BANK FOR INTERNATIONAL SETTLEMENTS

New Capital Accord
Basel II

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Outline

- Challenge
- 2nd consultative document
- Remarks from the industry
- Committee's response
- Implications

Challenge

- Changing financial markets
- More important role for financial intermediaries
- Evolving shortcomings of the 88’ Accord
  - Capital adequacy in relation to a bank's true risk profile
  - Broad-brushed risk weighting structure
  - Problematic OECD/Non-OECD distinction for sovereigns
  - Created an incentive to take some highest quality assets off the balance sheet
  - Covered only credit and market risks

The New Accord

- **Three Basic Pillars**
  - **Minimum Capital Requirements**
    - Weighted Risks
      - Credit Risk
        - Standardised Approach (RSA)
        - Internal Ratings Based Approach (IRBA)
          - Foundation Approach
          - Advanced Approaches
      - Operational Risk
      - Market Risk
    - Definition of Capital
  - Supervisory Review Process
  - Market Discipline

Enhanced Risk Sensitivity

- BCBS major objective: more risk sensitivity
- Implies a judgement on risk
  - Current Accord – judgement made by supervisors
  - Standardised Approach – judgement by third parties
  - IRB Approach – judgement by bank's themselves
- Evolutionary Approach
  - Current Accord
  - Standardised approach
  - Foundation Internal Ratings-Based Approach
  - Advanced Internal Ratings-Based Approach

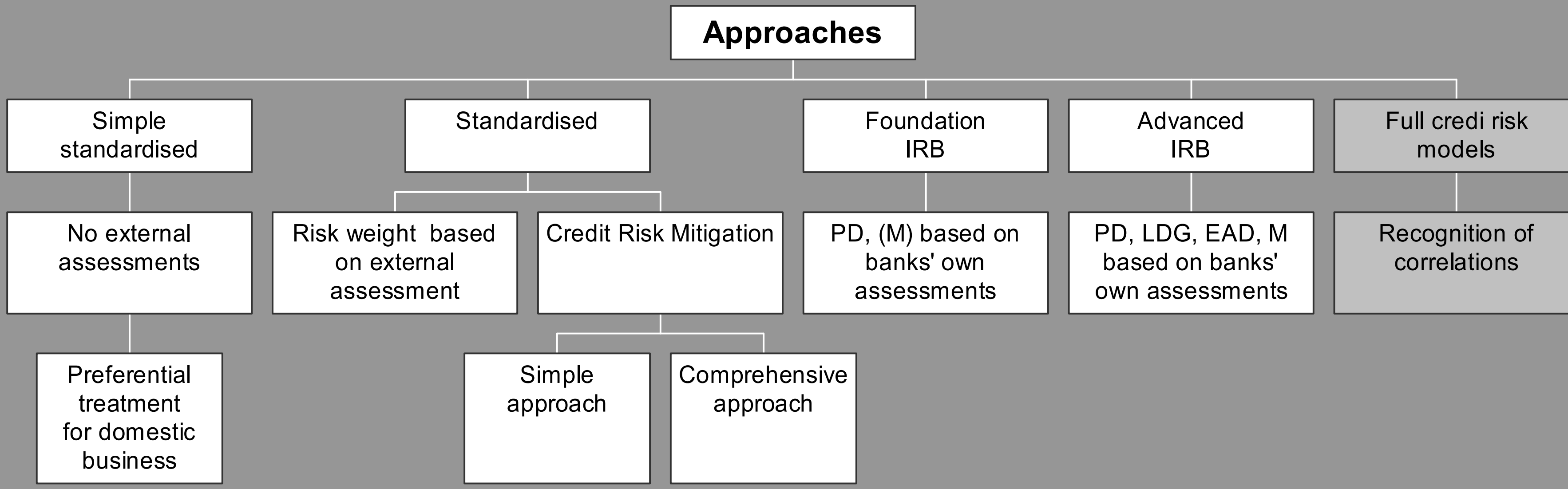
Increasing risk sensitivity

- Better risk management implies lower capital requirements

Drivers of Credit Risk

• Probability of default	⇨	Borrower risk
• Loss given default	⇨	Facility risk
• Exposure at default	⇨	Actual exposures
• Maturity	⇨	Time dimension risk
• Concentration	⇨	Diversification of portfolio

Evolutionary Structure for Credit Risk I



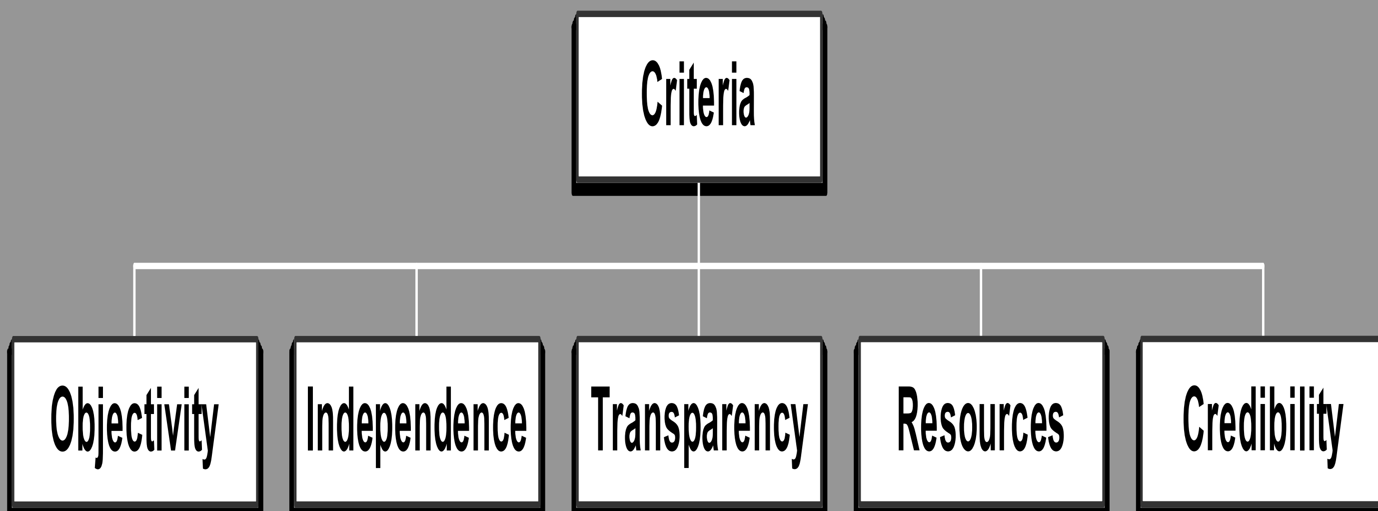
PD = Probability of default, LDG = Loss given default, EAD = Exposure at default, M = Maturity

Drivers of Credit Risk - RSA

Driver		Recognition
• Probability of default	⇨	Credit assessment institutions
• Loss given default	⇨	Credit risk mitigation
• Exposure at default	⇨	Credit conversion factors
• Maturity	⇨	Limited recognition in CRM
• Concentration	⇨	No specific recognition

Eligibility Criteria for ECAIs

Certain criteria must be fulfilled for recognition of ECAIs



CRM Methodologies – RSA/FIRBA

- Comprehensive approach
  - Focuses on the cash value of the collateral taking into account price volatility
  - Partial collateralization will be recognized
- Simple approach
  - Developed for banks that only engage to a limited extent in collateralized transactions
  - Maintains the substitution approach in the current accord
  - Will generate higher capital requirements than the comprehensive approach

Eligible Financial Collateral

Standardised approach and Foundation IRB

- Cash on deposit with the lending bank
- Government securities rated BB- and above (includes PSEs treated as sovereigns by national supervisor)
- Bank, securities firm, corporate securities rated BBB- and above
- Equities included in a main index
- Certain mutual funds
- Gold

Advanced IRB

- No limits

Eligible Physical Collateral

Standardised

- Residential real estate: risk weight 50%
- Commercial real estate: only when meeting strict conditions (risk weight 50%)

Foundation IRB

- Both residential and commercial real estate
  - LGD could go down to 40%

Advanced IRB

- No limits

Internal Ratings Based Approach IRBA

- Wider application than originally anticipated
- Different approaches for different exposure types
  - Corporate, bank, sovereign, retail
  - Project finance, equities, asset securitisation
- Based on three main elements
  - Risk components or inputs
  - Risk-weight function
  - Minimum requirements
- Plus Requirement for Market Discipline
- Subject to supervisory validation and approval
- Reflects evolutionary approach

Parameters

	Standard Approach	Internal Rating		Credit Risk Models
		Foundation Approach	Advanced Approach	
Risk weigths	5	More	More	More
PD	Supervisor	Bank	Bank	Bank
LGD	Supervisor	Supervisor	Bank	Bank
EAD	Supervisor	Supervisor	Bank	Bank
Correlations	No	No	No	Yes

Asset Securitisation - What's new?

- Compared to Accord 1988
  - Everything
  - Current proposal seeks to harmonise national treatments
- Compared to June 1999 Consultative Paper
  - Distinction between investing and originating banks
  - Added "clean-break" criteria
  - Deduction for credit enhancements
  - Treatment of early amortisation features
  - Added criteria for treatment of unrated securitisations
  - Added treatment and criteria for liquidity facilities
  - Discussion of IRB treatment and implicit risk
  - Disclosure requirements

Other Risk

OTHER RISKS

- Operational risks (including legal risk)
- Interest Rate risk in the banking book
- Liquidity risk
- Strategic, Reputational etc..

Pillar I

Pillar II (supervisory review) and/or Pillar III

Operational Risk

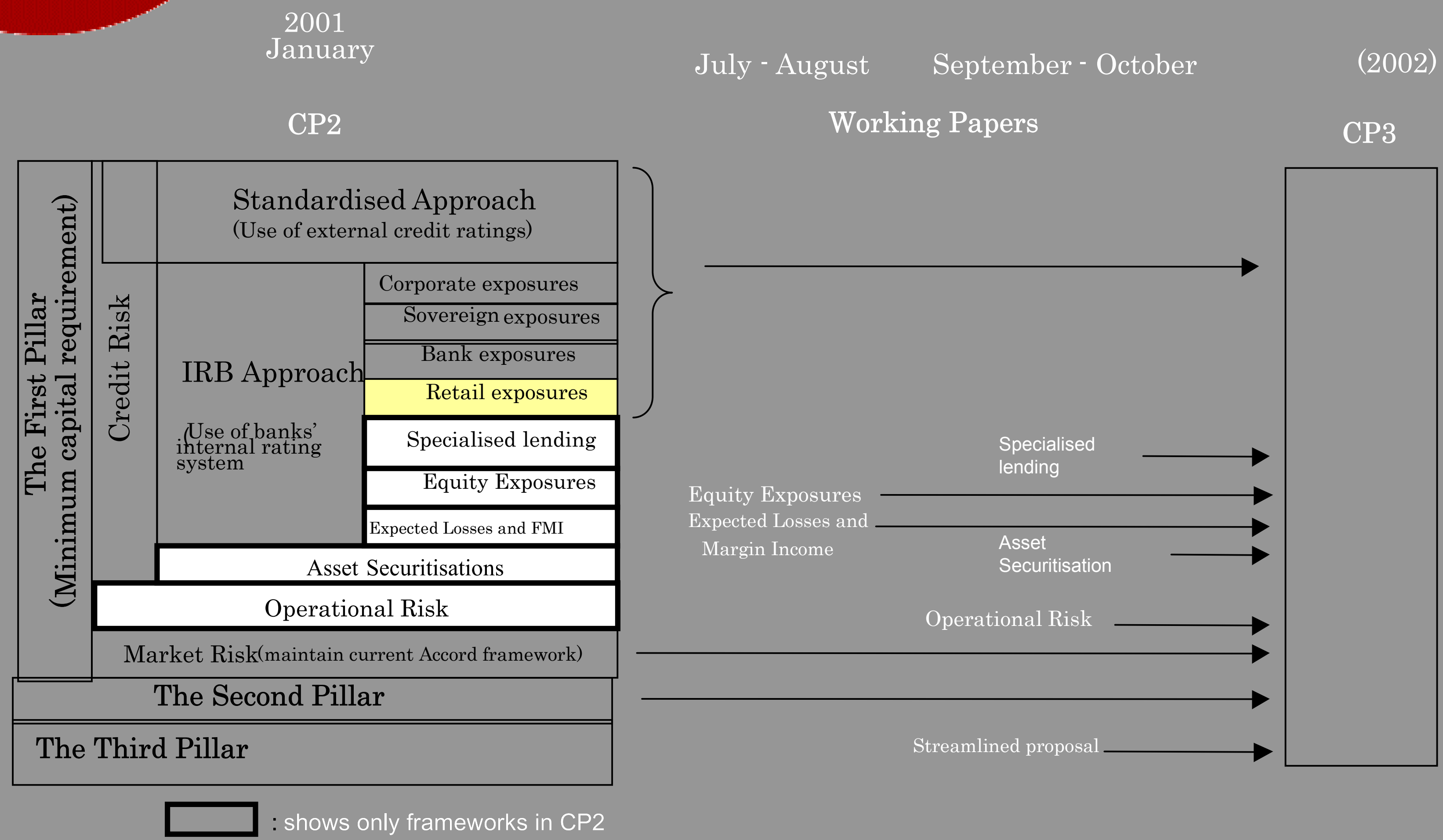
- 3 approaches outlined
  - Basic Indicator Approach (gross income)

$$\boxed{\text{Capital charge} = \alpha \times \text{indicator}}$$

  - Standardised Approach
    - Based on 8 business lines (gross income)
  - Advanced Measurement Approach
- Issues
  - Data availability
  - Risk Measure
  - Calibration

BCBS reactions on key issues raised

- Incompleteness
  - There are too many green areas. Ready for implementation?
- Calibration
  - The New Accord would impose too heavy a capital requirement
- SMEs
  - The New Accord is too onerous on lendings to SMEs
- Procyclicality
  - Capital requirement will swing up and down over an economic cycle
- Complexity
  - January 2001 proposal was too complex, with more than 500 pages



Getting the full picture

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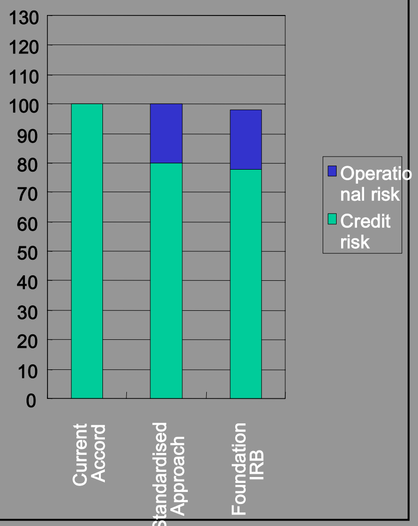
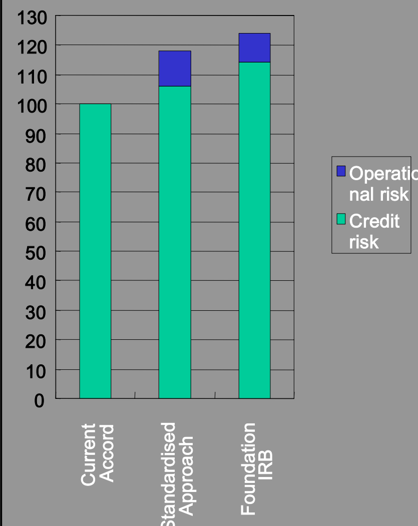
Calibration of New Accord

The calibration intended in the Second Consultative Package **(CP2,** January 2001)



The results of the Second Quantitative Impact Study **(QIS2)**:

G10 average, after incorporating some of the working paper proposals



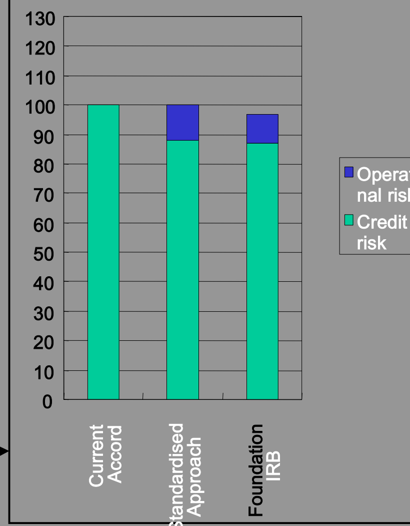
Review of the Standardised Approach calibration

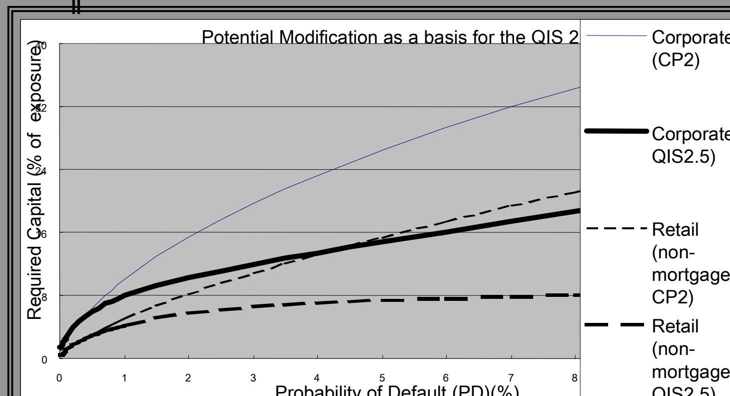
QIS2.5(Nov.2001)

QIS3(2002)

Further review of the IRB calibration

The calibration aimed at for the Third Consultative Package **(CP3)**





Proposals made in Working Papers

-Reduction in the target of **operational risk** capital as a percent of current minimum capital requirements from 20% to 12% (September 2001)

-Modifications related to the coverage of expected losses, including the use of excess general provisions, **specific provisions**, and future margin income (July 2001)

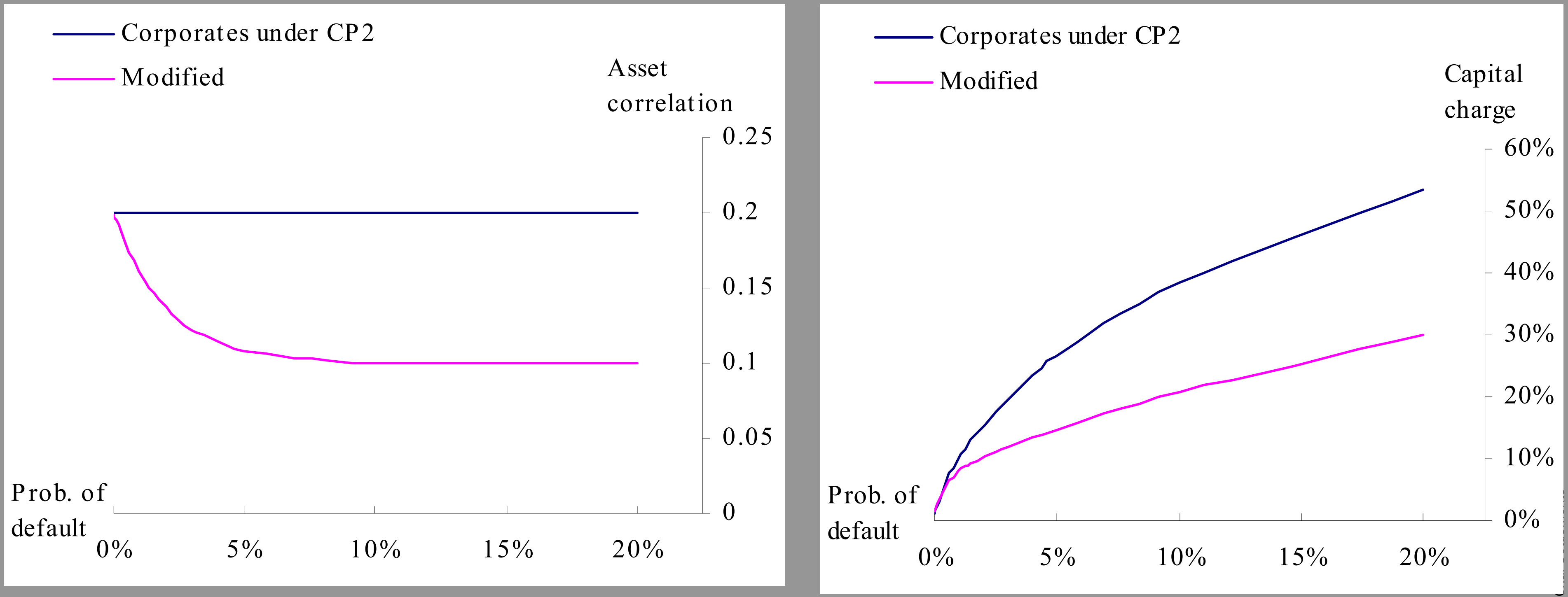
Calibration – additional changes

- Modified risk weight function is now (OIS 2.5) a decreasing function of asset correlation
  - C&I: asset correlation decreases from 20% to 10%
  - Residential mortgage: asset correlation equals 15%
  - Other retail: asset correlation decreases from 15% to 4%
- EL charges in CPII
  - Expected losses, including the use of excess general provisions, specific provisions, and margin income (in certain circumstances) can be used to offset IRB capital requirements
- “w” and probably "granularity-index" factor will be strenghtened in Pillar II

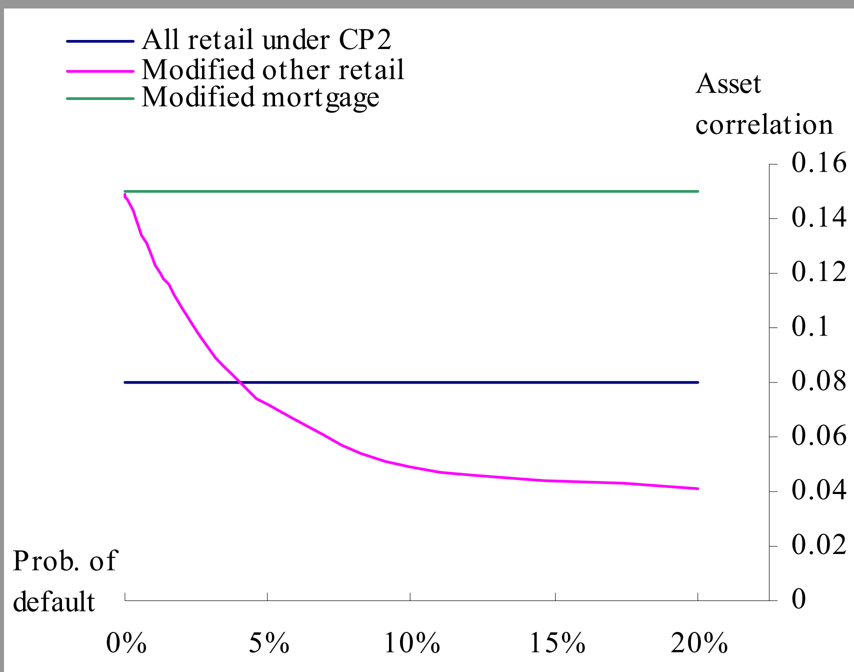
Probability of Default (PD)	IRB Capital Requirement – 1/2001 (C&I)	IRB Capital Requirement – QIS 2.5 (C&I)
3 bp	1.1%	1.4%
10 bp	2.3%	2.7%
25 bp	4.2%	4.3%
50 bp	6.4%	5.9%
75 bp	8.3%	7.1%
100 bp (1%)	10.0%	8.0%
1.25%	11.5%	8.7%
2.00%	15.4%	10.3%
4.00%	23.3%	13.4%
5.00%	26.5%	14.8%
10.00%	38.6%	21.0%
20.00%	50.0%	30.0%

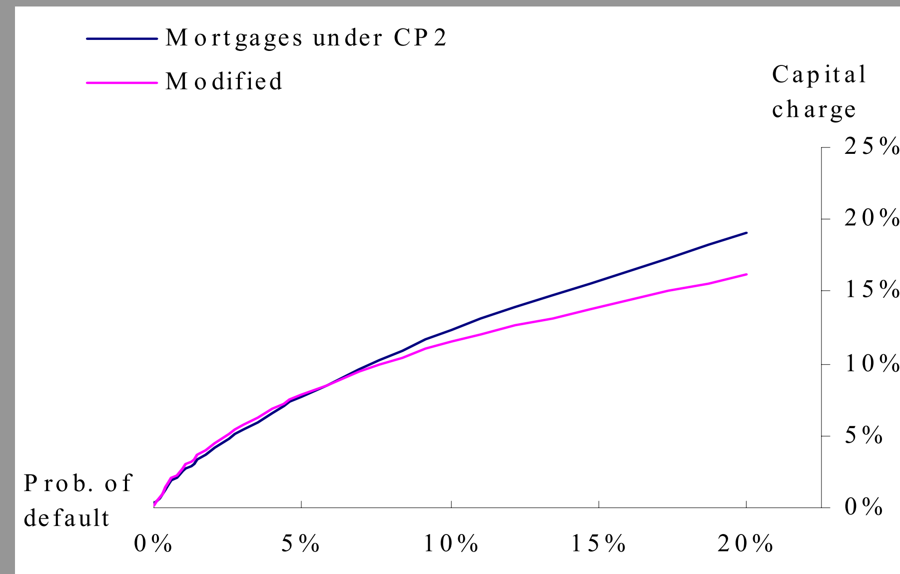
Probability of Default (PD)	IRB Capital Requirement – 1/2001 (Retail)	IRB Capital Requirement – QIS 2.5 (res. mortgage)	IRB Capital Requirement – QIS 2.5 (other retail)
3 bp	0.5%	0.4%	0.4%
10 bp	1.1%	1.0%	0.9%
25 bp	2.0%	2.0%	1.8%
50 bp	3.2%	3.4%	2.8%
75 bp	4.2%	4.5%	3.6%
100 bp (1%)	5.1%	5.5%	4.2%
1.25%	6.0%	6.4%	4.7%
2.00%	8.3%	8.8%	5.7%
4.00%	13.4%	13.7%	7.1%
5.00%	15.6%	15.7%	7.4%
10.00%	24.8%	23.2%	8.5%
20.00%	38.3%	32.5%	10.6%

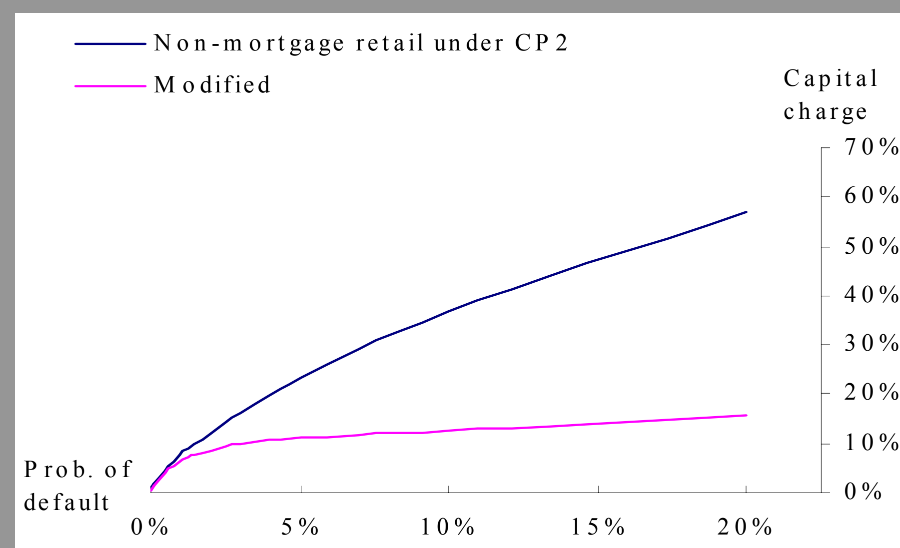
Graphical representation C&I



Graphical representation Retail



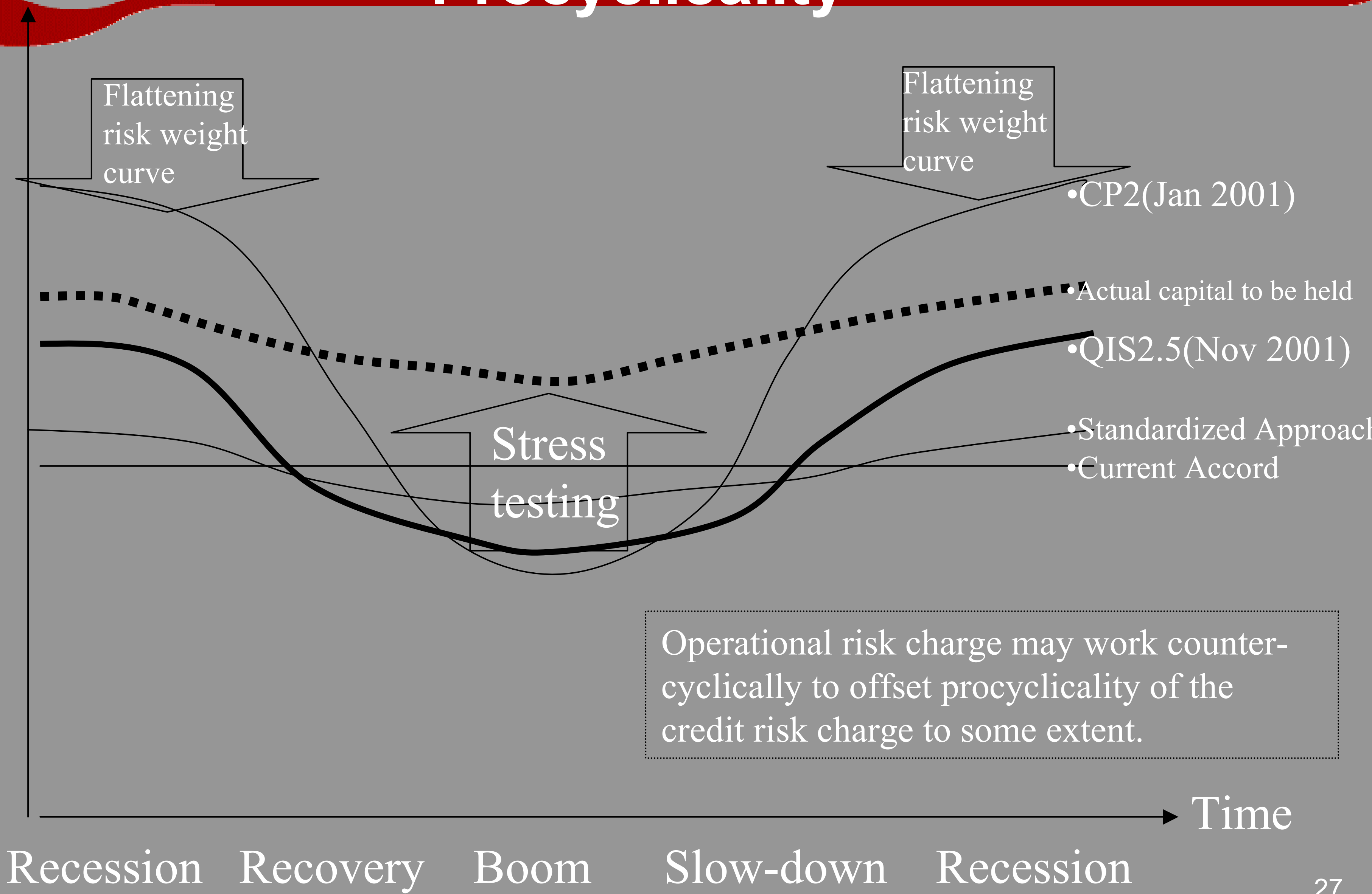




SME issue – likely lower capital charge

- Greater recognition of physical collateral and receivables in foundation IRBA; QIS 2.5 treats already fully secured loans via
  - Other physical collateral: 45% LGD
  - Receivables: 40% LGD
- Possible inclusion of size of company into the risk weight function in addition to “decreasing asset correlation”
  - Smoothes out cliff effect between retail and C&I
- What else?

Procyclicality



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Reduced Complexity

Simplification
Reduced "Prescriptiveness"
Flexibility

No "One size fits all"
Risk sensitivity
Level playing field

- Streamlining Pillar III: items reduced to 10% of CP2
- "Minimum Requirement" for IRBA reedited
- "Specialised Lending" will be part of C&I
- Rethinking of concentration measure within Pillar I
- "*w*" factor now in Pillar II

Implications

- Fully fleshed risk-sensitive proposals for QIS 3
  - Should provide incentive compatible approach
  - Should lead towards more stability
- Challenge for banks and supervisors
  - Need for expertise
  - Need for comparability of practices around the globe
  - Need for consistent implementation
  - Need for establishing IT infrastructure
- International Cooperation
  - BIS, FSI, …
  - Wider scope for regional cooperation