

that received supervisory approval for an internal market risk model under the market risk capital rules. Other banking organizations could apply separately for supervisory approval to use their internal VaR models for calculation of PFE for repo-style transactions.

A banking organization would use the following formula to determine EAD for each counterparty with which it has a master netting agreement for repo-style transactions.

$$EAD = \max \{0, [(Σ E - Σ C) + (VaR \text{ output from internal market risk model} \times \text{multiplier})]\}$$

Where:

E denotes the current value of the exposure (that is, all securities and cash delivered to the counterparty); and

C denotes the current value of the collateral received (that is, all securities and cash received from the counterparty).

The multiplier in the above formula would be determined based on the results of the banking organization's backtesting of the VaR output. To backtest the output, the banking organization would be required to identify on an annual basis twenty counterparties that include the ten largest as determined by the banking organization's own exposure measurement approach and ten others selected at random. For each day and for each of the twenty counterparties, the banking organization would compare the previous day's VaR estimate for the counterparty portfolio to the change in the current exposure of the previous day's portfolio. This change represents the difference between the net value of the previous day's portfolio using today's market prices and the net value of that portfolio using the previous day's market prices. Where this difference exceeds the previous day's VaR estimate, an exception would have occurred.

At the end of each quarter, the banking organization would identify the number of exceptions it has observed for its twenty counterparties over the most recent 250 business days, that is, the number of exceptions in the most recent 5000 observations. Depending on the number of exceptions, the output of the VaR model would be scaled up using a multiplier as provided in the table below.

Zone	Number of exceptions	Multiplier
Green Zone ...	0–99	None (=1)
Yellow Zone ..	100–119	2.0
	120–139	2.2
	140–159	2.4

Zone	Number of exceptions	Multiplier
Red Zone	160–179	2.6
	180–199	2.8
	200 or more ..	3.0

The Agencies seek comments on the methods set forth above for determining EAD, as well as on the proposed backtesting regime and possible alternatives banking organizations might find more consistent with their internal risk management processes for these transactions. The Agencies also request comment on whether banking organizations should be permitted to use the standard supervisory haircuts or own estimates haircuts methodologies that are proposed in the New Accord.

Guarantees and Credit Derivatives

The Agencies are proposing that banking organizations reflect the credit risk mitigating effects of guarantees and credit derivatives through adjusting the PD or the LGD estimate (but not both) of the underlying obligation that is protected. The banking organization would be required to assign the borrower and guarantor to an internal rating in accordance with the minimum requirements set out for unguaranteed (unhedged) exposures, both prior to the adjustments and on an ongoing basis. The organization also would be required to monitor regularly the guarantor's condition and ability and willingness to honor its obligation. For guarantees on retail exposures, these requirements would also apply to the assignment of an exposure to a pool and the estimation of the PD of the pool.

For purposes of reflecting the effect of guarantees in regulatory capital requirements, the Agencies are proposing that a banking organization have clearly specified criteria for adjusting internal ratings or LGD estimates—or, in the case of retail exposures, for allocating exposures to pools to reflect use of guarantees and credit derivatives—that take account of all relevant information. The adjustment criteria would have to require a banking organization to (i) meet all minimum requirements for an unhedged exposure when assigning borrower or facility ratings to guaranteed/hedged exposures; (ii) be plausible and intuitive; (iii) consider the guarantor's ability and willingness to perform under the guarantee; (iv) consider the extent to which the guarantor's ability and willingness to perform and the borrower's ability to repay may be correlated (that is, the degree of wrong-way risk); and (v) consider the payout structure of the credit protection and conservatively assess its effect on the level and timing of recoveries. The

banking organization also would be required to consider any residual risk to the borrower that may remain—for example, a currency mismatch between the credit protection and the underlying exposure.

Banking organizations would be required to make adjustments to alter PD or LGD estimates in a consistent way for a given type of guarantee or credit derivative. In all cases, the adjusted risk weight for the hedged obligation could not be less than the risk weight associated with a comparable direct exposure on the protection provider. As a practical matter, this guarantor risk weight floor on the risk weight of the hedged obligation would require a banking organization first to determine the risk weight on the hedged obligation using the adjustment it has made to the PD or LGD estimate to reflect the hedge. The banking organization would then compare that risk weight to the risk weight assigned to a direct obligation of the guarantor. The higher of the two risk weights would then be used to determine the risk-weighted asset amount of the hedged obligation.

Notwithstanding the guarantor risk weight floor, the proposed approach gives institutions a great deal of flexibility in their methodology for recognizing the risk-reducing effects of guarantees and credit derivatives. At the same time, the approach does not differentiate between various types of guarantee structures, which may have widely varying characteristics, that a banking organization may use. For example, a company to company guarantee, such as a company's guarantee of an affiliate or a supplier, is fundamentally different from a guarantee obtained from an unrelated third party that is in the business of extending financial guarantees. Examples of the latter type of guarantee include standby letters of credit, financial guarantee insurance, and credit derivatives. These products tend to be standardized across institutions and, thus, arguably should be recognized for capital purposes in a consistent fashion across institutions. The problem of inconsistent treatment could be exacerbated in the case of protection in the form of credit derivatives, which are tradable and which further can be distinguished by their characteristic of allowing a banking organization to have a recovery claim on two parties, the obligor and the derivative counterparty, rather than just one.

Industry comment is sought on whether a more uniform method of adjusting PD or LGD estimates should be adopted for various types of guarantees to minimize inconsistencies in