



OKO Bank

The flexibility to anticipate future risks and rewards

“With SAS® Risk Management, we can do anything and everything we want to —the only limitation is our imagination.” This confident proclamation comes from Juuso Rantala, an analyst working in OKO Bank’s asset and liability management unit, and one of the main players responsible for OKO Bank’s recent implementation of SAS Risk Management.

Esa Vilhonen oversees risk management and control for OKO Bank. “We provide the bank’s management with information relating to market risk,” he says, “and in my unit we develop methodologies to that end. We’re also looking at credit risk issues. In one sense it’s our job to act as the bank’s life insurance.”

Esa Vilhonen

Asset Liability Management, OKO Bank



The Power to Know™

The need for a new solution

Before OKO Bank established a relationship with SAS, Vilhonen’s group used another software vendor for decision support. But, according to Vilhonen, that software could not meet OKO Bank’s increased need for flexibility and accuracy in its risk management operation.

Vilhonen and his team began the search for a solution and spoke to several IT companies, including SAS. A representative from SAS’ Europe, Middle East & Africa (EMEA) headquarters in Heidelberg, Germany, flew to Helsinki to demonstrate SAS software. Vilhonen was impressed. “We saw that SAS software was flexible and capable enough to meet our needs. We started to think seriously about

other risk issues and used our basic profit and loss calculator with SAS to perform historical simulations. We furthered our partnership with the Institute by using SAS/INSIGHT to take a look at distributions.”

After these initial accomplishments with SAS software, OKO Bank learned of a risk-specific product SAS was developing called SAS Risk Management. “We were definitely interested. Our experience had shown us that SAS software is flexible enough even when you don’t have a clear view of where you’re heading. You identify a problem, correct it and then move on and look at another area — it’s a constantly evolving process.”

Alpha and beta and the future

As a development-testing partner for SAS Risk Management, OKO Bank received the alpha version of the software in 1998. It took half a year of beta testing before the bank received the first production version at the beginning of 1999. Vilhonen was so satisfied with the new product that he developed a plan to increase its use in increments throughout the organization.

Vilhonen says his team can now calculate everything they need to know. They’re currently preparing a history of proper risk factors. “We completed our value-at-risk (VAR) calculations this summer,” says Vilhonen. VAR is an estimate of the largest probable loss over a given time period. “Now we’ll move to

the counterparty risk for treasury instruments. Then we'll look at other counterparty risks and take measures to establish a complete portfolio overview." Counterparty risks calculate the expected loss associated with a contractual default.

"We need a consistent measure for market risks, including interest rates, currencies, equities, etc., and also credit risks, where the measure is the same for each and every one," Vilhonen adds. "With that in place we can get a true picture of 'what's the risk and what's the reward?' for everything we consider. Only after that can we show real performance measures, and say which part of the business is most productive when compared with the desired risk-reward profile."

Flexibility is the key word

One of the strengths of SAS Risk Management software is its ability to incorporate any kind of time series. Time series data is used to analyze trends and cyclical behaviors, and is

often used as an indicator for future developments. From market rates to macro-economic time series, SAS Risk Management treats each one as a risk factor. This is an attribute that Vilhonen is very enthusiastic about.

He says he even plans to move beyond risk management techniques such as Monte Carlo simulations and potential exposures. "SAS Risk Management's flexibility provides us with plenty of possibilities and opens up many opportunities for us," he says. "Statistical modeling on volatility behavior is important, and we also want to stress-test models and assumptions. Of course, our ultimate aim is to get a total value-at-risk for the whole bank, for both market and credit risk."

Rantala, Vilhonen's colleague in the asset and liability management unit, puts the value of SAS Risk Management software into perspective. "What we believe is that with SAS Risk Management, we can do whatever we want—

everything is possible. We just have to determine what it is that we want to achieve. Because we are SAS users, we can transfer our data and solutions to other areas of the business."

The benefits of SAS Risk Management reach beyond Vilhonen's unit to the bigger picture of OKO Bank's performance. Vilhonen sketches the possibilities. "If we could get our capital requirements for market risk lower using this software — and studies in the U.S. show that the capital requirement can go down by as much as 20 to 40 percent — then that would be quite considerable," he says. "That kind of percentage would mean a lower capital requirement of between 30 and 60 million Finnish Marks (US\$5 and \$10 million). If this is the measure, then we would easily recoup our investment within one year."

For more information about SAS Risk Management visit us on the Web at: www.sas.com/solutions/riskmgmt.



World Headquarters
and SAS Americas
SAS Campus Drive
Cary, NC 27513 USA
Tel: (919) 677 8000
Fax: (919) 677 4444
U.S. & Canada sales:
(800) 727 0025

SAS International
PO Box 10 53 40
Neuenheimer Landstr. 28-30
D-69043 Heidelberg, Germany
Tel: (49) 6221 4160
Fax: (49) 6221 474850

www.sas.com