

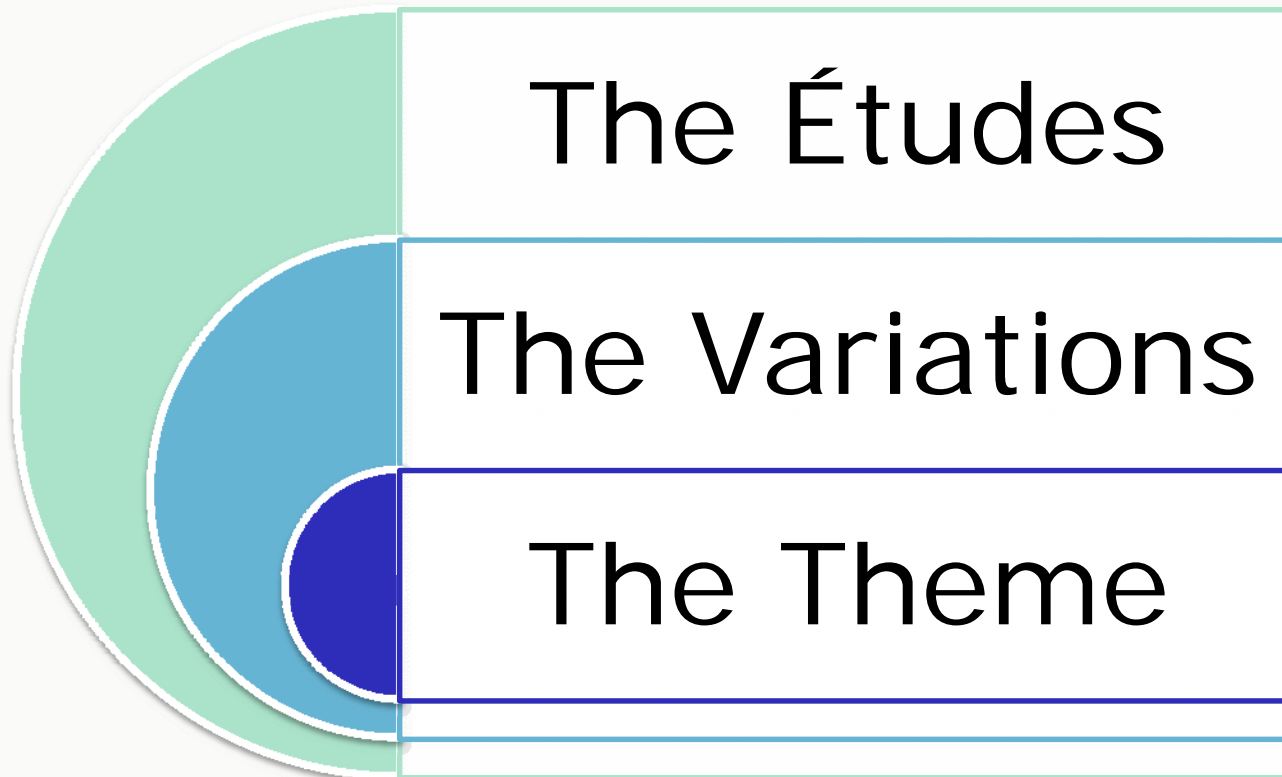
Group Modeling Hands-On Using PillarOne.RiskAnalytics



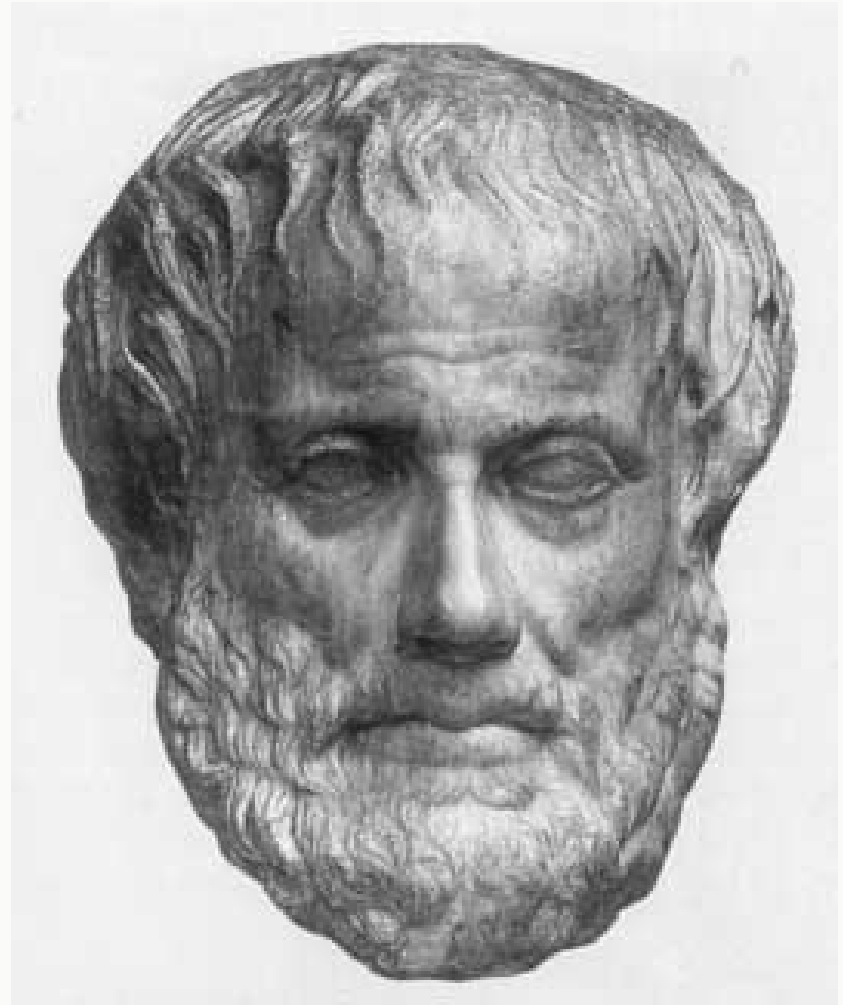
PillarOne Community Event, St. Gallen, 9./10. September 2010

Markus Meier, Intuitive Collaboration AG

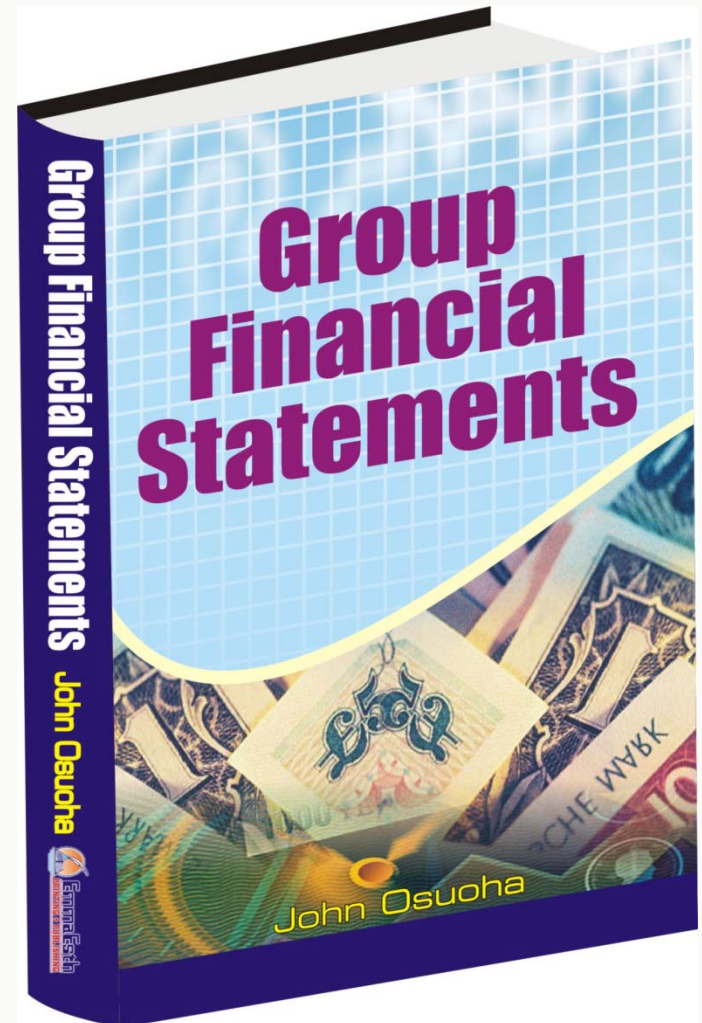




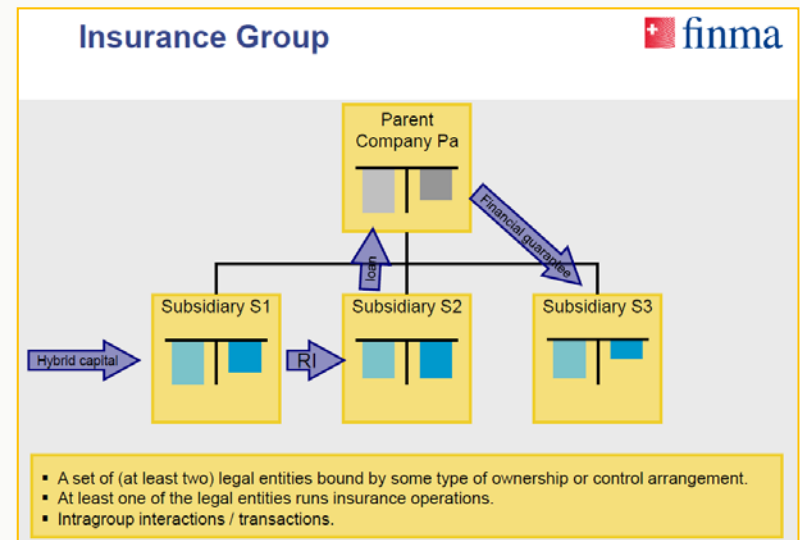
- Summing the SCR's:
The "Silo Approach"
 - "The Whole is **Greater**
than the Sum of its Parts"
 - Aristotle was right:
"Economies of Scale"
 - "The Whole is **Smaller**
than the Sum of its Parts"
 - Aristotle was wrong:
"Group Diversification"



- Consolidation
 - Depending on the “consolidation level”
 - OK for e.g.
 - (Tiny) Policies
 - (Big) Merged Companies
 - Not OK for Group Risk Management



- LE/Cluster level
- CRTI on (significant) LE/Cluster level



- **Loans**
- **Guarantees** and off-balance sheet transactions
- Business dealings and transactions constituting eligible capital pursuant to art. 37 sect. 2 ISO
- Capital investments
- **Reinsurance transactions**
- Cost-sharing agreements
- **Other risk-transfer transactions**

Regulating Insurance Groups: a Comparison of Risk-Based Solvency Models

Hato Schmeiser

Caroline Siegel*

Abstract

Since the 1990s, there has been extensive growth of financial groups involved in the insurance sector. As a result, supervisors and regulators are currently developing group-wide capital standards intended to enable effective monitoring of the financial soundness of such groups. Some jurisdictions are taking steps towards a consolidated approach, which views the group as one single integrated entity, while others model the group as a collection of interrelated but separate legal entities. This paper provides a theoretical as well as a numerical comparison of these two approaches to group-wide solvency assessment in light of the different regulatory issues and challenges associated with

- Examples
 - Loans
 - Direct and indirect loans between group/conglomerate companies
 - Guarantees and off-balance sheet transactions
 - Guarantees for additional capital contributions for covering losses
 - Reinsurance transactions
 - Intra-group reinsurance and retrocession agreements
 - Loss portfolio transfers
 - Other risk-transfer transactions
 - Alternative risk-transfer transactions (ARTs) within the group

	Fixed Out	Fixed In	Variable Out	Variable In
Loans	✓	✓		
Guarantees	✓		✓	✓
Reinsurance	✓		✓	✓
Other				

RI pos/neg Premium no Claim
SL (plus other RI where appl.)
Reinsurance
Other

- The shown examples will be published with version 1.0.4 of RiskAnalytics.

They include a Parent, a Daughter, and a Son with

- No CRTI
- **Loan** Daughter – Parent **with and without default**
- **Quota Share** Daughter – Son **with and without default**
- **Guarantee** Daughter – Parent **with and without default**
- **Quota Share** Daughter – Son **with and without default**
and
Guarantee Daughter – Parent **with and without default**

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- [Working Papers on Risk Management and Insurance No. 79 - June 2010; Regulating Insurance Groups: a Comparison of Risk-Based Solvency Models; Hato Schmeiser and Caroline Siegel](#)
- http://www.finma.ch/d/beaufsichtigte/versicherungen/schweizer-solvenztest/Documents/sst_group_structure_model_ppt.pdf
- http://www.finma.ch/d/beaufsichtigte/versicherungen/schweizer-solvenztest/Documents/20090514_CEIOPS_Group-SST_0505.pdf
- <http://www.finma.ch/e/regulierung/Documents/finma-rs-2008-44-e.pdf>