

Basel Committee on Banking Supervision

MAR

Calculation of RWA for
market risk

MAR11

Definitions and application of
market risk

**Version effective as of
01 Jan 2023**

First version in the format of the consolidated
framework, updated to take account of the
revised implementation date announced on 27
March 2020.



BANK FOR INTERNATIONAL SETTLEMENTS

Definition and scope of application

- 11.1** Market risk is defined as the risk of losses arising from movements in market prices. The risks subject to market risk capital requirements include but are not limited to:
- (1) default risk, interest rate risk, credit spread risk, equity risk, foreign exchange (FX) risk and commodities risk for trading book instruments; and
 - (2) FX risk and commodities risk for banking book instruments.
- 11.2** All transactions, including forward sales and purchases, shall be included in the calculation of capital requirements as of the date on which they were entered into. Although regular reporting will in principle take place only at intervals (quarterly in most countries), banks are expected to manage their market risk in such a way that the capital requirements are being met on a continuous basis, including at the close of each business day. Supervisory authorities have at their disposal a number of effective measures to ensure that banks do not window-dress by showing significantly lower market risk positions on reporting dates. Banks will also be expected to maintain strict risk management systems to ensure that intraday exposures are not excessive. If a bank fails to meet the capital requirements at any time, the national authority shall ensure that the bank takes immediate measures to rectify the situation.
- 11.3** A matched currency risk position will protect a bank against loss from movements in exchange rates, but will not necessarily protect its capital adequacy ratio. If a bank has its capital denominated in its domestic currency and has a portfolio of foreign currency assets and liabilities that is completely matched, its capital/asset ratio will fall if the domestic currency depreciates. By running a short risk position in the domestic currency, the bank can protect its capital adequacy ratio, although the risk position would lead to a loss if the domestic currency were to appreciate. Supervisory authorities are free to allow banks to protect their capital adequacy ratio in this way and exclude certain currency risk positions from the calculation of net open currency risk positions, subject to meeting each of the following conditions:
- (1) The risk position is taken or maintained for the purpose of hedging partially or totally against the potential that changes in exchange rates could have an adverse effect on its capital ratio.

- (2) The risk position is of a structural (ie non-dealing) nature such as positions stemming from:
 - (a) investments in affiliated but not consolidated entities denominated in foreign currencies; or
 - (b) investments in consolidated subsidiaries or branches denominated in foreign currencies.
- (3) The exclusion is limited to the amount of the risk position that neutralises the sensitivity of the capital ratio to movements in exchange rates.
- (4) The exclusion from the calculation is made for at least six months.
- (5) The establishment of a structural FX position and any changes in its position must follow the bank's risk management policy for structural FX positions. This policy must be pre-approved by the national supervisor.
- (6) Any exclusion of the risk position needs to be applied consistently, with the exclusionary treatment of the hedge remaining in place for the life of the assets or other items.
- (7) The bank is subject to a requirement by the national supervisor to document and have available for supervisory review the positions and amounts to be excluded from market risk capital requirements.

11.4 No FX risk capital requirement need apply to positions related to items that are deducted from a bank's capital when calculating its capital base.

11.5 Holdings of capital instruments that are deducted from a bank's capital or risk weighted at 1250% are not allowed to be included in the market risk framework. This includes:

- (1) holdings of the bank's own eligible regulatory capital instruments; and
- (2) holdings of other banks', securities firms' and other financial entities' eligible regulatory capital instruments, as well as intangible assets, where the national supervisor requires that such assets are deducted from capital.

- (3) Where a bank demonstrates that it is an active market-maker, then a national supervisor may establish a dealer exception for holdings of other banks', securities firms', and other financial entities' capital instruments in the trading book. In order to qualify for the dealer exception, the bank must have adequate systems and controls surrounding the trading of financial institutions' eligible regulatory capital instruments.

11.6 In the same way as for credit risk and operational risk, the capital requirements for market risk apply on a worldwide consolidated basis.

- (1) Supervisory authorities may permit banking and financial entities in a group which is running a global consolidated trading book and whose capital is being assessed on a global basis to include just the net short and net long risk positions no matter where they are booked.¹
- (2) Supervisory authorities may grant this treatment only when the standardised approach in [MAR20](#) to [MAR23](#) permits a full offset of the risk position (ie risk positions of the opposite sign do not attract a capital requirement).
- (3) Nonetheless, there will be circumstances in which supervisory authorities demand that the individual risk positions be taken into the measurement system without any offsetting or netting against risk positions in the remainder of the group. This may be needed, for example, where there are obstacles to the quick repatriation of profits from a foreign subsidiary or where there are legal and procedural difficulties in carrying out the timely management of risks on a consolidated basis.
- (4) Moreover, all supervisory authorities will retain the right to continue to monitor the market risks of individual entities on a non-consolidated basis to ensure that significant imbalances within a group do not escape supervision. Supervisory authorities will be especially vigilant in ensuring that banks do not conceal risk positions on reporting dates in such a way as to escape measurement.

Footnotes

- 1 *The positions of less than wholly owned subsidiaries would be subject to the generally accepted accounting principles in the country where the parent company is supervised.*

Methods of measuring market risk

11.7 In determining its market risk for regulatory capital requirements, a bank may choose between two broad methodologies: the standardised approach and internal models approach (IMA) for market risk, described in [MAR20](#) to [MAR23](#) and [MAR30](#) to [MAR33](#), respectively, subject to the approval of the national authorities. Supervisors may allow banks that maintain smaller or simpler trading books to use the simplified alternative to the standardised approach as set out in [MAR40](#).

- (1) To determine the appropriateness of the simplified alternative for use by a bank for the purpose of its market risk capital requirements, supervisors may wish to consider the following indicative criteria:
 - (a) The bank should not be a global systemically important bank (G-SIB).
 - (b) The bank should not use the IMA for any of its trading desks.
 - (c) The bank should not hold any correlation trading positions.
- (2) The use of the simplified alternative is subject to supervisory approval and oversight. Supervisors can mandate that banks with relatively complex or sizeable risks in particular risk classes apply the full standardised approach instead of the simplified alternative, even if those banks meet the indicative eligibility criteria referred to above.

11.8 All banks, except for those that are allowed to use the simplified alternative as set out in [MAR11.7](#), must calculate the capital requirements using the standardised approach. Banks that are approved by the supervisor to use the IMA for market risk capital requirements must also calculate and report the capital requirement values calculated as set out below.

- (1) A bank that uses the IMA for any of its trading desks must also calculate the capital requirement under the standardised approach for all instruments across all trading desks, regardless of whether those trading desks are eligible for the IMA.

- (2) In addition, a bank that uses the IMA for any of its trading desks must calculate the standardised approach capital requirement for each trading desk that is eligible for the IMA as if that trading desk were a standalone regulatory portfolio (ie with no offsetting across trading desks). This will:
 - (a) serve as an indication of the fallback capital requirement for those desks that fail the eligibility criteria for inclusion in the bank's internal model as outlined in [MAR30](#), [MAR32](#) and [MAR33](#);
 - (b) generate information on the capital outcomes of the internal models relative to a consistent benchmark and facilitate comparison in implementation between banks and/or across jurisdictions;
 - (c) monitor over time the relative calibration of standardised and modelled approaches, facilitating adjustments as needed; and
 - (d) provide macroprudential insight in an ex ante consistent format.

11.9 All banks must calculate the market risk capital requirement using the standardised approach for the following:

- (1) securitisation exposures; and
- (2) equity investments in funds that cannot be looked through but are assigned to the trading book in accordance to the conditions set out in [RBC25.8\(5\)\(b\)](#).