# Market Risk

FlexFinance provides data marts that contain information required for market risk management. This information has been called for by the **BCBS** (= **Basel Committee on Banking Supervision**) in order to define capital requirements. The market risks are divided into risks regarding interest rates, foreign exchange rates and securities prices. As regards the related capital requirements, the risks associated to foreign exchange rates and securities prices are only calculated for positions in the trading book whereas interest rate risk must be taken into account for all positions.

The data marts contain all the information required to differentiate between financial products and counterparties as well as all the individual components needed for reporting purposes or market risk management.
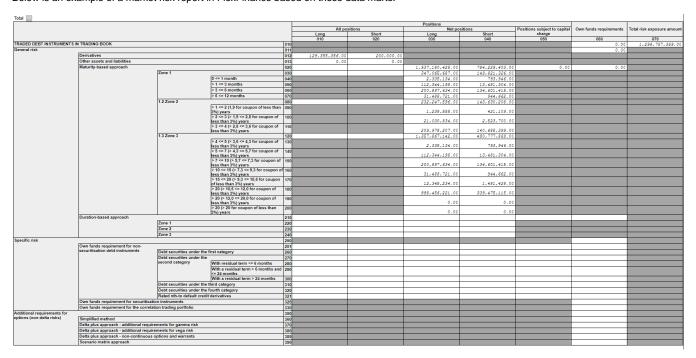
- Net risk amounts
- RWA (Risk-weighted assets)
- Sensitivities to price fixing for options (delta / gamma / vega / theta)
- VaR (Value at Risk)
- Stressed VaR

Both a bank's on-balance positions and off-balance commitments are processed and included in calculations.

- Loans / money markets
- FX deals
- Bonds / promissory notes
- Equities / funds
- FRA (forward rate agreements)
- IRS (interest rate swaps)
- Swaptions
- Forward deals
- Caps / floors / collars
- Options / futures
- Credit derivatives

FlexFinance allows parallel calculations to be made in accordance with various regulatory approaches (standard, IRB, CAD), the use of which for reporting purposes has to be approved by the national authorities in each case.

Below is an example of a market risk report in FlexFinance based on these data marts:

| | | | | | | Positions | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | All positions | | Net positions | | Positions subject to capital charge | Own funds requirements | Total risk exposure amount |
| | | | | | Long | Short | Long | Short | | | |
| | | | | | 010 | 020 | 030 | 040 | 050 | 060 | 070 |
| TRADED DEBT INSTRUMENTS IN TRADING BOOK | | | | 010 | | | | | | 0.00 | 1,298,757,389.00 |
| General risk | | | | 011 | | | | | | 0.00 | |
| | Derivatives | | | 012 | 129,355,356.00 | 200,000.00 | | | | | |
| | Other assets and liabilities | | | 013 | 0.00 | 0.00 | | | | | |
| | Maturity-based approach | | | 020 | | | 1,937,180,425.00 | 784,229,403.00 | 0.00 | 0.00 | |
| | | Zone 1 | | 030 | | | 347,065,687.00 | 149,821,326.00 | | | |
| | | | 0 <= 1 month | 040 | | | 2,335,134.00 | 783,946.00 | | | |
| | | | > 1 <= 3 months | 050 | | | 112,344,198.00 | 13,481,304.00 | | | |
| | | | > 3 <= 6 months | 060 | | | 200,897,634.00 | 134,601,415.00 | | | |
| | | | > 6 <= 12 months | 070 | | | 31,488,721.00 | 944,662.00 | | | |
| | | 1.2 Zone 2 | | 080 | | | 232,247,596.00 | 143,630,208.00 | | | |
| | | | > 1 <= 2 (1,9 for coupon of less than 3%) years | 090 | | | 1,238,555.00 | 421,109.00 | | | |
| | | | > 2 <= 3 (> 1,9 <= 2,8 for coupon of less than 3%) years | 100 | | | 21,030,834.00 | 2,523,700.00 | | | |
| | | | > 3 <= 4 (> 2,8 <= 3,6 for coupon of less than 3%) years | 110 | | | 209,978,207.00 | 140,685,399.00 | | | |
| | | 1.3 Zone 3 | | 120 | | | 1,357,867,142.00 | 490,777,869.00 | | | |
| | | | > 4 <= 5 (> 3,6 <= 4,3 for coupon of less than 3%) years | 130 | | | 2,335,134.00 | 783,946.00 | | | |
| | | | > 5 <= 7 (> 4,3 <= 5,7 for coupon of less than 3%) years | 140 | | | 112,344,198.00 | 13,481,304.00 | | | |
| | | | > 7 <= 10 (> 5,7 <= 7,3 for coupon of less than 3%) years | 150 | | | 200,897,634.00 | 134,601,415.00 | | | |
| | | | > 10 <= 15 (> 7,3 <= 9,3 for coupon of less than 3%) years | 160 | | | 31,488,721.00 | 944,662.00 | | | |
| | | | > 15 <= 20 (> 9,3 <= 10,6 for coupon of less than 3%) years | 170 | | | 12,345,234.00 | 1,481,428.00 | | | |
| | | | > 20 (> 10,6 <= 12,0 for coupon of less than 3%) years | 180 | | | 938,456,221.00 | 339,475,115.00 | | | |
| | | | > 20 (> 12,0 <= 20,0 for coupon of less than 3%) years | 190 | | | 0.00 | 0.00 | | | |
| | | | > 20 (> 20 for coupon of less than 3%) years | 200 | | | 0.00 | 0.00 | | | |
| | Duration-based approach | | | 210 | | | | | | | |
| | | Zone 1 | | 220 | | | | | | | |
| | | Zone 2 | | 230 | | | | | | | |
| | | Zone 3 | | 240 | | | | | | | |
| Specific risk | | | | 250 | | | | | | | |
| | Own funds requirement for non-securitisation debt instruments | | | 251 | | | | | | | |
| | | Debt securities under the first category | | 260 | | | | | | | |
| | | Debt securities under the second category | | 270 | | | | | | | |
| | | | With residual term <= 6 months | 280 | | | | | | | |
| | | | With a residual term > 6 months and <= 24 months | 290 | | | | | | | |
| | | | With a residual term > 24 months | 300 | | | | | | | |
| | | Debt securities under the third category | | 310 | | | | | | | |
| | | Debt securities under the fourth category | | 320 | | | | | | | |
| | | Rated nth-to default credit derivatives | | 321 | | | | | | | |
| | Own funds requirement for securitisation instruments | | | 325 | | | | | | | |
| | Own funds requirement for the correlation trading portfolio | | | 330 | | | | | | | |
| Additional requirements for options (non-delta risks) | | | | 350 | | | | | | | |
| | Simplified method | | | 360 | | | | | | | |
| | Delta plus approach - additional requirements for gamma risk | | | 370 | | | | | | | |
| | Delta plus approach - additional requirements for vega risk | | | 380 | | | | | | | |
| | Delta plus approach - non-continuous options and warrants | | | 385 | | | | | | | |
| | Scenario matrix approach | | | 390 | | | | | | | |

The following standard functions are also available for reports defined in FlexFinance:

- extensive drilldown possibilities
- possibility to compare the report for different posting days
- proof of rule for reporting contents
- manual editing combined with consistency check