Overview of
The New Basel Capital Accord

2nd Newly Independent States (NIS)
Policy Forum on Microfinance Law and Regulation

Krakow, 27 June 2003
Hirotaka Hideshima
Member of the Secretariat
Outline

- Capital regulation and the 1988 Accord
- Timetable and objectives of Basel II
- Outline of the new framework
  - The First Pillar - Minimum capital requirements
    - Credit risk
    - Operational risk
  - The Second Pillar
  - The Third Pillar
- Third Quantitative Impact Study
- Where are we in the process?
Capital regulation – why do we need one?

- Financial instability is costly to the economy
  - disruption in the distribution of funds
  - breakdown in the payment system
  - possibility of (international) contagion (bank runs etc.)
- Therefore, the need for supervision - capital regulation is a useful and crucial tool
  - but the objective should not be to assure that banks will never fail
- Capital regulation can have competitive implications
  - the need to have internationally harmonised rules for internationally active banks competing with each other
  - domestic implications need to be worked out domestically
The Current Accord - Basic Structure

- For internationally active banks in G-10 countries
- Capital requirements cover credit risk (and market risk since 1996)
  - but with inherent buffer for other risks
- Simple risk-weighting structure: 0, 20, 50, 100%

Minimum ratio: \[ \frac{\text{Capital}}{\text{Risk weighted assets}} \geq 8 \% \]
Benefits of the 1988 Basel Accord…and some issues

- Created an internationally recognised standard
  - Adopted world-wide
- Contributed to financial stability
  - Reversed a downward trend in international banks’ capital levels
  - Promoted level playing field among internationally-active banks
- Relatively simple

- Capital requirements not always reflective of economic risk
- Does not address innovation in risk measurement and management practices
  - Arbitrage opportunities through e.g. securitisation
- Little recognition of credit risk mitigants
- “OECD Club-Rule”
Outline

- Capital regulation and the 1988 Accord
- **Timetable and objectives of Basel II**
- Outline of the new framework
  - The First Pillar - Minimum capital requirements
    - Credit risk
    - Operational risk
  - The Second Pillar
  - The Third Pillar
- Third Quantitative Impact Study
- Where are we in the process?
Basel II timetable – Summary of the Process

- June 1999 paper reflected *conceptual* approach
- January 2001 package presented a *translation* of these concepts into a framework
- Autumn 2001 “working papers” and press releases to *update* on progress and process
- October 2002 impact study to field test the package
- April 2003 document to consult on *comprehensive* approach
Basel II – Summary of the Process

- To sum up: Basel II result of active dialogue with
  - Supervisors from countries outside the Committee
  - Banking associations, banks and other market participants
    (and thus based on leading industry practice)
Basel II - Objectives

- Enhanced framework making use of the roles played by bank management and the market
- Better align regulatory capital to underlying risk
- Encourage banks to improve risk management capabilities
- Comprehensive coverage of risks
- Applicability to a wide range of banks and systems
Basel II – Direction based on the objectives

● A structure composed of three pillars
  – Increased role for bank management and the market
● More reliance on banks’ own assessment of risk
● Greater recognition of credit risk mitigation techniques
● Inclusion of capital charges for operational risk
● Menu of options to choose from

➤ But, perfect rules are not feasible
  – no perfect measurement system
  – difficult balance between accuracy and simplicity
Outline

● Capital regulation and the 1988 Accord
● Timetable and objectives of Basel II
● **Outline of the new framework**
  – The First Pillar - Minimum capital requirements
    • Credit risk
    • Operational risk
  – The Second Pillar
  – The Third Pillar
● Third Quantitative Impact Study
● Where are we in the process?
Outline of the New Accord - Basic Structure

Three Basic Pillars
- Minimum capital requirements
- Supervisory review process
- Market discipline

Risk weighted assets
- Credit risk
  - Standardised Approach
  - Internal Ratings-based Approach
- Operational risk

Definition of capital
- Market risks
- Core Capital
- Supplementary Capital

Credit risk
- Standardised Approach
- Basic Indicator Approach

Operational risk
- Advanced Measurement Approaches

Supervisory review process

Market discipline

Minimum capital requirements

Core Capital

Supplementary Capital

Supervisory review process

Market discipline
Outline

- Capital regulation and the 1988 Accord
- Timetable and objectives of Basel II
- Outline of the new framework
  - The First Pillar - Minimum capital requirements
    - Credit risk
    - Operational risk
  - The Second Pillar
  - The Third Pillar
- Third Quantitative Impact Study
- Where are we in the process?
Standardised Approach – important improvements

- Elimination of the OECD “club-rule” for the risk weighting of sovereign exposures
- Possibility to differentiate risk weights based on creditworthiness of counterparty
  - but currently low ratings penetration for corporates in most countries (national supervisors can decide not to use)
- Introduction of higher risk category (150%)
- Risk sensitive treatment of credit risk mitigation techniques and asset securitisation
Standardised Approach – Risk Weights

<table>
<thead>
<tr>
<th>Claim</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sovereigns (Export credit agencies)</strong></td>
<td>0% (1)</td>
</tr>
<tr>
<td><strong>Banks</strong></td>
<td></td>
</tr>
<tr>
<td>Option 1¹</td>
<td>20%</td>
</tr>
<tr>
<td>Option 2²</td>
<td>20% (20%)³</td>
</tr>
<tr>
<td><strong>Corporates</strong></td>
<td>20%</td>
</tr>
<tr>
<td><strong>Retail</strong></td>
<td></td>
</tr>
<tr>
<td>Mortgages</td>
<td></td>
</tr>
<tr>
<td>Other retail</td>
<td></td>
</tr>
</tbody>
</table>

1. Risk weighting based on risk weights of sovereign in which the bank is incorporated, but one category less favourable.
2. Risk weighting based on the assessment of the individual bank.
3. Claims on banks of an original maturity of less than three months generally receive a weighting that is one category more favourable than the usual risk weight on the bank’s claim.
IRB - Basic principles

- Separate approaches for different portfolios
- Relies on a bank’s internal assessment of its counterparties and exposures
- Based on three main elements
  - Risk components (e.g. probability of default, loss-given-default)
  - Risk-weight function
  - Minimum requirements
- Subject to supervisory validation and approval
IRB – Categories of Exposures

<table>
<thead>
<tr>
<th>Portfolios</th>
<th>Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Corporates</strong></td>
<td></td>
</tr>
<tr>
<td>Traditional* (incl. SMEs)</td>
<td>foundation advanced</td>
</tr>
<tr>
<td>Specialised lending</td>
<td>supervisory slotting criteria foundation advanced</td>
</tr>
<tr>
<td><strong>Retail</strong></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>advanced</td>
</tr>
<tr>
<td>Qualifying revolving</td>
<td>advanced</td>
</tr>
<tr>
<td>Other</td>
<td>advanced</td>
</tr>
<tr>
<td><strong>Equity</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>market based</td>
</tr>
<tr>
<td></td>
<td>PD/LGD</td>
</tr>
</tbody>
</table>

* Sovereigns and banks are subject to same risk weighting curve

- Different categories of exposures reflect different risk profiles
- Data limitation were considered in providing approaches
IRB - Key Elements

- Under the Foundation IRB, banks will estimate
  - Borrower’s probability of default (PD) over 1-year time horizon

- Under the Advanced IRB, banks may also estimate
  - Loss given default (LGD)
  - Maturity (M)
  - Exposure at default (EAD)

- Risk weights will be function of these variables

\[ RWA = EAD \times f(PD, LGD, M) \]
  - different functions for different portfolios
Capital charges for corporate and SME exposures (assumed LGD of 45%)

“IRB” does not always mean lower capital requirements
Minimum requirements: the qualitative standards

- Banks’ rating systems should provide for a meaningful differentiation of risk.
- The data sources used by banks should be suitably rich and robust.
- Ratings should be subject to some independent review.
- Ratings should be an integral part of the culture and management of the banks: “the use test.”

Following industry comments, these standards have been streamlined to focus on essential elements.
## Comparison of the approaches

<table>
<thead>
<tr>
<th></th>
<th>Standardised Approach</th>
<th>Internal Ratings-Based Approach</th>
<th>Credit risk Models</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Foundation Approach</td>
<td>Advanced Approach</td>
</tr>
<tr>
<td>Risk weight buckets</td>
<td>5</td>
<td>More</td>
<td>More</td>
</tr>
<tr>
<td>PD</td>
<td>Supervisor</td>
<td>Bank</td>
<td>Bank</td>
</tr>
<tr>
<td>LDG</td>
<td>Supervisor</td>
<td>Supervisor</td>
<td>Bank</td>
</tr>
<tr>
<td>EAD</td>
<td>Supervisor</td>
<td>Supervisor</td>
<td>Bank</td>
</tr>
<tr>
<td>Maturity</td>
<td>Supervisor</td>
<td>Supervisor/Bank</td>
<td>Bank</td>
</tr>
<tr>
<td>Correlation</td>
<td>Supervisor</td>
<td>Supervisor</td>
<td>Supervisor</td>
</tr>
<tr>
<td>Model specification</td>
<td>Supervisor</td>
<td>Supervisor</td>
<td>Supervisor</td>
</tr>
</tbody>
</table>
Outline

• Capital regulation and the 1988 Accord
• Timetable and objectives of Basel II
• Outline of the new framework
  – The First Pillar - Minimum capital requirements
    • Credit risk
    • Operational risk
  – The Second Pillar
  – The Third Pillar
• Third Quantitative Impact Study
• Where are we in the process?
Evolution of regulatory approach to operational risk

1999 First Consultative Paper
- Proposal to apply an explicit capital charge on other risks

2001 Second Consultative Package
- Focus on operational risk (more quantifiable?)
- Other (non-operational) risks to be covered through Pillars 2 and 3

2001 Working Paper
- Downward revision of charge
- Development of AMA concept

2002 Third Quantitative Impact Study
- Draft alphas and betas
- Further refinement of AMA

2003 Third Consultative Paper
- Criteria for the recognition of insurance under AMA
- Allowing of partial use
- Development of Alternative Standardised Approach
- Supplementary business line mapping
Continuum of approaches

- Basic Indicator Approach
- Standardised Approach
- Advanced Measurement Approaches

Risk-sensitivity: lower to higher
Sophistication: lower to higher
Overall Capital

- Not much experience yet with IRB and AMA
- Parallel calculation for 2006 (before implementation)
- Capital floor for the first 2 years following implementation for banks using IRB or AMA
  - First year 90% of current minimum requirement
  - Second year 80% of current minimum requirement
Outline

- Capital regulation and the 1988 Accord
- Timetable and objectives of Basel II
- Outline of the new framework
  - The First Pillar - Minimum capital requirements
    - Credit risk
    - Operational risk
  - The Second Pillar
  - The Third Pillar
- Third Quantitative Impact Study
- Where are we in the process?
Pillars 2 and 3 - Underlying Principles

- The three pillars together are intended to achieve a level of capital commensurate with a bank’s overall risk profile
- More emphasis on bank managements’ role in assessing their capital adequacy
- More emphasis on the role of the market participants

- One interpretation: In normal times, Pillar 1 and the role of the supervisor should be minimal
Pillar 2 – Supervisory Review Process

- Banks must assess their overall capital adequacy positions relative to their risks
- Supervisors must review and respond
  - Establishes a dialogue between banks and supervisors
  - Creates incentives for prudent management
  - Focus on the validation of the integrity, accuracy and consistency of the banks’ internal assessment processes
- Supervisory intervention if necessary
Pillar 2 – specific issues to be addressed

- Interest rate risk in the banking book
- Operational risk
- Credit risk
  - Stress tests under IRB
  - Definition of default
  - Residual risk
  - Credit concentration risk
  - Securitisation
Pillar 3 – Market Discipline

Another lever to strengthen the safety and soundness of the system

– Complements regulatory capital requirements and the supervisory review process

– Strong incentive for banks to conduct business in a safe, sound and efficient manner

– Provides banks with an incentive to maintain a strong capital base

– Reliable and timely information allowing well founded counterparty risk assessments
Outline

- Capital regulation and the 1988 Accord
- Timetable and objectives of Basel II
- Outline of the new framework
  - The First Pillar - Minimum capital requirements
    - Credit risk
    - Operational risk
  - The Second Pillar
  - The Third Pillar
- Third Quantitative Impact Study
- Where are we in the process?
Third Quantitative Impact Study (QIS3)

- Carried out in autumn 2002
  - Over 350 banks from 43 countries participated
  - Overall quality of data has been good
- Purpose: field test the impact of Basel II
  - General principles
    - Capital requirements should, on average, maintain at current levels
    - Incentives for banks to move to the more advanced approaches
  - Are further modifications necessary?
## Results of QIS3

<table>
<thead>
<tr>
<th></th>
<th>Standardised approach</th>
<th>Foundation IRB</th>
<th>Advanced IRB</th>
</tr>
</thead>
<tbody>
<tr>
<td>G10 group 1*</td>
<td>11%</td>
<td>3%</td>
<td>-2%</td>
</tr>
<tr>
<td>G10 group 2</td>
<td>3%</td>
<td>-19%</td>
<td></td>
</tr>
<tr>
<td>EU group 1</td>
<td>6%</td>
<td>-4%</td>
<td>-6%</td>
</tr>
<tr>
<td>EU group 2</td>
<td>1%</td>
<td>-20%</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>12%</td>
<td>4%</td>
<td></td>
</tr>
</tbody>
</table>

* Group 1: Banks with more than € 3 billion Tier 1 capital
Outline

- Capital regulation and the 1988 Accord
- Timetable and objectives of Basel II
- Outline of the new framework
  - The First Pillar - Minimum capital requirements
    - Credit risk
    - Operational risk
  - The Second Pillar
  - The Third Pillar
- Third Quantitative Impact Study
- Where are we in the process?
Where are we in the process?

- Third Consultative Document released on 29 April 2003
  - Final paper (Autumn 2003)
  - Implementation (year-end 2006)
  - Comparison with Current Accord in 2007/2008 for IRB and AMA banks
  - Transition period for some emerging markets?
Concluding remarks

- Major improvement in capital regulation
  - intended to enhance safety and soundness of the banking system
  - but a lot of challenges in the implementation

- 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