Santander Holdings USA

Santander

ENTERPRISE RISK MANAGEMENT
MARKET & LIQUITIDY
RISK FRAMEWORK

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1. Introduction

1.1 Background

The identification, assessment, control, monitoring, testing and reporting of Market and Liquidity risks ("Market", "Liquidity" or "M&L risks"), together with the clear articulation and communication of the applicable risk tolerance, provide the foundation for the SHUSA Enterprise Risk Management ("ERM") M&L risk management program. Success in managing M&L risks as outlined in this framework is demonstrated by SHUSA establishing and maintaining an organizational culture that embraces by its actions prudent M&L risk taking and integrates M&L risk management processes within its day-to-day operations.

1.2 Scope

The Santander Holdings USA, Inc. ("SHUSA" or "the Company") ERM M&L Risk Management Framework ("M&LRMF") applies to SHUSA and its Subsidiaries. SHUSA is a U.S. bank holding company with two Subsidiaries, Santander Bank, N.A. ("SBNA"), a national bank, and Santander Consumer USA Inc. ("SCUSA"), a public, non-bank consumer finance company that is majority-owned and controlled by SHUSA (together "Subsidiary" or "Subsidiaries").

This M&LRMF describes the principles for the management, control and oversight of Market and Liquidity risks across SHUSA and its Subsidiaries as U.S. regulated institutions.

The Company expects that managers at all levels will understand and embed within their organizations the prudent M&L risk principles described in this Framework.

1.3 Purpose of the Market and Liquidity Risk Management Framework

The board of SHUSA has approved an overarching ERM Framework that sets the principles of SHUSA's oversight of risks arising from its business activities and operations and governs its risk management activities. This M&LRMF must be read in conjunction with the SHUSA ERM Framework as its purpose is it to develop the ERM program in relation to M&L risk, enabling the firm to achieve its strategic priorities, including its business plan, within its expressed M&L risk tolerance.

SHUSA's ERM Program is designed to achieve effective risk management in a consistent fashion across the organization and is in compliance with all applicable rules, regulations and guidance. Moreover, it is designed to provide early recognition and effective management of risks emerging from changes in SHUSA´s risk profile or from external or systemic sources and for the Program to be refined as the risks and risk profile of SHUSA or its Subsidiaries changes.

This M&LRMF is aligned to the General Structural Risks Framework approved by the Board of Directors of Banco Santander S.A., and adopted by the SHUSA Board, that establishes the principles that must be followed by all Santander Group entities when managing and controlling M&L risks.

1.4 Document Ownership and Maintenance

As owner, the SHUSA Chief Risk Officer (CRO) is responsible for the development and maintenance of this M&LRMF. The Chief Market Risk Officer ("CMRO") of SHUSA has primary responsibility for ensuring it is implemented and embedded on a day to day basis.

The M&LRMF is approved by the SHUSA Board Enterprise Risk Committee ("BERC") under recommendation from the SHUSA Enterprise Risk Management Committee ("ERMC") [1] and noting at the Executive Management Committee ("EMC").

The M&LRMF must be reviewed at least annually and updated as necessary in the event of material changes to the M&L risk profile of SHUSA, be it directly or through a change in the risk profile of its Subsidiaries, including regulatory changes. Material changes, relating to the way risks need to be managed and controlled, will be approved by the BERC. Non-material changes, such as changes to committee names or clarifications to the Framework contents will be approved by the CRO and noted at ERMC and BERC.

[1] For additional information about these committees, refer to section 4.5 of this Framework

2. Market and Liquidity Risks and Other Risk Types

2.1 Definition of Market Risk

The SHUSA ERM Framework defines Market Risk as: ***The risk to current or anticipated earnings or capital resulting from adverse movements in market rates or prices, including, but not limited to, interest rates, foreign exchange rates, or equity prices.***

Market Risk sub-types are:

Risk Sub-Type	Definition
Price Risk	The risk to current or anticipated earnings or capital arising from adverse movements in: • Interest Rates (e.g. LIBOR, EURIBOR, OIS, etc.) • Foreign exchange rates (e.g. EUR/USD, EUR/GBP, etc.) • Equity or equity indices (e.g. Euro Stoxx 50, etc.) • Commodity prices (e.g. crude oil, copper) • Credit Spreads (including counterparty Credit Valuation Adjustment - CVA) Price Risk Includes the potential economic impact (decrease in the value of assets) that could be derived from SHUSA's Subsidiaries participating in the underwriting of equity or debt capital markets transactions that are not fully sold into the market, and where the Subsidiary retains on its balance sheet a higher amount of exposure than anticipated.
Basis Risk	The risk that one subtype of market risk is offset with another subtype and they do not exhibit perfect correlation to one another. This includes mismatching of underlying tenors or interest rates. (Examples: when 90-day LIBOR is hedged with 180-day LIBOR; when Mortgaged Backed Securities are hedged with LIBOR; when cash instruments are hedged with forwards or futures contracts).
Correlation Risk	The risk of a potential economic impact (decrease in value of assets) coming from changes in the linear relationship or co-movement between risk factors or asset classes.
Non Linear Risk	The risk arising from the asymmetry of pay-offs in respect of the evolution of prices in the underlying risk factors. Non Linear risk includes *behavioral* and *optionality* risks: • *Behavioural*: potential economic impact (decrease in value of assets) coming from early unscheduled return of principal on a fixed-income security or a derivative with a security underlying. (Example: significant risk in mortgages and securities with underlying mortgage assets). • *Optionality:* potential economic impact (decrease in value of explicit or embedded financial options) coming from adverse changes in the volatility of the risk factors.

2.2 Definition of Liquidity Risk

The SHUSA ERM Framework defines Liquidity Risk as: ***The risk that the company would be unable to meet its obligations when they come due without incurring unacceptable losses. The firm, although solvent, either does not have available sufficient financial resources to enable it to meet its obligations as they fall due, or can secure them only at excessive cost.***

Liquidity Risk sub-types are:

Risk Sub-Type	Definition
Funding Liquidity Risk	The risk that the Institution will be unable to meet its obligations as they come due because of an inability to liquidate assets or obtain adequate funding. Funding risk is the risk of being unable to maintain or acquire funds at a reasonable or acceptable price when needed, or in a crisis and collapse scenarios, simply being unable to maintain or acquire funds.
Market Liquidity Risk	The risk that the Institution cannot easily unwind or offset specific exposures without significantly lowering market prices because of inadequate market depth or market disruptions. This can be cyclical in nature or as a result of a market disruption.
Structural Liquidity Risk	The maturity mismatch between assets and liabilities. (Example: Financial Institutions may borrow short and lend long. A maturity mismatch, such as the one between a residential mortgage and a retail deposit is a typical example of Structural liquidity risk).
Contingency Liquidity Risk	The risk that future events will create a greater need for cash than previously anticipated by management. Commitments to lend are uncertain, both in probability as well as in amount. Contingency risk also describes the risk of finding new liabilities, or replacing liabilities under difficult market condition.

2.3 Other Risk Types

The SHUSA ERM Framework identifies other key risk types which arise directly from its business activities. These risks are: Credit Risk, Operational Risk, Compliance Risk, Model Risk, Strategic Risk, and Reputational Risk. Information on how these risks are managed and controlled can be found in their specific risk type frameworks or in the SHUSA ERM Framework.

3. ERM M&L Risk Management Principles

3.1 Risk Culture and Risk Management Accountability

A strong risk management culture supports SHUSA's long term success. Through its Values Statement and Code of Conduct the Board of SHUSA has communicated the values and behaviors it expects the staff of SHUSA and its Subsidiaries to adopt in their daily activities.

As reflected in the SHUSA ERM Risk Framework, risk management accountability will be incorporated into all Frameworks and Policies at SHUSA and its Subsidiaries. This accountability is evidenced through clear definitions of Roles and Responsibilities for risk management, the alignment of performance and compensation with risk management goals and the ongoing support that must be provided by senior management to ensure that sufficient and competent risk management resources are deployed throughout the organization and that appropriate risk training is provided to all staff as required.

3.2 M&L Risk Management Governance Principles

The following are the M&L risk management governance principles that are applicable to SHUSA and its Subsidiaries:

- **Integral Management of Market and Liquidity Risk** – Through the effective implementation of the ERM Methodology[2] M&L risks will be identified, measured, monitored and controlled in all products and business activities to ensure that M&L risk policies are being implemented, that they remain effective and appropriate and that M&L risk decisions are being made taking into consideration a balanced measurement of risk and reward.

- **Independent functions** – The management function that originates M&L risks on the market trading books and the balance sheet portfolios should be separate from the risk function that will execute the necessary controls over the risks incurred.

- **Independent structure** – The SHUSA board and the Subsidiary boards will ensure the development and maintenance of independent M&L risk management functions and M&L risk governance structures that are communicated and understood throughout the organization.

- **Consolidated view of the risks taken** – A consolidated view of all the M&L risks incurred by SHUSA and its Subsidiaries on both trading activities and balance sheet management should be available, so that M&L risk management is effective, efficient and homogeneous. This consolidation will be aligned to the reporting requirements of Santander S.A.

[2] The ERM Methodology is described in Section 6 of this Framework

- **Effective Challenge** – Effective management challenge processes are required to be established as part of the M&L risk governance structures to ensure adequate oversight of M&L risk-taking and M&L risk management activities. Effective challenge includes dedicated oversight and review by an independent M&L risk control function, the BERC and Board where applicable, and an internal audit function vested with appropriate stature and authority.

- **Defined authority** – The SHUSA board and the Subsidiary boards will ensure that the M&L risk management teams establish separate and focused governance processes including committees and delegated authorities to oversee the operations of their function at the level of SHUSA and its Subsidiaries.

- **Definition of limits** – The SHUSA M&L risk management function will work with the Subsidiary M&L risk management functions to define M&L risk limits for each Subsidiary and Business Unit as appropriate by activity portfolios –banking or trading. These limits will be expressly reviewed and approved at least once a year or whenever there are significant variations in the risk profile of SHUSA or its subsidiaries. The limits will be subject to consolidation at SHUSA and Santander S.A. level to ensure that they can be measured and controlled and that they remain within the approved risk tolerance for each entity.

- **Clear oversight and escalation processes** – M&L risk governance and escalation policies will ensure that responsibility for oversight and reporting of M&L risk and the rules and processes for escalating issues are understood and followed throughout the organization. Any significant breach or weakness identified at any level of the Subsidiaries must be promptly escalated to the Subsidiaries' CMRO and to the SHUSA CMRO who will review and recommend actions to address the issues and emerging risks and ensure that the Subsidiaries implement the recommendations. Examples of issues that may be escalated include limit breaches, regulatory matters or internal audit recommendations. If the recommended actions are not followed, the SHUSA CMRO will escalate the matter to the SHUSA CRO and the SHUSA Market Risk Committee ("MRC").

- **Consistent and documented valuation methodologies –** The valuation of financial instruments and their related risks is a central element of the M&L risk management and control. All valuation methodologies across SHUSA and its subsidiaries will be consistent and documented and validated for use under applicable local regulations. They will also be aligned to Santander S.A. methodology thus enabling the consolidation of M&L risks at a global level.

- **Contingency plans and technical capability** – SHUSA and its Subsidiaries should have contingency plans in place to ensure that their day-to-day M&L risk management activities are not disrupted under exceptional circumstances. These plans should be adequately resourced from both a technical and a staffing perspective**.**

3.3 M&L Risk Identification and Assessment

SHUSA manages its risks through the application and operationalization of the elements of risk management: **Risk Identification and Risk Assessment, Internal Controls, Monitoring, Testing, and Reporting.** These integrated processes must be applied to M&L risks and the SHUSA CMRO will ensure that all Subsidiaries adopt and execute upon this program in a manner consistent with the nature and complexity of its M&L risks and business activities. The principles that underpin the M&L Risk Identification and Assessment program are:

- **M&L Risk identification** must be undertaken both at initiation of an activity and as an activity or the risks change with circumstances both internal and external to the organization.
- **M&L Risk assessment** is the process by which all identified M&L risks are measured for materiality. This process evaluates, pursuant to a common approach the size and/or materiality of each risk.
- **Definition and implementation of controls** that can be applied to M&L risks, where the design and implementation of these controls should be commensurate with the size of the market or liquidity risk being taken.
- **Residual M&L risk** is the market and/or liquidity risk remaining in each business activity after considering the effectiveness of the internal controls. The residual M&L risk is assessed by the risk owner to ensure that it corresponds with the overall strategy of SHUSA and is consistent with capital allocations.
- **M&L Risk reporting** is the means by which the SHUSA board, its management committees and all other governance structures are informed of the M&L risks and issues identified in the operations of the SHUSA entities.

M&L Risk Identification and Assessment is the first phase of the M&L Risk Methodology cycle that is described in detail in Section 6 of this Framework.

3.4 The SHUSA Enterprise Risk Tolerance Statement (“RTS”)

The RTS is proposed by the SHUSA Chief Executive Officer (“CEO”) for approval by the SHUSA board. It defines, amongst other metrics, the aggregate levels and types of M&L risk that SHUSA and its Subsidiaries are willing to accept in the pursuit of their strategic objectives. It is the overarching mandate governing all M&L risk-taking activities across the organization and it is arrived at through a process that identifies M&L risks and quantifies the amount and the circumstances under which SHUSA is willing to accept those risks. The Risk Tolerance Statement defines the governance for its review, update, challenge and approval.

The RTS establishes metrics and thresholds identified as being pertinent in the management of the market and liquidity risk profiles of SHUSA and its Subsidiaries. It provides additional detail regarding each of the quantitative metrics, including the definition of the metric and rationale regarding why the metric is used for the monitoring and control of the business line's market and/or liquidity risk exposure. It includes quantitative limits as well as qualitative statements.

In consultation with the SHUSA CMRO, the Subsidiaries are responsible for developing and approving their own M&L risk tolerance statements with proper review and challenge according to their respective governance structures. The Subsidiaries´ CMROs are accountable for ensuring that their M&L risk tolerance statements are aligned to the SHUSA M&L risk RTS limits. The Subsidiary-level M&L risk RTS will be cascaded down through more detailed limits appropriate to each Business Line within the Subsidiaries.

The SHUSA CMRO is responsible for overseeing the monitoring of compliance with the SHUSA M&L risk RTS limits, ensuring consistency between tolerance, capital, limits and the Strategic Business Plans. Subsidiaries' CMROs are responsible for overseeing the monitoring of compliance with their respective M&L risk RTS limits. M&L risk taking in excess of tolerances shall be escalated and monitored through the M&L risk management committee governance process.

3.5 Liquidity and Market Risk Mandates

The Market Risk Mandate ("MRM") and the Liquidity Risk Mandate ("LRM") ("the mandates") define the levels and types of market and liquidity risk that the Executive Management of each Subsidiary is willing to accept to achieve the business objectives. The mandates are intended to align to the overall market and liquidity risk tolerance statement as they refer to a more granular level of risk limits, such as operating limits and authorized instruments.

The CMRO of each Subsidiary, in consultation with the Business Lines and the SHUSA CMRO, develops and proposes the relevant market and liquidity risk mandates to the Subsidiaries' Enterprise Risk Management Committee ("ERMC") for approval. The SHUSA CRMO will consolidate, review, challenge and recommend the SHUSA mandates to the SHUSA ERMC. All mandates are reviewed and approved by the SHUSA and Subsidiary ERMCs at least annually, or when changes occur, to ensure that they remain applicable to the strategy and current and planned activities of the Business Lines.

It is the responsibility of the SHUSA ERMC to ensure that the mandates are aligned with the SHUSA Strategic Plan, Capital Plan, Recovery and Resolution Plans, and any other relevant enterprise-wide processes management plans. The Subsidiaries' ERMCs will reflect this responsibility in their charters.

3.6 The Strategic Business Plan (“SBP”)

The SBP is a management tool that is reviewed and approved through the appropriate governance by SHUSA and its Subsidiaries. The SHUSA CMRO and the Subsidiaries’ CRMOs are responsible for ensuring that the market and liquidity risks embedded in the SBP are appropriate to the size and complexity of the Subsidiaries and their Business Lines and fall within the parameters of the relevant Risk Tolerance Statements. Market Risk Tolerance is used in the strategic business planning process to better facilitate the analysis of market risk versus return and to improve decision-making.

The SHUSA CMRO, through review and challenge of the SBPs will ensure that:

- They align with the SHUSA SBP;
- The Subsidiaries’ growth strategies are within risk tolerance boundaries and there are no aggressive growth strategies that could negatively impact the Subsidiaries or SHUSA;
- They properly address all M&L risks in order to avoid any breaches of market metrics, limits, and risk indicators, in an effort to maintain the safety and soundness of M&L risks in each Subsidiary;
- They define how SHUSA and its Subsidiaries will update, if necessary, the M&L Risk Tolerance Statement and the M&L risk mandates to account for changes in the risk profile projected under the plan.

The SBPs are to be reviewed, updated, and approved as necessary, for example due to changes in the SHUSA or its Subsidiaries’ risk profile or operating environment.

3.7 Market & Liquidity Risk Management Frameworks, Policies and Procedures

A comprehensive inventory of M&LRMFs, M&L risk policies, and Operating M&L risk policies must be established and maintained by SHUSA and its Subsidiaries, to ensure that M&L risk management and controls are executed in accordance with the ERM requirements prescribed in this Framework.

The SHUSA M&LRMF and Enterprise Market Risk Policies are developed by the SHUSA CMRO and reviewed and approved by the SHUSA ERMC and the SHUSA BERC as required. The Enterprise Liquidity Risk Policies are developed by the SHUSA Treasury function reporting to the CFO and are reviewed and approved by the Asset and Liability Committee (“ALCO”) as required.

All Market & Liquidity Risk Policies are reviewed and/or approved at least annually to ensure they remain applicable to SHUSA’s strategy, ongoing M&L risks, and current and planned activities. As new M&L risks emerge and the existing M&L risk profiles change, the M&LRMF and Policies may be modified or developed.

Each Subsidiary will implement the enterprise-level policies taking into consideration the risk profile of its Business Lines, and aligned with the requirements of the SHUSA M&L Risk Management Policies. These policies will be reviewed and approved by the Subsidiary M&L risk management committees and their boards as required. Additional M&L risk policies aligned to the specific M&L profile of each Subsidiary or Business Line may be developed and approved as required.

All M&L risk frameworks and policies for SHUSA and its Subsidiaries must comply with the SHUSA Policy Administration Policy principles that include content standards, review frequency, roles and responsibilities and administration requirements. The SHUSA CMRO will be provided with a list of Subsidiary policies and will monitor their compliance, and report on their status to senior management and BERC. The SHUSA CMRO will ensure that they are reviewed on an annual basis and updated and revised according to any changes in the M&L risk profile, regulatory guidance or any for any other reason.

The necessary procedures will be developed by each Subsidiary to document the processes for executing M&L risk policies. Procedures will be defined for each Business Line as appropriate. It is the responsibility of Subsidiary CMROs to periodically review Business Line procedures for adequacy and compliance with Subsidiary and Enterprise M&L Risk Policies. Any material changes to existing policies or any new policies developed by the Subsidiary must be reviewed and opined upon by the SHUSA CMRO.

All employees are to be made aware of the documents relevant to them in their day to day activities.

3.8 Risk and compensation

The objective setting, performance management and compensation programs must be aligned to M&L risk management objectives. To be considered properly functioning programs they must avoid incentivizing inappropriate M&L risk taking activities. Performance against M&L risk objectives must be appraised, documented and linked, where appropriate to quantitative measures.

4. SHUSA M&L Risk Management Roles and Responsibilities

4.1 SHUSA ownership structure

SHUSA is wholly owned by Banco Santander, S.A. ("Santander" or the "Group").

SHUSA is required to meet all its obligations as a U.S. bank holding company, while also harmonizing its policies to the principles approved by the Santander Group Board. To support Santander S.A. in meeting its regulatory obligations, SHUSA will report on its M&L risks and M&L risk management activities to Santander S.A.

4.2 The SHUSA Board of Directors

The SHUSA Board is responsible for SHUSA's oversight.

With respect to governance, implementation, and monitoring of the M&LRMF the SHUSA Board has delegated its responsibilities to the SHUSA BERC that will review and approve the M&LRMF and any related Enterprise M&L Risk Policies, oversee implementation of the M&LRMF, and monitor compliance with the Policies.

These responsibilities will also be reflected in the charters of the BERCs of the SHUSA Subsidiaries.

4.3 The Chief Executive Officer ("CEO")

The Board delegates full responsibility to the CEO for the execution of business activities including the front line management of risks on a day-to-day basis.

The main responsibilities of the CEO are detailed in the SHUSA ERM Framework and they include, among others, the management of M&L risk arising from the agreed strategy and business plan, proposing the M&L risk tolerance statement, delegating authority to the Subsidiary CEOs, overseeing the establishment of appropriate systems and controls, reporting to the Board and ensuring an appropriate risk culture.

4.4 The Chief Risk Officer

The SHUSA CRO is an independent executive who reports to the SHUSA BERC and the SHUSA CEO.

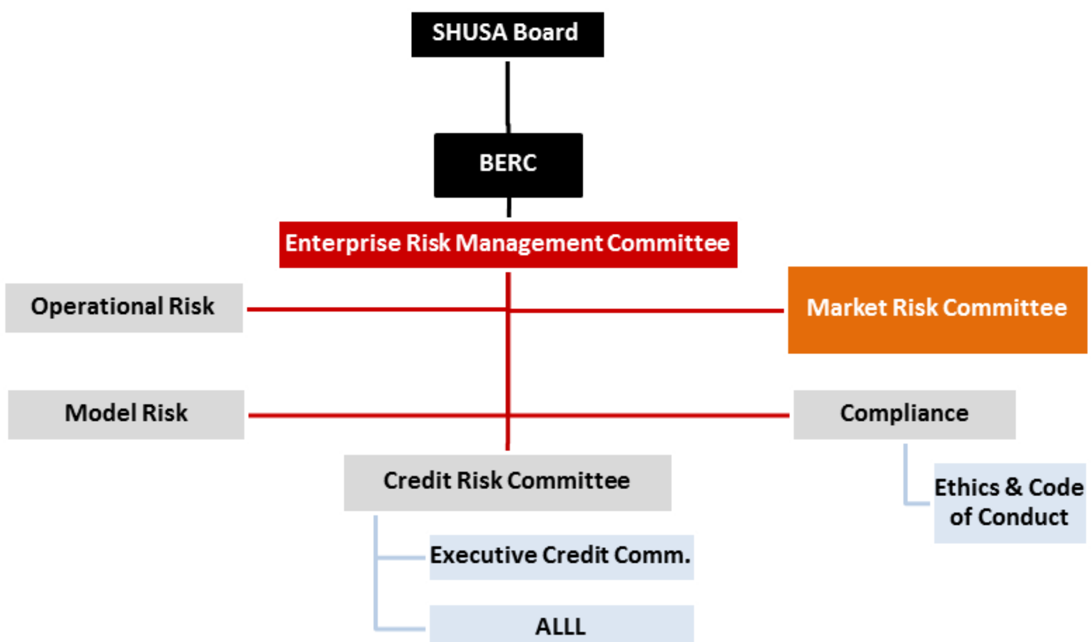
The CRO's responsibilities are detailed in the SHUSA ERM Framework and they include, among others, implementing the SHUSA ERM Program and overseeing the management and control of M&L risk within the parameters of the ERM Program; reviewing, challenging and controlling the M&L Risk Tolerance;

reporting M&L risk management deficiencies including escalation of breaches through the Committee process.

On a day to day basis, the CRO delegates his M&L risk ERM responsibilities to the SHUSA Chief Market Risk Officer ("CMRO") whose responsibilities are detailed in Section 5.1 of this M&LRMF.

4.5 Key M&L Risk Management Committees

SHUSA implements its M&L risk governance process through a hierarchy of board- and management-level committees with defined decision-making authorities detailed in their charters. These committees are responsible, along with management, for establishing and implementing risk type frameworks and ERM policies. The SHUSA M&L risk committee structure is outlined below, and it expects its Subsidiaries to adopt and adapt this structure when establishing their independent governance and decision-making bodies and defining their charters.



4.5.1 The SHUSA Board Enterprise Risk Committee ("BERC")

The SHUSA BERC is appointed by the SHUSA Board to assist it in its oversight responsibilities with respect to enterprise risk management activities and related compliance matters. In particular, and with regards to M&L Risk, the BERC will review and approve the M&LRMF and will:

- ***Market Risk:*** assist the Board in the establishment of guidelines and parameters for the management and mitigation of market risk levels in the portfolios and activities of each subsidiary through the review of:
    - Economic conditions and their potential impact on the subsidiaries;
    - Interest rate risk trends, reviewing and approving key interest rate risk measures;
    - Balance sheet trends and strategy.
    - All Treasury and market risk policies on an annual basis to ensure that such policies are appropriate in light of general economic conditions, regulatory requirements and the Company's financial and competitive position and strategic goals, including considering the adverse scenarios utilized in stress testing exercises; and
    - Compliance with Board-approved risk policies related to interest rate risk, liquidity and Treasury related trading and hedging activity

- ***Liquidity Risk:***
    - In coordination with the Capital Committee of the Board of the Company[3] (the "Capital Committee"), review the Company's liquidity and capital risk management frameworks as they relate to the Company's consolidated balance sheet as well as the balance sheets of each of the Company's subsidiaries;
    - Receive and review, on an ongoing basis, information sufficient to enable the Committee to assess risks relating to the Company's (including, without limitation, the Bank's and SCUSA's) liquidity position and liquidity needs and the primary sources that will be used to fund those needs;
    - Review on an ongoing basis, and recommend to the Board for approval no less frequently than annually, the acceptable level of liquidity risk that the Company may assume in connection with its operating strategies (i.e., liquidity risk tolerance), taking into account the Company's capital structure, risk profile, complexity, activities and size;
    - Review risks related to liquidity on an ongoing basis; review, and submit to the Board for further review (no less frequently than semi-annually), regular reports from the Company's Enterprise Risk Management Committee to ensure that the Company and its

[3] The Capital Committee is appointed by the Board of SHUSA to oversee the Company's consolidated capital planning, including governance and policy structures and organizational and operational processes relating to the capital planning and capital actions across all SHUSA Subsidiaries. Details of the duties and responsibilities of the Capital Committee are included in its charter.

subsidiaries are operating within established liquidity risk tolerances at a consolidated company level, and that such liquidity risk tolerances are consistent with applicable enterprise wide liquidity risk tolerances established by Banco Santander, S.A.;

- Review on an ongoing basis, and recommend to the Board for approval, the liquidity risk management strategies and policies developed by senior management of the Company to ensure that such policies are appropriate in light of general economic conditions, regulatory requirements and the Company's financial and competitive position and strategic goals, including considering the adverse scenarios utilized in stress testing exercises;
- Review the operations of significant Business Lines and products of the Company and its Subsidiaries to identify unanticipated liquidity risks relating thereto and determine if such risks are within established liquidity risk tolerances; and
- Review high level limits related to minimum liquidity management requirements that consider the day-to-day outflows in the settlement of reserve positions and customer demand for deposits and loans, the seasonal fluctuations of sources of funds and loan demands, and the cyclical fluctuations in economic conditions that impact the availability and/or demand of funds.

4.5.2 The SHUSA Enterprise Risk Management Committee ("ERMC")

The ERMC is established under the authority of the BERC and it is chaired by the SHUSA CRO. It is responsible for the oversight and monitoring of all risk-taking and risk management activities across the enterprise.

With regards to M&L risks, the ERMC's core responsibilities include the following:

- Review and recommend to the BERC for approval, the SHUSA M&LRMF and M&L risk tolerance statement;
- Oversee SHUSA's M&L risk governance structure, including the M&L risk management framework, M&L risk tolerance statement, and M&L risk policies, procedures and practices within each Subsidiary;
- Review and, if necessary or appropriate, recommend to the BERC for approval the M&L risk-related operating policies of the SHUSA Subsidiaries, on an annual basis or on a frequency as otherwise mandated by such policies;
- Assess, on an ongoing basis and based on information provided to the Committee by senior management of each Subsidiary and by subcommittees of the Committee, each Subsidiary's M&L risk management framework, M&L risk tolerance limits, and M&L risk identification and assessment processes to ensure they are in compliance with the enterprise-wide standards and

are accurately capturing the Subsidiary's level of risk, and report any issues or exceptions relating thereto to the BERC;

- Review and approve each Subsidiary's and Business Line key risk indicators (KRIs) and their associated limits (thresholds) to ensure they are consistent with SHUSA's established risk tolerance;

- Review management's assessment of each Subsidiary's M&L risk profile, including trends and emerging risks, and monitor M&L risk performance information from each Subsidiary and business line, in each case on an ongoing basis;

- Receive information from senior management of each Subsidiary and from subcommittees of the Committee relating to identified M&L risk issues and shall review plans and progress of accountable managers to resolve such issues, in each case on an ongoing basis;

- Ensure that the M&L risk management functions within each Subsidiary are adequately staffed and have access to sufficient M&L risk data and systems.

In relation to Funding and Liquidity risk, the ERMC shall review and recommend to the BERC annually for approval SHUSA's liquidity risk tolerance and contingency funding plan, as well as any applicable other liquidity and funding plans, policies or related materials. In support of such review and to enable the Committee to make such recommendation, in conjunction with and with the assistance of the Company's Asset Liability Committee[4] (the "ALCO"), as appropriate, the Committee shall:

  - Review and assess the management of funding and liquidity operations across SHUSA and its subsidiaries to ensure that such operations are carried out effectively and within the risk tolerances established by the Board;
  - Review SHUSA's funding profile on an ongoing basis, including with respect to diversification, future funding needs, and market developments;
  - Evaluate SHUSA's liquidity profile on an ongoing basis, including with respect to collateral management, asset liability management position, hedging strategies and costs, and the impact of customer behavior on liquidity sources; and
  - Review and evaluate the results of stress test scenarios relating to funding and liquidity positions and formulate appropriate actions relating thereto, as applicable.

[4] The ALCO is a management committee established under the authority of the Capital Committee of the Board of Directors of the Company (the "Board Capital Committee"). The ALCO has a reporting responsibility to the SHUSA board of directors, the purpose of which is to support management in all matters (other than matters delegated to the SHUSA Management Capital Committee) relating to SHUSA's balance sheet, including the impact thereon of fluctuations in interest rates. Details of the duties and responsibilities of the ALCO are included in its charter.

4.5.3 The SHUSA Market Risk Committee ("MRC")

The MRC is a management committee, the purpose of which is to advise the SHUSA ERMC and the SHUSA CRO with respect to the oversight of M&L risk management functions and the monitoring and evaluation of M&L risks in SHUSA's operations and in those of its Subsidiaries.

The MRC´s core responsibilities are to monitor the implementation of a consolidated M&L risk framework and in connection therewith:

- Review and recommend market and liquidity risk operating limits for submission to the ERMC;
- Review operating policies and guidelines in accordance with the requirements of SHUSA's enterprise risk management governance and ensure consistency across Subsidiaries;
- Review and recommend procedures and application manuals with respect to market risk, interest rate risk management and liquidity risk management;
- Review and provide input regarding Subsidiaries' submissions to the Committee, adjustments to current and proposed methodologies for M&L risks, and review calibration of model parameters and the associated impact on risk exposures;
- Review and challenge M&L risk-related assumptions/issues raised within the liquidity/funding stress test and the planning process;
- Provide input on the design and oversee the application of the M&L risk tolerance limits and review and challenge adherence to the key market risk metrics for each Subsidiary and Business Line; and
- Provide input on the design and oversee the implementation of the market risk identification and control framework and review, challenge and recommend actions regarding identified market risk issues and emerging market risks.

In order to discharge the core responsibilities described above the MRC will:

- Review the impact on, and associated response by, Subsidiaries from changes in the level of M&L risk exposures, and whenever appropriate, implement action plans to address economic or other events that could impact liquidity/funding as well as new and revised legislation, regulations and regulatory guidance and issues relevant to market risk management;
- Monitor the market, structural and liquidity risk exposures and related limits that have been established for the Subsidiaries. Take corrective action for identified breaches and review and monitor action plans designed to mitigate or prevent market, interest rate risk or liquidity exposures outside of the Subsidiaries' relevant risk operating limits;

- Provide internal monitoring of technological and other strategic initiatives which may affect market risk and liquidity risk;

- Oversee adherence to applicable policies, procedures and internal controls across SHUSA and its Subsidiaries regarding market and liquidity risk and recommendations from internal audit, external audit and regulators;

- Oversee the effective communication of the individual market and liquidity risk areas of the Subsidiaries with their SHUSA and Santander S.A. counterparts and verify the global market risk measures, ensuring implementation in accordance with the policies and global limits approved by the Company and the Subsidiaries;

- Review and approve procedures and application manuals for market risks, interest rate risk management and liquidity risk management;

- Review market and liquidity risk exception reporting and monitor incidents and trends; grant or deny temporary exceptions for market or liquidity risk based operating limits; and

- Aggregate and escalate information to the ERMC sufficient to enable the ERMC (and, subsequently, the Company's Board Enterprise Risk Committee) to fulfill its responsibilities, including those expressly set forth in its charter, with respect to market and liquidity risk management, oversight and reporting; aggregate and escalate such other information to the ERMC as is in all respects sufficient to enable the ERMC to understand each of the forgoing responsibilities on an ongoing basis.

4.6 Three Lines of Defense

SHUSA and its Subsidiaries organize their roles and responsibilities for M&L risk management into a "three lines of defense" model, with separately defined and segregated Roles and Responsibilities consistent with applicable regulations and guidance:

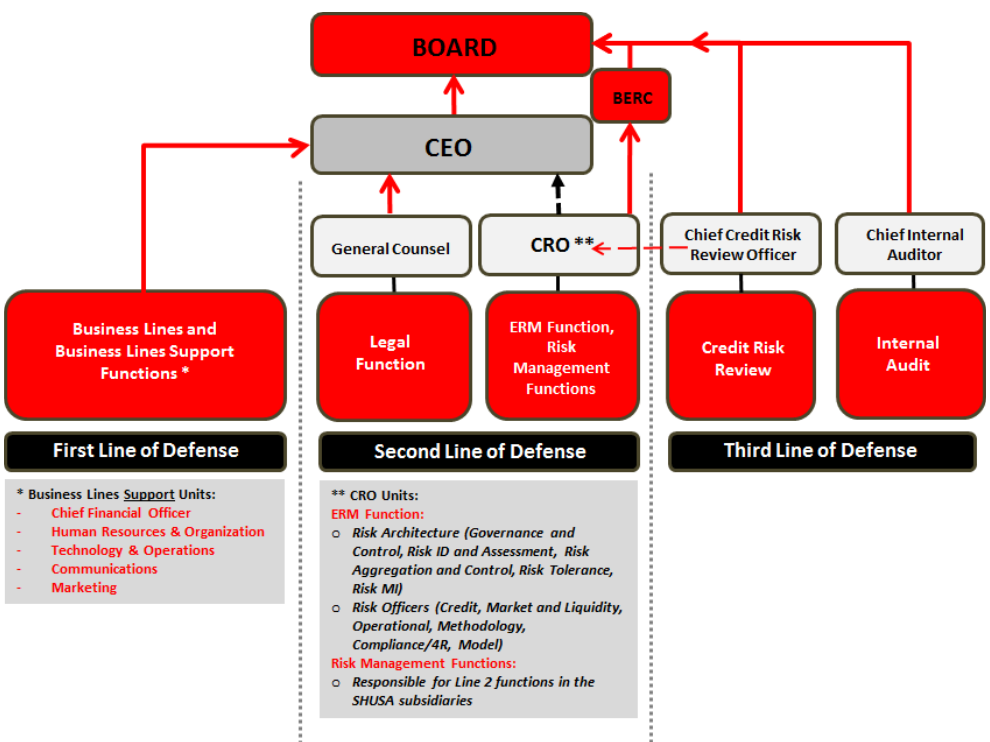
- **Line 1 Risk Management – SHUSA, its Subsidiaries and their Business Lines & Business Support Units:** reporting to the CEO, Line 1 units have responsibility for the primary management of the risks that emanate from their activities. Line 1 units own, identify, measure, control, monitor and report all risks that are originated through activities such as business origination, providing specialist advice, the development, marketing or distribution of products, client maintenance, or operational or technological processes supporting customer activity.

- **Line 2 Risk Management – Risk; Legal**
  - ***SHUSA´s ERM Risk Management function and its Subsidiaries' Risk Management Units*** *that are under the executive responsibility of the CEOs but report to the CROs. These Line 2 units manage and monitor risk exposures, define frameworks*, policies and comprehensive and appropriate controls, and ensure Line 1 units manage risk in line with the agreed frameworks and risk appetite levels.
  - ***Legal Function*** that is under the executive responsibility of the CEO.

- **Line 3 Risk Assurance - Internal Audit; Credit Risk Review Function.**
  - ***Internal Audit*** provides independent assurance and reports to the Board.
  - ***The Credit Risk Review Function*** provides an independent assessment of SHUSA's credit risk and credit risk practices and reports to the Board.

The responsibilities of all 3 Lines of Defense with regards to M&L Risk are organized into three sub-categories: **Identification and Assessment, Internal Controls and Monitoring, Testing, and Reporting** the main aspects of which are detailed in the sections below and must be further developed in Subsidiary frameworks and policies for M&L risk.

A simplified 3 Lines of Defense model is depicted below:



4.7 Line 1 Units - SHUSA, its Subsidiaries and their Business Lines & Business Support Units:

Reporting to the CEO, Line 1 units have responsibility for the primary management of the risks that emanate from their activities. Line 1 units own, identify, measure, control, monitor and report all risks that are originated through activities such as business origination, providing specialist advice, the development, marketing or distribution of products, client maintenance, or operational or technological processes supporting customer activity.

Only two Line 1 units are mandated for the origination and management of M&L risks:

- Santander Global Banking and Markets ("SGBM") who originates and manages M&L risks through its trading market making activities; and

- The Treasury / Funds Management units or Asset and Liability Management ("ALM") function that report to the Chief Financial Officer ("CFO") of SHUSA or the relevant Subsidiary CFO, and who have the responsibility for executing the market and liquidity risk strategies approved by the relevant governance committees, principally the ALCO.

All other Business Lines of SHUSA's Subsidiaries (Auto Finance, Retail Banking, Commercial Banking and SGBM non-treasury) will ensure that they follow the approved risk management processes and procedures established by the Treasury / Funds Management units for the transfer to the ALM function of all market and liquidity risk originated through their Business Lines (for example through the capture of deposits, the funding of loans or the provision of derivatives or other treasury market products).

The roles and responsibilities of Line 1 units as they relate to the identification, assessment, control, monitoring, testing and reporting of M&L risks will be set out in the M&LRMF of each subsidiary. These roles and responsibilities will develop the guidance set out below that is based on the principles reflected in the SHUSA ERM Risk Management Framework.

M&L Risk Identification and Assessment
• Develop the Strategic Planning process and Financial Planning according to predefined Top Down Risk Tolerance • Participate in Risk Identification process (e.g., in workshops as Business managers, subject matter experts…) along with 2nd Line • Perform Risk Assessment including evaluation of inherent risk, quality of risk management controls and residual risks • Define Risk Materiality for respective risk area • Prepare Remediation Plans and develop corrective actions • Provide support to additional tasks related to the Capital Planning Process: a) Provide input to stress test scenario analysis; b) Identify sources of uncertainty for capital buffer estimation

M&L Internal Controls
• Ensure sufficiency of resources (HR and Systems) to manage risk • Ensure risks are considered in the development and maintenance of Operating Policies, Procedures, and Processes • Adhere to the Risk Tolerance Statement and ensure adequate governance and controls • Ensure Reporting Plan is in place (Indicators, KRIs, KPIs, Limits…) • Identify Training Needs, communicate to 2nd Line and support rollout of training programs

M&L Monitoring, Testing and Reporting
• Manage Risk Taking Activity • Provide Quality Assurance for 1st Line, including reconciliations of Results, Balance Sheet and activities • Execute Controls and Monitoring Protocols for 1st Line of Defense • Analyze data to evaluate root causes, trends and internal controls and to support management decisions • Perform Self-Testing in compliance with policies and guidelines and define remediation actions for failed tests • Run realistic Crisis Management Exercises on an ongoing basis to evaluate the effectiveness of Incident Response Plans • Report on key, evolving and emerging risks • Escalate identified deficiencies as well as audit findings, regulatory reviews, etc. • Report on status of Remediation Plans

4.8 Line 2 – M&L Risk Roles & Responsibilities

M&L risk roles and responsibilities for M&L risks are led by the SHUSA CMRO and the Subsidiaries´ CMROs. Their responsibilities with regards to M&L risk identification, assessment, control, monitoring, testing and reporting as follows:

M&L Identification and Assessment
SHUSA: • Define and implement on a consolidated level the Enterprise Market Risk Management Framework for SHUSA & ensure its alignment to Santander Group's Principles and Guidelines and to US Regulatory Framework. Ensure that the framework is approved, communicated and implemented by the Subsidiaries • Review, Test and monitor adherence to Risk Frameworks both at SHUSA and its Subsidiaries • Define, communicate and implement the Market risk program and its elements for SHUSA. Ensure adequate implementation at Subsidiaries • Test implementation of the market risk program and its elements and communicate inconsistencies • Implement and ensure consistent risk assessment on M&L Risk Management uncovering vulnerabilities and key risk drivers and providing remediation plan. Use this risk assessment as a key input for Scenario Definition, Indicator selection and severity levels for Stress Testing, Capital and Strategic planning process

- Coordinate an effective and consistent aggregate risk identification and assessment program
- Define a consistent a common market risk new product and new business activities assessment and approval framework and ensure a consistent implementation at Subsidiary level. Review and test the efficacy of this assessment program
- Make the evolving and emerging risk identification process an integral part of the M&L Risk Identification and Risk Assessment Program. Ensure the program includes periodic and consistent identification, measurement and communication
- Monitor through indicators and warnings levels of severity of key evolving and emerging risk and provide an escalation process to SHUSA management
- Identify M&L risks regulatory and policy changes impacting SHUSA and its Subsidiaries endeavoring where possible to provide a consistent SHUSA /Subsidiaries joint response. Alert and communicate with all relevant stakeholders
- Participate in the identification process of business change management, communicate the SHUSA governance, assess preparedness of Subsidiaries
- Define and agree M&L risk tolerance for SHUSA with Santander Group and allocate it across Subsidiaries and Business Line level. Ensure results of Risk Identification and Assessment Program are factored in and that Risk Appetite is aligned with Strategic Plan and Capital Planning Process
- Provide feed-back, benchmarking and challenge to Risk Tolerance proposals
- Define key risk metrics, consistent with segmentation of activities by Business Line, risk types and market risk factors. Ensure deployment of key risk metrics in SHUSA and Subsidiaries. Test suitability and proper implementation of metrics

Subsidiaries:

- Implement the SHUSA M&LRMF at Subsidiary level and ensure it is adequately communicated, training is provided and the Framework is complied with
- Implement M&L risks program and its elements and ensure adequate training at the Subsidiary level
- Implement the comprehensive risk identification and assessment program at Subsidiary level and ensure results are used in the Stress Test, Capital and Strategic Planning Processes
- Implement new product/business activity assessment and approval at Subsidiary level
- Deploy Evolving and Emerging Risk Identification and Communication Process at Subsidiary level, with timely escalation to SHUSA M&L risk function of new or increasingly material ones
- On all Regulatory, Policy and Business Change Management proposals, provide input/ feedback and deploy responses at Subsidiary level
- Request allocation of Risk Tolerance limits to SHUSA & liaise with internal stakeholders for proper allocation of limits, warnings and indicators at Business Line level
- Implement key M&L risk metrics at Subsidiary level. Provide feedback to SHUSA CMRO function about the suitability and efficiency of the metrics at capturing relevant risk factors

M&L Internal Controls
SHUSA • Own market risk models and ensure proper and consistent deployment of market risk model governance: models are inventoried, validated, approved and uncertainty buffers determined. • Ensure consistent risk modeling and measurement at a consolidated level and Subsidiary level. Monitor compliance versus model governance internal controls and test model performance metrics, ensure audit trails is in place • Review implementation of models and resolve or escalate inconsistencies • Ensure a strong and consistent control culture through robust price certification, yield curve calibration, valuation and P&L reconciliation against the General Ledger with Business Lines and corporate functions. Ensure proper segregation of duties: pricing (Business Lines), valuation (Risk Management functions). Perform testing of the controls. • Ensure strong and consistent back testing program of all the metrics provided at the Subsidiary level. Review and challenge back testing program standards • Ensure strong and consistent program of market data, data model and market risk modelling. Review and challenge calibration program standards • Ensure strong and common culture of stress testing, scenario analysis, sensitivity analysis that encompasses all the relevant risk factors at the Subsidiary level. Review and challenge stress testing program standards • Ensure consistent implementation and monitoring of risk tolerance (limits, warnings and indicators) processes at Subsidiary level. Monitor risk tolerance program implementation and communication of any breaches • Ensure smooth functioning of the escalation and breach communication process. Ensure consistent aggregate reporting and escalate any breaches. **Subsidiaries:** • Implement model risk governance at Subsidiary level • Implement a consistent control culture around price certification, yield curve calibration, valuation and P&L reconciliation with Business Lines and corporate functions • Own and implement official risk analytics, measurement against market risk tolerance. Ensure compliance to model governance internal controls • Implement back testing program at Subsidiary level • Conduct calibration program at Subsidiary level • Conduct stress testing program at Subsidiary level • Implement risk tolerance (limits, warnings and indicators) and monitoring processes at Subsidiary level • Detect, communicate and ensure timely escalation and resolution of overages or breaches of limits or mandates

M&L Monitoring, Testing & Reporting

SHUSA

- Provide effective M&L limit utilization information through the review, monitoring and aggregation of Subsidiary data. Report a consolidated dashboard, test outputs and communicate inconsistencies, breaches and aggregate levels against the SHUSA Risk Tolerance
- Monitor effective resolution of overages and ensure a strong and consistent limit breach escalation and resolution culture for SHUSA Subsidiaries. Report Status of Resolution of Overages at Subsidiary and SHUSA consolidated level.
- Monitor EWIs at Subsidiary and SHUSA levels and consistency in decision making process. Aggregate EWIs and escalate any issues or deficiencies in the monitoring framework
- Ensure M&L modeling standards are consistently applied both at Subsidiary and SHUSA levels. This includes an effective monitoring and calibration program on the effectiveness of the models, escalation and resolution of modeling issues, communication of any deficiencies of M&L models against the model management framework.
- Own the SHUSA M&L consolidated reporting and define and ensure consistent implementation of M&L reporting at Subsidiary and SHUSA
- Ensure there is a strong culture of consistent qualitative and quantitative analysis for all metrics/indicators by risk factor and risk type in place at Subsidiary and SHUSA consolidated levels. Aggregate and test qualitative/quantitative analytical output
- Ensure consistent underwriting standards in the monitoring and approval of primary market deals. Monitor underwriting activity at the Subsidiaries: committed exposures, market, holding periods, etc. Test that underwriting and monitoring standards are complied with
- Define the elements of SHUSA Stress Testing and Contingent Funding Program and ensure that they are communicated, understood and complied with by Subsidiaries. Ensure proper remediation and response for all challenged assumptions is in place. Ensure proper synchronization between Market Stress Testing Program and Capital/Strategic Planning/Recovery/Resolution Planning
- Test Stress Testing Program, challenge Subsidiary assumptions in a systematic and consistent manner and report results of the Stress Testing Program and vulnerabilities of Subsidiary assumptions in light of Capital/Strategic/Recovery and Resolution Planning

Subsidiaries:

- Review, consolidate and report M&L limit utilization at Subsidiary level
- Issue Overage Communication, request Business Line response, monitor effective resolution of breaches
- Monitor and report EWIs impacting Subsidiaries' activities and ensure that decisions are adequately documented
- Implement M&L models at Subsidiary level and ensure that Model Management standards are complied with
- Implement M&L reporting at the Subsidiary level. Consolidate all metrics at Subsidiary level. Propose improvements to the reporting suite
- Ensure qualitative explanation of the evolution of all metrics/indicators by M&L risk factors and risk types are in place at Subsidiary level
- Monitor and participate in the approval of all primary market deal underwriting at Subsidiary level
- Implement, at the Subsidiary level, all the elements of the Stress Testing and Contingent Funding Program and ensure alignment to the Strategic, Capital, Recovery and Resolution Planning

4.9 The Third Line of Defense

Line 3 is composed of the Internal Audit function and the Credit Risk Review function.

The Internal Audit function's responsibilities with regards to M&L risk identification, assessment, control, monitoring, testing and reporting are reflected in the SHUSA ERM Risk Framework.

5. SHUSA´s Market and Liquidity Risk Organization

5.1 The Chief Market Risk Officer

The SHUSA CMRO reports to the SHUSA CRO. The CMRO is responsible for the day to day management of Line 2 ERM responsibilities at SHUSA as described above, as well as for the coordination and supervision of the Line 2 Risk Management functions in the Subsidiaries.

The SHUSA CMRO, in agreement with the Subsidiary CRO, will:

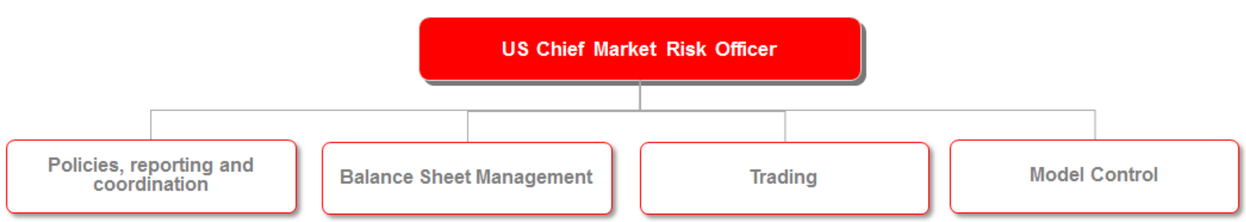
- Participate in the decision to hire or dismiss Subsidiary CMROs;
- Set goals and objectives for Subsidiary CMROs;
- Contribute to the annual performance evaluations of Subsidiary CMROs;
- Participate in compensation decisions regarding Subsidiary CMROs.

The SHUSA CMRO:

- Leads the SHUSA ERM M&L Risk program across Subsidiaries, providing for effective supervision of all M&L risks and operating independently from the Subsidiaries and their Business Lines;
- Ensures that SHUSA´s M&L risk management committees are informed and are able to discharge their responsibilities according to their charters.

5.2 The SHUSA ERM M&L Risk Function

The SHUSA CMRO is assisted by specialist teams that are responsible for supervising the delivery of the ERM M&L risk program by SHUSA´s Subsidiaries.



Their main responsibilities across SHUSA and its Subsidiaries are:

5.2.1 Policies, Reporting and Coordination:

The Policies, Reporting and Coordination M&L Risk Management team provides the US CMRO with a complete overview of the status of the M&L Risk Management Program in regards to two main areas, Governance and Strategic Initiatives, as follows:

Governance:

- Maintains the SHUSA M&LRM, policies and processes;
- Facilitates the adoption, alignment, harmonization and implementation of the SHUSA M&LRMF and policies at the Subsidiary level in respect to organizational and governance models, M&L risk policies, risk tolerance, and risk plans in support of joint objective setting.
- Ensures SHUSA's and Subsidiaries' adoption of Santander S.A. M&L risk management guidance;
- Coordinates across the CMRO function, the M&L inputs into the Risk Identification and Assessment program for SHUSA and its Subsidiaries
- Defines and maintains the SHUSA M&L Risk organization, including roles and responsibilities; SHUSA M&L Committees and fora.
- Consolidates and reports on operational performance (plans vs budgets) and limit and mandate utilization across SHUSA and its subsidiaries to all relevant risk and management committees (MRC, ALCO, ERMC, BERC, the Board)
- Monitors and tracks remediation plans; monitors the regulatory environment; tracks and supervises regulatory and audit requirements
- Reviews and challenges all new policies, projects, processes and procedures with the Subsidiaries' Policy and Reporting functions prior to final approval and implementation.

Strategic Initiatives / New Products approval:

- Plans, coordinates, and manages strategic business and regulatory projects within SHUSA that are in scope for M&L risk management and control.
- Provides all the required input such as definition of IT systems, business logic and operating process that must be satisfied in order to ensure that all M&L risk management and control requirements are defined and executed to comply with regulatory obligations and business needs.
- Complies with regulatory expectations through the implementation of strategic projects to enhance M&L risk management and control.

5.2.2 Balance Sheet Management – Asset and Liability (ALM) Control and Analysis:

The ALM Control and Analysis team is responsible for identifying, measuring, monitoring and reporting liquidity and market risk exposures in the banking book of SHUSA and its Subsidiaries on a consolidated basis. The responsibilities of the team are the following:

- Measure the overall exposure to structural liquidity; interest rate risk and market risk (IRR, MVE, NII Sensitivities, etc.)
- Analyze the proposed M&L risk limits for SHUSA and its Subsidiaries and, where applicable, resolve the proposals or present recommendations to the risk decision-making bodies;
- Provide the framework for the consolidation of banking book risks for the Subsidiaries;
- Supervise and tests that the M&LRMF is properly implemented in the Subsidiaries;
- Provide input for New Products and New Business activity, measuring the potential implications for M&L risks;
- Provide input in for risk tolerance limits, mandates and strategic planning at SHUSA and its Subsidiaries
- Supervise, promote and execute scenario analysis and stress tests as they relate to M&L risks
- Maintain a direct relationship and dialogue with supervisors, and monitor supervisory initiatives;
- Understand, analyze, control and continually monitor the situation of and trends in M&L risk positions and results, reporting them regularly to the Board, ERMC, BERMC and ALCO and propose measures/actions for improved management and controls

5.2.3 Trading Risk team

The Trading Risk Team is responsible for identifying, measuring, monitoring and reporting M&L risk exposures related to the trading book. The Trading Risk Team responsibilities include the following:

- Monitor trading positions against market and liquidity risk limits and mandates approved for SHUSA
- Ensure that all inputs into the position valuation process are independently verified by the Risk Management function.
- Prepare daily reports for senior management and Business Line management that reflect end-of-day positions versus approved M&L risk limits.

- Participate in the New Product and New Business review process for trading products and inform senior management of new product developments, define, approve and implement any new M&L limits as required, and ensure that risk monitoring systems have the capacity to manage and control all new trading products.

- Ensure that all models used to price traded product-related transactions are reviewed by independent parties with the appropriate quantitative skills.

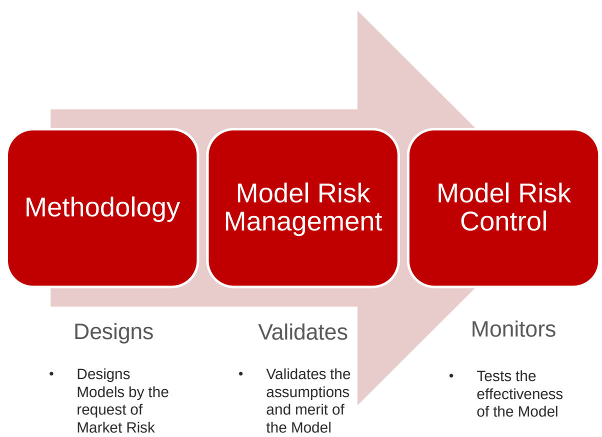
- Calculate the economic Profit and Loss (P&L). This involves verifying that reported P&L is consistent with the expected P&L given the Subsidiaries' trading positions and the day's market moves.

- Ensure that limit monitoring systems are reconciled to back office systems and the general ledger to ensure that all positions are reflected accurately

- Provide analysis on Stress scenario, Concentrations and Option-volatility sensitivity

5.2.4 Model Risk Control

The M&L Model Risk Control team works together with the Methodology and Model Risk Management functions within the CRO team to ensure that M&L models are accurate and reliable:



The Model Risk Control Team responsibilities are:

- Produce specifications for new model developments for internal and external developers in accordance with M&L risk management and control needs and priorities.

- Engage and support the Model Risk Management function for the validation of market risk models.

- Test if a model, as deployed by vendors and the Risk Methodology function, is functioning effectively. Assess its performance over time as conditions and model applications change. Guarantee that models function well and reflect economic and business reality.
- Maintain the M&L internal model inventory and provide support to Model Risk Management in inventorying Market Risk models across SHUSA and its subsidiaries.
- Produce and maintain model parameterization and setup logs across the market risk functions of SHUSA and its Subsidiaries, contributing to transparency and reducing the likelihood of model run and implementation errors.

5.2.5 Support for M&L risk models – Risk Methodology and Model Risk Management

The Risk Methodology function, reporting to the SHUSA CRO, is responsible for providing quantitative modeling services to support M&L risk requirements for SHUSA and its Subsidiaries. Working with the CMRO function, it covers principally the following types of models: ALM models, Trading and VaR calculation models, CVA models, Liquidity models, Transfer Pricing Models.

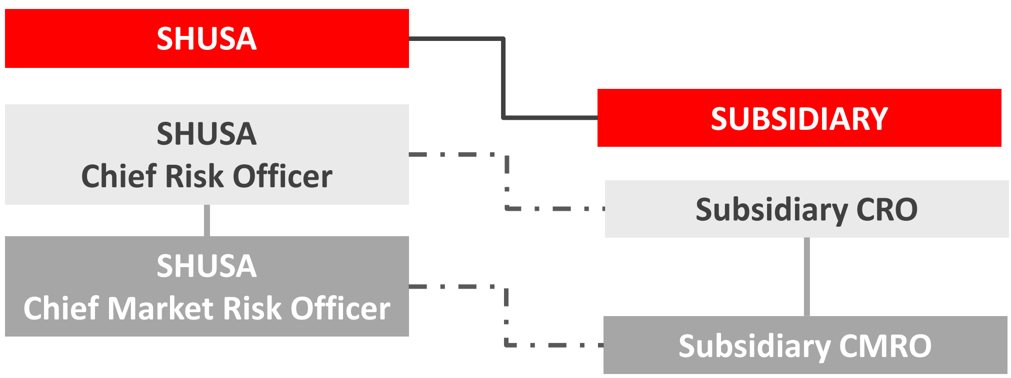
The Risk Methodology function is responsible for the design and development of models as per requirements defined by the CMRO function and for the maintenance of these models once they are put into production. Although there is a preference for developing the models with internal resources, whenever necessary Risk Methodology will also be responsible for engaging third-party vendors to carry out the assigned quantitative modeling tasks, ensuring that model development process adheres with the Enterprise Model Risk Management Procedures and of vendor model maintenance once they are put into production.

The Model Risk Management function, reporting to the SHUSA CRO, is responsible for implementing the model risk management which, relating to M&L risk includes the validation of all models following the Model Risk Management procedures and guidelines, the maintenance of the SHUSA model inventory, which includes M&L Risk Models.

5.3 SHUSA and Subsidiary M&L Risk Management Organizations

Each SHUSA subsidiary will maintain its own M&L risk management organization commensurate with its size and complexity. Each subsidiary CMRO will report hierarchically to its respective CRO and indirectly to the SHUSA CMRO.

The subsidiary M&L risk management organizations are directly accountable to the SHUSA M&L risk organization for the implementation of the ERM Framework and for operating in accordance with it. SHUSA's Credit Risk Management function can attend as an observer all of the Subsidiary's M&L risk committees.



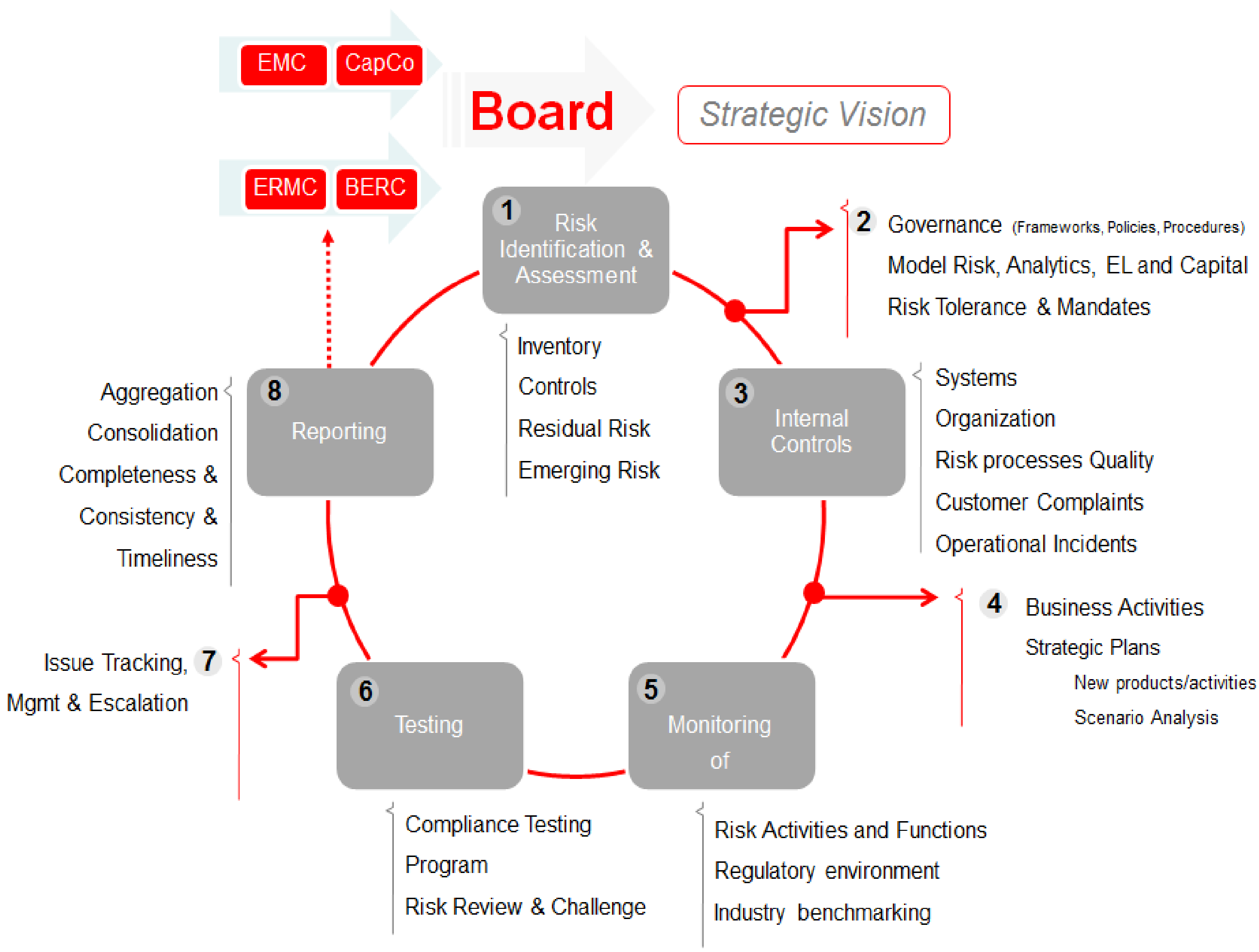
The M&L risk management functions within each subsidiary will have a functional report to their respective counterparts within the SHUSA CMRO structure. Through this defined reporting responsibility the SHUSA CMRO organization has the authority to review, challenge and recommend actions regarding identified issues and emerging risks within the risk cycle and timeline related to M&L risk within each Subsidiary. In this way SHUSA is able to provide general M&L risk management oversight, ensure effective controls, and implement an integrated enterprise-wide risk framework through coordination with the risk officers within SHUSA and each subsidiary.

This structure maintains the integrity of SHUSA's individual subsidiaries, and the accountability of their boards of directors and of executive management for their performance.

6. ERM Risk Methodology

The ERM Risk Methodology is based upon building blocks that, taken as a whole, ensure that an integrated set of processes are defined and implemented throughout the risk cycle[5]. All Frameworks and Policies must ensure that the ERM methodology is embedded across all risks and all the organization.

The hallmark of the methodology is to continuously verify that the business model is sustainable, the risk identification, assessment, management and reporting is effective and consistent across all Business Lines, with back testing of models and outcomes embedded as part of the business cycle.



5 'Cycle' denotes a conceptual relationship and not necessarily a calendar-based sequence. Each element of the cycle may become a priority for attention at any time, depending on developments in the risk or control environments.

1 Risk ID and Assessment
• Risk Identification:
    ○ Risk inventory
    ○ Risk measurement
    ○ Risk quantification
    ○ Risk controls and mitigants
• Risk response – accept/ mitigate/ reject.
• Risk Correlation
• Emerging Risks
	2 Governance
	• Governance of Risks (Risk Frameworks)
	• Policies
	• Procedures
	• New Product Approval
	• Cost management and effectiveness of controls
	• Organization, Staffing and Training
	
	Model Risk and Model Usage,
	Risk Analytics and Capital Calculation
	• Risk Model development and validation
	• Risk Model User/ Owner governance and back testing
	• Loss identification and forecasting
	• ICAAP / CCAR
	• Liquidity stress testing
	
	Risk tolerance & Mandates
	• Risk Tolerance Limits & Metrics
	• Risk Scoring, Risk Approvals & Mandates

3 Internal Control
• Quality assurance and Control
    ○ Systems
    ○ Organization
• Risk processes quality
• Customer complaints
• Operational incidents
	4 Business Activities
	• Business plans
	• Commercial strategy
	• New Products
	• Business plan scenario analysis

5 Monitoring • Regulatory, Policy and Business • Industry benchmarking • Risk Activities and functions • Risk Limits, KRIs, KPIs, Risk Tolerance Statement	**6 Testing** • Compliance Testing Program • Risk Review & Challenge
7 Issue tracking and Escalation	**8 Reporting** • Risk Monitoring / Loan Quality • Risk Reporting • Risk Aggregation / Consolidation • Completeness, consistency & timeLines • Regulatory Reporting

7. Regulatory references

This M&LRMF incorporates guidance from the Federal Reserve, the Office of the Comptroller of the Currency, and other regulators as follows:

- Enhanced Prudential Standards (EPS): Federal Reserve, Vol. 79, #59, subpart O, 252.155
- Interagency Policy Statement on Funding and Liquidity Risk Management. March 2010
- Section 3005.1 of the Trading and Capital Market Activities Manual. Federal Reserve Bank. July 2011
- Federal Reserve Regulation A. March 2010
- Federal Reserve Regulation D. July 2011
- Federal Reserve Regulation F. September 2003
- Federal Reserve Regulation W. January 2009
- Federal Deposits Corporation Improvement Act (FDCIA). December 1991.
- Federal Law 12 CFR 935, Federal Housing Finance Board – Advances. J
- Federal Law 12 CFR 337.6
- Federal Laws 12 CFR 5, 12 CFR and 12 USC 60
- FASB 115
- Joint Advisory on Brokered and Rate Sensitive Deposits, May 2001. By the OCC, FDIC, FED and OTS.
- Comptroller's Handbook Liquidity June 2012
- Bank Holding Company Supervision Manual, Division of Banking Supervision and Regulation of Board of Governors of the Federal Reserve System, Section 2127.0, Interest-Rate Risk (Risk Management and Internal Controls). Last update: January 2009.
- Office of the Comptroller of the Currency, Interest Rate Risk, Comptroller's Handbook, June 1997 and March 1998. http://www.occ.gov/static/publications/handbook/irr.pdf
- Office of the Comptroller of the Currency, Interagency Policy Statement on Funding and Liquidity Risk Management, (also known as SR 10-6), March 2010. http://www.occ.gov/news-issuances/federal-register/75fr13656.pdf
- Office of the Comptroller of the Currency, Advisory on Interest Rate Risk Management, (also known as SR 10-1), January 2010. http://www.occ.treas.gov/news-issuances/bulletins/2010/bulletin-2010-1a.pdf
- Interagency Advisory on Interest Rate Risk Management, January 7th 2010.
- FAS Statement No. 157 Fair Value Measurements, September 200
- FAS Statement No. 155.Accounting for Certain Hybrid Financial Instruments— an amendment of FASB Statements No. 133 and 140, February 2006[5].
- FAS Statement No. 137. Accounting for Derivative Instruments and Hedging Activities—Deferral of the Effective Date of FASB Statement No. 133—an amendment of FASB Statement, November 1976[5].
- Section 165 of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

8. Document History and Version Control

8.1 Ownership and Authorship

Version	Date	Author	Owner	Change
1.0	March 2015	CMRO	CRO	New Market and Liquidity Frameworks, alignment to SHUSA ERM Framework

8.2 Sign-Off

Version	Approving Body	Governance Committee Approval or Endorsement	Final Approval Date
1.0	N/A	Market Risk Committee	February 2015
1.0	N/A	Enterprise Risk Management Committee	2/25/2015
1.0	SHUSA Board Enterprise Risk Committee	N/A	3/19/2015