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Basel III: A Risk Management Perspective - 2011

25 May 2011

The PwC logo is located at the bottom left of the slide. It consists of the lowercase letters 'pwc' in a bold, black, sans-serif font. A small red horizontal bar is positioned above the 'p'.

Agenda (1/2)

- 8:30 – 9:00 **Registration and welcome**
- 9:00 – 9:15 **Introduction**
Rima Adas, Banking Leader, PwC
- 9:15 – 9:45 **Part 1 - Basel III recent developments**
Emmanuelle Henniaux, Partner, PwC
- 9:45 – 10:30 **Part 2 - ICAAP update and new Circular on stress tests**
Claude Wampach, Surveillance des banques, CSSF
- 10:30 – 11:00 **Coffee break**
- 11:00 – 11:30 **Part 3 - Bankers View**
Paul Marcy, Risk Manager, Banque Raiffeisen
- 11:30 – 11:50 **Part 4 - The new liquidity requirements – view from the industry**
Gilles Pierre, Banking Supervision, ABBL

Agenda (2/2)

11:50 – 12:25 **Part 5 - Roundtable – How to prepare for the new requirements?**

With the participation of:

- *Patrizio Borgognoni, Executive Director, UBS*
- *Claude Ludovicy, Head of Risk Portfolio Management, BGL BNP Paribas*
- *Paul Marcy, Risk Manager, Banque Raiffeisen*
- *Gilles Pierre, Banking Supervision, ABBL*
- *Claude Wampach, Surveillance des banques, CSSF*

Moderated by: Thierry López, Risk Management Leader, PwC

12:25 – 12:30 **Conclusion**

Emmanuelle Henniaux, Partner, PwC

As from 12:30 **Walking lunch**

Introduction

Rima Adas
Partner, PwC

Part

**Basel III recent
developments**

Emmanuelle Henniaux

Partner, PwC

Part 1 - Basel III recent developments

Basel III – Why?

Summary of upcoming changes

Likely IT & operational impacts

Basel III – Why?

Part 1 - Basel III recent developments

Basel III – Why?

“ There are **many factors** that led to the build up of the **crisis**. At the top of the list is **excess liquidity**, resulting in too much credit and weak underwriting standards. The vulnerability of the banking sector to this build up of risk in the system was primarily due to **excess leverage, too little capital of insufficient quality**, and **inadequate liquidity buffers**. ”

Stefan Walter

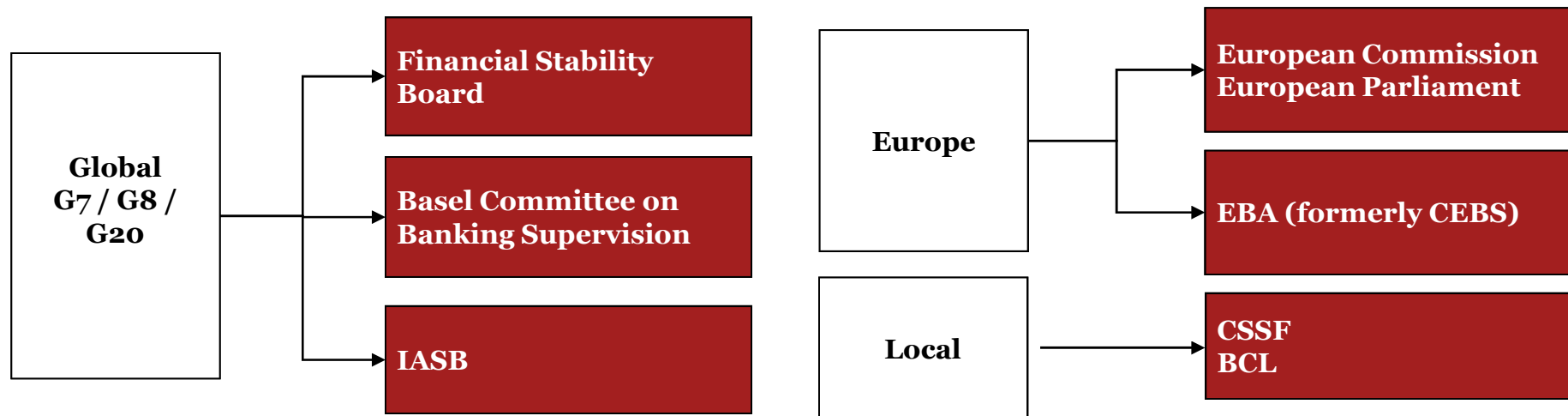
Secretary General, Basel Committee on Banking Supervision

November 2010

Part 1 - Basel III recent developments

Basel III – Why?

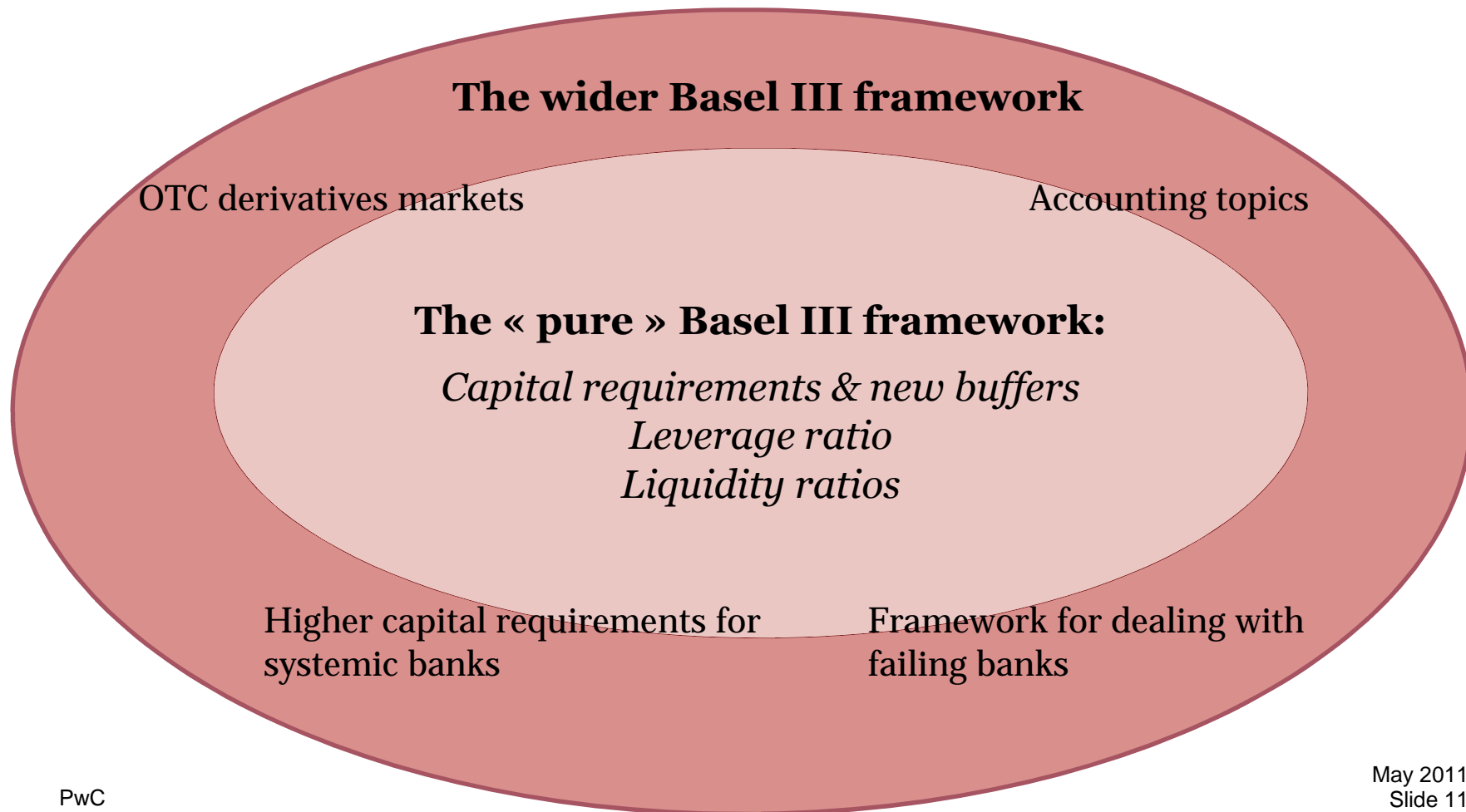
The financial crisis has resulted in a multitude of regulatory proposals from stakeholders at global, regional and national level



Summary of upcoming changes

Part 1 - Basel III recent developments
Summary of upcoming changes

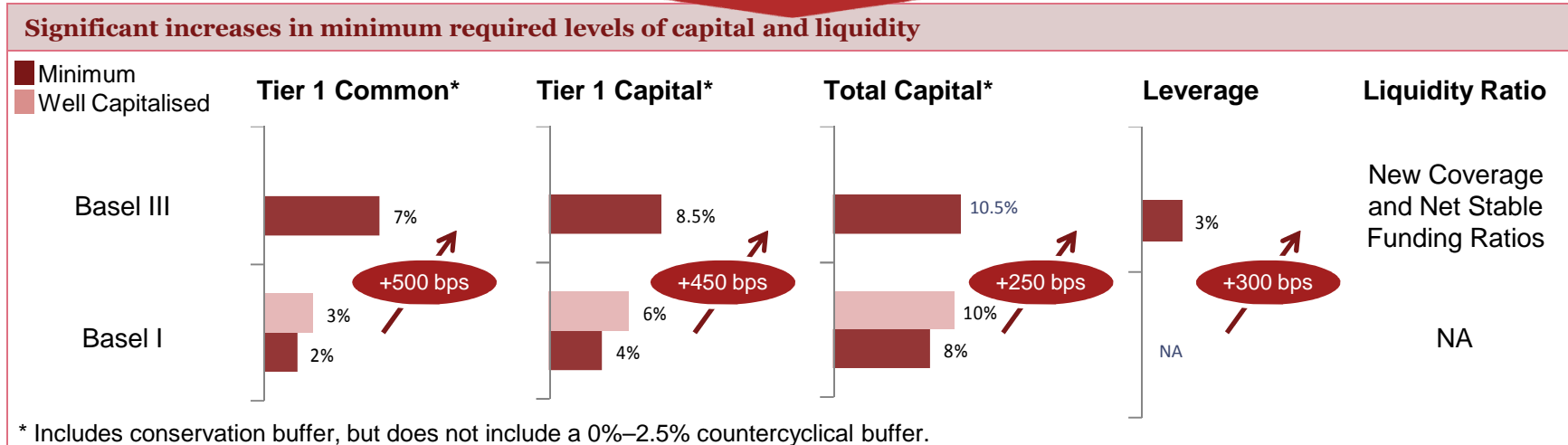
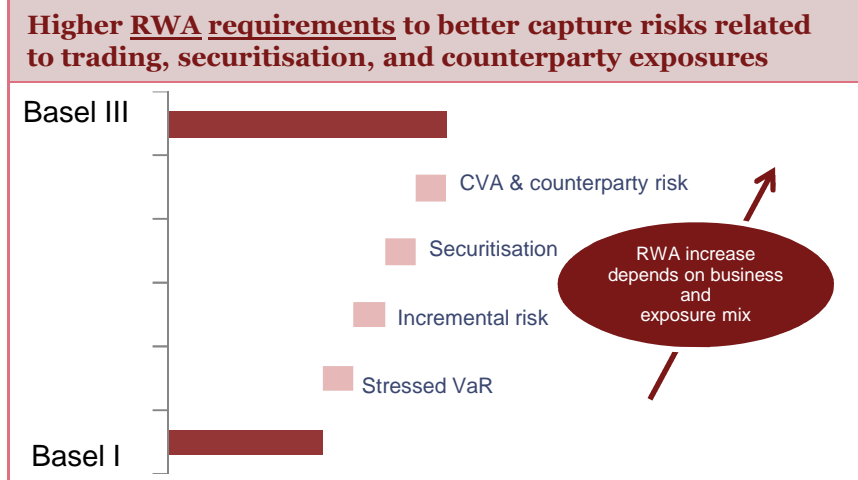
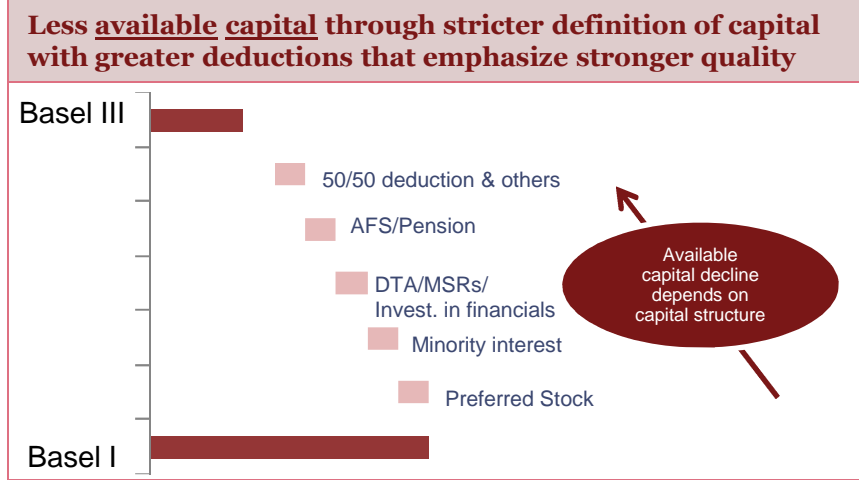
Reinforcement of the banking sector supervision



Part 1 - Basel III recent developments

Summary of upcoming changes

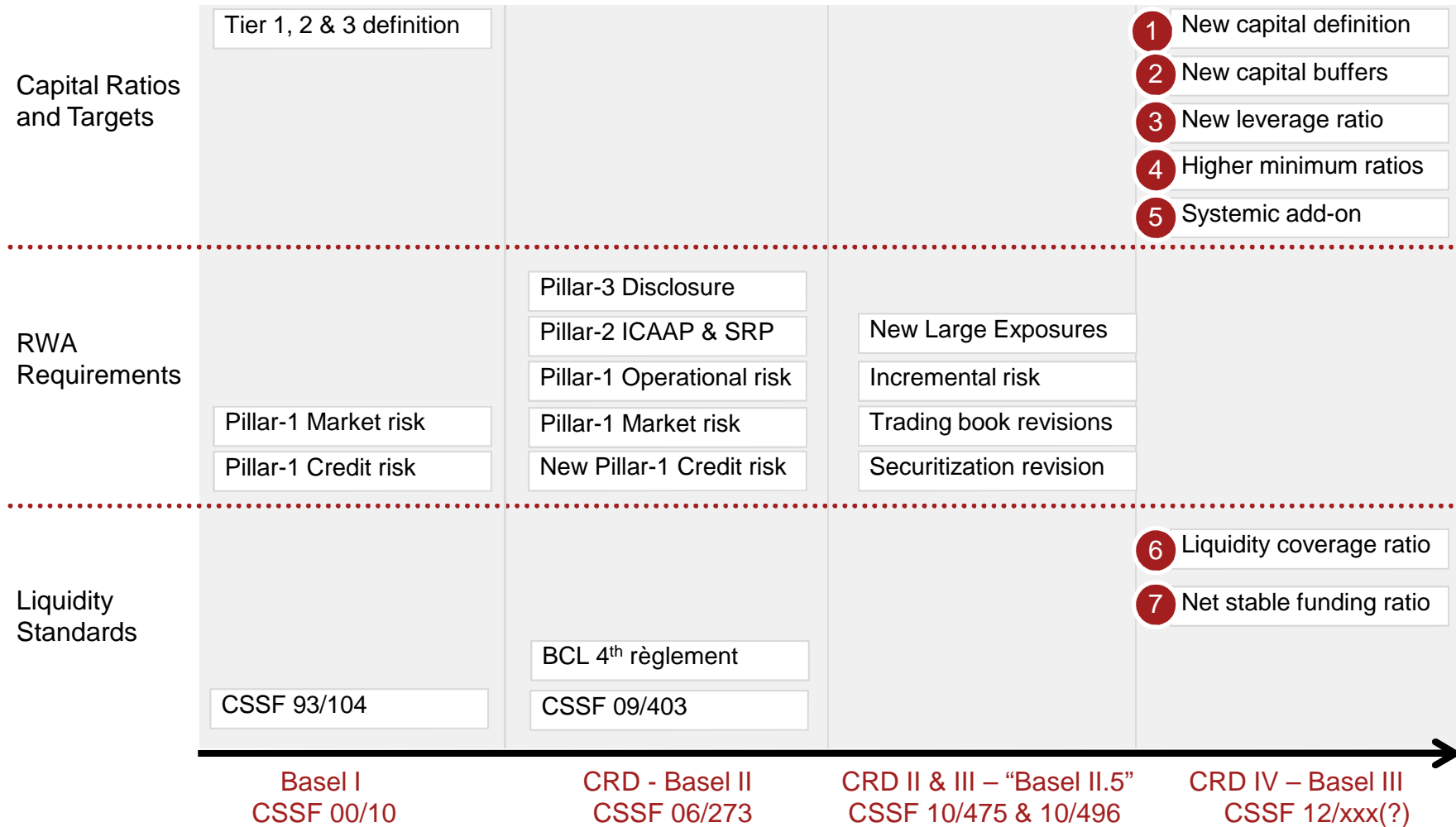
Basel III will result in less available capital to cover higher RWA requirements and more stringent minimum coverage levels.



Part 1 - Basel III recent developments

Summary of upcoming changes

Key changes brought about by Basel I, II, and III and equivalent Luxembourg regulation



Part 1 - Basel III recent developments
Summary of upcoming changes

1 New Capital Definition

Three main areas of focus:

- Revision of the regulatory **capital structure**:
 - a) Tier 1 – **going concern** capital:
 - Core Tier 1 – common equity, and
 - Non-core Tier 1 – hybrid capital (strict eligibility criteria)
 - b) Tier 2 – **gone concern** capital
 - c) Tier 3 – **abrogated**

- Harmonisation of regulatory **capital deductions** (holdings in financial subsidiaries, Deferred Tax Assets, etc.) and their treatment across territories: progressive full deduction from Common Equity Tier 1

- Publication of detailed **disclosures** of regulatory capital elements, adjustments and reconciliations

Part 1 - Basel III recent developments

Summary of upcoming changes

1 Empirical study over the change in capital (1)

Estimated impacts of new capital definition rules

Group 1 banks are those that have **Tier 1 capital excess of €3 billion**, are well diversified, and are internationally active. All other banks are considered Group 2 banks (%)

	Number of banks	Change in CET1 Capital *	Change in Tier 1 Capital	Change in Total capital
Group 1	87	-41.3	-30.2	-26.8
Group 2	136	-24.7	-14.1	-16.6

* The column « Changes in CET1 capital » compares gross CET1 capital (without deductions) with net CET1 capital

Source: <http://www.bis.org/publ/bcbs186.pdf>

Part 1 - Basel III recent developments
Summary of upcoming changes

1 Empirical study over the change in capital (2) – CET1 deductions

Breakdown of the elements that compose the deductions from gross CET1 to net CET1 (%)

	Number of banks	Goodwill	Intangibles	Financials	DTA	MSRs	Excess above 15%	Other	Total	Minority interests
Group 1	87	-19.0	-4.6	-4.3	-7.0	-0.4	-2.4	-3.6	-41.3	-2.0
Group 2	136	-9.4	-4.6	-5.5	-2.8	0.0	-1.0	-3.7	-24.7	-2.1

Source: <http://www.bis.org/publ/bcbs186.pdf>

Part 1 - Basel III recent developments

Summary of upcoming changes

New capital buffers

2 Capital Conservation Buffer

Save for a rainy day

- Create **buffers in 'good times'** that can absorb shocks in periods of stress (includes capital distribution constraints when capital levels fall within a specified range above minimum requirements)
- **Impose good bank governance** by increasing regulators' power (e.g. limit ability of banks to pay high dividends or bonuses in case of hard times)

2 Countercyclical Buffer

Prevent excessive credit growth

- **Macro-prudential buffer** add-on to the capital conservation buffer designed to protect the banking sector from period of **excess credit growth**
- Will be **country-dependent**, i.e. function of where the bank has exposures to the private sector

Part 1 - Basel III recent developments
Summary of upcoming changes

3 New leverage ratio

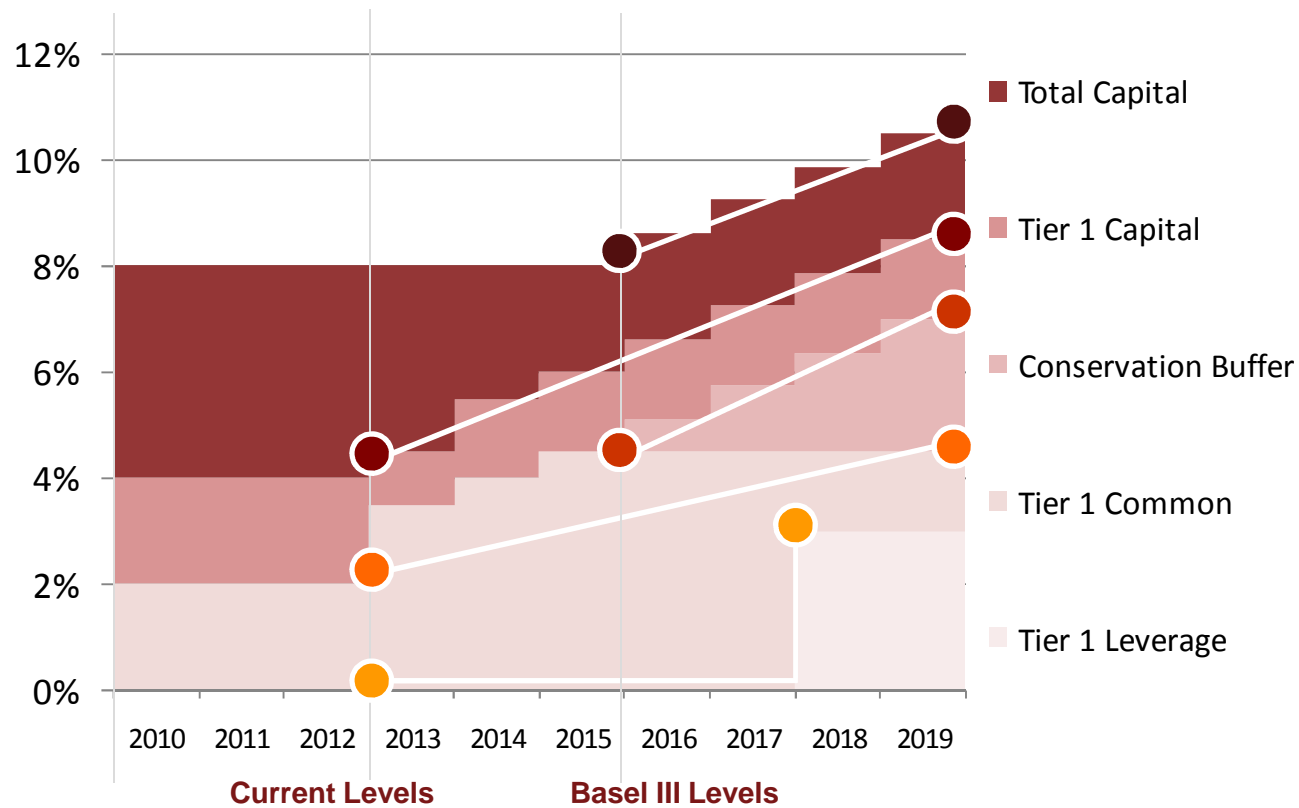
Know your own limits

- Simple and transparent ratio designed to **put a cap on the build-up of leverage** in the banking sector as well as to introduce additional **safeguards against model risk and measurement errors**
 - **Volume-based ratio, not risk adjusted**, to complement the risk-based minimum capital requirements under Pillar 1:
 - **Total Tier 1 Capital / Total Exposures** (on- and off-balance sheet)
 - Credit Conversion Factor of **10%** applies to unconditionally cancellable **commitments** (whereas 0% for solvency ratio)!
 - The Committee is proposing to test a **3% Tier 1** leverage ratio
 - Supervisory **monitoring starts in 2011!** Migrates to Pillar 1 in 2018
-

Part 1 - Basel III recent developments

Summary of upcoming changes

4 Higher minimum ratios



Minimum Ratios		Transition Period
Current	Basel III	
8%-10%	10.5%	2016-2019
4%-6%	8.5%	2013-2019
NA	2.5%	2016-2019
2%-3%	7%	2013-2019
NA	3%	2013-2018

Part 1 - Basel III recent developments
Summary of upcoming changes

5 Systemic add-on

Be responsible

- Development of policy options designed to reduce risks related to the **failure of systemically relevant, cross-border institutions (SIFIs)**

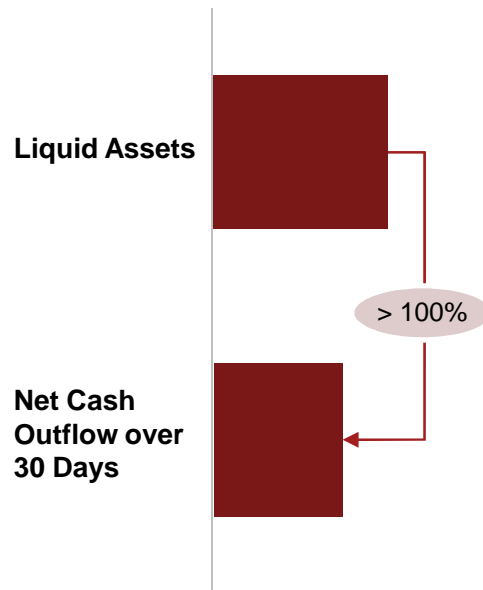
- Two aspects under consideration:
 1. Decrease the **probability** of failure of a systemic bank
 - Systemic banks will face increased regulatory supervision
 - Systemic banks will have extra capital buffers to absorb losses

 2. Decrease the **impact** of failure of a systemic bank
 - Requirements for recovery and resolution plans (expected mid-2011)
 - Preparatory and preventative measures ('living wills')
 - Supervisors will have the powers to take action before problems become severe (including the replacement of management)
 - Powers to force a takeover by a sound institution or to transfer all or part of the activities to a bridge bank to ensure continuity of services

Part 1 - Basel III recent developments
Summary of upcoming changes

6 Liquidity Coverage Ratio

Stay afloat – Weather the storm

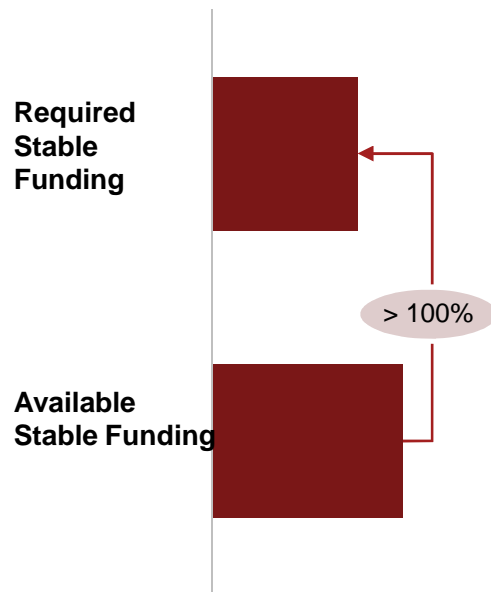


- For many institutions, the **liquidity challenge is likely to be greater** than the capital challenge.
- Objective: Ensure that a bank maintains an adequate level of high-quality, unencumbered assets to enable it to **weather a severe stress scenario** specified by supervisors
- Short-end of a bank's counterbalancing capacity
- Net cash outflows calculated according to **strict parameters specified by supervisors**
- **Stock of highly liquid assets** subject to quantitative and qualitative eligibility criteria

Part 1 - Basel III recent developments
Summary of upcoming changes

7 Net Stable Funding Ratio

You are in it for the long run



- Objective: Provide **incentive for structural changes** to shift from short-term funding profiles to more stable, **longer term funding** profiles and reduce reliance on wholesale funding
- Medium- to long-term orientation
- Assets (on- and off-balance sheet) are assigned required stable funding factors
- Liabilities are assigned available stable funding factors

Likely IT and Operational Impacts

Part 1 - Basel III recent developments

Likely IT and Operational Impacts

Systems Impacts

- **Liquidity risk:** Use of SWIFT messages for intraday liquidity monitoring, granularity required for NSFR computation & forecasting needs a very significant boost
- **Inter-connectivity:** Accounting information, client-data and risk systems need to be interconnected ever more (Large Exposures, Leverage Ratio, stress-testing, ...), connect to Central Counterparties for OTC derivatives clearing
- **Flexible processes and infrastructures** that may be amended and fine-tuned as new reporting requirements arise
- **Automation:** Best-of-class already have ability to reconcile data, compute ratios and check limits on a daily basis

Operational Impacts

- **New processes** and procedures to comply with new functionalities
- **New reporting & disclosures** that require the implementation of additional processes and controls
- **Rationalisation:** Basel III may be a unique opportunity to streamline various reports and disclosures production that share common data sources (FINREP, COREP, Pillar III, MIS, annual accounts, LFR ...)
- **Training** of staff and Senior Management, as regulations become ever more complex

Thank you

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Part 2

**ICAAP update and
new Circular on stress tests**

Claude Wampach

Surveillance des banques, CSSF



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ICAAP Update and Stress Testing Circular CSSF 11/506

*PwC Basel III: Risk Management Perspectives
2011*

Claude Wampach

May 2011



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Agenda

- Introduction
- Update on ICAAP
- Stress Testing – Circular CSSF 11/506

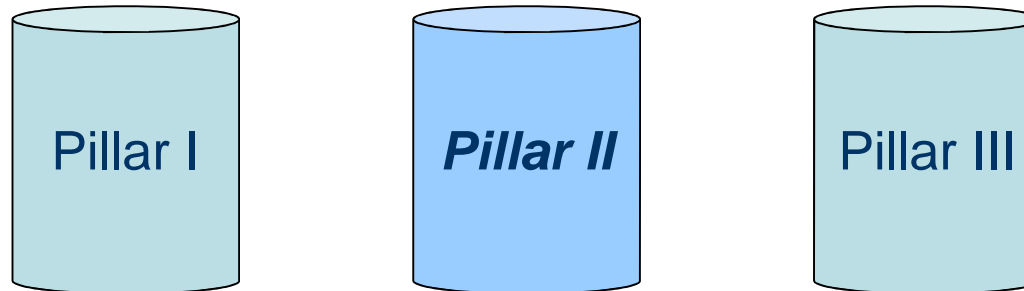


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Agenda

- **Introduction**
- Update on ICAAP
- Stress Testing – Circular CSSF 11/506

ICAAP and Stress Testing



- Stress tests form an integral part of internal risk management practices (“Pillar 2”) and of regulatory requirements (as imposed in the context of the advanced models under “Pillar 1”)
- The tests have to be documented in particular via the **ICAAP report** which the Authorized Management submits at least annually to the Board of Directors with copy to the CSSF



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Agenda

- Introduction
- **Update on ICAAP**
- Stress Testing – Circular CSSF 11/506

Supervisory Review Process (SRP) under CRD II

- Law of 28 April 2011 (Memorial A - No 81) and circular CSSF 06/273 as amended
- Joint (college) decision under Article 129(3) CRD on capital adequacy and ICAAP
- CEBS (EBA) Guidelines 39 on joint assessment under SRP, including ICAAP
 - ▶ Reform of circular CSSF 07/301 with respect to the ICAAP report

SRP under CRD IV/Basel III

- Pillar 2 (ICAAP↔SRP) remains a key building block of the supervisory framework
- EBA technical standards (“common risk assessment methodology”)
- Joint (college) decision on the overall risk bearing capacity, including liquidity



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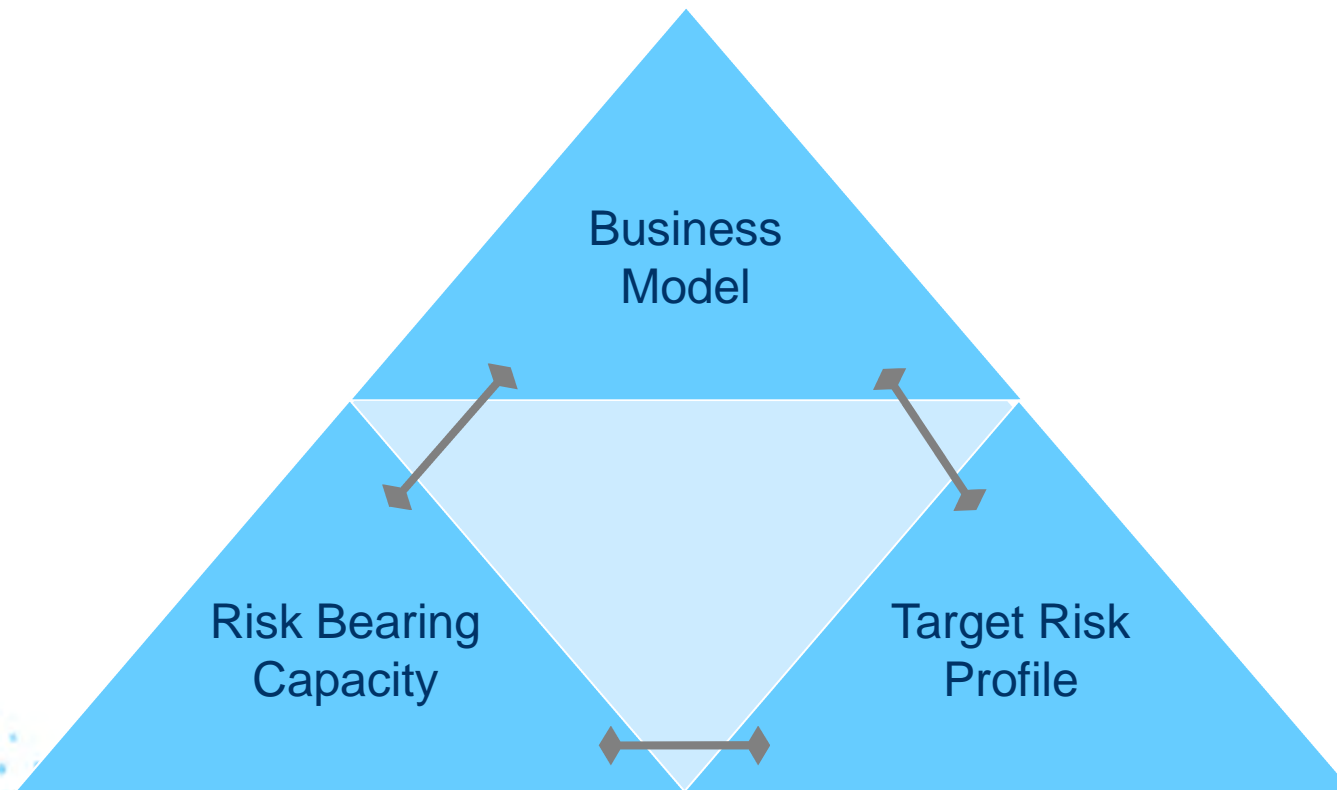
Agenda

- Introduction
- Update on ICAAP
- **Stress Testing – Circular CSSF 11/506**

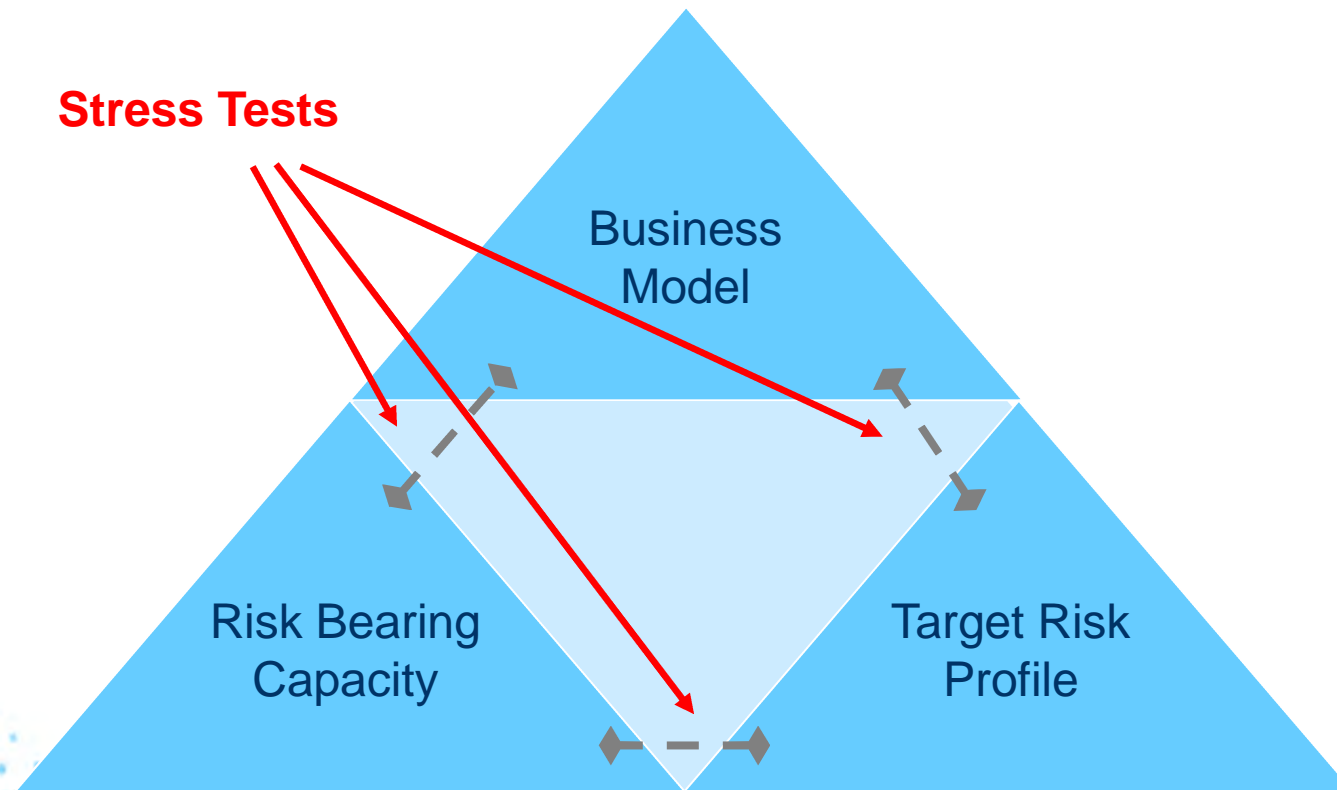
Objective-driven definition of “stress testing”

- Practice aimed at assessing to what extent adverse events could threaten the coherence between the business model, the (target) risk profile and the risk bearing capacity
- with a view to take corrective action in order to safeguard the financial and operational soundness of the institution

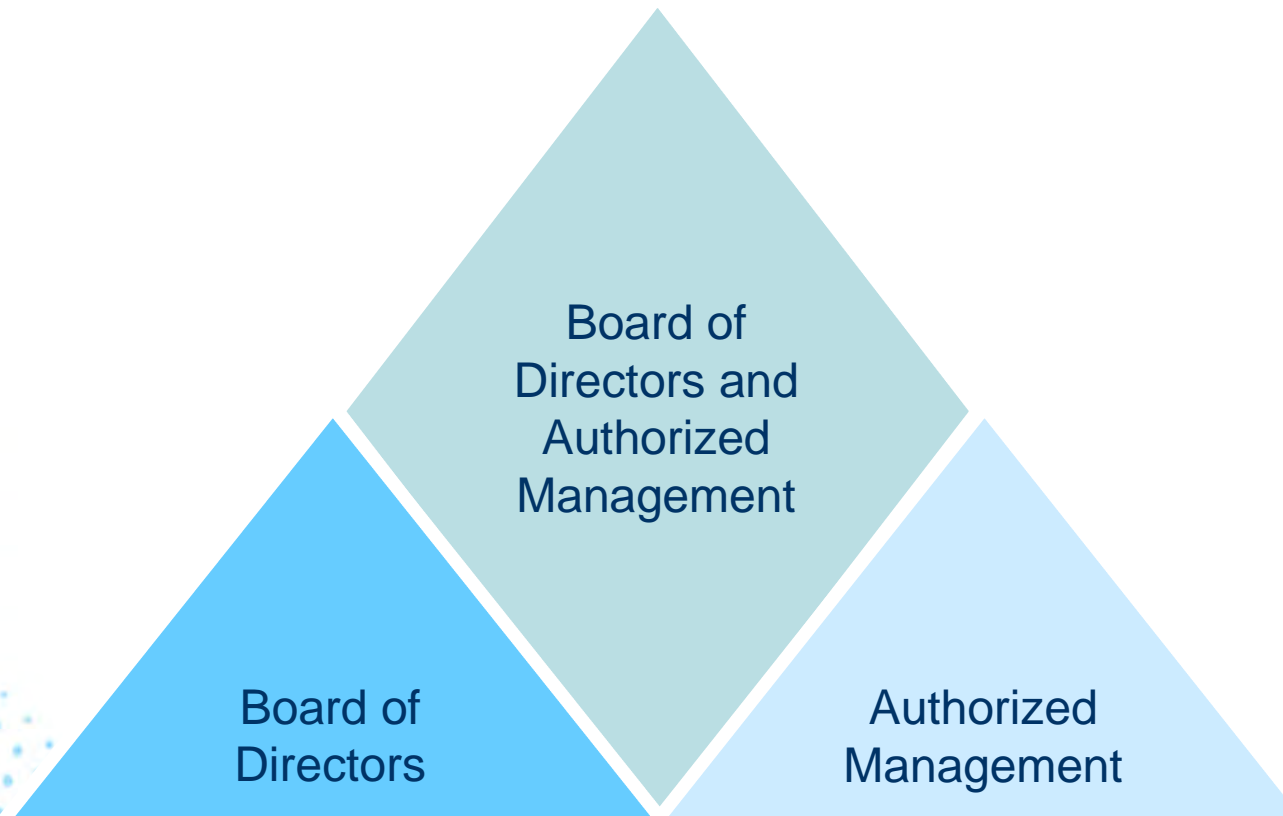
Global internal coherence



Stress testing the internal coherence



Internal governance




Internal governance (cont')



Board of
Directors

- Regular assessment of the robustness of the stress testing program
- Delegation of the implementation of a robust stress testing program to the Authorized Management

Internal governance (cont')



Authorized
Management

- Regular critical review and validation of the main methodological choices and hypotheses as well as of the chosen scenarios
- Responsible for the implementation of a robust stress testing program
- Annual plan of stress tests, documentation of the main characteristics (scope, frequency, calibration)

Internal governance (cont')



Board of
Directors and
Authorized
Management

- Regular analysis of stress test results
- Assessment of coherence between business model, risk profile and risk bearing capacity in the light of the stress test results
- Corrective measures in terms of:
 - Business model,
 - Risk profile,
 - Risk bearing capacity.

Robust stress testing

- Scope is comprehensive
- Concentration risks are fully addressed (lack of diversification or common risk factors)
- Scenarios comprise “extreme” stress events
- Infrastructure is appropriate and sound (proportionality)
- Planned credible corrective measures
- Regular independent review

Proportionality principle and stress test methodology

The requirements of the circular have to be implemented proportionally with regards to the scale, diversity and complexity of the institution's activities and organization:

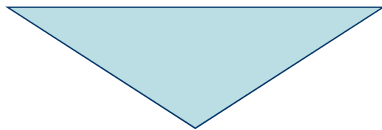
Qualitative program
is mandatory

Assessment of resilience
vis-à-vis internal and
external negative
developments

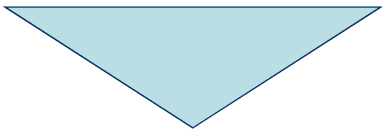
Quantitative program
following the
proportionality principle

- (Simple) Sensitivity analysis
- (Complex) Scenario analysis

Inverse stress testing



Identification of a significant negative outcome



Identification of causes and consequences that could lead to such an outcome

Identification of possible combinations of events and risk concentrations within an institution that might not be generally considered in regular stress testing

Use of group stress testing resources

- Accepted (and encouraged), to the extent that
 - the situation of the Luxembourg based entity is fully captured and that
 - local management is in a position to fully discharge its responsibilities under circular CSSF 11/506



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Thank you for your attention!

Claude Wampach

Part 3

Bankers View

Paul Marcy

Risk Manager, Banque Paribas



Basel III: Beyond the regulation



May 25th, 2011

Paul Marcy, Head of Risk Management

Agenda

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1. A question of philosophy
 2. LCR / NSFR
 3. ICAAP and Internal Stress Tests
 4. Internal Governance
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Agenda

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1. A question of philosophy
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A question of philosophy

Rules are not necessarily sacred, principles are.”

Franklin D. Roosevelt

- ▶ What kind of regime provides a more effective regulatory approach ?
- ▶ What kind of regime promotes comparability and convergence among different international jurisdictions ?
- ▶ Impossible to choose one over the other.

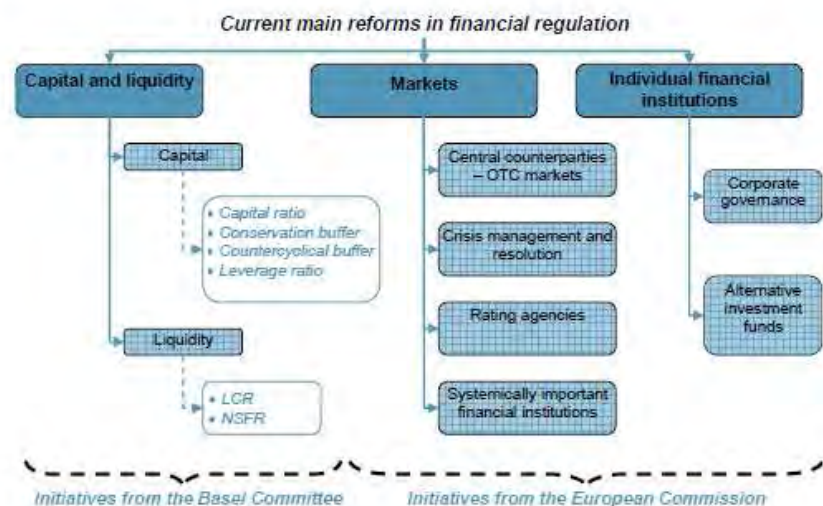
Each regulatory model should endeavor a combination of rules and principles

Agenda

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1. A question of philosophy
 2. **LCR / NSFR**
 3. ICAAP and Internal Stress Tests
 4. Internal Governance
-

LCR / NSFR

- ▶ Both the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR) will be binding Pillar 1 ratios.
- ▶ CRD IV (rules for the new capital and liquidity requirements) will introduce these two ratios by the end of 2011.



*source BCL

- ▶ The ratios and underlying components will need to be reported to Supervisors starting January 2012. LCR (NSFR) observation period will be held until January 1, 2015 (January 1, 2018).
- ▶ The LCR will be introduced as a binding constraint on January 1, 2015 and the NSFR will become a minimum standard by January 1, 2018.

Rule-based regulation

LCR / NSFR

Bank Raiffeisen started to implement both ratios on December 2009.

The new ratios challenged the Bank in several aspects:

- ▶ Strategy / business model
- ▶ Implementation of regulatory requirements
- ▶ Costs

Bank Raiffeisen implemented proper stress tests in line with its risk profile: → the results of these simulations helped us to understand the implications of the new regulations on the Bank.

Rule-based regulation with an “opening” to principle based regulation

Agenda

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1. A question of philosophy
 2. LCR / NSFR
 3. **ICAAP and Internal Stress Tests**
 4. Internal Governance
-

ICAAP of the Bank and Internal Stress Test

- ▶ The underlying aim of Pillar 2 processes is to enhance the relation between a bank's risk profile (risk appetite), its Risk Management, its risk mitigation tools and its capital management (internal planning and management of the capital).
- ▶ ICAAP is an internal process of a bank and supervisors are fixing the framework i.e. principle based approach.
- ▶ The dialogue between the bank and its supervisor is a key element of the supervisory review process ("Dialogue structuré").

CEBS' EU-wide Stress Test and ICAAP

- ▶ Bank Raiffeisen was invited to participate in the 2010 EU-wide stress testing exercise coordinated by the EBA.
- ▶ These stress tests complement the Risk Management procedures and regular stress testing programs set up in Bank Raiffeisen under the Pillar 2 framework of the Basel II and CRD1 requirements.
- ▶ Even if Bank Raiffeisen was not subject to the 2011 EU-wide stress testing exercise, Risk Management will follow up the exercise to ensure an update of the ICAAP process.

CEBS' EU-wide Stress Test and ICAAP

- ▶ Besides the fact that the results of the CEBS' EU-wide Stress Test were in line with our expectations, they offered Bank Raiffeisen a unique opportunity to challenge its ICAAP:
 - Improve stress testing and scenario definitions (assumptions) by using the data provided to complete the exercise (benchmark of PD, LGD and adverse scenario).
 - Enhance internal communication on ICAAP to the business lines (data suppliers) to ensure the appropriateness of the data and its quality.
 - Completion of the risk management techniques to assess credit risk.
 - Assess the needs of the future IT systems of the bank.

Bank Raiffeisen had the opportunity to benchmark its internal risk approach under ICAAP

Agenda

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1. A question of philosophy
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 4. **Internal Governance**
-

Internal Governance

Principle 17- Risk Culture (CP on the Guidebook on Internal Governance)

An institution should develop an integrated and institution-wide risk culture, based on a full understanding of the risks it faces and how they are managed, taking into account its risk tolerance/appetite.

- ▶ The Risk Management function is responsible for identifying, measuring, monitoring, controlling or mitigating, and reporting of risk exposures.
- ▶ Every member of the organisation should be fully aware of his or her responsibilities relating to Risk Management. Risk Management should not be limited to risk specialists or control functions.
- ▶ Business units, under the oversight of the management body, should be primarily responsible for managing risks on a day-to-day basis, taking into account the institution's risk tolerance/appetite and in line with its policies, procedures and controls.

Governance is the most important piece of the puzzle

Conclusion



Every regulatory model has to be a combination of rules and principles



Strong governance is essential in Risk Management

but

**“Capitalism without failure is like religion
without sin”**

Prof. Allan Meltzer

Part 4

The new liquidity requirements
view from the industry

Gilles Pierre, Banking Supervision, ABBL



Association des Banques et Banquiers, Luxembourg
The Luxembourg Bankers' Association
Luxemburger Bankenvereinigung

Basel III - New Liquidity Rules: Views of the Banking Industry

Gilles PIERRE, ABBL
May 25, 2011

Agenda

Open Issues

Expected Impacts

LCR at Solo Level

Agenda

Open Issues

Expected Impacts

LCR at Solo Level

A (Short) Sample of Issues

LCR

1. Buffer of HQLA **too narrow** => concentration risk
2. Corporate banking: **75% outflow** on corporate deposits
3. Mortgage lending: **50% inflow** only
4. Cap on inflows => minimum buffer (**floor**)
5. Covered bonds: HQLA + perspectives of issuing banks
6. **Scope** of application => Intra-group liquidity
7. Level playing field vs. the USA

A (Short) Sample of Issues

NSFR

1. No appetite in the market to extend longer term funding
2. 1 year wall => Cliff effect, not enough **granular**
3. Maturity transformation is necessary

Agenda

Open Issues

Expected Impacts

LCR at Solo Level

Expected Impacts

1. Increased Costs

Direct costs: IT systems, staff

Indirect costs: lower profitability due to buffers

2. Business models and structures

Specialised banks: custodians, covered bonds

Subsidiaries vs. branches

3. Concentration risk: buffers

4. Observation period: managing the expectation gaps

Agenda

Open Issues

Expected Impacts

LCR at Solo Level

LCR at Solo Level

Basel rules are calibrated for big cross border banks groups and for application at the consolidated level **only**

In the EU, rules apply to **all banks** (i.e. nationally and internationally active) at consolidated and at solo (i.e. legal Entity) level

Basel controversial decision: **minimum buffer (floor) = 25% of the outflows**

Rationale: to prevent banks from relying solely on anticipated inflows

LCR at Solo Level

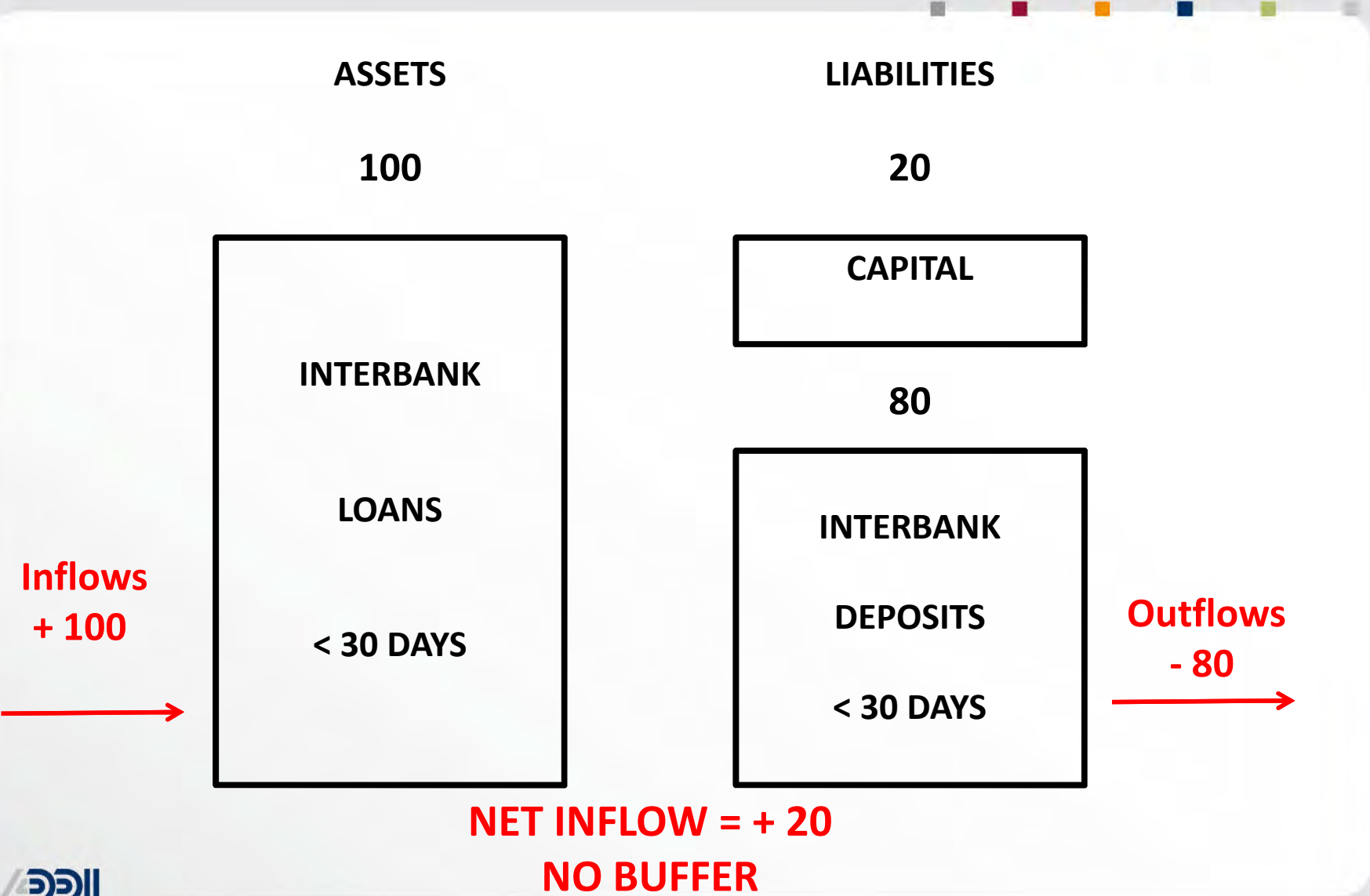
Unexpected consequence in the EU:

1. Minimum buffer to be held at legal entity level: subsidiaries, non-EU branches (if not subject to equivalent EU rules)
2. Liquidity is trapped at legal entity level, **even for liquid banks where inflows > outflows**

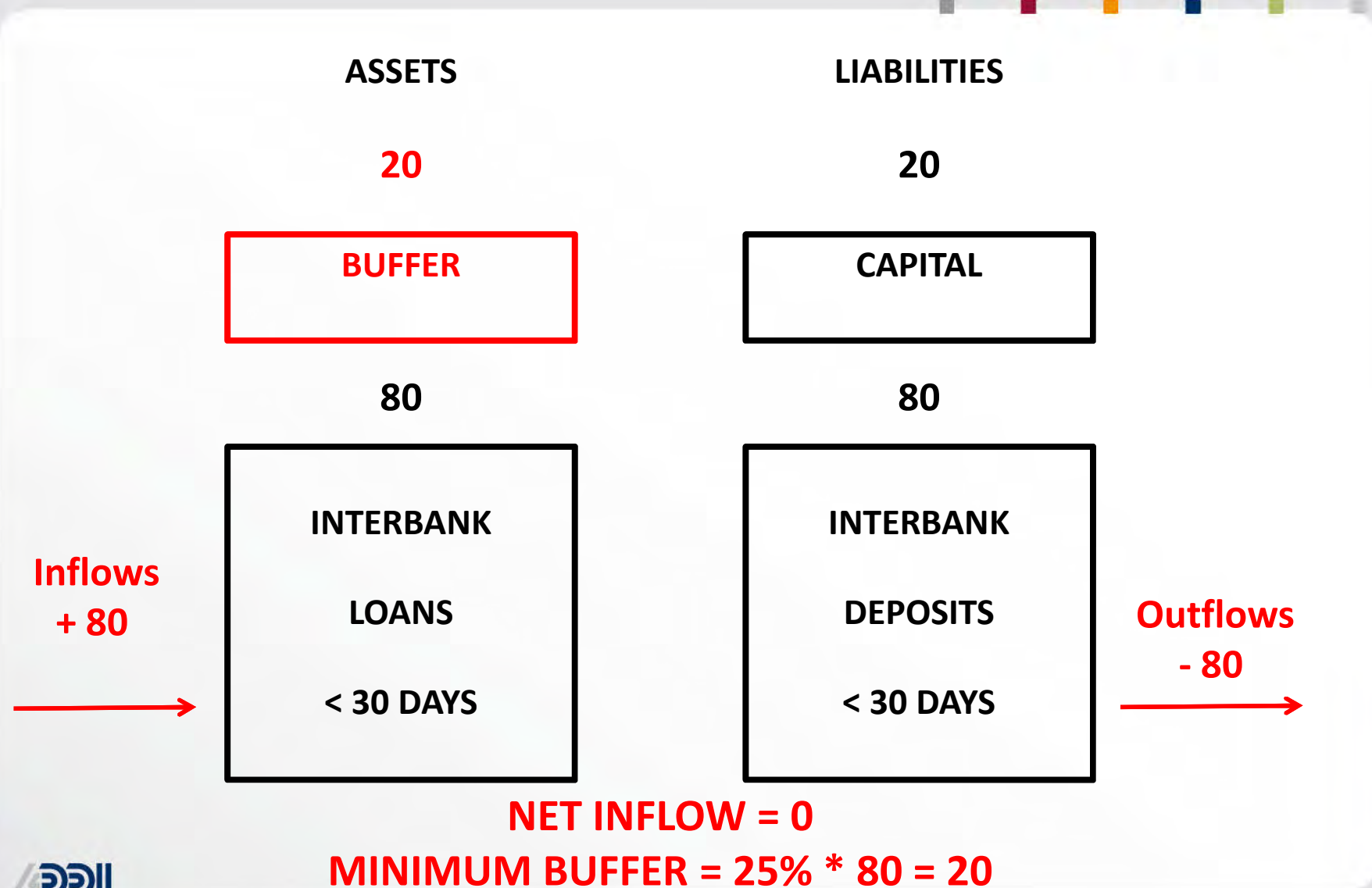
Potential response: WAIVER for applying LCR at the consolidated (sub-consolidated) level ONLY

=> PROPORTIONALITY

Bank X: Without the Minimum Buffer



Bank X: With the Minimum Buffer



Thank You!

Part

Roundtable - How to prepare for the new requirements?

Patrizio Borgognoni, Executive Director, UBS

Claude Ludovicy, Head of Risk Portfolio Mgt, BGL BNP Paribas

Paul Marcy, Risk Manager, Banque Raiffeisen

Gilles Pierre, Banking Supervision, ABBL

Claude Wampach, Surveillance des banques, CSSF

Moderated by: Thierry López, Risk Mgt Leader, PwC

Conclusion

Emmanuelle Henniaux
Partner, PwC

Thank you