



## W&W introduces group-wide risk-bearing capacity model

*Risks are uniformly measured and reported in all corporate group companies –  
New requirements as a result of supervisory legislation and operational management*

Group-wide risk management systems in financial groups are becoming increasingly important as a result of new supervisory legislation and operational requirements. Amongst other things, MaRisk requires that banks are able to determine their risk-bearing capacity at any given time. Comparable requirements are also anticipated for insurance companies in light of Solvency II, while the Financial Groups Directive also calls for risk management on a group-wide basis. Operational group management is also benefiting from consistent practices and more closely integrated systems. As such, risks and anticipated returns can be correlated to ensure optimal allocation of economic capital with the aim of increasing performance and determining relevant thresholds.

*“With group-wide standardised risk measurement and management, we are meeting supervisory legislation requirements and improving our risk-return management system. We received excellent support from ifb both during conception and implementation.”*

**Dr. Edmund Schwake**  
Deputy Chairman of the Management Board and Chief Risk Officer (CRO),  
Wüstenrot & Württembergische AG

### *Aims of the risk-bearing capacity model*

Last year, the financial group Wüstenrot & Württembergische AG (W&W) took the decision to implement a group-wide risk-bearing capacity model. The primary goal was to establish a standardised approach for measuring risk and determining the risk cover potential in order to consistently aggregate these figures throughout the entire group. On this basis, a reporting process was introduced in September 2006 that enabled uniform analysis of all the relevant types of risk, both for the major individual companies and the group as a whole.

The W&W group unites the two business areas of home savings/ construction financing/banking and insurance, essentially in the form of a building society, a bank, a life insurance company and an indemnity insurance company. Previously, market risks, counterparty risks, insurance-related risks and operational risks were measured and controlled on a decentralised basis in each individual company. Through this project, the method of measuring risk has been standardised throughout the group,

Risk-bearing capacity W&W-group	Individual companies					W&W-group		
	W&W AG	Wüstenrot BSK	Wüstenrot Bank	Württ LV	Württ Vers.	RK without diversification	Less diversification	RK requirement diversification
Market price risk								
thereof interest rate change/stock/foreign currency risk								
thereof equity risk								
less diversification								
Counterparty risk								
thereof from credit transactions								
thereof from principal transactions								
thereof vis-à-vis external reinsurance companies								
Insurance-related risk								
Operational risk								
Risk capital requirement								
Risk coverage potential								
Risk-bearing capacity ratio								

All risks are measured uniformly within the W&W group reporting process, including the diversification effects between risk types and between individual companies (figure shows blank reporting).

*Proportion of women**among the ifb group staff,  
March 2007***31**  
Percent

including the management systems used by the Karlsruher Versicherungen, which were integrated into W&W in 2005.

In order to achieve this, as an initial step, all the group companies jointly formulated the requirements to be placed on the future risk measurement system. Amongst others these included:

- Value-oriented, stochastic risk modelling on the basis of a central ratio and identical parameters, such as the confidence level and the time horizon established during risk measurement.
- Clarification of diversification effects and their impact on the overall risk position; these effects exist between risk types on the one hand, and between individual companies on the other.

Corresponding calculations were subsequently carried out on the basis of this approach in order to migrate the results into regular reporting. Following a risk measurement inventory in the individual companies, an entry-level model was then developed to provide initial analysis of group-wide risk.

*Group-wide measurement of the various types of risk*

In order to ascertain the group-wide market risk, using a scenario-based format individual risk items were consolidated within a prototype to determine a group-wide Value at Risk that afforded consideration of correlations between the individual companies. In doing so, the same scenarios were applied for each risk item. Risk scenarios for capital market prices (yields, stock prices, foreign currencies and property prices) were generated centrally using a Monte-Carlo simulation. Also considered were the peculiarities of individual units, such as the insurance collective with guaranteed interest rates in the life insurance company, or the home savings collective in the case of a building society.

Total counterparty risk is determined on the basis of a Credit Value at Risk approach. To ensure a consistent approach and the ascertainment of correlation effects, standardised rating-based default probabilities and migration matrices were applied with respect to insurance company assets and the trading business of banks. This process was supported with a tool developed by ifb.

For insurance-related risk and operational risk, measurement is similarly achieved using a Value at Risk approach or standard segment-related approaches.

Results are transferred to a matrix and displayed within the scope of regular reporting. The concept itself was developed by W&W group risk management personnel, risk management units of the individual companies and ifb AG consultants, who, following the concept phase, also monitored implementation of the risk measurement process. In addition to further developing the entry-level model, the next step will be to determine risk thresholds and integrate return data into capital allocation management; consequently transferring to a risk-return management system.

