses amount |
| **TESTING FREQUENCY** | Monthly.  Annualized monthly net charge-offs are defined as:    Total outstanding balances are defined as total on “balance sheet” balances, including interest accruing and non-interest accruing (NPL) balances. Outstanding balances are as of the last day of the month.  The monthly numerator and denominator should be compared to those used in the setting of the metric in order to highlight any divergence may be distorting the actuals versus the expected behavior of the portfolio. |
| **SOURCE OF INFORMATION** | SBNA Risk MI - Most recent month’s total net charge-offs and Total outstanding balances by portfolio are available within the Credit Metric Trends report (Commercial and Retail Risk data) published by SBNA Risk MI on a monthly basis. The report is available at [R:\CRMIS\DEPT\REPORTS\Credit Metrics](file:///\\corpormabop3\docs\CRMIS\DEPT\REPORTS\Credit%20Metrics)  SC - The data is queried from SC’s data warehouse by the Operational Data Development team.  BSPR – The information is provided by the Credit Risk MI area on a monthly basis and included within the Credit Trends Report. |

* 1. %60/ 61+ days past due

|  |  |
| --- | --- |
| **DEFINITION** | The percentage of total outstanding balances 60+ / 61+ days delinquent, for material portfolios.  SBNA and BSPR track delinquencies at 60+ days; SC tracks delinquency at 61+ days.  Material portfolios are defined as:   * SC Auto * SBNA Retail * BSPR (Commercial & Other, Personal Loans, Mortgages, Credit Cards) |
| **RISK TYPE** | Credit Risk |
| **RATIONALE** | Delinquencies are a pre-default measure that can serve as an early warning indicator of the deterioration of SHUSA’s retail portfolios; %60/61+ days past due (DPD) is ideal because %30+ DPD is too conservative (significant portion of these loans recover between 31-60 days) and %90+ DPD is too late |
| **ENTITY** | **SBNA, SC, BSPR** |
| **METRIC PROVIDER** | **SHUSA Credit Risk manager, SBNA Heads of Business, SC COO, BSPR Credit Risk** |
| **TRIGGER AND LIMIT SETTING** | Days Past Due (DPD) triggers and limits are established annually through a calibration process. Each material portfolio is analyzed as follows:   1. Calculation of the historical relationship (SBNA & BSPR) or forecasted CCAR relationship (SC) between NCOs and 60+/61+ DPD by establishing the scalar between NCO and DPD rates as percentages of balances (Scalar is calculated by dividing average DPDs over the time series by Average NCO rate over the same time series) 2. Applying the DPD ratio to amber and red NCO limits to derive DPD triggers and limits |
| **TESTING FREQUENCY** | Monthly.  Total outstanding balances are defined as total “on balance sheet” balances, including interest accruing and non-interest accruing (NPL) balances. Outstanding balances are as of the last day of the month. |
| **SOURCE OF INFORMATION** | SBNA Risk MI - Most recent month’s 60+ Delinquency by portfolio is available within the Delinquency report published by SBNA Risk MI. The report is available at R:\CMTEC\RRPT\\_Solvency Risk\Regulatory Reporting  Total outstanding balances by portfolio available within the Credit Metric Trends report (Commercial and Retail Risk data) published by SBNA Risk MI on a monthly basis. The report is available at R:\CRMIS\DEPT\REPORTS\Credit Metrics  SC - COO is the owner of this metric. The data is queried from SC’s database by the Operational Data Development team.  BSPR: The information is provided by Credit Risk MI area on a monthly basis and included within the Credit Trends Report. |

* 1. Single obligor (Corporates and Financial Institutions) exposure

|  |  |
| --- | --- |
| **DEFINITION** | The dollar value of total exposure to any individual customer (or aggregated to guarantor) in Global Corporate Banking, Middle Market, Auto or Specialty Lending.  It includes Financial Institutions and Corporates and other market counterparties. This subset excludes mortgage clearing houses.  Exposure is defined as the sum of:   * + Committed facilities (drawn and undrawn)   + Drawn balances under uncommitted facilities   + Off balance sheet items (e.g. Letters of Credit)   + PFE[[2]](#footnote-2) (“REC”) for derivatives.   Exposures will be calculated at individual counterparty level and aggregated as required to ultimate parent (economic group) level. Exposures to non-recourse project finance will be treated as individual exposures and not aggregated to the sponsor. |
| **RISK TYPE** | Credit Risk |
| **RATIONALE** | Important for SHUSA to monitor and manage obligor concentrations, given the size of their largest exposures, in order to limit the impact on capital of unexpected borrower events; cascaded from group. |
| **ENTITY** | **SBNA** |
| **METRIC PROVIDER** | **SBNA Solvency** |
| **TRIGGER AND LIMIT SETTING** | This metric has no amber trigger. The red limit is set per management discretion. |
| **TESTING FREQUENCY** | Monthly |
| **SOURCE OF INFORMATION** | The information is obtained from CCMIS.   * Single Obligor is defined as all related customers from the Customer table with a common Master One Obligor Number creating a Master One Obligor grouping. * Exposure is the sum of Binding Exposure for each Customer in the Customer table within the Master One Obligor grouping. * Master One Obligor Number is obtained by joining the Customer table to the Customer Additional Fields table using their native keys and joining the Master Customer Number in the Customer Additional Fields table to the Master Customer Number in the Master One Obligor To Master Customer table. * Note, PFE is not currently included as the calibration of limits did not take PFE into consideration |

* 1. Top 20 Corporates Exposure

|  |  |
| --- | --- |
| **DEFINITION** | The sum of the dollar value of total exposure to any individual customer (or aggregated to guarantor) in Global Corporate Banking, Middle Market, Auto or Specialty Lending.  It excludes Financial Institutions and other market counterparties.  Exposure is defined as the sum of:   * + Committed facilities (drawn and undrawn)   + Drawn balances under uncommitted facilities   + Off balance sheet items (e.g. Letters of Credit)   + PFE[[3]](#footnote-3) (“REC”) for derivatives.   Exposures will be calculated at individual counterparty level and aggregated as required to ultimate parent (economic group) level. Exposures to non-recourse project finance will be treated as individual exposures and not aggregated to the sponsor. |
| **RISK TYPE** | Credit Risk |
| **RATIONALE** | Important for SHUSA to monitor and manage obligor concentrations, given the size of their largest exposures, in order to limit the impact on capital of unexpected borrower events; cascaded from group. |
| **ENTITY** | **SBNA** |
| **METRIC PROVIDER** | **SBNA Solvency** |
| **TRIGGER AND LIMIT SETTING** | The amber trigger and red limit are set by management discretion. |
| **TESTING FREQUENCY** | Monthly |
| **SOURCE OF INFORMATION** | The information is obtained from CCMIS.   * Obligors are defined as all related customers from the Customer table with a common Master One Obligor Number creating a Master One Obligor grouping. * Exposure is the sum of Binding Exposure for each Customer in the Customer table within the Master One Obligor grouping. * Master One Obligor Number is obtained by joining the Customer table to the Customer Additional Fields table using their native keys and joining the Master Customer Number in the Customer Additional Fields table to the Master Customer Number in the Master One Obligor to Master Customer table. * Note, PFE is not currently included as the calibration of limits did not take PFE into consideration |

* 1. Obligor Rating Exposure

|  |  |
| --- | --- |
| **DEFINITION** | The total number of individual counterparties of lower credit quality (defined as internal risk rating of < 5.0) with exposure > $100MM  Exposure is defined as the sum of:   * + Committed facilities (drawn and undrawn)   + Drawn balances under uncommitted facilities   + Off balance sheet items (e.g. Letters of Credit)   + PFE[[4]](#footnote-4) (“REC”) for derivatives.   Exposures, including those in the Commercial Real Estate book, will be calculated at individual counterparty level and aggregated as required to ultimate parent (economic group) level. Exposures to non-recourse project finance will be treated as individual exposures and not aggregated to the sponsor. |
| **RISK TYPE** | Credit Risk |
| **RATIONALE** | Measures SHUSA’s significant exposures to lower credit quality counterparties |
| **ENTITY** | **SBNA** |
| **METRIC PROVIDER** | **SBNA Solvency** |
| **TRIGGER AND LIMIT SETTING** | Zero tolerance. |
| **TESTING FREQUENCY** | Monthly |
| **SOURCE OF INFORMATION** | The information is obtained from CCMIS.   * Counterparty is defined as all related customers from the Customer table with a common Master One Obligor Number creating a Master One Obligor grouping. * Exposure is the sum of Binding Exposure for each Customer in the Customer table within the Master One Obligor grouping. * Master One Obligor Number is obtained by joining the Customer table to the Customer Additional Fields table using their native keys and joining the Master Customer Number in the Customer Additional Fields table to the Master Customer Number in the Master One Obligor To Master Customer table. * Internal Risk Rating is the weighted average SRR of the Master One Obligor grouping. This is obtained by multiplying the SRR of each Master Customer in the Master Customer table by the sum of Binding Exposure from the Customer table for that Master Customer. The SRR is related to the Binding Exposure by joining the Customer table to the Customer Additional Fields table using their native keys and joining the Master Customer Number in the Customer Additional Fields table to the Master Customer Number in the Master Customer table. * This value is then aggregated to the Master One Obligor level by summing by Master One Obligor Number which can be obtained as previously described. * This aggregate value is then divided by the aggregate Binding Exposure of the Master One Obligor as previously defined * Note, PFE is not currently included as the calibration of limits did not take PFE into consideration |

* 1. Industry exposure (by OCC group)

|  |  |
| --- | --- |
| **DEFINITION** | The total dollar value exposure for all counterparties within one industry type, according to the OCC industry classification. Sectors / Industries are defined at the highest aggregation level for OCC industry codes[[5]](#footnote-5).  Exposure is defined as the sum of:   * + Committed facilities (drawn and undrawn)   + Drawn balances under uncommitted facilities   + Off balance sheet items (e.g. Letters of Credit)   + PFE[[6]](#footnote-6) (“REC”) for derivatives.   Exposures will be calculated at individual counterparty level and aggregated as required to ultimate parent (economic group) level. Exposures to non-recourse project finance will be treated as individual exposures and not aggregated to the sponsor. |
| **RISK TYPE** | Credit Risk |
| **RATIONALE** | Limits on industry size ensure that the credit portfolio is adequately diversified |
| **ENTITY** | **SBNA** |
| **METRIC PROVIDER** | **SBNA Solvency** |
| **TRIGGER AND LIMIT SETTING** | The amber trigger is anchored as a percentage of CET1+ACL with adjustment; red limit is adjusted up from amber trigger per management discretion. |
| **TESTING FREQUENCY** | Monthly |
| **SOURCE OF INFORMATION** | The information is obtained from CCMIS.  Utilizing the Credit Metric Cube table Sum Binding Exposure by NAICS Code where:   * CRE\_CI\_Indicator = Non-CRE and (excludes Investment CRE) * Permanent Segment Rank <> 16 and (excludes Small Business Banking) * Customer Number does not begin with GL (excludes General Ledger adjusting entries) * Join NAICSCode in result to NAICS in OCC NAICS Groups reference table and sum by OCC Group * Note, PFE is not currently included as the calibration of limits did not take PFE into consideration |

* 1. Industry exposure Finance & Insurance

|  |  |
| --- | --- |
| **DEFINITION** | The total dollar value exposure for all counterparties within the Finance and Insurance OCC industry classification.  Exposure is defined as the sum of:   * + Committed facilities (drawn and undrawn)   + Drawn balances under uncommitted facilities   + Off balance sheet items (e.g. Letters of Credit)   + PFE[[7]](#footnote-7) (“REC”) for derivatives.   Exposures will be calculated at individual counterparty level and aggregated as required to ultimate parent (economic group) level. |
| **RISK TYPE** | Credit Risk |
| **RATIONALE** | Limits are sized based on appetite and approved strategic plans. |
| **ENTITY** | **SBNA** |
| **METRIC PROVIDER** | **SBNA Solvency** |
| **TRIGGER AND LIMIT SETTING** | The amber trigger is anchored as a percentage of CET1+ACL with adjustment; red limit is adjusted up from amber trigger per management discretion. |
| **TESTING FREQUENCY** | Monthly |
| **SOURCE OF INFORMATION** | The information is obtained from CCMIS.  Utilizing the Credit Metric Cube table Sum Binding Exposure by NAICS Code where:   * xxxx |

* 1. Industry exposure Utilities

|  |  |
| --- | --- |
| **DEFINITION** | The total dollar value exposure for all counterparties within the Utilities OCC industry classification.  Exposure is defined as the sum of:   * + Committed facilities (drawn and undrawn)   + Drawn balances under uncommitted facilities   + Off balance sheet items (e.g. Letters of Credit)   + PFE[[8]](#footnote-8) (“REC”) for derivatives.   Exposures will be calculated at individual counterparty level and aggregated as required to ultimate parent (economic group) level. |
| **RISK TYPE** | Credit Risk |
| **RATIONALE** | Limits are sized based on appetite and approved strategic plans. |
| **ENTITY** | **SBNA** |
| **METRIC PROVIDER** | **SBNA Solvency** |
| **TRIGGER AND LIMIT SETTING** | The amber trigger is anchored as a percentage of CET1+ACL with adjustment; red limit is adjusted up from amber trigger per management discretion. |
| **TESTING FREQUENCY** | Monthly |
| **SOURCE OF INFORMATION** | The information is obtained from CCMIS.  Utilizing the Credit Metric Cube table Sum Binding Exposure by NAICS Code where:   * xxx |

* 1. CRE exposure

|  |  |
| --- | --- |
| **DEFINITION** | The total dollar value of Commercial Real Estate exposure, excluding the exposure to Multifamily real estate.  Exposure is defined as the sum of:   * + Committed facilities (drawn and undrawn)   + Drawn balances under uncommitted facilities   + Off balance sheet items (e.g. Letters of Credit)   + PFE[[9]](#footnote-9) (“REC”) for derivatives.   Exposures will be calculated at individual counterparty level and aggregated as required to ultimate parent (economic group) level. |
| **RISK TYPE** | Credit Risk |
| **RATIONALE** | CRE is an important metric to track in the RAS given its large exposure; cascaded from Group |
| **ENTITY** | **SBNA** |
| **METRIC PROVIDER** | **SBNA Solvency** |
| **TRIGGER AND LIMIT SETTING** | The amber trigger is anchored as a percentage of CET1+ACL with adjustment; red limit is adjusted up from amber trigger per management discretion. |
| **TESTING FREQUENCY** | Monthly |
| **SOURCE OF INFORMATION** | CRE is defined as all Investor/Developer Commercial Real Estate (CRE) exposure, excluding exposure classified as Multifamily property type.  In the CCMIS database, Investor/Developer CRE is defined the following way:   * Utilizing the Concentration Detail Expanded table Sum Binding Exposure where: * Segment = “CRE” or “SREC” or “CCRC” * Or, GL Category = “CRE” or “Multi” and Investor Classification <> “Owner Occupied RE”   and   * Retype <> Multifamily * Note, PFE is not currently included as the calibration of limits did not take PFE into consideration |

* 1. Multifamily exposure

|  |  |
| --- | --- |
| **DEFINITION** | The total dollar value of Multifamily real estate exposure.  Exposure is defined as the sum of:   * + Committed facilities (drawn and undrawn)   + Drawn balances under uncommitted facilities   + Off balance sheet items (e.g. Letters of Credit)   + PFE[[10]](#footnote-10) (“REC”) for derivatives.   Exposures will be calculated at individual counterparty level and aggregated as required to ultimate parent (economic group) level. |
| **RISK TYPE** | Credit Risk |
| **RATIONALE** | Multifamily is an important metric to track in the RAS given its large exposure |
| **ENTITY** | **SBNA** |
| **METRIC PROVIDER** | **SBNA Solvency** |
| **TRIGGER AND LIMIT SETTING** | The amber trigger is anchored as a percentage of CET1+ACL with adjustment; red limit is adjusted up from amber trigger per management discretion. |
| **TESTING FREQUENCY** | Monthly |
| **SOURCE OF INFORMATION** | Multifamily exposure is defined as any Investor/Developer Commercial Real Estate (CRE) exposure classified as Multifamily property type.  In the CCMIS database, Investor/Developer CRE is defined the following way:   * Utilizing the Concentration Detail Expanded table Sum Binding Exposure where: * Segment = “CRE” or “SREC” or “CCRC” * Or, GL Category = “CRE” or “Multi” and Investor Classification <> “Owner Occupied RE”   and   * Retype = Multifamily * Note, PFE is not currently included as the calibration of limits did not take PFE into consideration |

* 1. Project Finance Exposure

|  |  |
| --- | --- |
| **DEFINITION** | Measures the maximum exposure with project finance portfolios relative to equity.  Within specialized lending portfolios, only project finance is taken into consideration in the SHUSA RAS, presently, as other specialized portfolios are immaterial in size. |
| **RISK TYPE** | Credit Risk |
| **RATIONALE** | Important for SHUSA to monitor and manage portfolio exposures of more sophisticated and higher-risk assets, in order to limit impact on capital of unexpected borrower events |
| **ENTITY** | **SBNA** |
| **METRIC PROVIDER** | **SBNA Solvency** |
| **TRIGGER AND LIMIT SETTING** | The amber trigger is anchored as a percentage of CET1+ACL with adjustment; red limit is adjusted up from amber trigger per management discretion. |
| **TESTING FREQUENCY** | Monthly |
| **SOURCE OF INFORMATION** | SBNA Solvency |

* 1. Public Sector exposure (BSPR only)

|  |  |
| --- | --- |
| **DEFINITION** | The total dollar value of PR Government, authorities, agencies, dependencies and municipalities exposure to BSPR, including contingencies.  Exposure is defined as the sum of:   * + Committed facilities (drawn and undrawn)   + Drawn balances under uncommitted facilities   + Off balance sheet items (e.g. Letters of Credit)   + PFE[[11]](#footnote-11) (“REC”) for derivatives.   Exposures will be calculated at individual counterparty level and aggregated as required to ultimate parent (economic group) level. |
| **RISK TYPE** | Credit Risk |
| **RATIONALE** | Important metric given its large exposure at BSPR relative to total credit exposure and current public sector challenges in Puerto Rico |
| **ENTITY** | **BSPR** |
| **METRIC PROVIDER** | **BSPR Credit Risk** |
| **TRIGGER AND LIMIT SETTING** | The amber trigger and red limit for this metric are reviewed annually by the Board when setting the RAS. The trigger and limit for Public Sector exposure are set as follows:   * Amber trigger: Set using a 20% deviation below the max exposure (limit) per BSPR Concentration Guideline (Board-approved document) * Red limit: Max exposure per BSPR Concentration Guideline (Board-approved document) is 14% of the total credit portfolio exposure |
| **TESTING FREQUENCY** | Monthly |
| **SOURCE OF INFORMATION** | The data is provided by the BSPR Credit Risk MI area on a monthly basis and also included within the Concentration Guideline (BOD-approved document and monitoring is presented quarterly at the Board Risk Committee). |

* 1. SC subprime assets as % of SHUSA credit exposure

|  |  |
| --- | --- |
| **DEFINITION** | The concentration of SC sub-prime assets as a % of total SHUSA consolidated credit exposure |
| **RISK TYPE** | Credit Risk |
| **RATIONALE** | Important to monitor and manage the portion of SHUSA’s credit exposure which is subprime in order to maintain and improve SHUSA’s issuer ratings |
| **ENTITY** | **SC** |
| **METRIC PROVIDER** | **SHUSA Solvency, SC COO** |
| **TRIGGER AND LIMIT SETTING** | The limit and trigger are as follows:   * The amber trigger of 23% establishes an early warning indicator that allows for management actions to control the sub-prime exposure growth; * A red limit of 25% was set by management as it aligns with Rating Agencies’ expectations and is benchmarked against competitors’ positions. |
| **TESTING FREQUENCY** | Monthly  The percentage of SHUSA’s sub-prime assets to SHUSA’s total credit exposure:  Sub-prime assets are defined as having either a FICO score below 630 or no FICO score – excluding assets without a FICO score but classified as Commercial Fleet Retail and Chrysler Commercial Fleet Lease, Chrysler Lease, UBER Lease, wholesale and dealer lending and revolving facility – “Drive time”.  Total SHUSA Credit Exposure (excludes leases) is defined as the sum of:   * Committed facilities (drawn and undrawn) * Drawn balances under uncommitted facilities * Off balance sheet items (e.g. Letters of Credit) * PFE (“REC”) for derivatives. |
| **SOURCE OF INFORMATION** | SC Subprime exposure: The data is queried from SC’s database by the Operational Data Development team.  SHUSA Total Exposure: SBNA uses the GL + Unfunded exposure in CCMIS to generate Total Exposure and from there we receive the figure from the Solvency team in an Excel file titled “SBNA Credit\_Template” on a monthly basis. SC exposure: The sum of Current Legal Balance Amount, Total Letter of Credit Issued Amount and Credit Availability Amount, In deals participated with other financial institutions, this amount is based on the Santander only portion of the deal sourced from SQLPrdDataWarehouse, table: Vw\_Loan\_Finance\_Month\_Fact |

* 1. SHUSA subprime assets as % of SHUSA credit exposure

|  |  |
| --- | --- |
| **DEFINITION** | The concentration of sub-prime assets as a % of total SHUSA consolidated credit exposure |
| **RISK TYPE** | Credit Risk |
| **RATIONALE** | Important to monitor and manage the portion of SHUSA’s credit exposure which is subprime in order to maintain and improve SHUSA’s issuer ratings |
| **ENTITY** | **SBNA, SC, BSPR** |
| **METRIC PROVIDER** | **SHUSA Solvency, SBNA Solvency, SC COO and BSPR ?** |
| **TRIGGER AND LIMIT SETTING** | The limit and trigger are as follows:   * The amber trigger of 23% establishes an early warning indicator that allows for management actions to control the sub-prime exposure growth; * A red limit of 25% was set by management as it aligns with Rating Agencies’ expectations and is benchmarked against competitors’ positions. |
| **TESTING FREQUENCY** | Monthly  The percentage of SHUSA’s sub-prime assets to SHUSA’s total credit exposure:  Sub-prime assets are defined as having either a FICO score below 630 or no FICO score – excluding assets without a FICO score but classified as Commercial Fleet Retail and Chrysler Commercial Fleet Lease, Chrysler Lease, UBER Lease, wholesale and dealer lending and revolving facility – “Drive time”.  Total SHUSA Credit Exposure (excludes leases) is defined as the sum of:   * Committed facilities (drawn and undrawn) * Drawn balances under uncommitted facilities * Off balance sheet items (e.g. Letters of Credit) * PFE (“REC”) for derivatives. |
| **SOURCE OF INFORMATION** | SC Subprime exposure: . The data is queried from SC’s database by the Operational Data Development team.  SBNA comes from SBNA Solvency.  BSPR - BSPR subprime exposure comes from BSPR Credit Portfolio Management team.  SHUSA Total Exposure: SBNA uses the GL + Unfunded exposure in CCMIS to generate Total Exposure and from there we receive the figure from the Solvency team in an Excel file titled “SBNA Credit\_Template” on a monthly basis. SC exposure: The sum of Current Legal Balance Amount, Total Letter of Credit Issued Amount and Credit Availability Amount, In deals participated with other financial institutions, this amount is based on the Santander only portion of the deal sourced from SQLPrdDataWarehouse, table: Vw\_Loan\_Finance\_Month\_Fact |

1. Residual value risk metrics
   1. Net residual value exposure

|  |  |
| --- | --- |
| **DEFINITION** | The implied profit or loss in the residual value of all leased vehicles at the point in time of calculation – the difference between the Forecasted Residual Value (3-month smoothed average) and the Contract Residual less Incentives & Tax (CRLIT) as a proportion of total CRLIT |
| **RISK TYPE** | Residual Value Risk |
| **RATIONALE** | As the projected residual value deterioration is only calculated annually, SHUSA will want a BAU metric to monitor more frequently |
| **ENTITY** | **SC** |
| **METRIC PROVIDER** | **SC COO** |
| **TRIGGER AND LIMIT SETTING** | Net Residual Value exposure trigger and limit are established annually through a calibration process as follows:   * Using an internal ROA model, SC compares lifetime expected return of lease assets (lifetime ROA) to CRLIT * This is translated to a shortfall analysis to show the break-even point where the portfolio ROA becomes 0%. This point is selected as the red limit * Expert judgement is used to set the amber trigger |
| **TESTING FREQUENCY** | Monthly  The difference between Forecasted Residual Value and CRLIT, divided by CRLIT – net of the Chrysler Risk Share:    The Forecasted Residual Value is the lower of ALG (quarterly number) and the forecasted residual value for internal mark (3 month average).  Note: The forecast used for future originations is produced every 2 months, while the forecast used to measure residual risk on the current portfolio (Mark to Market) is produced every month. |
| **SOURCE OF INFORMATION** | The data is produced by the Residual Forecasting Model. The model output is then uploaded into the SC data warehouse. The Credit Risk MIS team then pulls the metric data from the data warehouse. |

1. Liquidity / funding risk metrics
   1. Stressed survival period

|  |  |
| --- | --- |
| **DEFINITION** | The amount of days until SHUSA and its subsidiaries will have a cash shortfall under stressed conditions.  The metric is stressed under four different scenarios:   * Market, * Idiosyncratic * Combined, and * Less-than-Well-Capitalized |
| **RISK TYPE** | Liquidity / Funding Risk |
| **RATIONALE** | Designed to measure longevity of liquidity under short-term stress |
| **ENTITY** | **SHUSA** |
| **METRIC PROVIDER** | **SHUSA Market and Liquidity Risk** |
| **TRIGGER AND LIMIT SETTING** | The amber trigger (75 days) and red limit (45 days) are set because they represent a more conservative timeframe than the regulatory definition of 30 days. |
| **TESTING FREQUENCY** | Monthly |
| **SOURCE OF INFORMATION** | Data comes from Treasury. File name: “Management LST Results 2015 October”  Note: Golden Sources for calculation of the metric are changing in Q1’16. A more detailed description of the source information and calculation will be provided in due course. |

* 1. Liquidity Coverage Ratio (LCR)

|  |  |
| --- | --- |
| **DEFINITION** | A measurement of the resilience of a firm to a short term (30 days) liquidity crisis, on the basis of its High Quality Liquid Assets.  Two LCR metrics will be calculated – one under European regulatory guidelines and another under US guidelines. Limits and triggers will be measured against the worst-case of the two metrics. |
| **RISK TYPE** | Liquidity / Funding Risk |
| **RATIONALE** | Defined by regulators and is designed to measure liquidity under short-term stress. SHUSA must ensure its cash flow profile keeps the Liquidity Coverage Ratio (LCR) at or above limits to remain compliant with European and US regulatory requirements. |
| **ENTITY** | **SHUSA** |
| **METRIC PROVIDER** | **SHUSA Market and Liquidity Risk** |
| **TRIGGER AND LIMIT SETTING** | LCR limits are set using the regulatory minimum (100%) as an anchor point, then adding a buffer per management discretion, and verifying against historical trends. |
| **TESTING FREQUENCY** | Monthly.  The proportion of High Quality Liquid assets to total net cash outflows:    The calculation of the LCR follows the standard industry calculation:   * HQLA are defined based on specific regulatory guidance; * Net Cash Outflows are defined as expected cash outflows over the next 30 days less expected cash inflows over the next 30 days, based on the European method, and 21 days for both expected cash outflows and inflows using the U.S. method. Specific cash outflows/inflows are defined according to the specific regulatory guidance[[12]](#footnote-12). |
| **SOURCE OF INFORMATION** | QRM; Source and Use Report; Investment Portfolio Report; GL - File name: “RL\_LCR\_019\_*yyyymm*” |

* 1. Structural Funding Ratio (SFR)

|  |  |
| --- | --- |
| **DEFINITION** | The percentage of structural assets that are funded with medium and long term liabilities |
| **RISK TYPE** | Liquidity / Funding Risk |
| **RATIONALE** | SHUSA currently monitors the structural funding ratio which is a precursor to net stable funding ratio (NSFR), a monitoring standard specified by US and European regulators. |
| **ENTITY** | **SHUSA** |
| **METRIC PROVIDER** | **SHUSA Market and Liquidity Risk** |
| **TRIGGER AND LIMIT SETTING** | SFR trigger and limit are set keeping in mind the future regulatory minimum (100%) for the Net Stable Funding Ratio, adding a buffer per management discretion, and verifying against historical trends. |
| **TESTING FREQUENCY** | Monthly.  The ratio of total structural funding to total structural needs[[13]](#footnote-13): |
| **SOURCE OF INFORMATION** | SHUSA - Liquidity risk - File name: “201511\_O\_SFR\_Detail” |

* 1. Liquidity Horizon – Wholesale Scenario

|  |  |
| --- | --- |
| **DEFINITION** | The metric is designed to measure the amount of days remaining until the bank will have a cash shortfall and only considers wholesale term funding, cash, and unencumbered securities. The metric does not consider Core Deposits/Loans. |
| **RISK TYPE** | Liquidity / Funding Risk |
| **RATIONALE** | Measures the amount of liquidity that would ensure survival horizon equal to a minimum number of days in a wholesale scenario with no funding renewal and no additional sources of funding.  The RAS metric only considers SHUSA (Parent Only). |
| **ENTITY** | **SHUSA** |
| **METRIC PROVIDER** | **SHUSA Market and Liquidity Risk** |
| **TRIGGER AND LIMIT SETTING** | The Liquidity Horizon in a Wholesale Scenario (Parent-Only) limit and trigger are set as follows:   * Amber trigger: <=12 Months * Red limit: <=6 Months |
| **TESTING FREQUENCY** | Monthly.  The only items considered in the calculation of the metric are wholesale term funding, cash, and unencumbered securities. Only contractual outflows are included and debt is by maturity, rather than by call date. The Liquidity Horizon equals the point at which cash and unencumbered securities are not sufficient to meet the cumulative outflows of the wholesale term funding. |
| **SOURCE OF INFORMATION** | QRM; Source and Use Report; Investment Portfolio Report; GL - File name: “Liquidity\_Limit\_SHUSA\_*mmyyyy*.xls” |

* 1. Asset encumbrance

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| --- | --- |
| **DEFINITION** | Assets encumbered by guarantees contributed in mid- and long-term financing operations in order to finance balance sheet commercial activity (covered bonds, securitizations and TLTRO) as a percentage of total assets. |
| **RISK TYPE** | Liquidity/Funding Risk |
| **RATIONALE** | Tracks the level of assets which are encumbered and might not be readily accessible should the Bank need emergency liquidity, thus, it allows for monitoring of mid- and long-term liquidity |
| **ENTITY** | **SHUSA** |
| **METRIC PROVIDER** | **SHUSA Market and Liquidity Risk** |
| **TRIGGER AND LIMIT SETTING** | Levels are set per group guidance. |
| **TESTING FREQUENCY** | Monthly |
| **SOURCE OF INFORMATION** | SHUSA Liquidity risk |

1. Interest rate risk metrics
   1. Net interest income (NII) sensitivity (+/- 100 bps shock)

|  |  |
| --- | --- |
| **DEFINITION** | A measurement of the directional sensitivity of earnings at risk (NII) due to the re-pricing interaction of the existing assets and liabilities over time resulting from a particular yield curve shift. |
| **RISK TYPE** | Interest Rate Risk |
| **RATIONALE** | Estimates the directional sensitivity of earnings at risk (NII) due to the re-pricing interaction of the existing assets and liabilities over time resulting from a particular yield curve shift.  NII shocks provide a short- to mid-term view of the impact on earnings and capital due to various changes in interest rates. |
| **ENTITY** | **SHUSA** |
| **METRIC PROVIDER** | **SHUSA Market and Liquidity Risk** |
| **TRIGGER AND LIMIT SETTING** | NII shocks provide a short-to-mid-term view of the impact on earnings and capital due to various changes in interest rates. The configuration of the metric is an industry standard. The metric is computed through the full measurement of interest income and expense of all components of the Balance Sheet (On-B/S and Off-B/S), selecting the biggest loss generated between relevant parallel shocks computed from minus 100 bps up to plus 100 bps, compared to the base case scenario.   * The amber trigger is established by the business line (Treasury) * The red limit is proposed by Treasury, reviewed and challenged by Market Risk and approved by ERM. |
| **TESTING FREQUENCY** | Monthly  The NII shock and its base Net Interest Income projection are subject to a complex set of assumptions and models. These models and assumptions are subject to SHUSA’s Model Risk Governance. |
| **SOURCE OF INFORMATION** | QRM - File name: “GAP Int Driver”  SHUSA QRM supplies Market Risk with finalized values. |

* 1. Market value of equity (MVE) sensitivity (+/- 100 bps shock)

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| --- | --- |
| **DEFINITION** | A measurement of the directional sensitivity of the market value of equity (MVE) due to the re-pricing interaction of the existing assets and liabilities over time resulting from a particular yield curve shift.  MVE measures the difference between the current fair value of an asset and the current fair value of liabilities; it serves as a proxy to the market value of SHUSA’s balance sheet. |
| **RISK TYPE** | Interest Rate Risk |
| **RATIONALE** | Estimates the directional sensitivity of MVE due to the re-pricing interaction of the existing assets and liabilities over time resulting from a particular yield curve shift.  MVE shocks provide a longer-term economic view of SHUSA’s IRR exposure that incorporates all future cash flows from existing asset/liability and off-balance sheet exposures. |
| **ENTITY** | **SHUSA** |
| **METRIC PROVIDER** | **SHUSA Market and Liquidity Risk** |
| **TRIGGER AND LIMIT SETTING** | The metric is computed through the full revaluation of all interest rate sensitivity components of the Balance Sheet (On-B/S and Off-), selecting the biggest loss generated between a relevant parallel shocks computed from minus 200 bps up to plus 200 bps compared to the base case scenario.  This configuration of the metric is an industry standard.   * The amber trigger is established by the business line (Treasury) * The red limit is proposed by Treasury, reviewed and challenged by Market Risk and approved by ERM |
| **TESTING FREQUENCY** | Monthly - MVE is dependent on a number of assumptions that include: interest rate characteristics of deposits, non-maturing assets/liabilities and the optionality of loans. All deposits without explicit maturities[[14]](#footnote-14) such as DDA, Savings and MMDA type accounts are subject to call risk. Market Risk will annually calibrate and submit to the ALCO and Model Risk Management non maturity asset and liability durations and the model calibrations. |
| **SOURCE OF INFORMATION** | QRM - File name: “GAP Int Driver”  SHUSA QRM supplies Market Risk with finalized values. |

1. Mark-to-market portfolio risk metrics
   1. Mark-to-market (MtM) Value at Risk (VaR)

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| --- | --- |
| **DEFINITION** | The MtM VaR metric covers the market risk in all material trading portfolios for SHUSA.  Material portfolios include:   * SBNA client facilitation, * SBNA mortgage servicing rights, * SBNA mortgage pipeline, and * SIS (market-making) |
| **RISK TYPE** | Market Risk |
| **RATIONALE** | The purpose of this metric is to have a standalone measure that covers the value at risk in all the material MtM portfolios for SHUSA. These include: client facilitation, mortgage pipeline, mortgage servicing rights, and SC economic hedges. |
| **ENTITY** | **SHUSA** |
| **METRIC PROVIDER** | **SHUSA Market and Liquidity Risk** |
| **TRIGGER AND LIMIT SETTING** | The metric is calculated by taking historical series of daily market data of the last 2 years and using a level of confidence of 99% (unweighted percentile). This configuration of the metric is an industry standard.  SHUSA MtM VaR is the sum of the 99% VaR limits for each portfolio set by management. It is assumed that limits for portfolio are additive, i.e. there is no risk diversification across portfolios   * The amber trigger is at $7MM * The red limit is at $9MM and is calibrated as the amber trigger plus the sum of an additional buffer by portfolio, added per management discretion. Management chose to add a buffer for the following reasons: * The VaR position may grow with new risk balance limits * Increased market volatility may elevate the VaR metric even if the position does not change |
| **TESTING FREQUENCY** | Monthly  The sum of the end-of-month 99% VaR for the each material portfolio. |
| **SOURCE OF INFORMATION** | Aire system |

1. Operational Risk Metrics
   1. Gross Operational Risk Losses over Gross Margin

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| **DEFINITION** | Gross operational risk (OR) losses as a percentage of gross margin within the same period |
| **RISK TYPE** | Operational Risk |
| **RATIONALE** | Measures overall OR losses and is preferred over measuring net OR losses as measuring gross losses accounts for a “worst-case” scenario where there are no loss recoveries and avoids not acting on a RAS limit breach while waiting for recoveries |
| **ENTITY** | **SHUSA** |
| **METRIC PROVIDER** | **SHUSA Director of Operational Risk** |
| **TRIGGER AND LIMIT SETTING** | The following calibration methodology is applied to SHUSA utilizing historical internal loss data on an annual basis to arrive at the amber trigger and red limits:   * Amber trigger: 12 month trailing historical average of gross OR losses as a % of 12 month trailing historical average of gross margin less 1 standard deviation * Red limit: 12 month trailing historical average of gross OR losses as a % of 12 month trailing historical average of gross margin   This approach highlights systemic changes in operational risk management, covers a full cycle of losses and revenue, which lowers volatility from seasonality and is consistent with the methodology of other RAS metrics.  Final SHUSA limits are calculated as a weighted average of the entity levels to ensure internal consistency of breach events. |
| **TESTING FREQUENCY** | Quarterly with cumulative data for the last 12 months at the end of the period.  Gross operational risk losses are defined as:  Operational Risk Losses reported in the period (excluding recoveries – direct or indirect, excluding legal reserves and including legal settlements)  Gross Margin (Net Revenue) is defined as: |
| **SOURCE OF INFORMATION** | * Data provided by : Internal Loss Data Team * Source System : Internal Loss Database * Data Provided : Gross Operational Risk Loss Number * Data provided by : Management Control * Source System : Cumbre (SBNA), Archer (SC) * Data Provided : Net revenue (Gross Margin) Number |

* 1. Material Operational Risk Events

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| **DEFINITION** | Material OR events and their impacts categorized amongst one or more of the following impact types:   * Economic/Financial * Regulatory * Reputational and Media Impact * Client and Service * Other |
| **RISK TYPE** | Operational Risk |
| **RATIONALE** | May be indicators of a weakening control environment or increased risk profile |
| **ENTITY** | **SHUSA** |
| **METRIC PROVIDER** | **SHUSA Director of Operational Risk** |
| **TRIGGER AND LIMIT SETTING** | The following calibration methodology is applied to SHUSA utilizing historical operational risk material event data on an annual basis to arrive at the amber trigger and red limits:   * Amber trigger: 12 month trailing historical average of operational risk events that meet the impact thresholds (below) less ½ standard deviation * Red limit: 12 month trailing historical average of operational risk events that meet the impact thresholds (below)   Only the Economic/Financial OR impact type is accompanied by a limit. The other impact types use thresholds, which, in some cases, require the use of management judgment and subjectivity in order to determine whether a breach has occurred. The limit and threshold criteria for each impact type are as follows:   * Economic/Financial   1. Real or potential loss; **Limit: >= $500K**   2. P&L Impact; **Limit: >= $500K**   3. Incidents with the same root cause whose aggregate amount over the last 12 months exceeds $500K * Regulatory   1. Severe regulatory attention including the potential for investigation leading to enforcement actions such as Memorandum of Understanding, Consent Order, Cease and Desist   2. Potential cessation of major business, operation or strategic action * Reputational and Media Impact   Event results in negative or unfavourable regional, national or international media coverage   * Client and Service   1. Technological incidents classified as P0, P1 or P2   2. Affecting more than 1% of the clients, or 5,000 in absolute value, and impacted detrimentally   3. Affecting 10 or more strategic, commercial or institutional clients * Other   Loss of or exposure to confidential or restricted information |
| **TESTING FREQUENCY** | Quarterly.  No calculation necessary. Data extraction from SAN US Operational Risk Event Repository of operational risk events with impacts as defined above. |
| **SOURCE OF INFORMATION** | * Data provided by : SHUSA Operational Risk Management * Source System : SAN US Operational Risk Event Repository * Data Provided : Absolute number of escalated operational risk events that meet the material event impact thresholds within the period |

1. Model risk metrics
   1. Backlog of Tier 1 models not appropriately approved

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| --- | --- |
| **METRIC** | The number of legacy Tier 1 models used in production without appropriate approvals. |
| **RISK TYPE** | Model Risk |
| **RATIONALE** | Tracks progress against the schedule for clearing the large validation backlog; important given regulatory concerns about model risk management at SHUSA |
| **ENTITY** | **SHUSA** |
| **METRIC PROVIDER** | **SHUSA Model Risk Management** |
| **TRIGGER AND LIMIT SETTING** | The metric is set with 6 months targets for validation of models linked to agreed remediation plans.  A breach of the metric occurs if the target is not reached within the allocated quarter. |
| **TESTING FREQUENCY** | Monthly  No calculation necessary – the number of Tier 1 (highest risk) model used in production without appropriate approvals, as recorded in the MRMG database. |
| **SOURCE OF INFORMATION** | The model inventory database is a Sequel Server back-end, with InfoPath frontend forms where MRMG tracks all pertinent details associated to the model lifecycle. This includes:   * Model / non-model use detail * Approval dates * Validation history * Findings remediation detail * Change / decommissioning / reactivation requests * Ongoing monitoring issues * Policy exception detail * Annual review |

1. Compliance and reputational risk metrics
   1. Open Matters Requiring Immediate Attention (MRIAs) and other equivalent matters requiring immediate attention

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| --- | --- |
| **DEFINITION** | The total number of open MRIAs issued by the Federal Reserve to all Santander entities operating in the US and over which the FRB has jurisdiction, and all other matters of equivalent gravity requiring immediate attention.  MRIAs are matters of significant importance and urgency that the Federal Reserve requires an organization to address immediately and include: matters that have the potential to pose significant risk to the organization’s safety and soundness; matters that represent significant instances of noncompliance with laws or regulations; repeat criticisms that have escalated in importance due to insufficient attention or action by the organization; and, in the case of consumer compliance examinations, matters that have the potential to cause significant consumer harm. |
| **RISK TYPE** | Compliance / Reputational Risk |
| **RATIONALE** | It is vital for SHUSA to restore the confidence of regulators and other external stakeholders; metric send a strong tone from the Board about focus on regulatory compliance |
| **ENTITY** | **SHUSA, SBNA** |
| **METRIC PROVIDER** | **SHUSA Chief Compliance Officer** |
| **TRIGGER AND LIMIT SETTING** | This metric has no amber trigger and the red limit is set at zero. |
| **TESTING FREQUENCY** | Monthly |
| **SOURCE OF INFORMATION** | MRIAs are identified in Federal Reserve examination or inspection reports, supervisory letters or other supervisory communications and are recorded and tracked by SHUSA Regulatory Affairs in an Excel file. |

1. Document Administration
   1. Ownership and Authorship

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version** | **Date** | **Author** | **Owner** | **Change** |
| 1.0 | January 2016 | SHUSA Risk Appetite Team | SHUSA Risk Appetite Team | First SHUSA Risk Appetite Metrics Glossary |
| 2.0 | June 2016 | SHUSA Risk Appetite Team | SHUSA Risk Appetite Team | Updated to reflect the 2016 Annual setting of the RAS |
|  |  |  |  |  |

* 1. Sign Off

|  |  |  |
| --- | --- | --- |
| **Approving Body** | **Governance Committee Approval or Endorsement** | **Final Approval Date** |
| SHUSA Director of Risk Appetite | N/A | January 28, 2016 |
| SHUSA Director of Risk Appetite |  |  |
|  |  |  |

1. APPENDIX II – Loss in Stress metric calculation

**Loss in Stress**

***Definition:*** The impact to Profit before Tax (“PBT”) that SHUSA is willing and able to assume. It is expressed as the percentage of the annual PBT that would be at risk based on an adverse stressed scenario affecting the relevant risks.



***US calculations of Loss in Stress[[15]](#footnote-15):***

* Calculation: The metric is calculated once a year, to coincide with CCAR full year. It is presented as the accumulated results over the full CCAR cycle.
* Stressed outputs: The metric uses the outputs from the CCAR FRB Base, Adverse and Severely Adverse[[16]](#footnote-16) scenarios, but is submitted to Santander Group based on the FRB Adverse outputs as this scenario is closest to ICAAP.
* Stress Horizon: The stressed impacts to the PBT scenarios will be calculated as per CCAR, allowing for 9 quarters of adjusted losses[[17]](#footnote-17).
* PBT: The PBT that is used in this metric calculation comes from the Strategic Plan for SHUSA as agreed with Santander Group[[18]](#footnote-18) under IFRS accounting. The impact to the income statement is calculated for each year as the sum of the stress tests described in items 13.1.1 to 13.1.6 below.

**Stress tests applied to the metric:** The metric stresses are divided into two categories: macroeconomic stresses and non-macroeconomic stresses. The methodology described below reflects the US calculation and, where applicable, the adjustments that are made to reconcile Group methodology to US practices.

***US Sign-off required for the metric calculation:***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of Stress** | **Metric Element** | **SBNA** | **SC** | **SHUSA** |
|  | **Strategic Plan PBT** | SHUSA Finance Capital Planning | SHUSA Finance Capital Planning | SHUSA Finance Capital Planning |
| **Macroeconomic Stress** | **PPNR**  **Baseline & Stressed** | SHUSA Finance Capital Planning –  Strategic Plan and CCAR Output | SHUSA Finance Capital Planning –  Strategic Plan and CCAR Output | SHUSA Finance Capital Planning –  Strategic Plan and CCAR Output |
| **Macroeconomic Stress** | **Provisions** | SBNA Solvency & SHUSA Finance Capital Planning –  CCAR Output | SHUSA Finance Capital Planning –  CCAR Output | SHUSA RAS team –  Sum of SBNA and SC |
| **Macroeconomic Stress** | **Stressed Concentration GCB** | SHUSA & SBNA Solvency | N/A | SHUSA & SBNA Solvency |
| **Non-macroeconomic stress** | **Stressed VaR** | Market Risk SHUSA | Market Risk SHUSA | Market Risk SHUSA |
| **Non-macroeconomic stress** | **Stressed CVA** | Market Risk SHUSA | N/A | Market Risk SHUSA |
| **Non-macroeconomic stress** | **Operational Risk Stressed Losses Overlay** | SHUSA Operational Risk and Finance Capital Planning –  CCAR Output | SHUSA Operational Risk and Finance Capital Planning –  CCAR Output | SHUSA RAS team –  Sum of SBNA and SC |

* + 1. **Stressed pre-provision net revenue (PPNR)**

***Definition:*** This metric reflects the incremental negative variation in PPNR in a stressed scenario, over and above the baseline case.

The scenarios used are those defined in the CCAR scenarios for SHUSA, SBNA and SC. CCAR methodology is applied to stress PPNR and reflects the sensitivity of PPNR to changes in interest rates, the increase / decrease of total asset and liability levels, price changes in assets and liabilities as well as other relevant Balance Sheet management items such as accelerated leases depreciation.

***Group reconciliation for PPNR***: US PPNR stresses include the following items that are excluded from the Group Calculation of stressed PPNR: Operational Risk Expense and accelerated auto lease depreciation. These items are adjusted as follows to enable a “normalized” Santander Group calculation.

1. The operational risk expense that is included in CCAR as a line item in PPNR is added back to PPNR using the average for the 9 quarters and annualizing. This adjustment is applied to SHUSA, SBNA and SC. The amount is taken from the PPNR projection sheet for each entity. This is done because the Loss in Stress calculation for Group requires that operational risk stress be itemized separately, taking only the incremental change to operational risk losses.
2. The annualized accelerated auto lease depreciation is added back to PPNR for SBNA, SC and SHUSA.

|  |  |
| --- | --- |
| **METRIC** | Stressed pre-provision net revenue |
| **ENTITY** | **SBNA, SC** |
| **CALCULATION** | Incremental PPNR losses under adverse scenario to baseline using CCAR methodology.  Detailed calculation procedures are available from the Finance Capital Planning team and CCAR teams. |
| **FREQUENCY** | Annual CCAR full year |
| **SOURCE OF INFORMATION** | CCAR Y14-A and Strategic Plan  SHUSA, SBNA and SC Finance Capital Planning and CCAR teams |

* + 1. **Stressed credit provisions**

***Definition:*** This stress covers the increase in provisions for credit risk in a stressed scenario over and above the base case. The scenarios used are those defined in CCAR and the methodology is applied to obtain stressed provisions projections.

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| --- | --- |
| **METRIC** | Stressed credit provisions |
| **ENTITY** | **SBNA, SC** |
| **CALCULATION** | Incremental provisions under the FRB Severely Adverse scenario to FRB Baseline. |
| **FREQUENCY** | Annual, CCAR full year |
| **SOURCE OF INFORMATION** | CCAR Y14-A and Strategic Plan  SBNA and SC CCAR Solvency functions |

* + 1. GCB Concentration Risk

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| --- | --- |
| **DEFINITION** | Concentration losses (LGD) as the output of a calculation that measures (with a probability of 1 in 40 years) the granularity of the GBM portfolio penalizing large counterparty concentration, low portfolio granularity, large counterparty poor credit quality |
| **RISK TYPE** | Credit Risk |
| **RATIONALE** | Serves as a component of the Loss in Stress composite metric; provides a high-magnitude, low-probability loss forecast which is affected by over-concentration in the GCB portfolio |
| **ENTITY** | **SBNA** |
| **TRIGGER AND LIMIT SETTING** | There is no threshold presently set for GCB Concentration Risk, as it is a subcomponent of the Loss in Stress metric |
| **TESTING FREQUENCY** | Quarterly |
| **SOURCE OF INFORMATION** | SHUSA Solvency Risk |

* + 1. **Loss Impact on Trading Portfolio**

***Definition:*** Stress based on plausible scenarios that assume trading positions and portfolios will be traded regularly.

As this is not a stress associated to the severity of macroeconomic scenarios, the impact applied to each of the 2 years will be the same for each year.

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| --- | --- |
| **METRIC** | Stressed Value at Risk (“VaR”) Trading Book (SBNA Client Facilitation) |
| **ENTITY** | **SBNA** |
| **CALCULATION** | VaR Model in use and validated. Model documentation and metric calculation procedures are available from the SHUSA Market Risk Management function. |
| **FREQUENCY** | Monthly |
| **SOURCE OF INFORMATION** | SHUSA Market Risk |

* + 1. **Stressed Credit Valuation Adjustment (“CVA”)**

***Definition:*** This stress measures, through the application of an LGD stress (Group stress set at 60% of stressed CVA), the incremental CVAs in a stressed scenario with respect to the base line.

As this is not a stress associated to the severity of macroeconomic scenarios, the impact applied to each of the 2 years will be the same for each year.

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| --- | --- |
| **METRIC** | Stressed Credit Valuation Adjustment (“CVA”) |
| **ENTITY** | **SBNA** |
| **CALCULATION** | CVA Stress Model in use and validated. Model documentation and metric calculation procedures are available from the SHUSA Market Risk Management function. |
| **FREQUENCY** | Monthly |
| **SOURCE OF INFORMATION** | SHUSA Market Risk |

* + 1. **Operational Risk Stress**

***Definition:*** The Operational Risk loss estimate from CCAR submission.

The CCAR calculation has 3 main components:

1. The starting point of the baseline estimate is the average observed historical gross loss determined from internal loss data for each Basel Tier One risk event type.
2. Because the historical average (HA) is a backward looking metric it must be augmented by a Scenario Analysis (SA) process that reflects the firm's forward looking risk profile. This is achieved by comparing the HA with the estimate from SA by entity and risk type. If the SA estimate is larger than the HA, the difference is added to the HA result in the form of an add-on.
3. Additionally there is the contribution from legal reserves. Legal reserves are set via a third-party evaluation of the probable, possible and remotely possible outcomes of outstanding litigations. The baseline estimate is the sum of the HA, SA Add-on and the probable expected legal losses.

The severely adverse scenario includes a management overlay in the form of a heuristically derived scaling component estimated from external loss data that is used to scale the baseline HA and SA-Add on for each risk type and entity. In particular, the putative Legal Reserves include the expected losses for those cases deemed possible and an idiosyncratic loss scenario is also included for each legal entity.

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| --- | --- |
| **METRIC** | Operational Risk Stress |
| **ENTITY** | **SBNA, SC** |
| **CALCULATION** | Operational Risk Stress Model in development and subject to validation. Calculation as described above. Output of model is used to inform an expert judgment adjustment. Documentation available from the SHUSA Operational Risk function. |
| **FREQUENCY** | Annual |
| **SOURCE OF INFORMATION** | CCAR Y14-A and Strategic Plan  SHUSA, SC and SBNA Operational Risk functions |

1. Exact allocation of credit losses and PPNR impairment is calculated in the RAS excel file for SHUSA, tab “Credit Losses and PPNR Limits” [↑](#footnote-ref-1)
2. “PFE”: “potential future exposure” for derivatives. “REC”: Spanish acronym for “Riesgo en Crédito”, equivalent to PFE in the context of derivative exposures. [↑](#footnote-ref-2)
3. “PFE”: “potential future exposure” for derivatives. “REC”: Spanish acronym for “Riesgo en Crédito”, equivalent to PFE in the context of derivative exposures. [↑](#footnote-ref-3)
4. “PFE”: “potential future exposure” for derivatives. “REC”: Spanish acronym for “Riesgo en Crédito”, equivalent to PFE in the context of derivative exposures. [↑](#footnote-ref-4)
5. Specific limits are set for CRE and Multifamily which are based on internal definitions for CRE and Multifamily. Those exposures will also feed into the relevant OCC industry classification. [↑](#footnote-ref-5)
6. “PFE”: “potential future exposure” for derivatives. “REC”: Spanish acronym for “Riesgo en Crédito”, equivalent to PFE in the context of derivative exposures. [↑](#footnote-ref-6)
7. “PFE”: “potential future exposure” for derivatives. “REC”: Spanish acronym for “Riesgo en Crédito”, equivalent to PFE in the context of derivative exposures. [↑](#footnote-ref-7)
8. “PFE”: “potential future exposure” for derivatives. “REC”: Spanish acronym for “Riesgo en Crédito”, equivalent to PFE in the context of derivative exposures. [↑](#footnote-ref-8)
9. “PFE”: “potential future exposure” for derivatives. “REC”: Spanish acronym for “Riesgo en Crédito”, equivalent to PFE in the context of derivative exposures. [↑](#footnote-ref-9)
10. “PFE”: “potential future exposure” for derivatives. “REC”: Spanish acronym for “Riesgo en Crédito”, equivalent to PFE in the context of derivative exposures. [↑](#footnote-ref-10)
11. “PFE”: “potential future exposure” for derivatives. “REC”: Spanish acronym for “Riesgo en Crédito”, equivalent to PFE in the context of derivative exposures. [↑](#footnote-ref-11)
12. October 2014: The Office of the Comptroller of the Currency (OCC), the Board of Governors of the Federal Reserve System (Federal Reserve Board), and the Federal Deposit Insurance Corporation (collectively, the agencies) issued a final rule that implements a quantitative liquidity requirement consistent with the liquidity coverage ratio (LCR) established by the Basel Committee on Banking Supervision (BCBS). [↑](#footnote-ref-12)
13. **SC. Structural Needs.** Loan portfolio, netted by the allowance for loan losses; Total amount of restricted cash; Lease balance; Other assets: other assets considered as structural are Goodwill, intangibles and Furniture and Fixtures. **SC. Structural Funding.** Warehouses: intragroup and third party warehouses; Outstanding Securitizations; Equity. **SBNA. Structural Needs.** Complete Loan portfolio (Retail and Commercial); investments that have been clearly identified as structural (stock for FHLB and FRB membership); Other assets: Allowance for Loan Losses, Real estate assets, Fixed assets and BOLI.**SBNA. Structural Funding.** DDA, Savings and Money Market Deposits ( Retail + SME); CDs and Jumbo CDs; Wholesale Borrowing identified as structural (FHLB Borrowings); Total amount of debt; Equity (Brokered Deposits are excluded). **SHUSA. Structural Needs.** SBNA Structural Needs + SC Structural Needs. **SHUSA. Structural Funding.** SHUSA Debt issuances; SBNA Structural Funding; SC Structural Funding. [↑](#footnote-ref-13)
14. For a detailed description of the non-maturity deposit model used by SHUSA please refer to the **Appendix IV** to this Policy. [↑](#footnote-ref-14)
15. ***Group Calculation:*** The metric is calculated twice a year: to coincide with ICAAP full year and with the half year refresh. The metric is calculated for each year over a 3 year horizon, aligned to the ICAAP process, as the ratio of the incremental impact to the income statement of the stress scenarios (incremental losses in an adverse stress scenario with respect to the baseline scenario) against the PBT included in the strategic business plan for each year. The impact to the income statement is calculated for each year as the sum of the stress tests described in items 13.1.1 to 13.1.6 below. The value of the metric corresponds with the worst year of the 3 projected years. The projected PBT is the one included in the annual 3 year Strategic Business Plan (e.g. P-18) as provided by the Strategic Capital Planning team. [↑](#footnote-ref-15)
16. FRB Adverse is chosen to benchmark the Risk Appetite Statement metrics because it remains relatively consistent over time, whereas the current design of the BHC scenarios, although more reflective of idiosyncratic Elements of the SHUSA consolidated risks, can vary in intensity at each calculation. The results of FRB scenarios are publicly available, thus providing external stakeholders with a relevant comparison for SHUSA against the market.

    [↑](#footnote-ref-16)
17. SHUSA Finance intends to implement stress testing based on internally designed stress scenarios and that will run to a full three year stress. Once this is implemented (dates to be advised) the Loss in Stress metric will also cover 3 years as per Santander Group guidance, and scenarios can be tailored to the Board requirements [↑](#footnote-ref-17)
18. Best efforts will be made to record any differences between the Strategic Plan PBT (e.g. IFRS vs US GAAP, asset volumes) and the CCAR PBT. [↑](#footnote-ref-18)