

Basel II: Objectives and Implications

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Objectives of Basel II

- To design a capital adequacy framework that:
 - responds dynamically to changes in credit quality
 - alerts bank management, supervisors, and others to emerging problems more quickly than under current capital Accord
 - better suited to the complex activities of large, internationally-active banking organizations
 - capable of adapting to market and product evolution
 - encourages banks to invest additional resources in risk management activities

What is a Capital Adequacy Framework?

- Measure of a bank's available capital
 - Numerator of the capital ratio
- Measure of risk
 - Denominator of the capital ratio
 - A key focus of Basel II is improving this measure of risk in line with modern approaches to credit risk assessment
- Minimum levels of the capital ratios – pillar 1
 - Broadly sets the overall amount of minimum capital
- Supervisory review – pillar 2
 - A more tailored assessment of whether a bank has enough capital to support its risks
- Disclosure of key measures of risk and capital – pillar 3
 - To allow market discipline to function more effectively

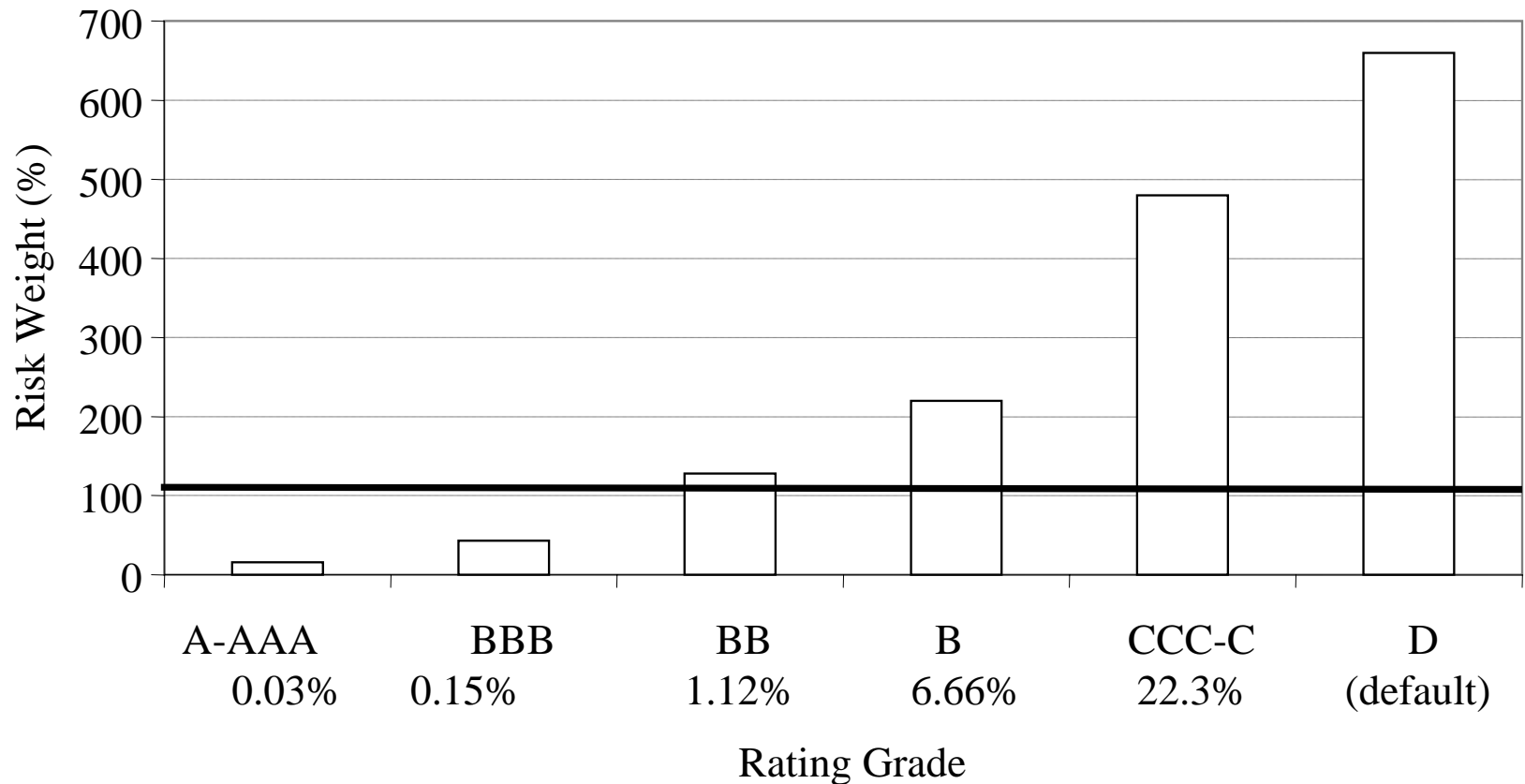
Internal Ratings Based (IRB) Approach to Credit Risk

- Link banks' internal risk assessments to minimum regulatory capital requirements
 - Requires multi-dimensional assessment: PD/LGD/EAD framework
- IRB approach reflects a series of trade-offs:
 - Risk-sensitivity vs. complexity
 - Flexibility vs. comparability
- IRB approach is inherently intermediate between a purely regulatory assessment of risk and a “full models” specification
 - Reflects supervisory assessment of issues with validating full credit risk models (i.e., correlation assumptions)
 - Desire to gain supervisory experience with validating internal risk inputs that IRB requires
- Supervisory view is that while banks have made great progress in developing internal ratings systems, more efforts are needed:
 - To ensure they are implemented with the rigor and comprehensiveness necessary to ensure integrity of output

Why Does Ratings Integrity/Accuracy Matter?

Example Risk Weights By Rating Grade / PD (based on EL + UL)

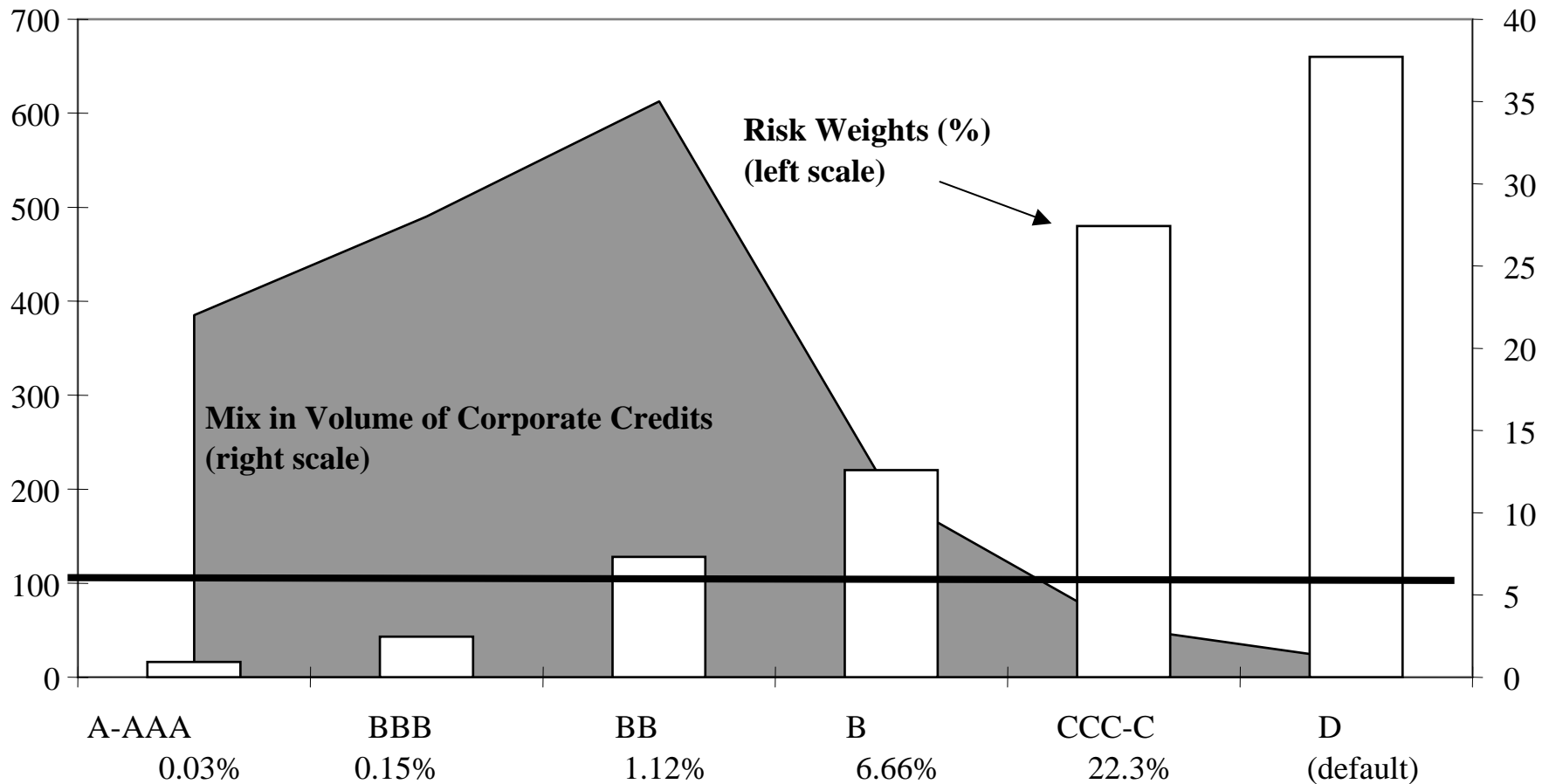
Hypothetical Corporate with LGD 50%



*Based on U.S. QIS 3 data

Where is the Volume of Exposures Relative to Ratings?

(Based on average QIS 3 Data for U.S. Banks)



Key Aspects of IRB Approach

- Meaningful Differentiation of Risk
- Ratings Integrity
- Data Warehousing

Meaningful Differentiation of Risk

■ Rating System Structure

■ Probability of Default (PD)

- Banks' internal ratings generally correspond to external rating equivalents (e.g. AAA.....B-)
- Banks' methods vary widely in deriving PDs and in assigning them to rating buckets -- differences also arise with respect to data sources/methodologies used, which may include:
 - KMV estimated default frequencies
 - 20 year average Moody's, S&P actual default experience on bonds
 - Combination of the two with differing weights
 - Weighting/smoothing of historical or predicted figures
- Some banks indicate they are using a point-in-time philosophy while other banks are using a modified or through-the-cycle concept for their probability estimates

Meaningful Differentiation of Risk (cont'd)

- Loss Given Default (LGD)
 - For some banks, LGDs estimates involve expert judgement
 - Data which connects losses with facility structure/collateral/covenants needs to be collected by banks
 - What is a conservative estimate of LGD that reflects potential correlation with PD?
- Exposure at Default (EAD)
 - In many cases, EADs also estimated by expert judgement
- More empirical evidence supporting the PD, LGD, EAD estimation processes is highly desirable
 - Most large U.S. BHCs are working toward a better balance between “expert judgment” and “objective measurement” in their assignment of ratings

Ratings Integrity

- Integrity of a bank's rating process is dependent upon advances in all of the following areas:
 - Independent assignment of rating at inception and ongoing
 - Independent loan review
 - Accountability (penalties for inaccurate ratings)
 - Transparency of the rating process (criteria and documentation)
 - Oversight/Audit (loan review/independence/transparency)
 - Quantitative tests of ongoing performance of rating system
 - Use of ratings (limits/approvals/monitoring/reserving for EL)

Data Warehousing

- Many banks need to build a data warehouse and address the key data elements
- Need systematic capability to track the performance of credits from “cradle to grave”
- Many banks need to enhance information systems in order to capture relevant customer and transaction data
 - Credit MIS continues to be significant issue
 - Many banks are required to “stitch” together data from several incompatible systems with some manual intervention

Basel II and Credit Derivatives

- Basel II framework provides significantly enhanced recognition of collateral, guarantees, and credit derivatives
- But for banks that hedge loan exposures with credit default swaps (CDS), there is an important limitation:
 - Banks “substitute” the risk-weight of the CDS counterparty for the risk-weight of the borrower
 - Banks argue that this treatment ignores the reduced risk associated with the fact that two parties would have to default
- Basel Committee is working with the industry on a treatment that incorporates this “double default” effect
 - What is the PD of the borrower conditional on the CDS counterparty having defaulted?

Basel II and Securitization

- Aim of Basel II treatment to reflect risk of underlying pool of exposures / degree of risk transferred via securitization
 - Capital requirements on positions held by originators should not exceed what they would have been had no securitization occurred
- External ratings of ABS can be used to establish capital requirements, but
 - Risk-weights differ from externally-rated positions on corporate exposures
- A supervisory formula has been developed to allocate capital requirements on an underlying pool of exposures across tranches
- Internal assessment of the credit risk associated with unrated exposures to ABCP conduits is also being allowed

Potential Implications

- Continued significant investment in credit assessment tools and technology by banks and others
 - Improved data to support ongoing refinement of the credit risk assessment process
- Progress toward a more comparable and widespread approach to measuring credit risk
- Continued interaction and dynamic tension between the risk assessment of individual exposures and the risk assessment of a portfolio of exposures
- Broadly supportive of the transformation of credit risk into a more transparent, liquid, tradable, and hedgeable risk

What's next in the U.S.?

- Mid-year text on Basel II to serve as basis for national implementation in member countries
- Quantitative study to assess impact of Basel II (QIS 4)
- Issuance of notice of proposed rulemaking (NPR)
 - Further consultation on aspects of the framework
- Completion of supervisory guidance
- Final rule
- Implementation