SLG RiskEngine

Risk management within a completely new dimension

www.slg.co.at

Efficiently secure and save costs.

View risks as a whole, receive cost-efficient backup proposals at the push of a button, no more gut decisions.

Optimization determines hedging ratio per currency for a defined target risk while minimizing costs.

SLG RiskEngine as a reporting tool frees you from tedious Excel acrobatics and puts an end to hedging decisions "flying blind": With just a few clicks you can, ...

- ◢ calculate the risk from exchange rate, interest rate and commodity price changes in the price of raw materials,
- ◢ determine the group risk position.
- ◢ represent the overall risk for the group and its subsidiaries.

With SLG RiskEngine as an optimization tool, you can, ...

- ◢ Reduce forward premiums, number of currencies, hedging volume or line utilization,
- ◢ the option of setting annual or monthly upper and lower limits for back-up quotas, and
- ◢ a desired maximum overall FX risk

... an efficient security suggestion at the push of a button.

SLG RiskEngine

Technology and methods – simple, but not basic

The SLG RiskEngine has an easy-to-use Excel interface. The results are presented in Excel reports, the structure and design of which you determine yourself. A powerful calculation kernel works in the background. As a data basis for the risk calculation are used to calculate planned cash flows, commitment items and derivatives, delivered from your system or entered manually. You can map common derivatives to hedge foreign exchange, interest rate and commodity risks. You can also use price escalation clauses for commodities.

The diversified risk (taking into account correlations between risk factors) is calculated using Monte Carlo simulation or a variance-covariance approach.

The optimization function of the SLG RiskEngine finds the optimal hedging portfolio at the push of a button for a given risk appetite, depending on the criterion (lowest costs, lowest number of transactions, minimization of line utilization). To achieve this, the RiskEngine uses a genetic algorithm (for the number of transactions) and a gradient method for all other criteria.

In the cockpit – overall risk and simulation of scenarios

In the „Cockpit" of the SLG RiskEngine: The user can see at a glance the risk per currency and in total (1). For the most important currencies, hedging ratios can be easily set using the slider (4).

If the optimization function is used, it automatically delivers the optimal hedging ratios (4) for a desired maximum risk (2). You can define limits for the ratios per currency and month (3).

Minimization of	hedging volume
Target risk after hedging	2.500
Constant backup quotas	1
Monthly limits (CfaR)	0

2. Selection of the optimization criterion, the desired target risk and the type of hedging limits

3. Definition of minimum and maximum hedging ratios per currency

Simulation FX Fuses

in TEUR

Currency	Basic position (position, CF)	Current risk	Current risk contribution	Hedging ratios		Ffuse new	New risk	New risk contribution	Current risk contribution MIN	Current risk contribution MAX
USD	52.253	7.252	6.631	78%	78	-40.992	1.563	605	0%	100%
HUF	-16.010	1.104	-5	0%	0	0	1.104	134	0%	100%
KRW	13.151	1.855	1.249	34%	34	-4.484	1.222	465	0%	100%
MXN	-10.623	2.319	-317	41%	41	4.382	1.362	335	0%	100%
CNY	-9.616	1.290	-970	0%	0	0	1.290	-289	0%	100%
CAD	9.349	1.298	722	0%	0	0	1.298	439	0%	100%
UAH	-3.711	1.864	-126	0%	0	0	1.864	751	0%	0%
VND	2.802	376	337	0%	0	0	376	145	0%	0%
JPY	-2.299	335	-168	0%	0	0	335	-47	0%	100%
GBP	-1.318	182	-77	0%	0	0	182	-39	0%	100%
Total	121.132	7.276				49.859	2.500			
	in % of EBIT	20,8%					7,1%			

1. Risk per currency and diversified overall risk

4. At the touch of a button, the optimized backup quotas are invoiced