



SYSTEM10

Risk Management

TietoEnator 

Building the Information Society

SYSTEM10 Risk Management

Efficient and competent tools

Corporates of today face a multitude of risks in the daily activities. The use of an efficient risk management system is vital for the success of the corporation. SYSTEM10 offers a rich selection of tools that will give your company a head start in risk management. You will be provided with efficient and easy to use tools for analysing foreign exchange, interest rate risks and positions in real time.

Comprehensive Tools

SYSTEM10 provides you with a comprehensive set of on-line tools for analysing or simulating any combination of currencies, portfolios, companies or products. SYSTEM10 gives you the possibility of analysing Assets & Liabilities risk as well as Value at Risk (VaR), convexity, options strategies, limits, price sensitivity, and more. The screens and graphs are simple to interpret and provide valuable information upon which risk management decisions can be based.

Interest Distribution

SYSTEM10 provides a module where you can analyse the interest risk and foreign exchange risk using non-VaR methods. In an easy and flexible way you can analyse the fixed interest distribution per currency, per yield, per instrument or per deal. You can select the type of buckets on which the distribution should be done, and how you want the information to be presented.

Value At Risk

The VaR methodology used in SYSTEM10 is based upon the application of J.P. Morgan RiskMetrics currency coefficients, volatility, and exchange rates for Value at Risk on the net present values of all of the live contracts contained in the system. The system even gives the user the ability to include the budgeted and simulated contracts contained in the system.

Cur	\$10 Position	Budget	Net	Simulation	Price/Vol	Rate	Position	Risk
000	124 054 344		124 054 344		0.8190	1.2736	124 054 344	2 135 248
01M	-1 684 196		-1 684 196		0.0068	6.5928	-1 684 196	-240
03M	19 776 562		19 776 562		0.0211	6.1867	19 776 562	9 760
06M	49 450 090		49 450 090		0.0397	5.8813	49 450 090	41 207
12M	29 554 600		29 554 600		0.0786	5.5611	29 554 600	40 636
025	26 957 270		26 957 270		0.1812	5.3682	26 957 270	102 670
035					0.2805	5.5051		
045					0.3884	5.6048		
055					0.5023	5.7800		
065					0.6312	5.8702		
105					0.9410	6.0746		
02Y					0.1760	4.7289		
03Y					0.2630	4.7311		
04Y					0.3552	4.7326		
05Y					0.4501	4.7338		
07Y					0.6046	4.8036		
09Y					0.7303	5.0784		
10Y					0.7800	5.1811		
15Y					1.0272	5.2651		
20Y					1.1984	5.4116		
30Y					1.3773	5.7404		

	Simulated Risk	Original Risk	Difference
Gross	2 981 900,63	2 981 900,63	0,00
Net	2 255 693,81	2 255 693,81	0,00
0	2 156 819,29	2 156 819,29	0,00

Cur	Cur Risk	Gross Pos	Net	2004-07-29	2004-09-28	2004-09-28	2004-10-20	2004-11-20	2004-12-28	2005-01-28	2005-02-28	2005-03-28	2005-04-28	2005-05-28	2005-06-28
Total	6 506	650 090	605 127	79 024	97 402	64 568	59 748	59 517	102 701	33 262	270	10			20 322
CAD	165	16 529	17 144						15 484	1 660					
CHF	4 809	480 877	469 506	79 503	97 145	59 791	59 644	53 732	36 580	24 216	682	139	480		20 332
EUR	-149	-14 946	-9 609	982	345	3 230	989	2 961	-18 615	1					-2
GBP	1	75	31		9	22	1								
HKD															
JPY	-30	-3 040	-305 095	-136 006	-39 884	18 087	-9 645	-17 841	-21 347	-40 496	-15 906		833		-154
PLN		13	37	15	22										
PLZ															
SEK		5	21	12	8	1		7	5 294	567					
SGD	50	5 037	12 089	1 111	1 118										
USD	1 620	162 044	124 054	-907	-527	-349	1 320	1 125	59 879	7 007	91		5		-8

The Fixed Interest Distribution module allows you to view risks over different time periods and in different portfolios.

The user can specify any combination of portfolio, currency, company or product mix that should be included in the analysis, and even specify the exchange rates that should be used to derive their respective NPVs. The risk module also gives the treasury the opportunity of selecting the base currency and time horizon of the VaR calculation. In short, this facility enables the Treasury to perform simulations, conduct stress tests, and obtain an overall better perspective from which to plan, execute, and evaluate the various hedging strategies implemented.

Stress Analysis

SYSTEM10 gives you the opportunity to examine present values and deltas per currency or per currency pair with different stress scenarios such as shifts in the yield curve, turning the yield curve with or without an anchor, altering the prices or all of the above at the same time.

Currency	Present Value	Delta	Delta	Delta	Delta
CAD	16 379 589	-696	-146 553	149 223	686
CHF	469 506 430	-30 346	-7 095 048	11 370 594	30 362
EUR	14 770 044	799	179 959	-179 426	-799
GBP	72 870	-1	-541	549	1
HKD	0	0	0	0	0
JPY	3 040 149	96	222	-222	-96
PLN	12 962	0	0	0	0
PLZ	0	0	0	0	0
SEK	3 490	0	0	0	0
USD	8 949 228	-768	-80 488	82 196	796
USD	198 016 940	-14 372	-3 733 179	4 027 349	14 378

In the Present Value Stress module you can simulate different scenarios and study the change in your positions,

MM-Position/Convexity

The MM-position module provides the Treasury with on-line position keeping facilities for money market positions, displaying maturity, notional values, rates, present values in original currency or home currency, risk in original currency or home currency, internal rate of return and duration. The convexity module gives the user the opportunity to make a graphical presentation of convexity analysis on a user defined selection.

Gap Analysis

The online Gap Analysis module gives a graphical overview of the net present value on a user defined selection of cash flow structure, maturity structure, interest risk, interest and currency exposure per currency.

Foreign Exchange

The Foreign Exchange position module provides you with the on-line facilities of examining your foreign exchange positions by presenting both underlying notional value, underlying present value, underlying spot positions and the hedged volumes of these per currency or currency pair.

Options Graphics

The graphical options module provides the user with the ability to simulate option and futures scenarios. It calculates the premium and pertinent Greeks for the option, as well as including a graphical representation of the option scenario.

More Features

- Graphical examination of foreign exchange flows and maturity distribution.
- Graphical examination of currency and interest exposure.
- Analysis of individual or totaled cash flows of a number of different currencies.
- Examination of open interest rate risks over a specific period.
- Sensitivity analysis.
- Comparison of positions to budgets / benchmarks.
- Graphical examination of option strategies.
- Graphical presentation of convexity.
- On-line limit system with global limit management.
- On-line profit & loss calculations for different periods
- On-line report generator presenting flexible reports instantly.
- For Option valuation FinancialCAD is used.

TietoEnator is one of the leading architects in building a more efficient information society. With close to 15 000 experts, we are the largest IT services company in the Nordic countries.

Our leading-edge know-how is geared towards developing innovative IT solutions that realise and digitalise the visions of our customers. And we work in close partnership helping them to manage and run their business better.

We've chosen to focus on areas where we have the deepest industry expertise. The principal ones are globally banking, forest and telecom. In these areas, we work hand in hand with many of the world's leading companies and organisations. We are growing with them and are now active in more than 20 countries.

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