

S denotes borrower size (expressed in millions of dollars).

The maximum reduction in the asset correlation parameter based on this formula is 4 percent, and is achieved when borrower size is \$5 million. For all borrower sizes below \$5 million, borrower size would be set equal to \$5 million. The adjustment shrinks to zero as borrower size approaches \$50 million. The broad rationale for this adjustment is the view that the credit

condition of SMEs will be influenced relatively more by idiosyncratic factors than is the case for larger firms, and, thus, SMEs would be less likely to deteriorate simultaneously with other exposures. This greater susceptibility to idiosyncratic factors would imply lower asset correlation. The evidence in favor of this view is mixed, particularly after considering that the A-IRB framework already incorporates a negative relationship between asset correlation and PD. The following table illustrates

the practical effect of the SME adjustment by depicting the capital requirements (K) across a range of PDs and borrower sizes. As in the previous table, LGD is assumed to equal 45 percent. For this table, M is assumed to be equal to three years. Note that the last column is identical to the three-year maturity column in the preceding table because the SME adjustment is phased out for borrowers of \$50 million or more in size.

CAPITAL REQUIREMENTS
[In percentage points]

PD	Borrower size (S)			
	\$5 million	\$20 million	\$35 million	≥ \$50 million
0.05 percent	1.44	1.57	1.70	1.83
0.10 percent	2.14	2.33	2.51	2.71
0.25 percent	3.54	3.83	4.13	4.44
0.50 percent	4.97	5.37	5.79	6.21
1.00 percent	6.63	7.17	7.72	8.29
2.00 percent	8.40	9.11	9.83	10.56
5.00 percent	11.70	12.73	13.74	14.75
10.00 percent	16.76	18.05	19.30	20.50
20.00 percent	24.67	26.08	27.40	28.65

Subject to the caveats mentioned above, evidence from QIS3 suggested an average reduction in credit risk-based capital requirements for corporate SME exposures of about 39 percent for twenty large U.S. banking organizations.

If the Agencies include a SME adjustment, are the \$50 million threshold and the proposed approach to measurement of borrower size appropriate? What standards should be applied to the borrower size measurement (for example, frequency of measurement, use of size buckets rather than precise measurements)?

Does the proposed borrower size adjustment add a meaningful element of risk sensitivity sufficient to balance the costs associated with its computation? The Agencies are interested in comments on whether it is necessary to include an SME adjustment in the A-IRB approach. Data supporting views is encouraged.

Wholesale Exposures: Other Considerations Specialized Lending

The specialized lending (SL) asset class encompasses exposures for which the primary source of repayment is the income generated by the specific asset(s) being financed, rather than the financial capacity of a broader commercial enterprise. The SL category encompasses four broad exposure types:

- *Project finance* (PF) exposures finance large, complex, expensive installations that produce goods or services for sale, such as power plants, chemical processing plants, mines, or transportation infrastructure, where the source of repayment is primarily the revenues generated by sale of the goods or services by the installations.

- *Object finance* (OF) exposures finance the acquisition of (typically moveable) physical assets, such as ships or aircraft, where the source of repayment is primarily the revenues generated by the assets being financed, often through rental or lease contracts with third parties.

- *Commodities finance* (CF) exposures are structured short-term financings of reserves, inventories, or receivables of exchange-traded commodities, such as crude oil, metals, or agricultural commodities, where the source of repayment is the proceeds of the sale of the commodity.

- *Commercial real estate* (CRE) exposures finance the construction or acquisition of real estate (including land as well as improvements) where the prospects for repayment and recovery depend primarily on the cash flows generated by the lease, rental, or sale of the real estate.¹⁹ The broad CRE category is further divided into two groups: low-asset-correlation CRE and HVCRE.²⁰

¹⁹ CRE exposures are typically non-recourse exposures, often to special purpose vehicles, and are distinguishable from corporate exposures that are collateralized by real estate for which the prospects for repayment and recovery depend primarily on the financial performance of the broader commercial enterprise that is the obligor.

²⁰ To describe a loan portfolio as having a relatively high asset correlation means that any defaults that occur in that portfolio are relatively likely to occur at the same time, and for this reason the portfolio is likely to exhibit greater variability

Most of the issues raised below for comment are described in substantially greater detail, in the context of CRE exposures, in a white paper entitled "Loss Characteristics of CRE Loan Portfolios," released by the Federal Reserve Board on June 10, 2003. Commenters are encouraged to read the white paper in conjunction with this section.

A defining characteristic of SL exposures (including CRE) is that the risk factors influencing actual default rates are likely to influence LGDs as well. This is because both the borrower's ability to repay an exposure and the banking organization's recovery on an exposure in the event of default are likely to depend on the same underlying factors, such as the net cash flows of the property being financed.

in aggregate default rates. For two portfolios with the same EL, the portfolio with more highly variable aggregate default rates warrants higher capital to cover UL ("bad-tail events") with the same level of confidence. Describing a portfolio as having a relatively high asset correlation does not imply that loans in that portfolio have relatively high PD, LGD, or EL. In particular, loans in high asset correlation portfolios may well have very low PDs and LGDs and therefore ELs; conversely, loans in low asset correlation portfolios may have very high PDs and LGDs (and ELs). For any two loans from a portfolio with a given asset correlation (or from two different portfolios with the same asset correlation), the loan with the lower EL should be assigned a lower risk weight. For any two loans with the same EL, the loan from the portfolio with the lower asset correlation should incur a lower capital charge, because bad-tail events are less likely to occur in that portfolio.