

Designing a Comprehensive ICAAP and Capital Management Under Basel II/Pillar II

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Outline

- **Pillar II and ICAAP– A Reminder**
- **“Earlier” practices and challenges in Capital Adequacy assessment and management**
- **ICAAP**
 - Necessary ingredients
 - The design
- **Pro-cyclicality – Is it really the problem we made it out to be?**
- **Basel II under scrutiny – What is next?**

Basel II - Pillar 2 – A Reminder

- **Principle 1 – The Internal Capital Adequacy Assessment Process (ICAAP):**

“Banks should have a process for assessing overall capital adequacy in relation to risk profile and a strategy for maintaining capital levels.”

- Sound capital assessment
 - Policies and procedures...to measure...all material risks
 - Process to relate capital to level of risk
- Comprehensive assessment of all risks
- Board and senior management oversight
- Monitoring and reporting
- Internal control review

Basel II - Pillar 2 – A Regulatory Interpretation

- “We need to be convinced that the organizations can *convince themselves* they have adequate capital using their particular framework and process.”
- “Evolution not revolution”

- In this broader sense, it would be shortsighted to see ICAAP as only a regulatory compliance requirement.
- **All institutions need ICAAP!**

ICAAP – Examples of “Earlier” Practices and Challenges

- Capital Adequacy \equiv Book Value of Equity $>$ Max (Economic Capital, Regulatory Capital, Rating Agency Capital)
- Capital estimated for internal vs. “external” audience. “Smoothed PDs” used in estimation of “regulatory” capital requirement.
- Ad-hoc, non-standardized, non-creditable Stress Testing, not formally linked to Capital Adequacy assessment
- Liquidity not formally linked to Capital Adequacy assessment
- Insufficiently understood, defined and quantified risk appetite
- Lack of preparation via “fire drills” and “war games”
 - Stress testing
 - Capital and liquidity contingency plans
- **Lack of a comprehensive, robust and transparent framework to assess overall capital adequacy!**

Designing ICAAP - Necessary Ingredients

- **Pillar I Minimum Capital**

- Perhaps a good starting point (and a definite improvement over Basel I) but still a poor proxy for EC

- **Economic Capital**

Why use the proxy if we have EC?

- Proven useful as a relative measure but you need to be careful when used as an absolute measure
 - Simplifying assumptions (e.g., risk horizon, single default point)
 - Aggregation difficulties, inter-risk type correlations
 - Difficulty measuring, especially operational and business risk
 - Validation challenges: Critical model assumptions are hard to validate or cannot be backtested at all

- **Nevertheless, it is certainly risk sensitive and a very useful input**

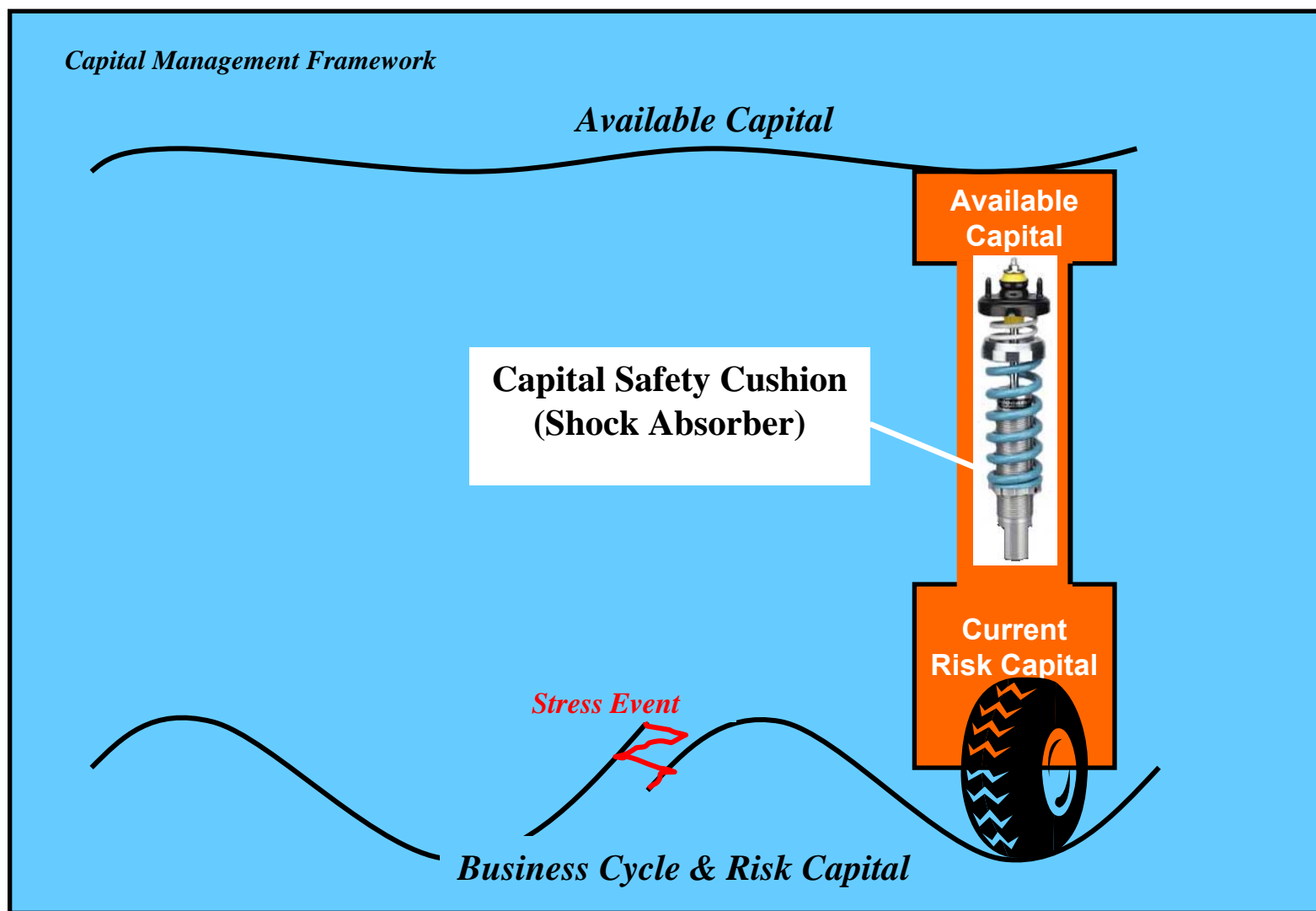
Designing ICAAP - Necessary Ingredients

- **What if the bank has no economic capital? Can it still comply with Pillar II?**
- **Stress Testing: Pillar 2** (proposed Supervisory Guidance, 02/28/2007)
 - “Requires a rigorous process for assessing overall capital adequacy in relation to risk and a comprehensive strategy for maintaining appropriate capital levels. Focus: overall capital needs of firm.”
 - **It is certainly important and a lot of progress is yet to be made – but let’s not think it is the solution for everything!**

Designing ICAAP - Necessary Ingredients

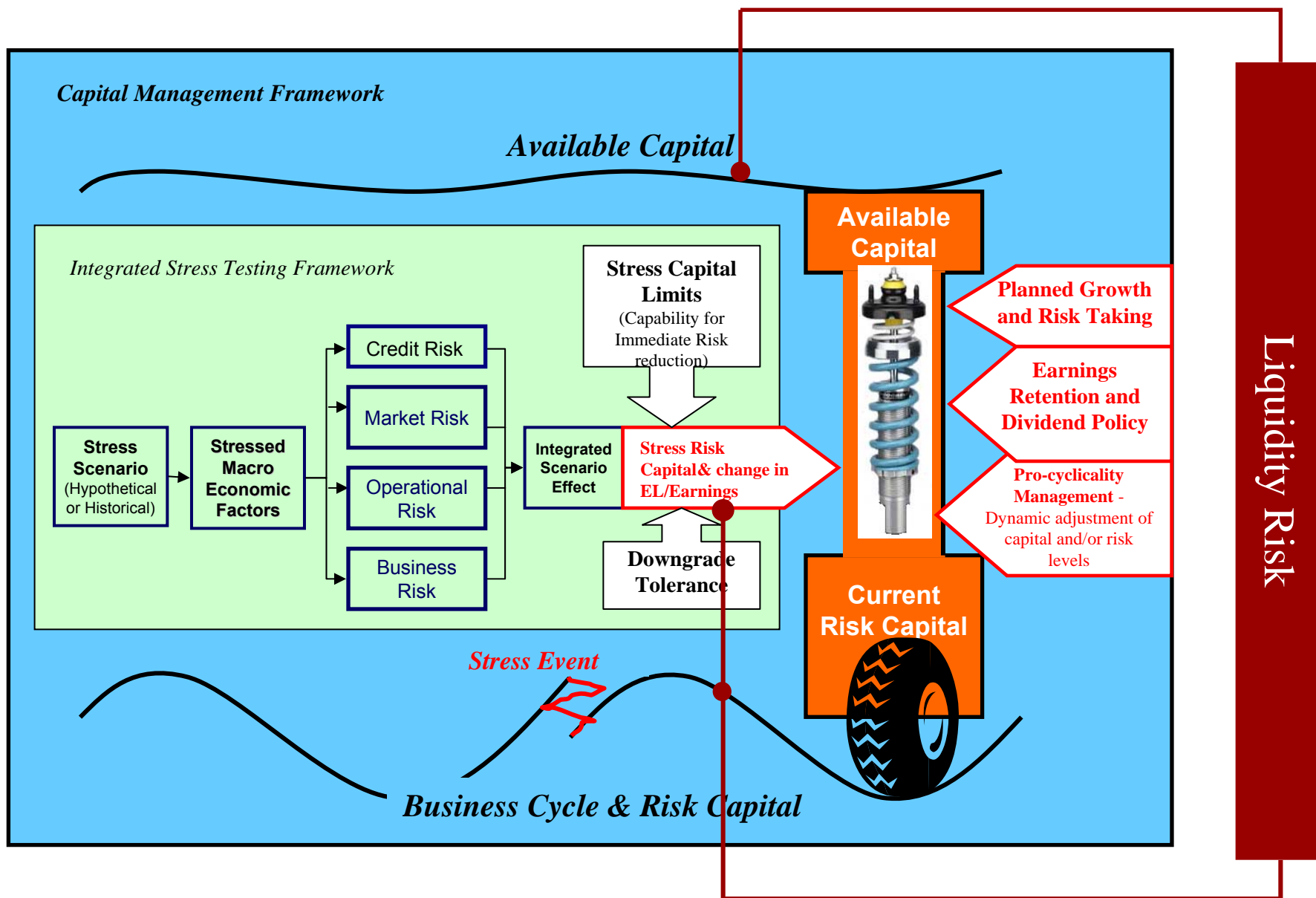
- **Risk Appetite** - Needs to be better understood, agreed upon and quantified!
 - Target Rating
 - Incur losses less than direct competition during downturns — Be the “safe choice” during credit downturns — Reflection on the share price?
 - Downgrade tolerance? — Stress-Testing Limits
 - Capital Management policy (how dynamic?)
- **Preparation via “fire drills” and “war games”**
 - Stress testing
 - Capital and liquidity contingency plans
- **Liquidity formally linked to Capital Adequacy assessment**
 - Capital is for rainy days but capital is held in less than perfectly liquid assets!
 - Losses → Expected CFs not materialized → Reduced Liquidity Position
 - (Magnified) Losses ← Increased Liquidity Risk Premium ← (System wide)
Reduced Liquidity

ICAAP Design - Managing Capital Adequacy



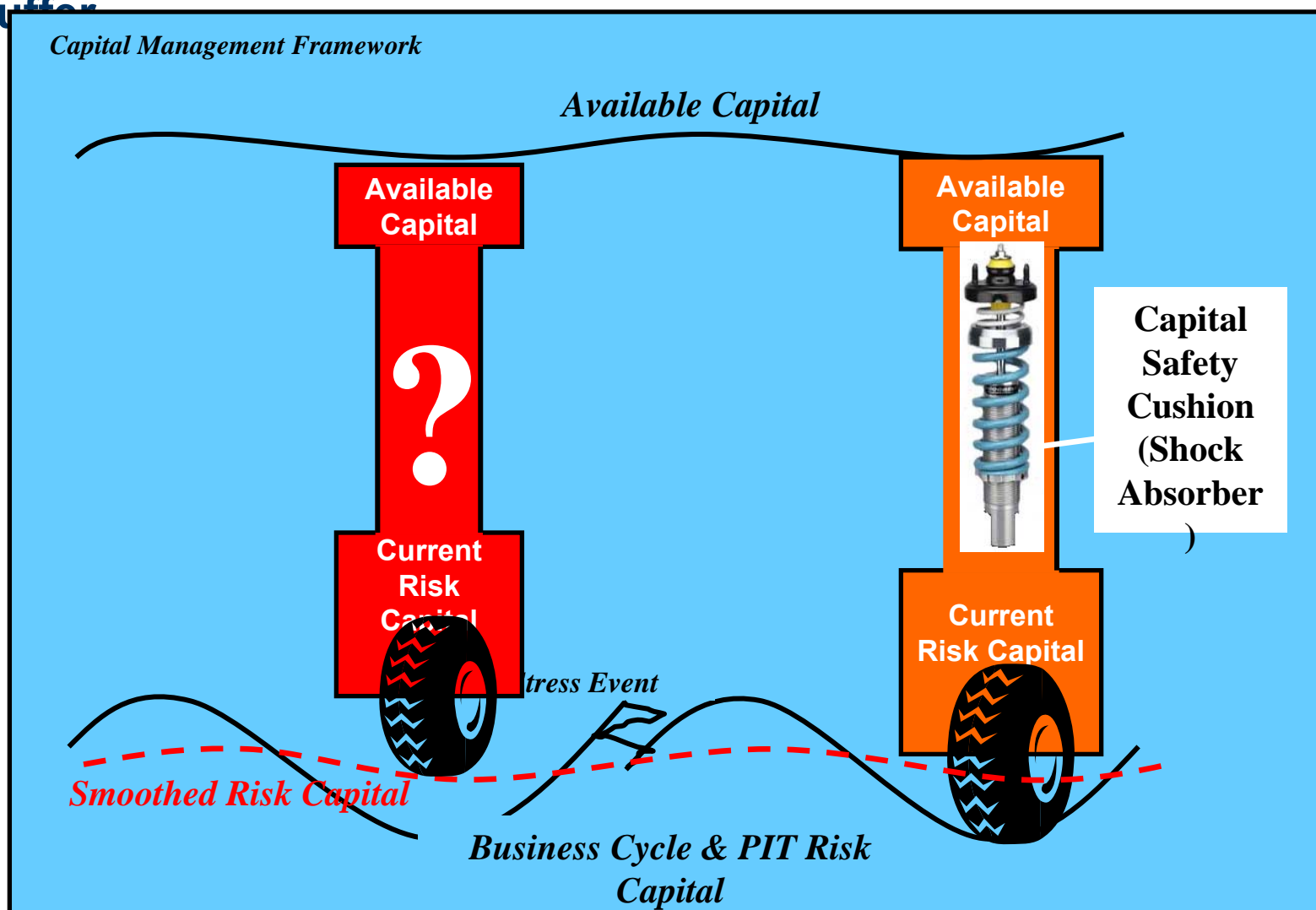
- How to measure and manage the safety cushion?

ICAAP Design - Managing Capital Adequacy



Procyclicality

- Risk is PIT – PIT view of risk capital provides a clearer picture of the capital cushion available relative to risk taking. “Smoothing” the risk capital will blur the true picture of risk and necessary buffer



Procyclicality

- However, there is a lot of concern over the procyclicality of Pillar I capital
 - ***“Tier I ratio is based on Pillar I capital requirements. And Tier I is the ratio that EVERYONE is focused on. In fact the Total Capital ratio gets virtually no attention these days.”***
- Cyclical Tier I ratio is NOT desired thus procyclicality of Pillar I capital is not desired
- **But why are we concerned about Pillar I capital? Pillar I is a stepping-stone — it is at best among the building blocks of ICAAP! (albeit only as a proxy for economic capital)**

Basel II and Beyond

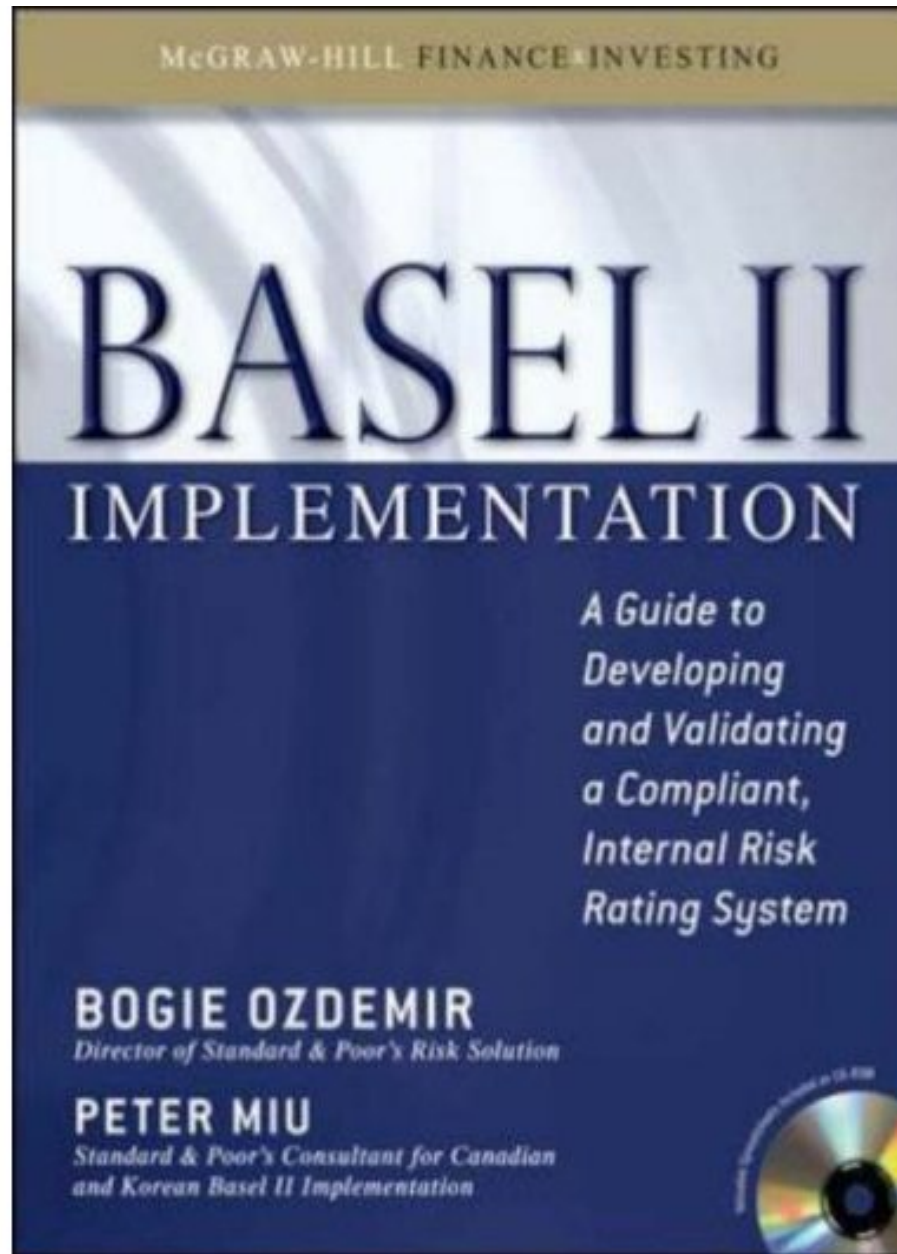
- **Fundamental premise of Basel II – Putting it into perspective**
 - Making and using more reliable estimations of key risk parameters, and simplifying assumptions to generate a first-cut minimum capital requirement (Pillar I)
 - Designing a comprehensive framework to assess and manage capital adequacy, which in the process improves and fills in any gaps in the Pillar I minimum capital requirement (Pillar II)
 - Disclosing more information to the market about the underlying risk of the portfolio and the bank’s risk-based capital position (Pillar III)
- **Setting up the Pillar I “Straw Man”**
 - We need to maintain the perspective that Pillar I is nothing more than a stepping-stone while designing a comprehensive framework to assess and manage capital adequacy is the real purpose

Basel II and Beyond

- **Basel II criticized under the crisis**
 - *“Regulators develop Pillar 2 add-ons, not the banks.”*
 - *“It’s not such a bad thing for regulators to become heavy-handed and impose leverage limits.”*
- **We run the risk of killing the spirit of Basel II**
 - Imposing overly-punitive restrictions in terms of top-down capital requirements would leave financial institutions with little incentive to develop better risk and capital management capabilities.
 - If capital requirements are dictated from the top, banks are less likely to develop their own strong ICAAP, which could increase the risk of another crisis.
 - The crucial thing that Basel II can do is provide banks with the regulatory framework and tools to fully understand and effectively manage their risk and capital positions.
- **No amount of equity is a substitute for (lack of) sound risk management. Basel II should stand for strengthening a bank’s ability to manage risk, accurately assess its capital needs, and disclose that risk to the marketplace. The closer it comes to achieving those goals, the better off the banking system will be.**

A Few “Take-Homes”

- **ICAAP is more than a regulatory compliance requirement. All institutions need ICAAP!**
- **Pillar I minimum capital is a poor proxy for economic capital**
- **Economic capital is a useful input for ICAAP — but beware of its shortcomings as an absolute measure**
- **ICAAP needs to incorporate many other ingredients**
- **Pillar I is only stepping-stone, keep the eye on ICAAP/Pillar II**
- **Focusing on Pillar I capital and Pillar I driven Tier I capital ratio will defeat the purpose**
- **No amount of equity is a substitute for (lack of) sound risk management. Regulate, ensure and encourage development of sound risk/capital measurement management practices**



Questions & Answers

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