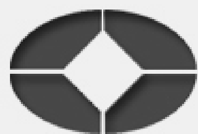

BASEL COMMITTEE ON BANKING SUPERVISION

BANK FOR INTERNATIONAL SETTLEMENTS

The New Basel Capital Accord and Housing Finance

OECD Workshop on Housing Finance in Transition Economies

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Outline

1. Overview of the New Capital Accord
2. Residential mortgage in the New Accord
3. Securitisation in the New Accord
4. Implications

1. Overview of the New Capital Accord

- The time schedule
- Outline of the new framework
- Objectives of the review

The time schedule

- July 1988: Basel Accord (Basel I)
- June 1999: CP1
- January 2001: CP2
- **October 2002: release of Quantitative Impact Study (QIS) 3**
- 20 December 2002: deadline of QIS submission
- Second quarter 2003: CP3
- Fourth quarter 2003: Basel II
- End-2006: implementation of Basel II

Outline of the new framework

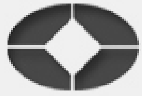
- Three Pillars
  - Minimum Capital Requirements
    - Weighted Risks
      - Credit Risk
        - Standardised Approach (SA)
        - Internal Ratings Based Approach (IRBA)
          - Foundation Approach
          - Advanced Approaches
        - Asset Securitisation
          - SA
          - IRBA RBA & SFA
      - Operational Risk
        - Basic Indicator Approach (BIA)
        - Standardised Approach (SA)
        - Advanced Measurement Approaches (AMA)
      - Market Risk
    - Definition of Capital
  - Supervisory Review Process
  - Market Discipline

Objectives of the review

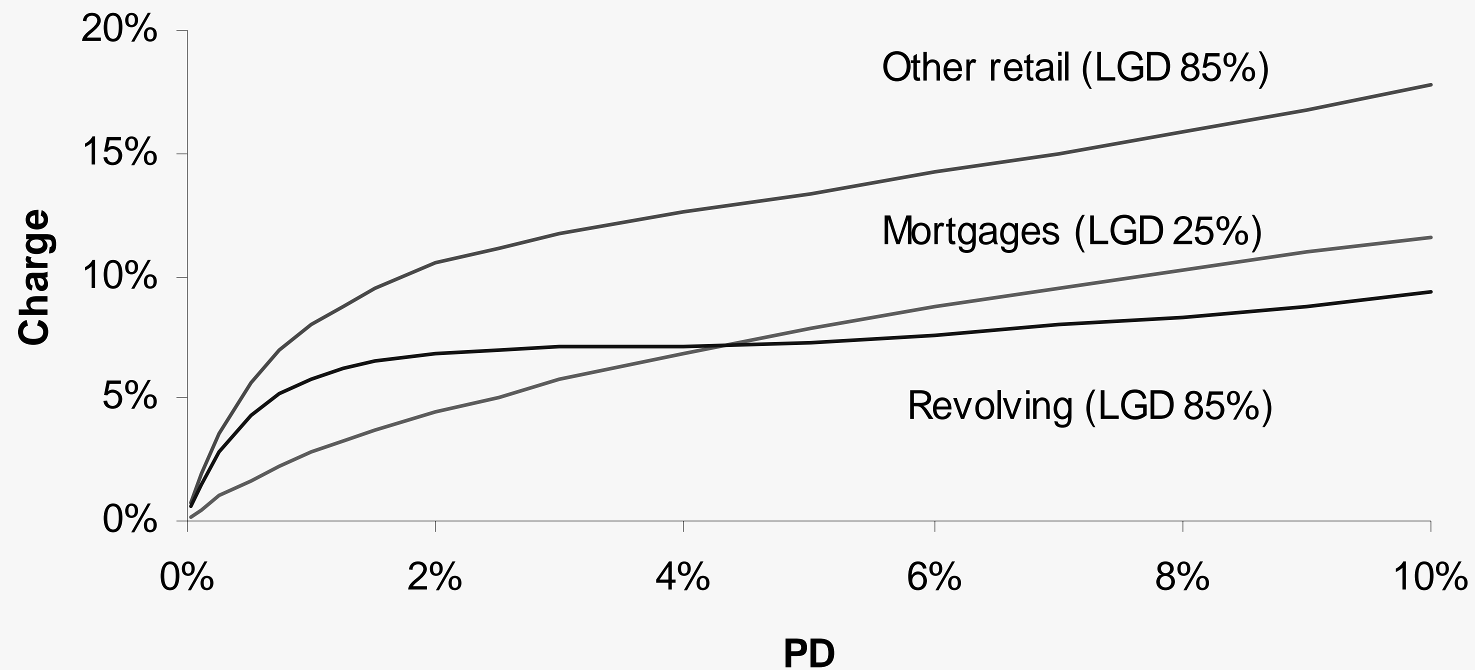
- Better measurement of risk
  - comprehensive coverage
  - more risk sensitivity
  - greater emphasis on banks‘ own assessment
- Ability to meet different needs of different banks (and banking systems)
  - balancing of simplicity and accuracy
  - several options to fit banks with different sizes and different levels of sophistication.
- More use of discipline from the market and management
  - three mutually reinforcing Pillars

2. Residential mortgage in the New Accord

- Under the Standardised approach, claims secured by residential property will be generally risk weighted at 40%
- Under the IRB approach, there will be a several risk weight curves
  - a risk weight curve relates the probability of default (PDs) and loss given default (LGDs) to risk weights
  - a separate risk weight curve for residential mortgage exposures within retail



Capital charges for retail exposures in IRB



3. Securitisation in the New Accord

- Definition of securitisation
- Banks’ roles in securitisation transactions
- Requirements for recognition of risk transfer
- Treatment of securitisation exposures

Definition of securitisation

Credit exposures arising from all types of securitisations fall within the framework

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1. The transaction in question involves the stratification or tranching of credit risk
2. The performance and/or the risk of the tranched exposures is linked to that of the underlying credits
3. Do not satisfy the definition of specialised lending*

* Loans to which the primary source of repayment is the income generated by specific assets as defined separately (e.g. project finance)

- Asset Backed Securities
- Mortgage Backed Securities
- Credit enhancements
- Liquidity facilities
- Credit derivatives

etc.

- Treatment to be determined on basis of economic substance rather than legal form

Roles played by banks: illustrative example

* Sponsors of ABCP conduit or similar programmes are to be treated as originators

Recognition of risk transfer

1. Requirements for traditional securitisation
   - Significant risk has been transferred
   - The transferor does not maintain effective control over the transferred assets (the assets are beyond of reach of transferor's creditors)
   - Investors only have claim to the underlying assets (and not to assets of the transferor)

➢ When met, the underlying assets can be excluded from risk weighted assets

2. Requirements for synthetic securitisation
   - Credit derivatives are legally enforceable and meet the general requirements for credit risk mitigation
   - Significant risk has been transferred
   - Specific range of eligible protection providers

➢ When met, the effect of risk mitigation can be recognised

Treatment of securitisation exposures: summary

<table>
<tr><th rowspan="2">Securitisation exposure</th><th rowspan="2">Standardised approach</th><th colspan="2">IRB approach</th></tr>
<tr><th>Originating banks*</th><th>Investing banks</th></tr>
<tr><td>Investment grade</td><td>Risk weighting by rating</td><td rowspan="2">Exposures below K_{IRB}:
Deduction
Exposures above K_{IRB}:
Ratings Based Approach
K_{IRB} cap applies</td><td rowspan="2">Rating Based Approach</td></tr>
<tr><td>Non-investment grade</td><td>Originating banks: deduction
Investing banks:
BB: risk weights by rating
Below BB: deduction</td></tr>
<tr><td>Unrated</td><td>Deduction</td><td>Exposures below K_{IRB}:
Deduction
Exposures above K_{IRB}:
Supervisory Formula Approach or deduction
K_{IRB} cap applies</td><td>Deduction</td></tr>
</table>

* An investing bank may be included in this category if approved by its supervisor.

Risk weights under the Standardised approach

Rating		Originating banks	Investing banks
Long-term rating	AAA ~ AA-	20%	
	A+ ~ AA-	50%	
	BBB+ ~BBB-	100%	
	BB+ ~BB-	Deduction	350%
	below BB-	Deduction	
	unrated	Deduction ←	
Short-term rating	A1/P1	20%	
	A2/P2	50%	
	A3/P3	100%	
	other ratings	Deduction	
	unrated	Deduction ←	

Exceptions

1. Most senior exposure
   → average risk weight of underlying asset If known
2. Exposure in ABCP:
   - Economically in a second loss position or better and the first loss position must provide meaningful credit protection to the second loss position
   - associated credit risk must be the equivalent of investment grade or better
   - must not retain or provide the first loss position

   → highest risk weight of underlying asset (floor of 100%)

Capital requirements in the Standardised approach depend on the creditworthiness of the exposure

Risk weights under the Ratings Based Approach

Rating*	**Thick tranches backed by highly granular** pools**	**Base risk weight**	**Tranches backed by non-granular** pools**
AAA	7%	12%	20%
AA	10%	15%	25%
A	20%		35%
BBB+	50%		
BBB	75%		
BBB-	100%		
BB+	250%		
BB	425%		
BB-	650%		
below BB- and unrated	Deduction		

* Includes inferred rating

** Highly granular is defined as N>=100, non-granular is defined as N<32

Calculation under the Supervisory Formula Approach

(more senior)

Credit enhancement level

(more junior)

SPE

Underlying assets

A

T

L

Marginal capital requirement

Supervisory Formula

1

0

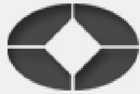
K_{IRB}

L

L+T

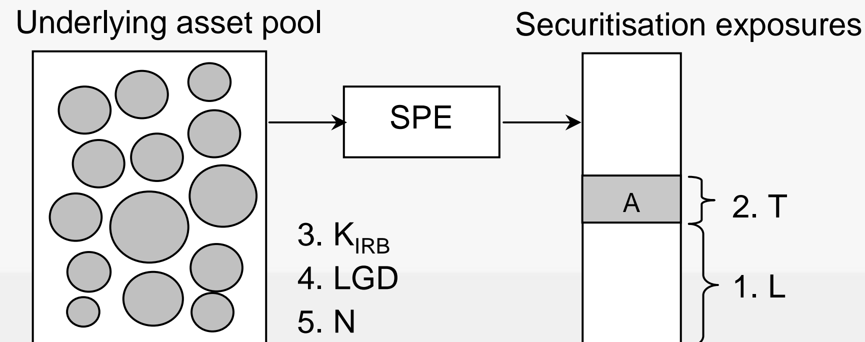
When a bank holds exposure A, the size of the shaded area is the amount of capital requirement

Credit enhancement level of the exposure (%)



Inputs into the Supervisory Formula Approach

1. Credit enhancement level (L)
   - notional amount of all securitisation exposures subordinated to the exposure in question, divided by the notional amount of assets securitised
2. Thickness of the exposure (T)
   - nominal size of the exposure in question, divided by the notional amount of assets securitised
3. Capital requirement for the underlying assets (K_{IRB})
   - IRB capital requirement for the underlying asset if they were on balance-sheet, divided by the notional amount of assets securitised
4. Weighted average LGD of the underlying assets
5. Effective number of exposures of the underlying assets (N)
   - $N = (\Sigma EAD)^2 / \Sigma EAD^2$



... some more aspects

- Liquidity facilities
- Securitisation of revolving assets with early amortisation features
  - Please refer to “QIS3 Technical Guidance” and “Second Working Paper on Securitisation” posted on the BIS website at http://www.bis.org

4. Implications of the new framework

- Current Accord does not explicitly address securitisation
  - a more consistent treatment across jurisdictions
- Capital requirements more aligned to underlying risks
  - less incentives for regulatory arbitrage
  - transactions likely to be motivated more by funding and credit risk management needs
  - better risk management and pricing by institutions
  - more efficient allocation of capital