

Federal Deposit Insurance Corporation

Standardized Approach for Counterparty Credit Risk

Community Bank Compliance Guide

May 2021

Introduction

This guide¹ is intended to help community banking organizations understand the application of the standardized approach for counterparty credit risk (SA-CCR), which is available for use by the community banking organizations on a voluntary basis as a substitute for the current exposure method (CEM) for calculating the exposure amount of derivative contracts.

This guide summarizes the SA-CCR and therefore does not carry the effect of law or regulation. In addition to using this guide, community banking organizations that choose to adopt the SA-CCR methodology should review the regulations implementing SA-CCR.²

Overview of the SA-CCR

On December 2, 2019, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, and the Board of Governors of the Federal Reserve System (together, the agencies) jointly issued a final rule that amends the regulatory capital rule to implement a new approach for calculating the exposure amount for derivative contracts for purposes of calculating the total risk weighted assets (RWA). This new approach, the SA-CCR, is optional for community banks. For larger banks, the final rule also incorporates SA-CCR into the determination of the exposure amount of derivatives for total leverage exposure under the supplementary leverage ratio, and the cleared transaction framework under the capital rule. Further, the final rule makes technical amendments to the capital rule with respect to cleared transactions.

All FDIC-supervised bank organizations that are not advanced approaches banking organizations may elect to use SA-CCR to calculate standardized total RWA. However, advanced approaches banking organizations are required to use SA-CCR to calculate standardized total RWA.

In general, the final rule:

- (1) Replaces the current exposure method (CEM) for advanced approaches banking organizations with SA-CCR as an option to the internal models methodology (IMM) for purposes of calculating advanced approaches total RWA;
- (2) Requires an advanced approaches banking organization to begin using SA-CCR by January 1, 2022, for determining the exposure amount of a derivative contract when calculating standardized total RWA; and,
- (3) Allows a non-advanced approaches banking organization to choose to use either CEM or SA-CCR to determine the exposure amount for its derivative contracts.

If a banking organization elects to use SA-CCR to determine the exposure amount for its derivative contracts, it also is required to use SA-CCR to determine the trade exposure amount for cleared derivative contracts and default fund contributions.

The final rule simplifies the formula used to determine the RWA amount of a default fund contribution by basing the calculation on the banking organization's pro rata share of the default fund. The final rule allows banking organizations that are required or elect to use SA-CCR to continue to use CEM to

¹ This small entity compliance guide is issued in accordance with Section 212 of the Small Business Regulatory Enforcement Fairness Act of 1996, Pub. L. No. 104-121, 110 Stat. 857, reprinted in 5 U.S.C.A. § 601, note.

² See 85 FR 4362 (January 24, 2020).

calculate the RWA amount for default fund contributions until January 1, 2022.

The effective date of the final rule is April 1, 2020. The mandatory compliance date of the final rule is January 1, 2022, for advanced approaches banking organizations.

What are the goals of SA-CCR?

The final rule seeks to improve the risk-sensitivity and calibration of the RWA exposure calculation for derivative contracts relative to CEM. It also is intended to provide a less complex and non-model dependent alternative than the IMM. Currently, all banks are required to use CEM to determine their derivative exposure under the standardized approach, and advanced approaches banking organizations also may use the IMM to determine derivatives exposure.

Which banks are required to adopt this method?

Advanced approaches banking organizations are required to use SA-CCR to calculate its standardized total RWA and to determine the exposure amount of derivative contracts for purposes of calculating total leverage exposure under the supplemental leverage ratio. An advanced approaches banking organization may use SA-CCR or the IMM to calculate its advanced approaches total RWA.

Banking organizations subject to Category III capital standards, which include the supplementary leverage ratio, are provided an option to use CEM or SA-CCR to determine the exposure amount of derivative contracts for total leverage exposure.

For all non-advanced approaches banking organizations, SA-CCR is available as an option to CEM in calculating their standardized total RWA. A non-advanced approaches banking organization that elects to use SA-CCR, however, must also use SA-CCR to determine the trade exposure amount for its cleared derivative contracts and for purposes of calculating the RWA amount of the default fund contribution of a central counterparty or qualifying central counterparty.

Voluntary SA-CCR opt-in process for community bank organizations

Community bank organizations that choose to adopt SA-CCR must notify the FDIC that they made a SA-CCR opt-in election in the period of adoption. This notification must be made in the Consolidated Reports of Condition and Income (Call Reports) (FFIEC 031, FFIEC 041, FFIEC 051). A community bank organization that adopts SA-CCR must notify its appropriate federal supervisor that it made a SA-CCR opt-in election by entering "1" for "Yes" in the SA-CCR opt-in section of the Call Report. A non-advanced approaches bank organization that does not wish to use SA-CCR is not required to make any election or to complete the SA-CCR opt-in section of the Call Report.

A community bank organization must use the same methodology to calculate the exposure amount for all of its derivative contracts and, if a banking organization has elected to use SA-CCR, a banking organization may change its election only with prior approval of the FDIC.

How might SA-CCR impact a given bank organization's capital?

Generally, under SA-CCR, exposure amounts for interest rate, credit and foreign exchange derivatives would likely decrease, and exposure amounts for equities and commodities would likely increase.

SA-CCR Terms and Concepts

SA-CCR Mechanics	<p>A banking organization using SA-CCR determines the exposure amount for a netting set of derivative contracts as follows:</p> <p><i>Exposure amount = alpha factor x (replacement cost + potential future exposure)</i></p>
Key Elements of the SA-CCR formula	
Replacement Cost	<p>The <i>replacement cost</i> of a derivative contract reflects the amount that it would cost a banking organization to replace the derivative contract if the counterparty were to immediately default. Under SA-CCR, replacement cost is based on the fair value of a derivative contract under U.S. Generally Accepted Accounting Principles (GAAP), with adjustments to reflect the exchange of collateral for margined transactions.</p> <p>For un-margined transactions: $RC = \max\{V - C; 0\}$, where replacement cost equals the maximum of the fair value of the derivative contract (after excluding any valuation adjustments) (V) less the net amount of any collateral (C) received from the counterparty and zero.</p> <p>For margined transactions: $RC = \max\{V - C; TH + MTA - NICA; 0\}$, where replacement cost equals the maximum of (1) the sum of the fair values (after excluding any valuation adjustments) of the derivative contracts within the netting set less the net amount of collateral applicable to such derivative contracts; (2) the counterparty's maximum exposure to the netting set under the variation margin agreement (TH +MTA),³ less the net collateral amount applicable to such derivative contracts (NICA⁴); or (3) zero.</p>
Potential Future Exposure	<p>The <i>potential future exposure</i> (PFE) of a derivative contract reflects the possibility of changes in the value of the derivative contract over a specified period. Under SA-CCR, the potential future exposure amount is based on the notional amount and maturity of the derivative contract, volatilities observed during the financial crisis for different classes of derivative contracts (i.e., interest rate, exchange rate, credit, equity, and commodity), the exchange of collateral, and full or partial offsetting among derivative contracts that share an economic relationship.</p> <p>$PFE = multiplier \times aggregated\ amount$, where the PFE multiplier decreases exponentially from a value of 1 to recognize the amount of any excess collateral and the negative fair values of derivative contracts within the netting set. The aggregated amount accounts for full or partial offsetting among derivative contracts within a hedging set that share an economic relationship, as well as observed volatilities in the reference asset, the maturity of the derivative contract, and the correlation between the derivative contract and the reference exposure (i.e., long or short).</p>
Alpha Factor	<p>The <i>alpha factor</i> is a measure of conservatism that is designed to address risks that are not directly captured under SA-CCR, and to ensure that the capital requirement for a derivative contract under SA-CCR is generally not lower than the one produced under IMM.</p> <p>For most derivative contracts, the alpha factor equals 1.4; however, no alpha factor applies to derivative contracts with commercial end-user counterparties.</p>

³ Threshold amount plus minimum transfer amount.

⁴ Net independent collateral amount.

Netting Sets

Under SA-CCR, a banking organization calculates the exposure amount of its derivative contracts at the netting set level, meaning either one derivative contract between a banking organization and a single counterparty, or a group of derivative contracts between a banking organization and a single counterparty that are subject to a qualifying master netting agreement.

Hedging Sets

For purposes of the PFE calculation under SA-CCR, a banking organization fully or partially nets within each hedging set, which are derivative contracts within the same netting set that share similar risk factors. The formula for arriving at PFE under SA-CCR of netted derivative contracts within a hedging set is particular to each hedging set type and would reflect different regulatory correlation assumptions between risk factors in the hedging sets.

Exposure Amount

Under SA-CCR, the exposure amount for a derivative contract is equal to an alpha factor of 1.4 multiplied by the sum of the replacement cost of the netting set and PFE of the netting set and is calibrated to produce exposures that are no lower than those amounts calculated using the IMM. For a derivative contract with a commercial end-user counterparty, the exposure amount is equal to the sum of the replacement cost of the netting set and PFE of the netting set.

PFE Multiplier

SA-CCR introduces the concept of a PFE multiplier, which reduces the aggregated amount of PFE of a given derivative netting set by taking into account the amount of excess collateral available and negative fair value of the set. The PFE multiplier has a value of between 1 and 0.05 depending on the value of the financial collateral held compared to the net fair value of the derivative contract.

Aggregated Amount and Hedging Set Amounts

Under the final rule, the PFE for a netting set results from the product of the PFE multiplier and the sum of all hedging set amounts within the netting set. Hedging sets are determined by derivative contracts that share similar risk factors based on the following asset classes: interest rate, foreign exchange, credit, equity, and commodities. A banking organization then determines each hedging set amount using asset-class specific formulas that allow for full or partial netting.

Adjusted Derivative Contract Amount

Under the final rule, a banking organization calculates an adjusted derivative contract amount for each derivative contract prior to aggregating these amounts within a hedging set for purposes of calculating default exposure for counterparty credit risk, and therefore RWA for the capital rule. The adjusted derivative contract amount is intended to reflect a conservative estimate of the effective expected positive exposure (“EEPE”) of the derivative contract based on supervisory-provided inputs and the risk horizon of the particular derivative contract, assuming zero market value and zero collateral. Specifically, a banking organization calculates the adjusted derivative contract amount as the adjusted notional amount of the derivative contract, multiplied by a supervisory factor, maturity factor, and supervisory delta. The adjusted notional amount generally specifies the size of the derivative contract. The supervisory factor converts the adjusted notional amount of the derivative contract into an EEPE based on the measured volatility specific to each asset class over a one-year horizon. The maturity factor scales down the one-year time horizon of the supervisory factor to the appropriate risk horizon

of the derivative contract. The supervisory delta adjustment reflects the sensitivity of the derivative contract, scaled to unit size, to the underlying risk factor, including the direction of the derivative contract (positive or negative) with respect to the underlying risk factor.