

Key URLs

To learn more about the history of the Basel Agreement and the many issues it has raised in recent years you may wish to consult such sources as *Regulation Magazine* at www.cato.org/pubs/regulation/index.html and the International Monetary Fund's Working Papers at www.imf.org/external/pubs/cat/wp.cfm.

Calculating Risk-Weighted Assets

If a bank must compare its Tier 1 and Tier 2 capital to its total risk-weighted assets in order to determine if it is adequately capitalized, what exactly are *risk-weighted assets*?

Each asset item on a bank's balance sheet and each off-balance-sheet commitment it has made are multiplied by a *risk-weighting factor* designed to reflect its credit risk exposure. Among the most closely watched off-balance-sheet items are standby letters of credit and long-term, legally binding credit commitments banks often make to their customers.

Here is an example of how bankers could calculate their minimum level of capital under Basel I. Suppose a bank has \$4,000 in Tier 1 capital and \$2,000 in Tier 2 capital, \$100,000 in total assets, and the following on-balance-sheet and off-balance-sheet (OBS) items:

<i>On-Balance-Sheet Items (Assets):</i>	
Cash	\$ 5,000
U.S. Treasury securities	20,000
Deposit balances held at domestic banks	5,000
Loans secured by first liens on 1- to 4-family residential properties	5,000
Loans to private corporations	65,000
Total balance sheet assets	\$100,000
<i>Off-Balance-Sheet (OBS) Items:</i>	
Standby letters of credit backing municipal and corporate borrowings	\$ 10,000
Long-term, legally binding credit commitments to private companies	20,000
Total off-balance-sheet items	\$ 30,000

This bank's core capital or leverage ratio (Tier 1 capital-to-total assets) would be $\$4,000 \div \$100,000$, or 4.00 percent, and this bank's total-capital-to-total-balance-sheet assets ratio would be

$$\$6,000 \div \$100,000 = 6.00 \text{ percent}$$

However, the international capital standards are based upon risk-weighted assets, not total assets. To compute this bank's risk-weighted assets under Basel I a banker would:

1. Compute the *credit-equivalent amount* of each off-balance-sheet (OBS) item. This figure is supposed to translate each OBS item into the equivalent amount of a direct loan considered to be of equal risk.

Off-Balance-Sheet (OBS) Items	Face Value		Conversion Factor		Credit Equivalent Amount
Standby letters of credit (SLCs) backing municipal general obligation bonds	\$50,000	×	0.20	=	\$10,000
Long-term unused loan commitments made to private corporations	\$20,000	×	0.50	=	\$10,000

2. Multiply each balance sheet item and the credit-equivalent amount of each OBS item by its *risk weight*, as determined by regulatory authorities. The weights given to each item in the bank's portfolio include 0 percent for cash and government securities; 20 percent for deposits held at other banks and certain standby credit letters; 50 percent for home