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Regulatory Capital Management & Reporting and the Impact of Basel III

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Beirut BIII Conference, May 2012

Agenda

1. Summary of key changes under Basel III and their impact
2. Focus on Enterprise Risk Management
3. Linking to Pillar II; ICAAP and Economic Capital Management

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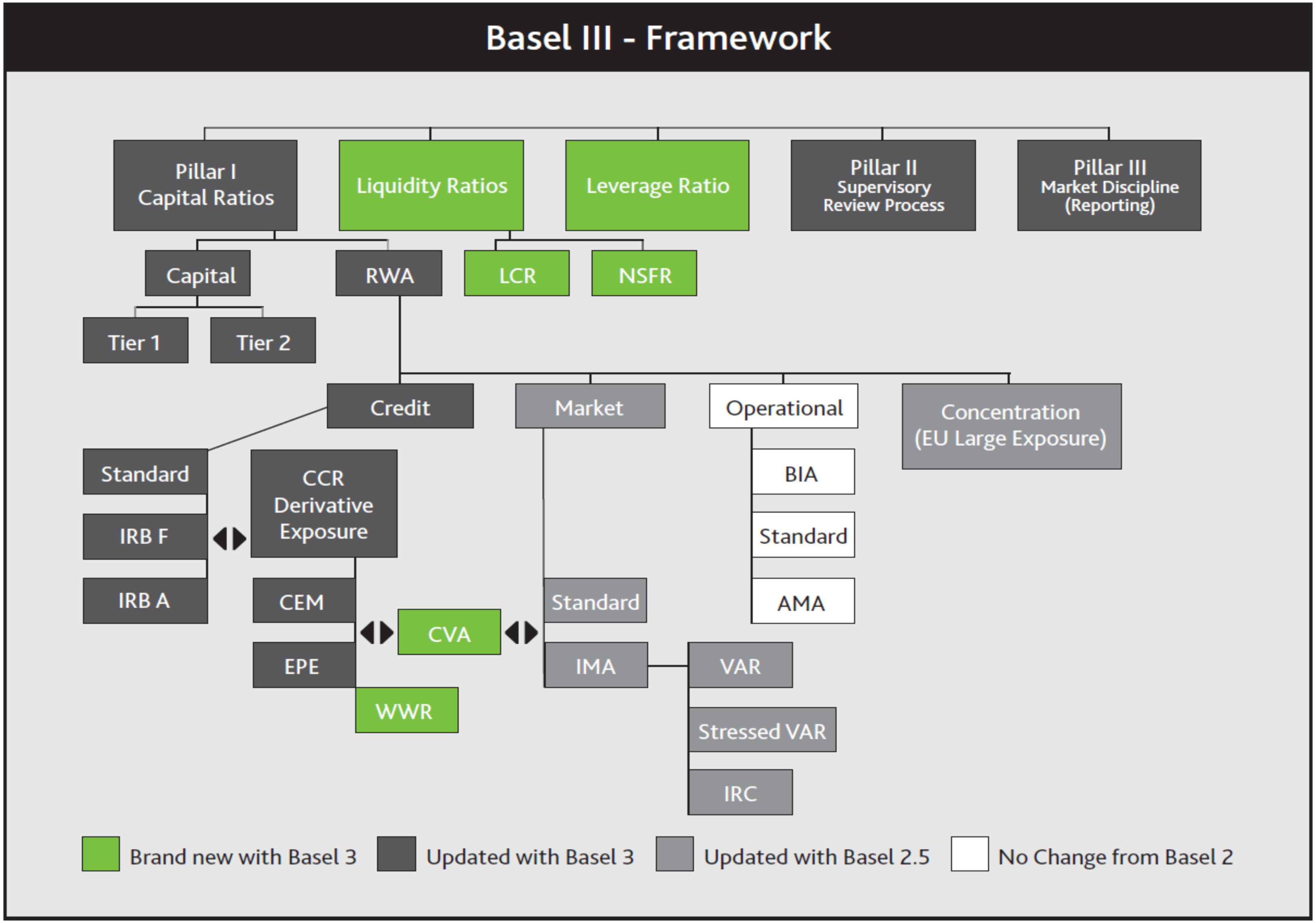
Basel III…

- 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?

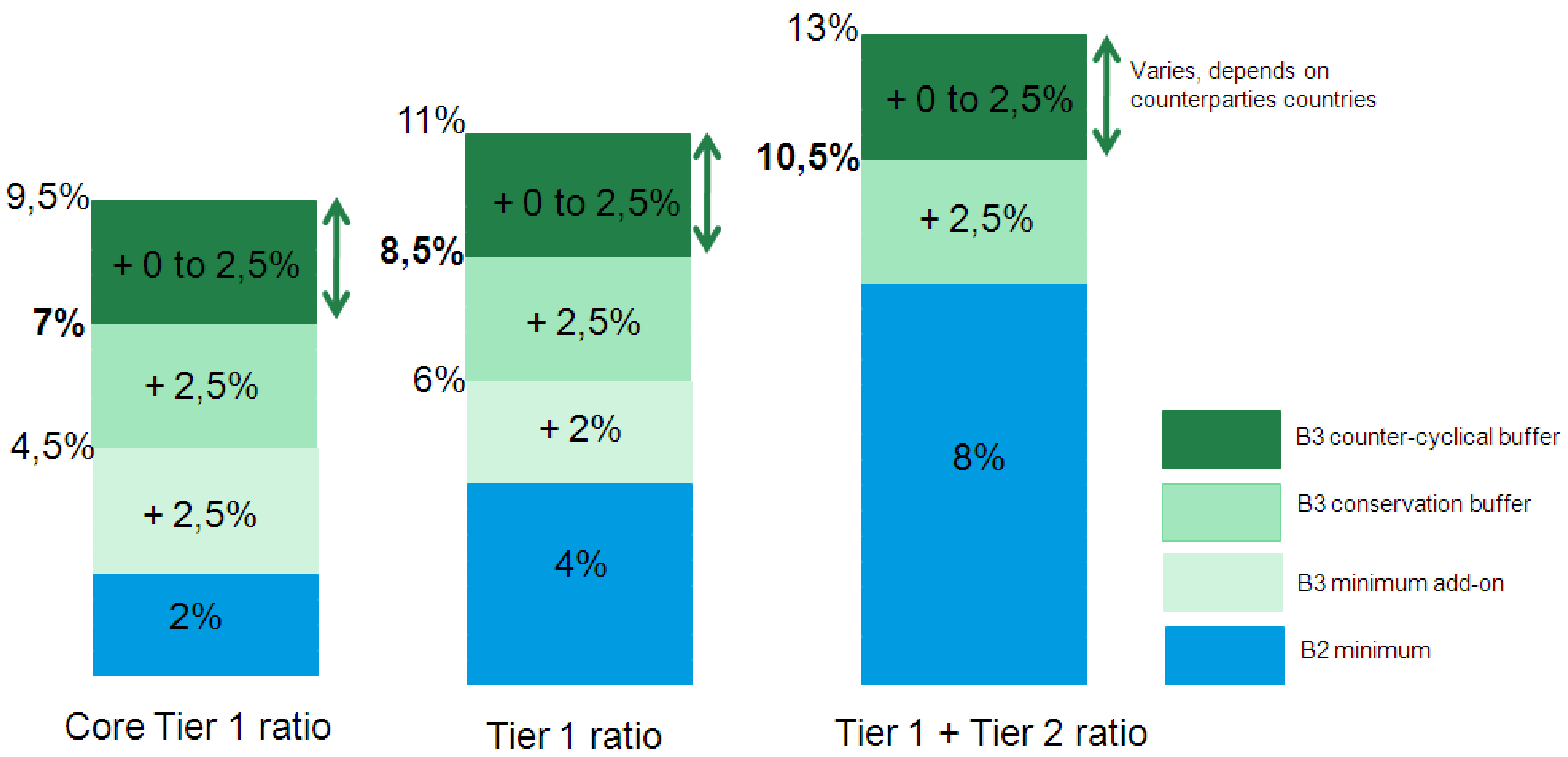
1 = draft regulation not published; 2 = draft regulation published; 3 = final rule published; 4 = final rule in force.

Per BIS, as of end March 2012:

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



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	

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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: ERM (Flexible & Adaptable Infrastructure)

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

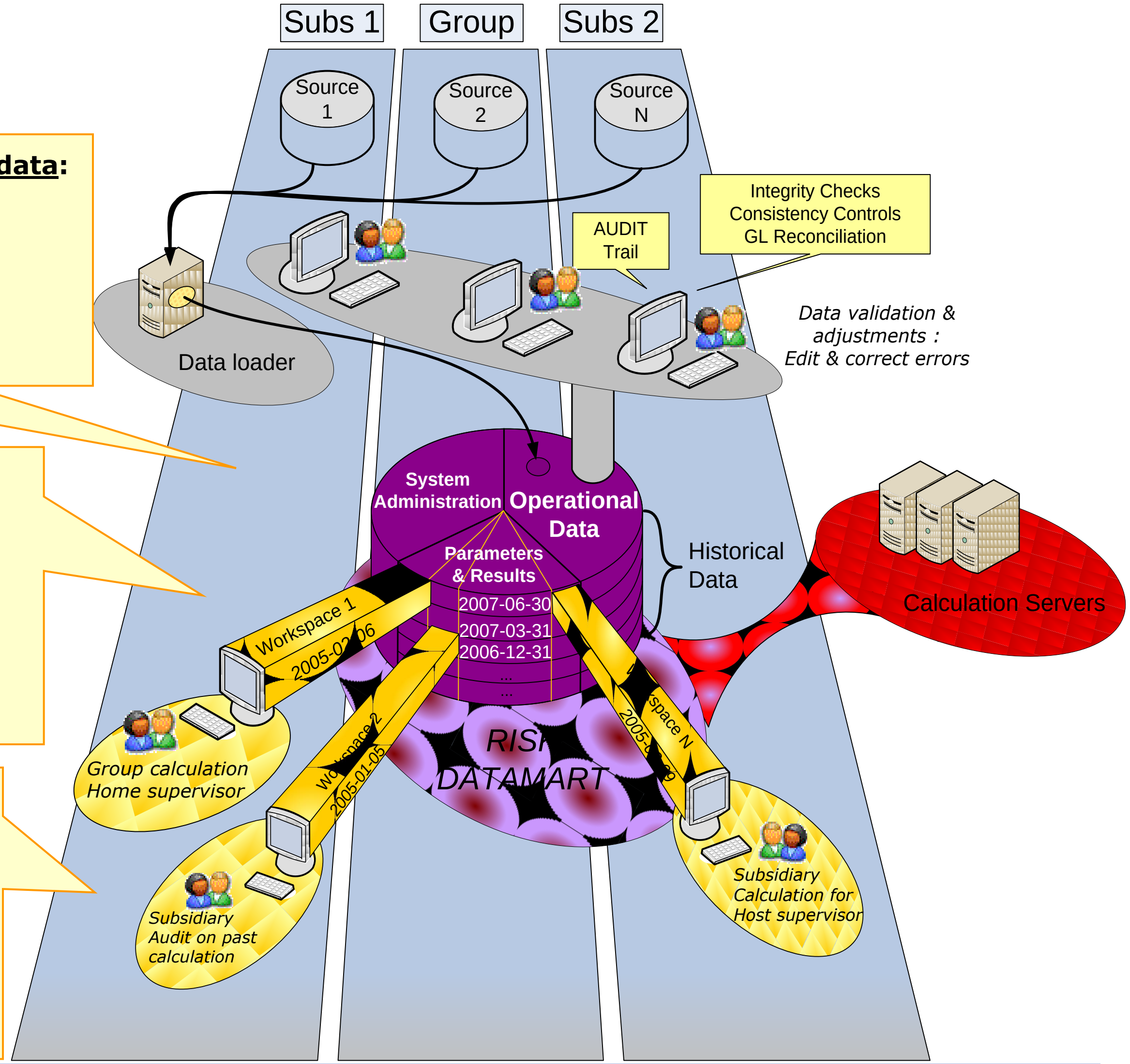
- ✓ **Recording**
- ✓ **Loading, validating, reconciling**
- ✓ **Instrument modelling**
- ✓ **Client/product granular information**

<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)**



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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

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What went wrong...

- Minimum target return on equity: e.g.15%
  - Unadjusted for risk?
- What is the mindset at the helm of most important global banking institutions?
  - Leverage rules?

"Return on equity is the wrong target. Over the past 10 to 15 years it has helped to make many bankers rich and loyal shareholders poor. Moreover, it prompts banks to fight to keep loss absorbing capital low. This makes their enterprises vulnerable and our financial system fragile."

Robert Jenkins, Member of the Financial Policy Committee of the Bank of England

Pillar 2 Purpose

To:

- » Ensure a firm holds internal capital that is consistent with its risk profile and strategies
- » Encourage firms to develop and use **better** risk management techniques in monitoring and managing their risks
- » Focus on risks not fully captured under Pillar 1, e.g. credit concentration risk
- » Direct supervisors to review firms' processes and strategies, to determine appropriate prudential or other measures, if weaknesses or deficiencies are identified

Capital is not a substitute for strong and effective risk management and internal control processes

Basel's ICAAP requirements can be leveraged to define a best in class risk management framework

Basel 2: Capital accord

Pillar 1: Minimum capital requirements

- Minimum capital requirements:
  - Credit risk IRB
  - Market Risk
  - Operational risk

Pillar 2: Capital adequacy and supervisory review

- Supervisory assessment of the amount of capital considered necessary to cover Pillar 1 risks and Risks not included under Pillar 1

ICAAP

- The firm's own assessment of capital needs
- Calculated by reference to regulatory capital
- Key factors for considerations are amount, quality and depth of internal capital that the firm holds, at group & business unit levels, and the mechanisms as to how internal capital is allocated within the firm

Pillar 3: Market discipline

- Improved disclosure

So then, what *is* Economic Capital?

- Aggregate amount of equity capital required as a cushion for Unexpected Losses due to credit risks, given the institutions target financial strength

- Risk is measured *objectively* in terms of economic reality using modeling techniques

- Provides a *common yardstick* to measure, evaluate, manage, and price a wide range of risks

- Economic Capital includes the effect of default risk and the changes in customer credit quality through time

Correlation and……

» Banks need a common risk metric for e.g. the loan portfolio

» Required across all asset classes and types

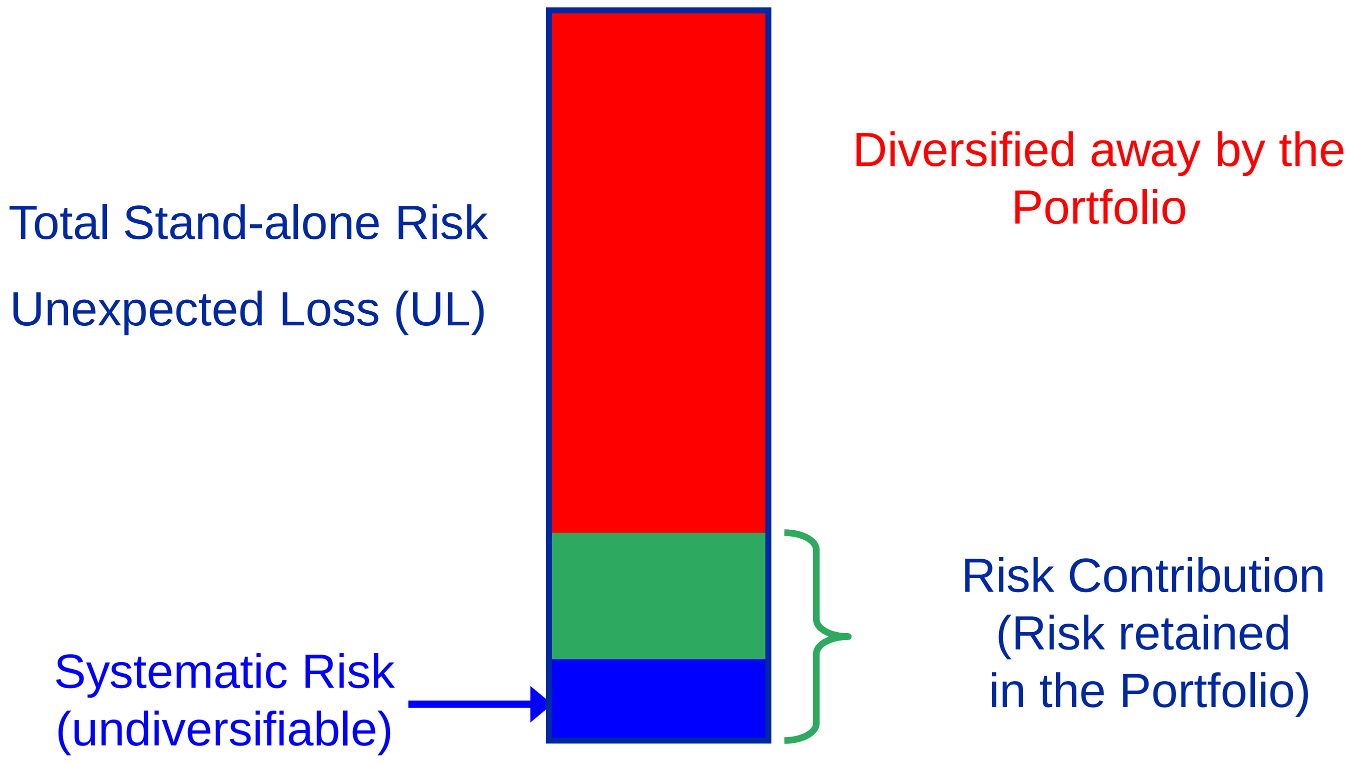
» Economic Capital is the catch-all risk metric reflecting

- ***standalone risk***
- ***correlation risk***
- ***concentration risk***
- ***migration risk…….***

What is the right way of thinking about risk? How do we allocate risk?

» Portfolio Capital needs to be allocated to exposures to facilitate decision making

» How should we allocate Portfolio Capital?



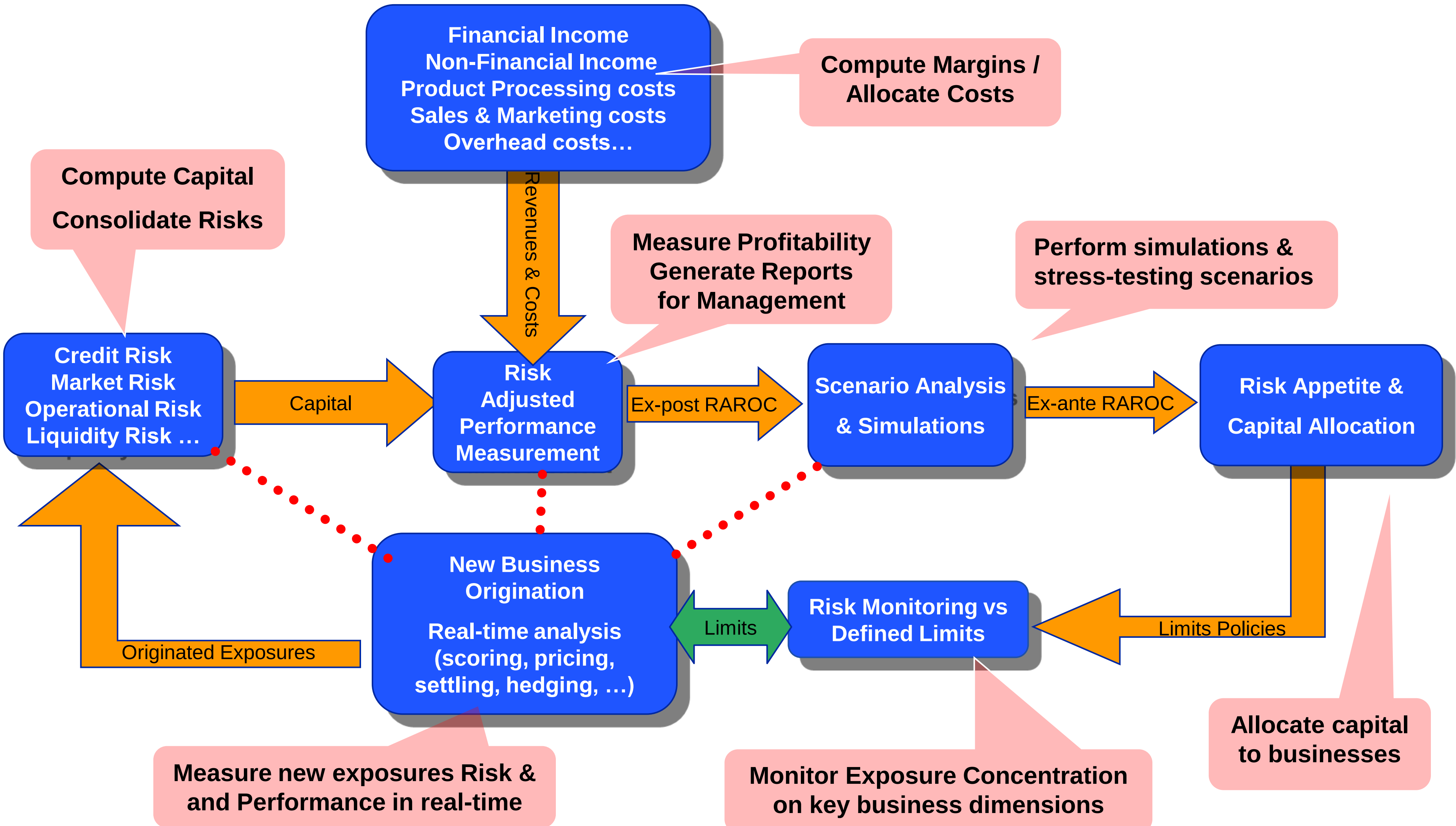
Economic Capital usage

Economic Capital is used for a variety of purposes:

- **Pillar 2 / regulatory reporting**
- **Capital adequacy assessment**
- **External reporting (Rating Agencies, the market)**
- **Strategic planning**
- **Capital budgeting**
- **Risk and performance measurement**
- **Customer profitability analysis**
- **Limit setting**
- **Risk-based pricing**
- **Incentive compensation**

Those Financial Institutions that are calculating EC are more informed about their credit portfolios

Core Component of an ERM Architecture



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Memories are short…

» "Despite the severity of the crisis, we are already seeing signs that its lessons are beginning to fade."*

**Stefan Walter, Secretary General, BCBS*

at the Financial Stability Institute, Basel

6th April 2011

» "The costs of banking crises are extremely high but, unfortunately, the frequency has been as well. Since 1985, there have been over 30 banking crises in Basel Committee-member countries*. Roughly, this corresponds to a ***5%*** **probability of** a Basel Committee member country ***facing a crisis*** in any given year – a one in 20 chance… Many countries …have been affected by the ***global fall out***"

*(*out of 25 countries, only Saudi Arabia and Canada were observed as being crisis free)*

“Those who cannot remember the past, are condemned to repeat it”

George Santayana

Regulation:

» The status quo cannot be maintained

» Better availability and management of enterprise wide information is key

Sustainable growth:

» Process and infrastructure need revisiting

» Banks define themselves by processes… (processes describe cultures)

Strategic & Tactical

» Economic Capital is a conduit for communicating and managing Risk Culture

» Embedding a robust ERM framework is the solution….

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