

Basel Committee on Banking Supervision

MAR

Calculation of RWA for
market risk

MAR10

Market risk terminology

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Reflects revisions in the standardised and internal models approach for market risk, including the shift to an expected shortfall measure. Also reflects the revised implementation date announced on 27 March 2020.



BANK FOR INTERNATIONAL SETTLEMENTS

General terminology

- 10.1** Market risk: the risk of losses in on- and off-balance sheet risk positions arising from movements in market prices.
- 10.2** Notional value: the notional value of a derivative instrument is equal to the number of units underlying the instrument multiplied by the current market value of each unit of the underlying.
- 10.3** Trading desk: a group of traders or trading accounts in a business line within a bank that follows defined trading strategies with the goal of generating revenues or maintaining market presence from assuming and managing risk.
- 10.4** Pricing model: a model that is used to determine the value of an instrument (mark-to-market or mark-to-model) as a function of pricing parameters or to determine the change in the value of an instrument as a function of risk factors. A pricing model may be the combination of several calculations; eg a first valuation technique to compute a price, followed by valuation adjustments for risks that are not incorporated in the first step.

Terminology for financial instruments

- 10.5** Financial instrument: any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity. Financial instruments include both primary financial instruments (or cash instruments) and derivative financial instruments.
- 10.6** Instrument: the term used to describe financial instruments, instruments on foreign exchange (FX) and commodities.
- 10.7** Embedded derivative: a component of a financial instrument that includes a non-derivative host contract. For example, the conversion option in a convertible bond is an embedded derivative.
- 10.8** Look-through approach: an approach in which a bank determines the relevant capital requirements for a position that has underlyings (such as an index instrument, multi-underlying option, or an equity investment in a fund) as if the underlying positions were held directly by the bank.

Terminology for market risk capital requirement calculations

- 10.9** Risk factor: a principal determinant of the change in value of an instrument (eg an exchange rate or interest rate).

- 10.10** Risk position: the portion of the current value of an instrument that may be subject to losses due to movements in a risk factor. For example, a bond denominated in a currency different to a bank's reporting currency has risk positions in general interest rate risk, credit spread risk (non-securitisation) and FX risk, where the risk positions are the potential losses to the current value of the instrument that could occur due to a change in the relevant underlying risk factors (interest rates, credit spreads, or exchange rates).
- 10.11** Risk bucket: a defined group of risk factors with similar characteristics.
- 10.12** Risk class: a defined list of risks that are used as the basis for calculating market risk capital requirements: general interest rate risk, credit spread risk (non-securitisation), credit spread risk (securitisation: non-correlation trading portfolio), credit spread risk (securitisation: correlation trading portfolio), FX risk, equity risk and commodity risk.

Terminology for risk metrics

- 10.13** Sensitivity: a bank's estimate of the change in value of an instrument due to a small change in one of its underlying risk factors. Delta and vega risks are sensitivities.
- 10.14** Delta risk: the linear estimate of the change in value of a financial instrument due to a movement in the value of a risk factor. The risk factor could be the price of an equity or commodity, or a change in an interest rate, credit spread or FX rate.
- 10.15** Vega risk: the potential loss resulting from the change in value of a derivative due to a change in the implied volatility of its underlying.
- 10.16** Curvature risk: the additional potential loss beyond delta risk due to a change in a risk factor for financial instruments with optionality. In the standardised approach in the market risk framework, it is based on two stress scenarios involving an upward shock and a downward shock to each regulatory risk factor.
- 10.17** Value at risk (VaR): a measure of the worst expected loss on a portfolio of instruments resulting from market movements over a given time horizon and a pre-defined confidence level.
- 10.18** Expected shortfall (ES): a measure of the average of all potential losses exceeding the VaR at a given confidence level.
- 10.19** Jump-to-default (JTD): the risk of a sudden default. JTD exposure refers to the loss that could be incurred from a JTD event.

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Liquidity horizon: the time assumed to be required to exit or hedge a risk position without materially affecting market prices in stressed market conditions.

Terminology for hedging and diversification

10.21 Basis risk: the risk that prices of financial instruments in a hedging strategy are imperfectly correlated, reducing the effectiveness of the hedging strategy.

10.22 Diversification: the reduction in risk at a portfolio level due to holding risk positions in different instruments that are not perfectly correlated with one another.

10.23 Hedge: the process of counterbalancing risks from exposures to long and short risk positions in correlated instruments.

10.24 Offset: the process of netting exposures to long and short risk positions in the same risk factor.

10.25 Standalone: being capitalised on a stand-alone basis means that risk positions are booked in a discrete, non-diversifiable trading book portfolio so that the risk associated with those risk positions cannot diversify, hedge or offset risk arising from other risk positions, nor be diversified, hedged or offset by them.

Terminology for risk factor eligibility and modellability

10.26 Real prices: a term used for assessing whether risk factors pass the risk factor eligibility test. A price will be considered real if it is (i) a price from an actual transaction conducted by the bank, (ii) a price from an actual transaction between other arm's length parties (eg at an exchange), or (iii) a price taken from a firm quote (ie a price at which the bank could transact with an arm's length party).

10.27 Modellable risk factor: risk factors that are deemed modellable, based on the number of representative real price observations and additional qualitative principles related to the data used for the calibration of the ES model. Risk factors that do not meet the requirements for the risk factor eligibility test are deemed as non-modellable risk factors (NMRF).

Terminology for internal model validation

- 10.28** Backtesting: the process of comparing daily actual and hypothetical profits and losses with model-generated VaR measures to assess the conservatism of risk measurement systems.
- 10.29** Profit and loss (P&L) attribution (PLA): a method for assessing the robustness of banks' risk management models by comparing the risk-theoretical P&L predicted by trading desk risk management models with the hypothetical P&L.
- 10.30** Trading desk risk management model: the trading desk risk management model (pertaining to in-scope desks) includes all risk factors that are included in the bank's ES model with supervisory parameters and any risk factors deemed not modellable, which are therefore not included in the ES model for calculating the respective regulatory capital requirement, but are included in NMRFs.
- 10.31** Actual P&L (APL): the actual P&L derived from the daily P&L process. It includes intraday trading as well as time effects and new and modified deals, but excludes fees and commissions as well as valuation adjustments for which separate regulatory capital approaches have been otherwise specified as part of the rules or which are deducted from Common Equity Tier 1. Any other valuation adjustments that are market risk-related must be included in the APL. As is the case for the hypothetical P&L, the APL should include FX and commodity risks from positions held in the banking book.
- 10.32** Hypothetical P&L (HPL): the daily P&L produced by revaluing the positions held at the end of the previous day using the market data at the end of the current day. Commissions, fees, intraday trading and new/modified deals, valuation adjustments for which separate regulatory capital approaches have been otherwise specified as part of the rules and valuation adjustments which are deducted from CET1 are excluded from the HPL. Valuation adjustments updated daily should usually be included in the HPL. Time effects should be treated in a consistent manner in the HPL and risk-theoretical P&L.
- 10.33** Risk-theoretical P&L (RTPL): the daily desk-level P&L that is predicted by the valuation engines in the trading desk risk management model using all risk factors used in the trading desk risk management model (ie including the NMRFs).

Terminology for credit valuation adjustment risk

- 10.34** Credit valuation adjustment (CVA): an adjustment to the valuation of a derivative transaction to account for the credit risk of contracting parties.

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CVA risk: the risk of changes to CVA arising from changes in credit spreads of the contracting parties, compounded by changes to the value or variability in the value of the underlying of the derivative transaction.