Regulatory Capital Management & Reporting: The Impact of Basel III

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Agenda

1. Summary of key changes under Basel III and their impact
2. Focus on Enterprise Risk Management

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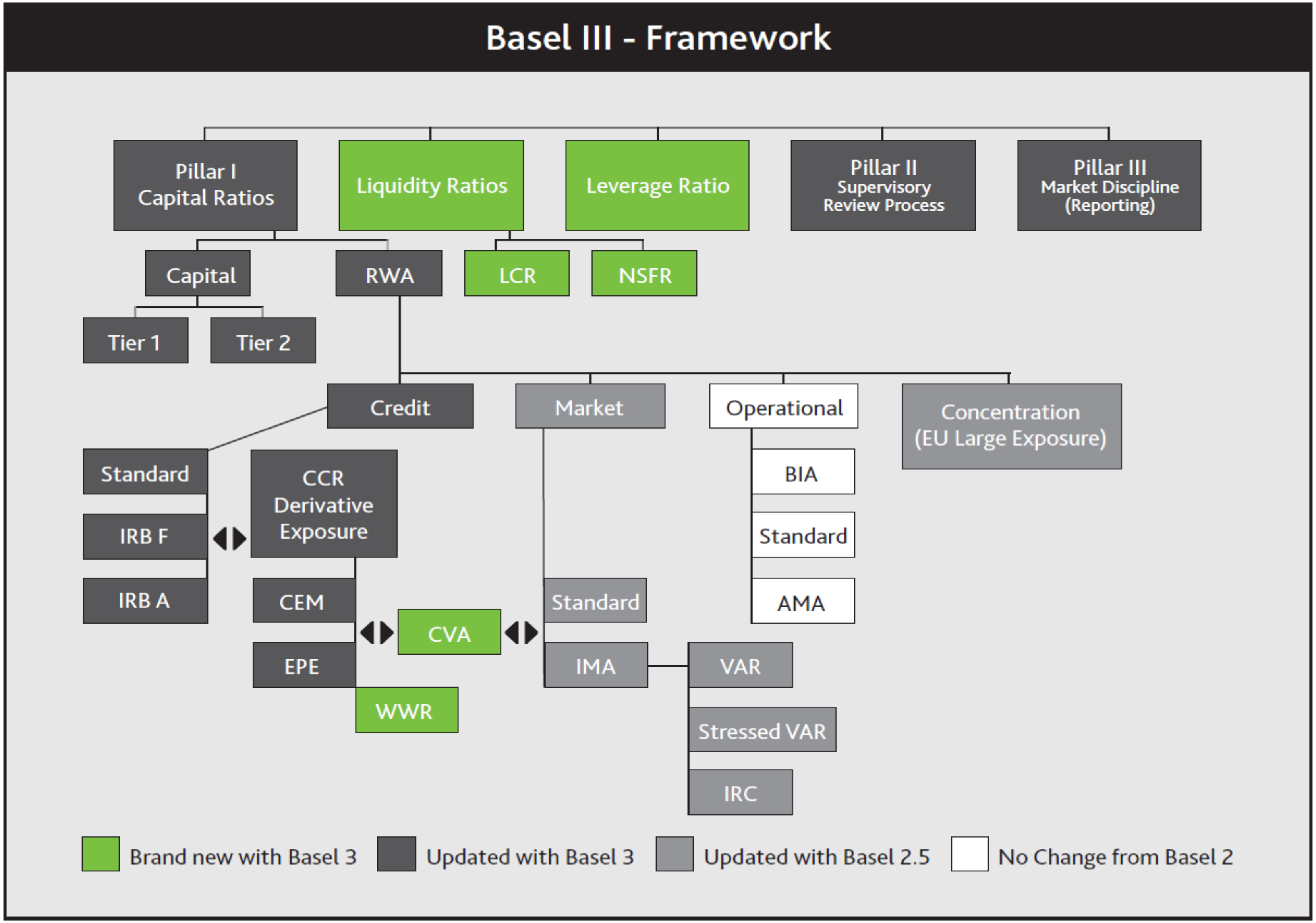
1. **Summary of key changes under Basel III and their impact**
2. **Focus on Enterprise Risk Management**

Basel III…

- More information and the need for greater transparency
- Focus on strengthened capital buffers, stronger risk management and governance practices, etc.
- Spotlight on structured credit and off-balance sheet activity
- Spotlight on liquidity risk
- Counterparty credit risk – market risk
- Leverage
- Countercyclical measures
- Attention to macro-prudential supervision


Basel III - Framework
Pillar I
Capital Ratios
Liquidity Ratios
Leverage Ratio
Pillar II
Supervisory
Review Process
Pillar III
Market Discipline
(Reporting)
Capital
RWA
LCR
NSFR
Tier 1
Tier 2
Credit
Market
Operational
Concentration
(EU Large Exposure)
Standard
IRB F
IRB A
CCR
Derivative
Exposure
CEM
EPE
CVA
WWR
Standard
IMA
VAR
Stressed VAR
IRC
BIA
Standard
AMA
Brand new with Basel 3
Updated with Basel 3
Updated with Basel 2.5
No Change from Basel 2

Implementation progress?

1 = draft regulation not published; 2 = draft regulation published; 3 = final rule published; 4 = final rule in force.

Per BIS, as of end September 2011:

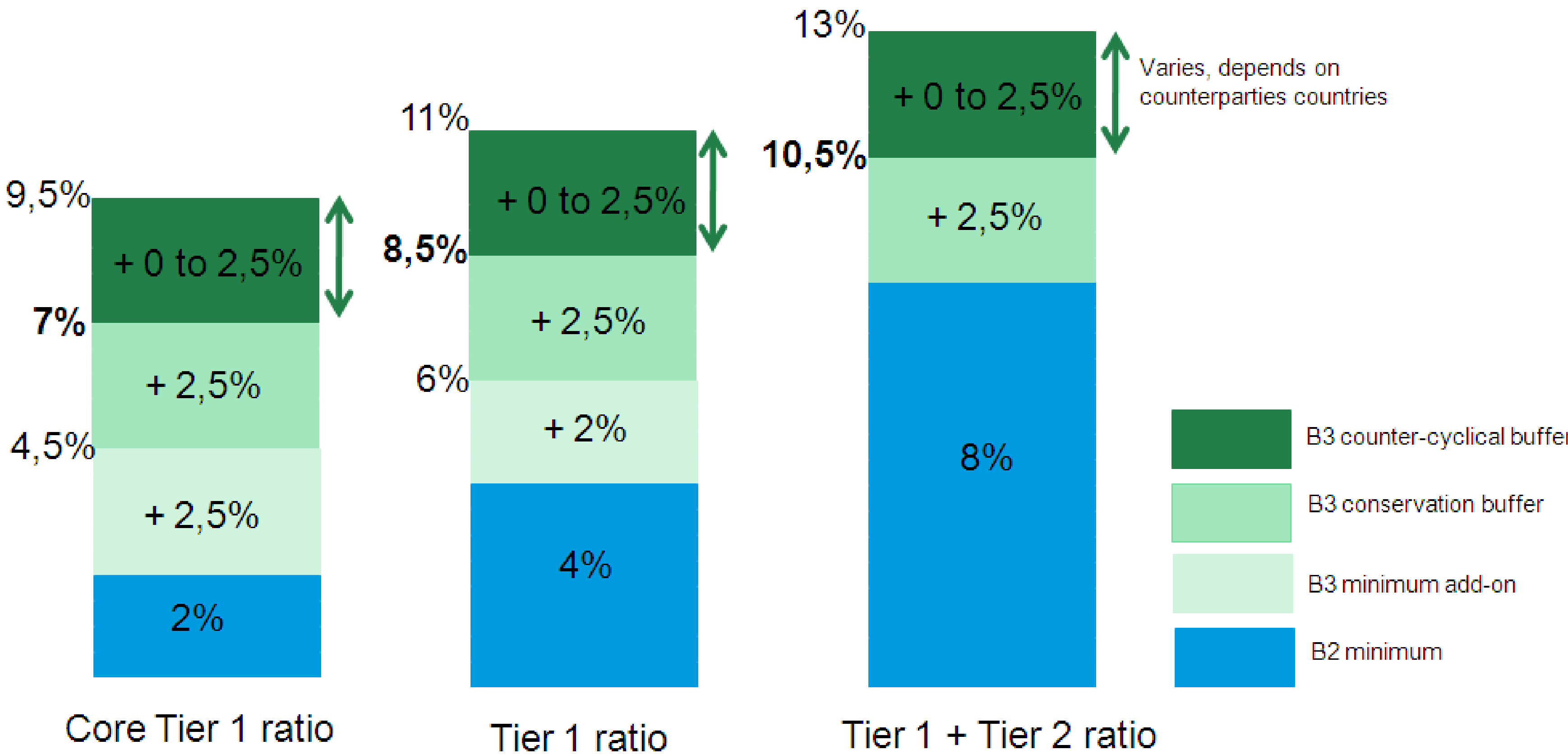
» ***Status of Basel II adoption***
  - USA = 4, Canada = 4, EU (inc UK) = 4, Japan = 4, China = 4, Singapore = 4
  - **Saudi Arabia; 4 = final rule in force... implementation completed**

» ***Status of Basel 2.5 adoption***
  - USA = 1/2, Canada = 2, EU (ex UK) = 4, UK = 2, Japan = 3, China = 4, Singapore = 3/4
  - **Saudi Arabia; 3 = final rule published**

» ***Status of Basel III adoption***
  - USA = 1, Canada = 1, EU (inc UK) = 2, Japan = 1, China = 2, Singapore = 1
  - **Saudi Arabia; final regulation issued to banks, i.e. 3 = final rule published ... the most advanced**

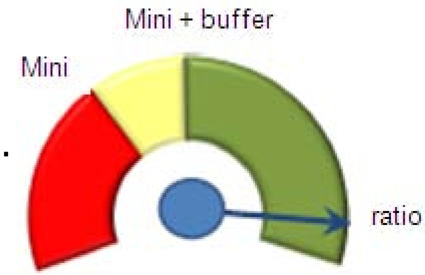
Basel II vs Basel III capital ratios

Plus additional capital ratio buffer for SIFIs (G-SIB)

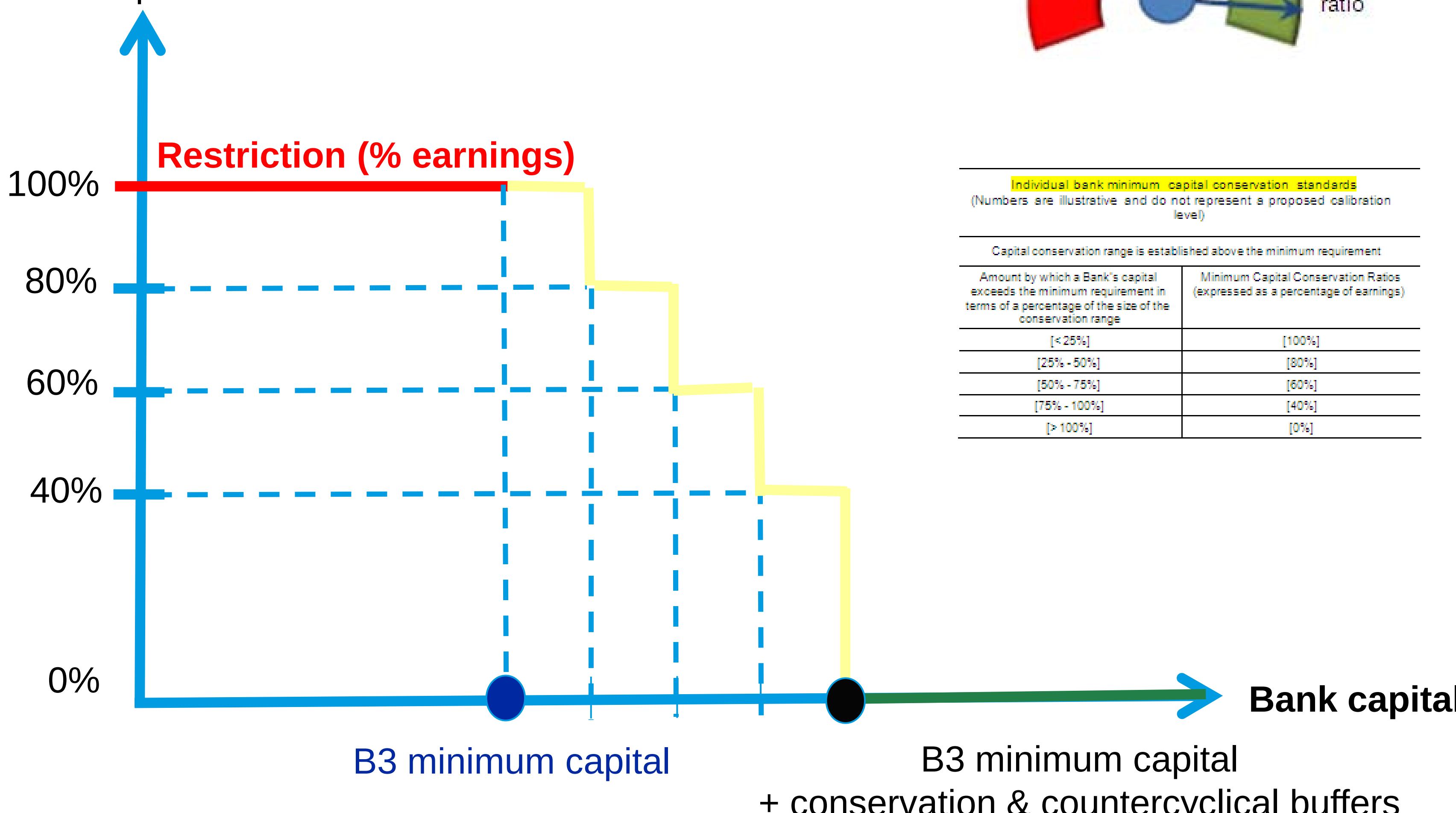


Moody's Analytics

Restriction on earnings distribution



Restriction on dividends, compensation bonuses, equity buy back …
if capital ratios do not exceed minimum + buffers



Individual bank minimum capital conservation standards
(Numbers are illustrative and do not represent a proposed calibration level)

Capital conservation range is established above the minimum requirement	
Amount by which a Bank's capital exceeds the minimum requirement in terms of a percentage of the size of the conservation range	Minimum Capital Conservation Ratios (expressed as a percentage of earnings)
[< 25%]	[100%]
[25% - 50%]	[80%]
[50% - 75%]	[60%]
[75% - 100%]	[40%]
[> 100%]	[0%]

G20 G-SIBs named

Bank of America
Bank of China
Bank of New York Mellon
Banque Populaire CdE
Barclays
BNP Paribas
Citigroup
Commerzbank
Credit Suisse
Deutsche Bank
Dexia
Goldman Sachs
Group Crédit Agricole
HSBC
ING Bank

JP Morgan Chase
Lloyds Banking Group
Mitsubishi UFJ FG
Mizuho FG
Morgan Stanley
Nordea
Royal Bank of Scotland
Santander
Société Générale
State Street
Sumitomo Mitsui FG
UBS
Unicredit Group
Wells Fargo

Source: Financial Stability Board 04.11.11

- G20 endorsed a **core T1 capital requirement surcharge starting at 1%** of risk-weighted assets and **rising to 2.5 percent** for the biggest banks (plus an empty bucket of 3.5% CET1 as a means to discourage banks from becoming even more systemically important) -- to be phased in over three years from 2016; capital categories to be outlined from November 2012

- The banks will also have to meet ***resolution planning requirements ("living wills") by end-2012*** (National authorities can extend this requirement to other banks at their discretion)

Increasing capital for Counterparty Credit Risk

- Additional capital charge to cover CVA for OTC derivatives (and possibly SFTs)
  - Standardized approach formula defined (closed function)
  - Credit Derivatives can be used to hedge such charge
  - Internal Model can also be used integrating CVA in EPE model

- Increased IRB RWA for exposures toward large financial institutions (e.g. banks, insurance companies) and unregulated ones (e.g. hedge funds)
  - Asset Value Correlation factor multiplied by 1.25 in IRB risk weighting function

- New haircuts defined for securitization products used as collateral

Increasing capital for Counterparty Credit Risk, cont.d

- More strict capital deductions rules (e.g. deduction from Core Tier 1)

  ⇒ Incentive to reduce OTC activities and to go through clearing houses

- But exposures to “Qualifying” Central Counterparties -CCP- (e.g. clearing houses) not risk free anymore (2% Risk Weight proposed)

- Capital requirements for clearing members contribution to CCPs defaults funds based on the CCP “hypothetical” regulatory capital

Compliance Starting from 2013 – The Pressure is On!

Full Compliance Required

» **Capital**
  - 2013 – Counterparty Credit Risk
  - 2015 – Minimum Core Tier 1 Ratio
  - 2018 – Capital deductions
  - 2019 – Conservation buffer

» **Leverage**
  - 2018 – Leverage Ratio

» **Liquidity**
  - 2015 – Liquidity Coverage Ratio
  - 2018 – Net Stable Funding Ratio

Annex 4

Phase-in arrangements

(shading indicates transition periods - all dates are as of 1 January)

	2011	2012	2013	2014	2015	2016	2017	2018	As of 1 January 2019
Leverage Ratio	Supervisory monitoring		Parallel run 1 Jan 2013 – 1 Jan 2017 Disclosure starts 1 Jan 2015					Migration to Pillar 1	
Minimum Common Equity Capital Ratio			3.5%	4.0%	4.5%	4.5%	4.5%	4.5%	4.5%
Capital Conservation Buffer						0.625%	1.25%	1.875%	2.50%
Minimum common equity plus capital conservation buffer			3.5%	4.0%	4.5%	5.125%	5.75%	6.375%	7.0%
Phase-in of deductions from CET1 (including amounts exceeding the limit for DTAs, MSRs and financials)				20%	40%	60%	80%	100%	100%
Minimum Tier 1 Capital			4.5%	5.5%	6.0%	6.0%	6.0%	6.0%	6.0%
Minimum Total Capital			8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Minimum Total Capital plus conservation buffer			8.0%	8.0%	8.0%	8.625%	9.25%	9.875%	10.5%
Capital instruments that no longer qualify as non-core Tier 1 capital or Tier 2 capital			Phased out over 10 year horizon beginning 2013						
Liquidity coverage ratio	Observation period begins				Introduce minimum standard				
Net stable funding ratio	Observation period begins							Introduce minimum standard	

BUT....continuing uncertainty

- Local rules / interpretation
  - E.g. Dodd Frank, G-SIBs, EBA, UK Independent Commission on Banking
  - E.g. Pillar II negotiations
  - E.g. BIS reviews
- E.g. Global bank regulators eased parts of bank-capital rules to counter concerns from lenders that the measures may harm international trade:
  - The BCBS waived some rules on the reserves lenders must hold against guarantees for importers and exporters... so as to protect growth in emerging markets (October 2011)
- Basel IV...

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Basel III Top 10 Implementation Challenges

Convergence Between Risk and Finance

- New liquidity ratios
- Integrated liquidity and risk data sourcing, consolidation and management

Streamlined and Integrated Regulatory Reporting

- Increased urgency (some reports starting 2013) and depth (need for data granularity)
- Regional regulatory gold plating

Single Data Source for Capital and Liquidity Risk

- Single data source to feed calculations and regulatory reports prevents mismatch errors downstream
- Banks need Basel III credit risk data to compute the new Basel III liquidity risk ratios

Increased Regulatory, Board and Shareholder Pressure

- Internal pressure to understand and improve – shareholders, C-suite, Non-Executive Directors (NEDs) and other stakeholders
- Political uncertainty

Holistic Stress Testing

- Define and run scenarios across risk types

Basel III Top 10 Implementation Challenges (Continued)

Regulatory Uncertainty

- Regulations are still being defined
- What will be the Dodd Frank impact
- Timing

Multi-Jurisdictional Compliance

- Calculations and reporting with different national discretion options

Trading Book Market Risk and CCR Requirements (for IMM)

- Enhancing existing VAR for new 10 day VAR and stressed VAR requirements, IRC to be added
- Enhancing EPE solutions to meet new requirements

Pressure to Reduce Capital Requirements and Increase Returns

- RWA optimization
- Internal pressure to improve operational efficiency

"Hypothetical" Capital Computation by CCPs

- Clearing members will need to capitalize their share of default funds

A direct impact on banks' profitability

- Risk-adjusted return on capital (RAROC) is falling
  - The regulator requires more capital for each transaction
  - The cost of capital is higher due to the markets' risk aversion

- Market conditions are not conducive to higher margins on transactions

- Optimise use of available capital:
  - By refining models that affect RAROC (PD, LGD, FTP, etc.)
  - By analysing transactions ex-ante (profitability at origin)
  - By optimising regulatory calculations (IRBA, EPE, CRM allocation, etc.)
  - By giving management and business lines the indicators needed to steer the business in a very precise and more steady manner (selecting the best segments/customers/products, adapting prices)

→ Need to integrate Business/Risks and Finance/Risks

Solution: Flexible & Adaptable Infrastructure

Centralisation of business line / accounting <u>data</u>:

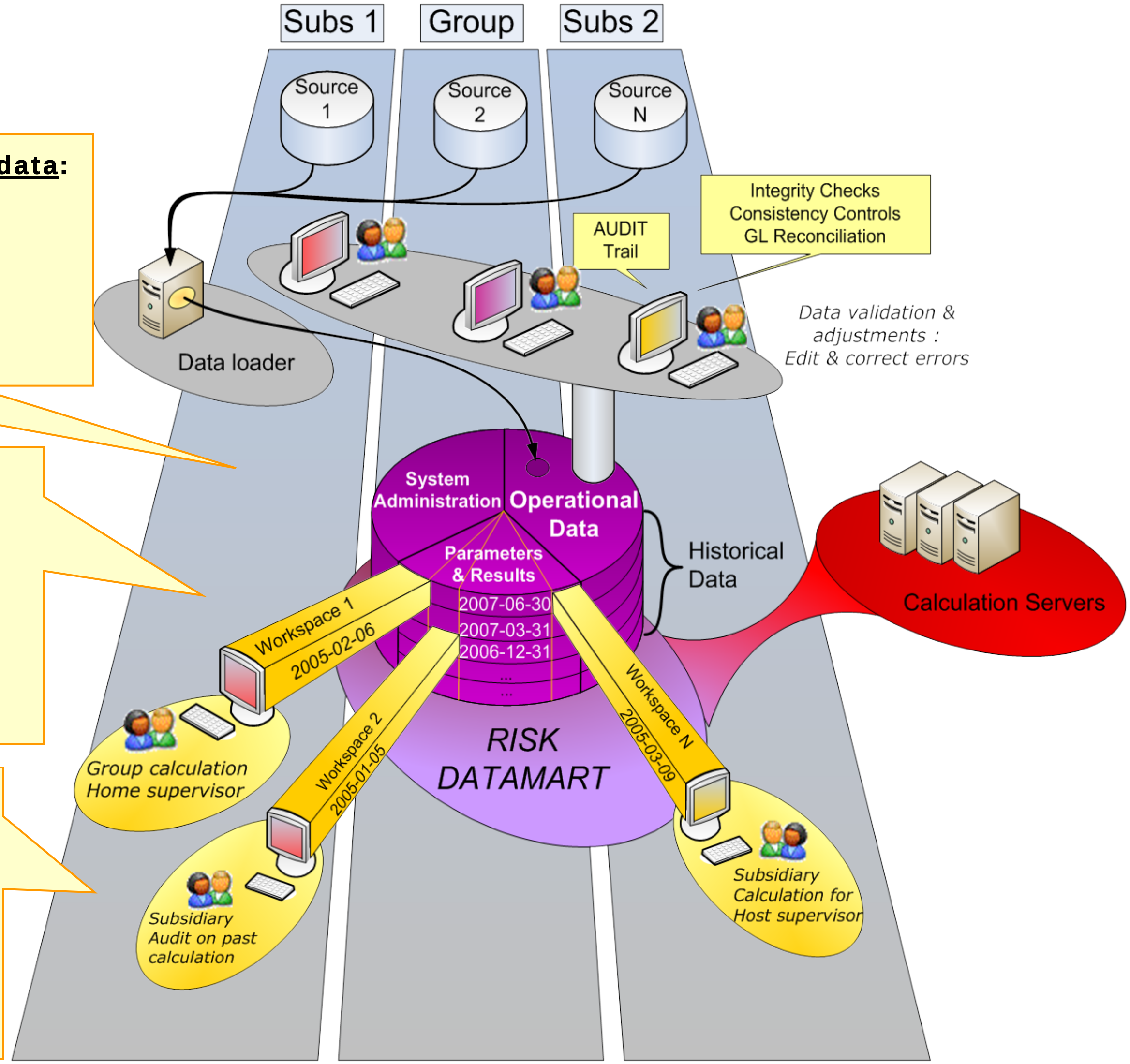
- ✓ Recording
- ✓ Loading, validating, reconciling
- ✓ Instrument modelling
- ✓ Client / product granular information

<u>Calculation</u> architecture enabling:

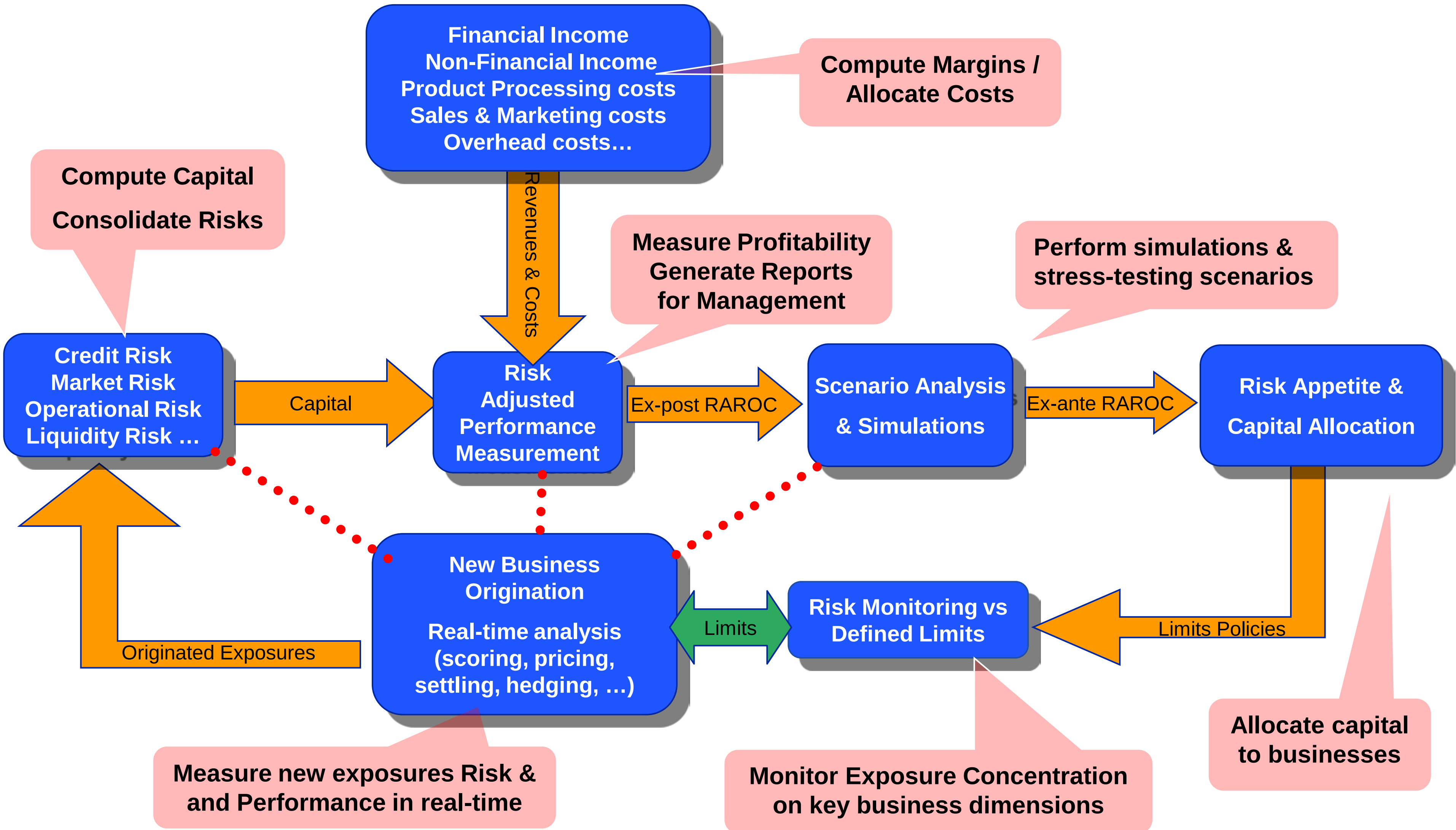
- ✓ Group / Subsidiary access
- ✓ Multi-regulations (home / host)
- ✓ Integration of internal models
- ✓ Support for stress testing
- ✓ Granularity of results

<u>Reporting</u> architecture offering:

- ✓ Regulatory reports by level of consolidation, by country and by date
- ✓ Drill-down of results analysis
- ✓ Summary reports for management (trend analyses, comparison of scenarios, dashboards)



Delivering an ERM Architecture



The benefits of Enterprise Risk Management

» No "stop-gap" effect when implementing regulations
  – Avoids endless reconciliations between different "versions of the truth"
  – Puts focus on the key issues when making changes
  – Accelerates the creation of value by using what is currently in place

» Offers benefits in terms of enterprise management
  – Risk/Reward analysis and stress tests on an industrial scale
  – Responsive to market fluctuations and one-off events
  – Very quick alignment of businesses to strategic decisions
  – Easier capital reallocation between business lines
  – Effective management of P&L related performance indicators
  – Better visibility for investors and rating agencies

Conclusions

- Regulatory change continues apace
- The cost is high...   The opportunity cost is also potentially huge
- ERM is the opportunity at stake

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