

The Basel II Standardized Approach

By Raymond Natter¹

Introduction

The Basel II capital framework agreed to by the banking authorities of the world's leading economic countries in 2004 envisions a three pronged approach to enhancing the safety and soundness of financial institutions: (i) new capital standards; (ii) enhanced supervision; and (iii) increased market discipline through additional public disclosures.² Most of the attention has focused on the first pillar, the new capital standards.

With respect to capital, the Accord permits banks to adopt one of two methods for risk-weighting of assets: the "standardized approach" or the "internal ratings based" (IRB) model. The IRB model provides for two alternatives: "Foundation" and "Advanced." In the United States, the bank regulatory agencies have been proposing to implement only the Advanced IRB model. However, the regulatory proposal has been subject to criticism on the ground that the proposed standards to be applied in the U.S. are inconsistent with the internationally agreed upon capital framework, and will work to disadvantage U.S. depository institutions. Some trade associations have publicly advocated that the agencies permit wider choice for U.S. institutions, and in particular that they should be allowed to select either the standardized approach or a proposed new version of the existing capital standard, the so-called Basel I-A framework. Congress has also weighed in through House and Senate hearings, during which some prominent Members of the relevant committees have expressed the view that options would be appropriate.

In light of the recent publicity about the regulatory implementation of the Basel II accord, this paper will provide a summary and explanation of the standardized approach as described in the international accord.

Standardized Approach to Credit Risk

The Standardized Approach increases the risk sensitivity of the capital framework by recognizing that different counterparties within the same loan category present far different risks to the financial institution lender. Thus, instead of placing all commercial loans in the 100 percent risk weight basket, the Standardized Approach takes into account the credit rating of the borrower. The following examples illustrate the enhanced alignment between risk and capital under the Standardized methodology:

1 Partner, Barnett Sivon & Natter, Washington, D.C. This firm currently represents financial institutions that are advocating changes in the proposed regulations implementing the Basel II advanced approach. However, this paper represents the views of Mr. Natter, and does not necessarily represent the position of any client institution.

2 "International Convergence of Capital Measurement and Capital Standards: A Revised Framework," Basel Committee on Banking Supervision (November, 2005).

- **Claims Against Corporations**

Assets that represent claims against corporations (including insurance companies) are assigned a risk weight according to credit rating assigned to the corporation or the asset. The credit rating must be assigned by an external recognized rating agency that satisfies certain criteria described in the Accord.³

For unrated exposures, the risk weight is 100 percent. For rated exposures, the following chart correlates the credit rating and the risk weight:

Credit Rating	AAA to AA-	A+ to A-	BBB+ to BB-	Below BB-	Unrated
Risk Weight	20%	50%	100%	150%	100%

- **Retail Exposures (Loans to Individuals and Small Businesses)**

Loans to individuals and small businesses, including credit card loans, installment loans, student loans, and loans to small business entities are risk weighted at 75 percent, if the bank supervisor finds that the bank's retail portfolio is diverse (for example, no single asset exceeds .2 percent of the entire retail portfolio, and no loan exceeds 1 million Euro (approximately \$1.3 million). [Basel I – retail and small business loans are placed in the 100 percent risk weight basket].

- **Residential Real Estate**

Prudently written residential mortgage loans are risk weighted at 35 percent. [Basel I-residential mortgage loans are placed in the 50 percent basket.]

- **Commercial Real Estate Loans**

In general, loans secured by commercial real estate are assigned to the 100 percent risk basket. However, the Accord permits regulators the discretion to assign mortgages on office and multi-purpose commercial properties, as well as multi-family residential properties, in the 50 percent basket subject to certain prudential limits. [Basel I – commercial real estate assigned to the 100 percent basket]

- **Claims Against Sovereign Governments and Central Banks**

Assets that represent claims against Governments or Central Banks are risk weighted according to the risk rating assigned to that Government by recognized Export Credit Agencies. The correlation between credit rating and risk weight is as follows: [Basel I assigns claims against OECD member countries to the 0% basket].

Credit Rating	AAA to AA-	A+ to A-	BBB+ to BB-	Below BB-	Unrated
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³ For example, the credit rating agency must be independent, the methodology used should be publicly available, and the rating should be rigorous, systematic and subject to some form of validation.

Risk Weight	0%	20%	50%	150%	100%
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- **Claims on Banks and Securities Firms**

Countries are given two options, but must apply the same option to all banks within their country. The first option risk weights claims on banks and securities firms at one risk weight category below the country's risk weight.⁴ The second option is to risk weight banks and securities firms based on an external credit assessment score, and with lower risk weights for short term obligations (originally maturity of 3 months or less).

[Basel I assigns a 20 percent basket to claims on banks and securities firms organized in OECD member countries].

Standardized Approach to Off-Balance Sheet Items

Off-balance sheet items, such as loan commitments and guarantees, expose a financial institution to credit risk. Both Basel I and the Standardized Approach recognize this credit risk by converting the off-balance sheet item into an on-balance sheet asset, than placing the asset into the appropriate risk basket. The following examples illustrate Standardized Approach to these conversions:

- **Commitments**

Commitments, such as an open line of credit, that have an original maturity of one year or less are converted to an on-balance sheet asset by using a conversion factor of 20 percent. Longer term commitments are transferred by using a conversion factor of 50 percent. [Basel I – commitments of one year or less are not converted to on-balance sheet assets. Longer term commitments are converted using a 50 percent conversion factor.]

- **Securities Lending**

Securities lent or the posting of securities as collateral are converted to on-balance sheet assets using a 100 percent conversion factor.

- **Letters of Credit**

Short-term self-liquidating trade letters of credit collateralized by the goods being shipped are converted using a 20 percent factor. [Basel I – same]

Credit Risk Mitigation

Credit risk mitigation techniques, such as third party guaranty, are generally not recognized under Basel I. The Standardized Approach greatly enhances risk sensitivity by recognizing many more credit risk mitigation techniques. For example:

- **Collateral**

⁴ Subject to a cap of 100 percent risk weighting, unless the country has a below B- credit score.

Banks have two options for recognizing collateral for capital purposes. Under the simple approach, the bank may adjust the risk weight for its exposure by using the appropriate risk weight for the supporting collateral instrument. The collateral must be marked-to-market and revalued at least every six months. A risk weight floor of 20 percent will also apply, unless the collateral is cash, certain Government securities, or certain repo instruments. Eligible collateral includes corporate debt instruments rated BBB- or higher, equity securities traded on a main index, and Government instruments.

Under the second option, or “comprehensive approach,” the value of the exposure is reduced by a discounted value of the collateral.⁵ The amount of the discount varies with the credit rating of the collateral. The Standardized Approach provides for the amount of the discount. For example, collateral consisting of A+ rated debt with a remaining maturity of five years or less, would be discounted by 6 percent. Alternatively, the regulatory agencies may permit the banks to calculate their own discounts based on internal models that take into account market volatility, historical performance, and foreign exchange rate movement. [Basel I recognizes only limited types of collateral, such as cash, Government securities, and Government agency securities].

- **Netting**

Where banks have legally enforceable netting arrangements they may calculate capital on the basis of the net credit exposure. [Basel I recognizes bilateral netting agreements for derivative contracts]

- **Guarantees and Credit Derivatives**

Guaranties and credit protection derivative contracts that provide equivalent protection are recognized provided certain conditions are met (e.g. the guarantee must be direct, explicit, unconditional and irrevocable). The risk weight of the guarantor is substituted for the risk weight of actual counterparty. Guarantors and credit protection sellers must have a credit rating of at least A-. [Basel I – guarantees issued by OECD Governments and GSEs, and by banks and securities firms chartered in OECD countries are recognized].

Standardized Approach - Securitizations

The Standardized Approach permits a bank to exclude securitized assets from the calculation of risk weighted assets if the credit risk associated with the assets have been transferred to third parties, and the bank does not maintain effective or indirect control over the transferred exposures. The assets must be beyond the reach of the bank and its creditors. However, the transferring bank may continue to service the assets.

- **General Rule**

Banks that retain or acquire positions in a securitization, or have an off balance sheet

⁵ Where appropriate, the asset must also be adjusted to reflect potential increases in value of the exposure, for example, the potential that securities lent may increase in value due to market appreciation.

exposure in a securitization, are required to hold capital with respect to these interests. The position is assigned a risk weight basket depending on the credit rating of the exposure as follows:

Credit Rating	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to BB- (Investors only) ⁶	B+ and below Unrated
Risk Weight	20%	50%	100%	350%	Deduct from capital. ⁷

- **Gain on Sale**

Originating banks must deduct from capital any “gain on sale” that results from the transfer of the asset into the securitization pool.

- **Early Amortization**

If a bank sells revolving assets (e.g. credit card receivables) into a securitization structure that contains an early amortization feature, the bank will be required to hold capital against a specified percentage of the assets sold into the securitization (the investor’s interest in the pool). The percentage increases as the excess spread account (which serves to protect security holders) declines.

Standardized Approach – Operational Risk

The Basel II Accord has three methods for determining a capital charge for operational risk: (i) the Basic Indicator Approach; (ii) the Standardized Approach; and (iii) the Advanced Measurement Approach (AMA). A bank may use the Standardized Approach for credit risk, and the AMA for operational risk.

- **Basic Indicator Approach**

Under this approach the operational risk capital charge is set at 15 percent of the institution’s net positive annual gross income.⁸

- **Standardized Approach**

This method divides a bank’s activities in eight business lines (e.g. corporate, finance, retail, asset management, etc.). Gross income for each of the eight lines is then multiplied by a specified factor, ranging from 12 to 18 percent. The Accord also recognizes an alternative under which outstanding loans are substituted for gross income with respect to retail and commercial banks.

⁶ Banks that originate a securitization and retain a tranche that is rated BB+ or below must deduct the entire interest from capital.

⁷ If the most senior exposure in a securitization is unrated, the bank may use the risk weight applicable to the obligor under a “look through” approach. A risk weight of 100 percent, rather than a deduction from capital, is used for second loss positions of asset backed commercial paper programs.

⁸ Gross income is determined pursuant to adjustments detailed in the Accord.

- **Advanced Measurement Approach (AMA)**

Under the AMA, the operational risk capital charge will be determined by using the bank's internal operational risk measurement system. The Bank must track internal operational risk loss data and assess the relevance of that data to current operations. The data must capture all material activities and exposures in all systems and bank locations. External loss data must be used for events that are infrequent, yet potentially severe, such as an earthquake. Scenario analyses including expert opinion input must be utilized for high-severity events. The risk assessment should cover all key business environments and internal controls factors. Risk mitigation will be recognized. However, the recognition of third party insurance cannot exceed 20 percent of the total operational risk capital charge.