Market Risk

FlexFinance powered by FERNBACH

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:

Total ...

					Positions					
					All positions		Net positions			
					Long	Short	Long	Short	Positions subject to capital charge	Own funds requirements	Total risk exposure amount
					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	793,946.00			
			> 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	793,946.00			
			> 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			998,456,221.00	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

© FERNBACH Financial Software S.A.