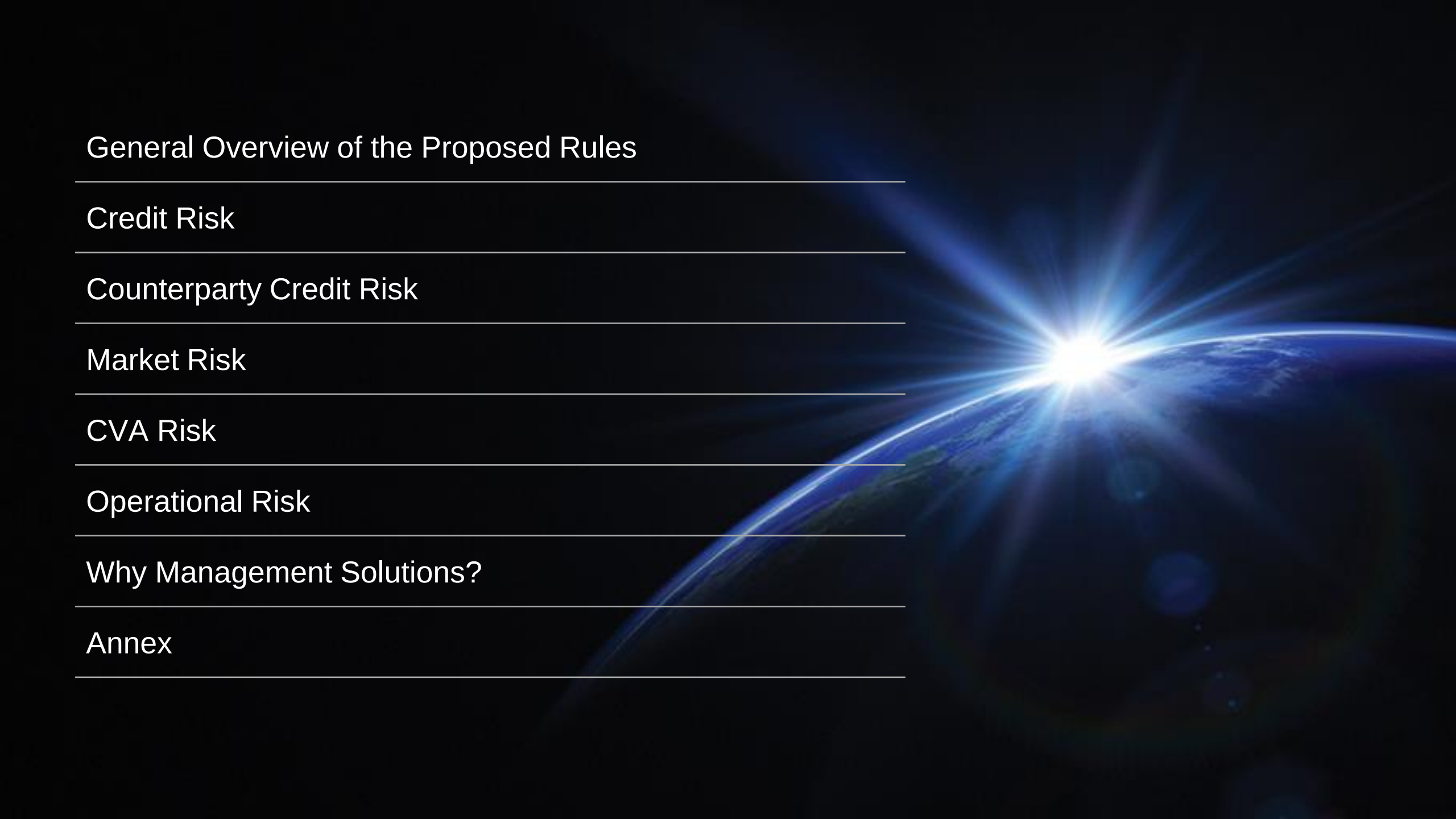
Basel III Endgame

Basel III final reforms in the US



1 General Overview of the Proposed Rules

Executive Summary

The three federal banking agencies[1] have published a set of proposed rules, known as Basel III endgame, to strengthen capital requirements for large banks to enhance the banking system

Context

Following the **2008 financial crisis**, the agencies adopted an initial set of reforms to improve the effectiveness of the regulatory capital framework and address its weaknesses. In **July 2023**, the agencies jointly published the **proposed rules to Strengthen Capital Requirements for Large Banks** that would build on these initial reforms by making additional changes in response to the financial crises. The proposal would implement the final components of the Basel III agreement, also known as Basel III endgame.

Objectives

By **strengthening the requirements** that are applicable to large banking organizations, the proposal would enhance their resilience, and would reduce the risk of financial instability in the system and the costs these entities may pose to the Federal Deposit Insurance Fund in the case of material distress or failure. The standardization of risk-based procedures is one of the key enhancements to achieve consistency in risk and capital measurements.

Main Changes

- **Regulatory capital calculation alignment** with BCBS proposal for banking organizations subject to Category III or IV capital standards.
- **Remove the use of internal models** to calculate regulatory capital requirements and substitute them by simpler and more consistent standardized frameworks.
- **Update the standardized approaches** for market risk and CVA risk.
- **Align Federal Reserve's regulatory reporting requirements** with the changes to capital requirements.

Timeline

(1) Fed, FDIC, OCC

Access to Document

1 General Overview of the Proposed Rules

Scope: The Four Banking Categories

The proposal would apply to large banking organizations, which are classified into four categories depending on their asset size. Categories III and IV are to be the most affected

	Category I	Category II	Category III	Category IV
	US G-SIBs	≥$700B in total assets or ≥$75B in cross jurisdictional activity	≥$250B in total assets or ≥$75B in non-banking assets, WSTWF or OBS exposure	≥$100B in total assets
Credit risk	✚	✚	✚	✚
Counterparty Credit Risk	✚	✚	✚	✚
Market Risk	✚	✚	✚	✚
CVA risk	✚	✚	✚	✚
Operational Risk	✚	✚	✚	✚

Newly applicable regulations ✚

Currently applicable regulations with changes ✚

1 General Overview of the Proposed Rules
Defined Risk-Based and Capital Changes

Each type of risk is affected by the proposed regulations by altering the current methods of assessment, as well as the output floor and capital ratio requirements

	Current	Proposed
Credit Risk	• (SA) Standardized credit risk approach • (AIRB) Internal models (only Cat I-II)	• (SA) Revisited Standardized credit risk approach • (ERBA) Expanded risk-based approach
Counterparty Credit Risk	• (SA) Standardized approach (SA-CCR) or CEM • (AIRB) Standardized approach (SA-CCR) or Internal Models	• (SA-CCR) Standardized risk weight (updated for Cat I-II, new requirements for Cat III-IV)
Market Risk	• Market Risk Rule applicable to both standardized and advanced approaches	• (SA) New risk-based standardized method (Cat I –IV) • (IMA) Internal models-based method (they require specific approval) (Cat I-IV)
CVA Risk	• Simple or CVA Internal Methods (Cat I-II)	• (BA-CVA) Basic approach and (SA-CVA) Standardized approach (updated for Cat I-II, new requirements for Cat III-IV)
Operational Risk	• No RWA requirement in the US except if in AMA (Cat I-II)	• (ERBA) Standardized approach replaces internal model (Cat I-II) and it is a new requirement for Cat III-IV

Dual risk weighted asset requirement

- The higher of the two risk-weighted asset amounts:
  - Standardized RWA (SA CR + SA-CCR + SA MR)
  - Expanded-approach RWA (CR, MR, Equity, OR, CVA on ERBA), adjusted by the output floor (maximum RWA with or without floor)

  Output Floor = 0.725 × (Credit RWA + Operational RWA + Market RWA (standardized measure) + Equity RWA + CVA RWA)
- All capital buffer requirements, including stress tests, would apply regardless of which method produced the **lower ratio**[1]
- Category III and IV banks must include AOCI components in common equity tier 1 capital elements and **lose the ability** to opt-out of this

(1) Capital ratios will be adjusted by credit loss allowance not included in tier 2 capital and allocated risk transfer reserves

2 Credit Risk
Summary and Implications

New risk-based approaches to calculating credit risk capital requirements are built on a foundation of due diligence, risk weights, Off-balance sheet exposures, and mitigation

Due Diligence

Banking organizations must:

- Have **effective internal procedures** for regulatory reporting.
- Take appropriate **risk mitigating measures** such as allocating additional capital, establishing larger credit loss allowances, or requiring additional collateral.
- Maintain capital **commensurate** with the levels of risk exposure.
- Understand the risk associated with lending.

Weights for Credit Risk

- Use **new ERBA** for capital requirements calculations (replace the use of internal models).
- The risk-weighted asset amount for an on-balance sheet exposure is calculated by **multiplying the exposure** amount by the risk weight, consistent with current methodologies.
- **Increase the risk weights for defaulted exposures**, exposures to depository institutions, exposures to debt instruments, and real estate exposures.

Off-balance sheet Exposures

- **Credit conversion factors** would now reflect the expected proportion of the off-balance sheet (OBS) item that could become an on-balance sheet credit exposure to the borrower.
- Upon determining the off-balance sheet exposure amount, it will be multiplied by the appropriate risk weight in order to calculate a risk-weighted asset value which helps in capital requirement calculations. The proposed averaging methodology would apply a multiplier of 10 to the average total drawn amount.

Credit Risk Mitigation

- Replace certain methodologies for recognizing the risk-reducing benefits of financial collateral and eligible guarantees and credit derivatives—namely, the internal model methodology, simple VaR. For **eligible** guarantees and eligible credit derivatives, the proposal would permit banking organizations to **use the substitution approach**.
- **No longer permit the recognition of credit protection** from nth-to default credit derivatives.

3 Counterparty Credit Risk
Summary and Implications

To determine if a borrower is credible, risk-sensitive measures are necessary in aiding the process of risk management and measurement of exposure at default

Hedging Sets, Haircuts, and Exposure Calculations

- Exposure calculations for **repurchase-style transactions** and **margin loans** are refined
- **Hedging** sets for **specific assets** are introduced
- Better recognition of **secured and cleared trades**
- Minimum **haircut floors** for **SFT** exposures
- **Increased risk-sensitivity** through addressing negative market values and over-collateralization
- Alignment with risk-based framework by revising market price **volatility haircuts**
- Standardized approach to CCR (SA-CCR) replaces the current methodology for all categories of banking institutions. The **current exposure method** is to be replaced

Standardized Approach for Measuring Exposure at Default

$$\textit{Exposure at Default} = (\propto \times \textit{replacement cost}) + \textit{potential future exposure}$$

1. Regulatory scaling factor alpha
- 1.4 for non-commercial end users
- 1.0 for commercial end users

2. Replacement cost (trading)
- As calculated under SA-CCR
- The notional amount of the derivative contract

3. Potential future exposure
- Multiplier accounting for over-collateralization
- Add-ons from various asset classes
- Must be greater than 0

4 Market Risk
Summary and Implications

The proposal would introduce a risk-sensitive standardized methodology for calculating risk-weighted assets for market risk and a new models-based methodology

Market Risk-Covered Position	• The definition of market risk covered position is expanded to include **any trading asset or trading liability** held for regular dealing or making a market in securities or other instruments, as well as **foreign exchange and commodity positions**, regardless of whether they are a trading asset or liability, with certain exclusions (i.e. structured positions subject to prior approval and , those that are eligible as CVA hedges that mitigate the exposure component of CVA risk).
Internal Risk Transfers	• **Internal risk transfers** are defined and requirements are established for a banking organization to recognize certain types of internal risk transfers in risk-based capital requirements. (Capitalized exposure to a trading desk or CVA desk to a trading desk)
General Requirements	• Introduction of the concept of a **trading desks** and **notional trading desks**, banking organizations must define their trading desk structure and have clearly defined trading and hedging strategies for their trading positions. • Replacement of the VaR-based measure with an **expected shortfall-based measure** that better accounts for extreme losses. • Active management of covered positions, **stress testing**, and internal assessment of capital adequacy. • Expanded responsibilities for the independent risk control unit's oversight to include market risk management systems.
Measure for Market Risk	• **Standardized measures** will be the default methodology for capital requirements, consisting of sensitivities-based method, standardized default risk capital requirement, a residual risk add-on, fallback capital requirement, capital add-on for re-designations, and any additional capital requirement established by the primary Federal supervisor. • **Models-based methodology** is introduced and combines internal models approach capital requirements for model-eligible trading desks, standardized approach capital requirements for model-ineligible trading desks, and additional capital requirements for model-eligible trading desks with shortcomings in internal models. These desks must satisfy model eligibility criteria and processes, ensuring efficient operations and regulatory compliance. • **Apply fallback capital requirements** to market risk covered positions and have clear identification on market risk covered and non-covered positions.

5 CVA Risk
Summary and Implications

New CVA risk requirements stem from adding new standardized approaches relating risk-weights and hedges as well as new measures and risk management requirements

Risk Management Requirements

- Organizations using the standardized approach must document all policies of the CVA desk, **internal auditing procedures**, and internal CVA calculations.
- To receive approval to use the standardized approach, an organization must be able to calculate its **regulatory CVA** on a **monthly basis**.
  - Once approved, exposure models included in regulatory CVA calculations must be a **part of the risk management framework** including management, identification, approval, measurement, and reporting of CVA risk.

CVA Positions and Hedges

- Define a risk-covered position as a derivative contract that is not a cleared transaction.
- **Cleared transactions** and **SFTs** are not considered CVA risk-covered positions.
- Certain **CVA hedges** can be included as **risk-reducing elements** in risk-weighted asset calculations.
  - Treatment of hedges aims to reflect economic risks and CVA capital requirements
  - Clear policies must be established by being reviewed and approved by senior management

Measurements for Calculating Capital Requirements

- **Basic approach (BA-CVA)**
  - Easier to implement than SA-CVA, similar to the current standard approach
  - Recognizes the risk-mitigating benefit of hedges
  - Restricts hedge-effectiveness
  - Exposure-based approach
  - New method for calculating risk-weights for credit indices
- **Standardized approach (SA-CVA)**
  - Requires regulatory approval to use
  - Complex and uses model sensitivities-based approach similar to market risk
  - Reflects capital requirements for **delta and vega** only (market-based)
    - Aggregates risk-weighted sensitivities for delta and vega separately
  - Includes a capital multiplier that accounts for any model risk

Operational risk capital requirements are now standardized and are computed as a functional measure of the business indicator and the ILM

Business Indicator Components

1 Interest, Lease, and Dividends
- Aims to capture lending and investment activities through measures of interest income and expense (includes interest-earning activities) and dividends.

2 Services
- Aims to capture commission-based activities and sales, as well as other banking activities, such as those resulting in other operational incomes and expenses.

3 Financial
- Aims to capture trading activities and other activities that are associated with balance sheet activities relating to assets and liabilities

Business Indicator Input

- The input to each of the business indicator components will be calculated based on a **three-year rolling** average in order to dampen the effect of temporary fluctuations in each of them.

Internal Loss Multiplier

- Replaces internal models of risk evaluation with standardized approaches.
- Net operational losses **in excess of $20,000** must be included in the calculation of the ILM.
- ILM is **floored at 1.0** and scales up capital requirements based on **10 years** of operational loss data.
  - Scaling factor that captures a bank's internal losses
  - In other words, the capital requirement must be greater than the business indicator
  - Exposure is approximated based on a banking organizations prior business volume and activities with higher volumes driving higher capital

Data Collection

- Organizations must document the procedures used for the identification of operational loss data. Must have procedures in place to determine the **accuracy** of such data.

Capital under the new standardised calculation approach for operational risk (SMA or BCBS SA)

Capital = BIC x ILM

BIC = $\sum \alpha \; x \; BI$ + **ILDC** (Interests, leases, dividends Component) + **SC** (Services Component) + **FC** (Financial component)

ILM* = $Ln\left(\exp(1) - 1 + \left(\frac{LC}{BIC}\right)^{0,8}\right)$ → Loss Component (LC) = 15 x average of the total annual operational risk loss (of the last 10 years)

(*) Component not applicable in European regulation.

7 Why Management Solutions?

MS has extensive experience in risk and capital management, particularly in the processes of compliance with the associated regulation (Basel/CRR/CRD/Capital Rules)

1. **Experience with supervisory bodies.** MS is a "highly rated external service provider" in internal capital models by different European and American Supervisors. In particular, it has seven framework service agreements with the ECB related to internal models and is the highest rated provider in the capital area.
2. **Regulatory modeling.** MS has extensive experience in modeling: (i) credit risk (IRB, IFRS 9 & CECL, stress testing, others), (ii) market risk, CCR and IRRBB (VaR, pensions, xVA); (iii) ALM and liquidity; (iv) residual value; and (v) economic capital, among others.
3. **Independent validation.** MS collaborates with different institutions as an independent supervisor of internal models, verifying compliance with regulatory requirements (e.g., FRB Capital Rule, SR11-7, CRR, EBA, ECB Guidance on internal models...) to obtain approval from regulators (e.g., FRB, OCC, ECB, DNB, Bundesbank...).
4. **Experience in the design and implementation of capital calculation engines.** MS has extensive experience in supporting institutions in the design and implementation of capital calculation and reporting solutions (including our proprietary MIR and SIRO tools, already adapted to BIS IV), as well as in the execution of capital impact analysis exercises and optimization.
5. **Specialized team.** MS has a team of more than 1,000 experts in the field of risk and capital management (modelling, regulation, impacts, information systems, reporting...), combining quantitative and technical expertise with strong regulatory knowledge.

A Annex
Acronyms

AIRB	Advanced Internal Rating-Based
AOCI	Accumulated Other Comprehensive Income
BCBS	Basel Committee for Banking Supervision
CCR	Counterparty Credit Risk
CEM	Current Exposure Method
CRR III	Capital Requirements Regulation III
CVA	Credit Valuation Adjustment
ECB	European Central Bank
ERBA	Expanded Risk-Based Approaches
ESG	Environmental, Social, and Governance
FDIC	Federal Deposit Insurance Corporation
FED	Federal Reserve System
GSE	Government-Sponsored Enterprise
G-SIB	Global Systemically Important Bank
ILM	Internal Loss Multiplier
IMA	Internal Models Approach
OCC	Office of the Comptroller of the Currency
OTC	Over-the-counter
PSE	Public sector entity
RWA	Risk-weighted assets
SA	Standardized Approach
SFT	Securities financing transactions
VaR	Value-at-risk
WSTWF	Weighted short-term wholesale funding

ManagementSolutions

Making things happen

International *One Firm*

Multiscope Team

Best practice *know-how*

Proven Experience

Maximum Commitment

Patricia Pajuelo
Partner at Management Solutions
patricia.pajuelo@msnorthamerica.com

Marta Hierro
Partner at Management Solutions
marta.hierro@managementsolutions.com

For more information please visit

www.managementsolutions.com

Or follow us at: