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The Chief Risk Officer Forum:

A Framework for Incorporating Diversifications in the Solvency Assessment of Insurers

by John C.R. Hele and Henk van Broekhoven

Preface

The Chief Risk Officer (CRO) Forum comprising of risk officers of the major European insurance companies and financial conglomerates, was formed to address key relevant risk issues. It is a technical group focused on developing and promoting industry best practices in risk management. The membership comprises of the following companies: AEGON NV, Allianz AG, Aviva PLC, AXA Group, Converium, Fortis, Generali, ING Group, Munich RE, Prudential PLC, Swiss RE, Winterthur, Zurich Financial Services. As a technical group representing the leading European insurers, the Chief Risk Officer Forum established a subgroup, under the leadership of John C.R. Hele, ING, and Sue Kean, Aviva, to coordinate the CRO forum responses and input to the new European Union insurance regulatory framework (Solvency II) project on the topics of diversification and group solvency. As a result the paper, "A Framework for Incorporation Diversification in the Solvency Assessment of Insurers," was presented on June 10, 2005. Another study, "Principles for Regulatory Admissibility of Internal Models" was also presented to assist in the development of the Solvency II framework. These projects were supported by Mercer Oliver Wyman and Professor Damir Filipovic of the University of Munich.

This article gives an overview of the CRO Forum diversification paper. Another major study will be highlighted in the next issue.

Introduction

The discussions at the European level for Solvency II have gathered pace in recent months. The European Commission sent out the first request for advice in July 2004, to which the Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS) provided a progress update and plan for subsequent work in October 2004. Since then, the response of CEIOPS to the first wave for advice was published at the end of June 2005, and CEIOPS' Working Groups have started work on

the second and third wave calls for advice and have requested insurance industry input. For the second wave, a draft answer from CEIOPS was also published at the end of June, with comments from external stakeholders to CEIOPS expected to be accepted until the end of September. CEIOPS' final report is due at the end of October 2005. The formal input from CEIOPS to the third wave will be published at the end of February 2006.

The purpose of the paper was to start an informed debate on the issues surrounding the treatment of diversification in the solvency assessment of insurers. Although diversification is the underlying reason for insurance, there is an imbalance in the recognition (or lack thereof) of diversification effects within the solvency regulation. The aim of the paper was to correct the imbalance and to make some initial suggestions regarding how diversification should be treated within a prudential regulatory framework.

Overview of the Paper

The CRO Forum believes that Solvency Capital Requirement (Pillar 1) needs to take account of risk concentrations, risk dependencies and risk diversification, both within and across entities of a group. Although such effects can be difficult to measure, diversification lies at the heart of the principles of insurance, and is a key rationale for the existence of the industry—to bear risks that individual policyholders would be unable or unwilling to bear themselves. The paper makes three key points:

1. Concentration of risk is one of the primary causes of insurer insolvency, and conversely risk diversification plays a critical role in the economics of insurance. There is



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widespread and accepted evidence of diversification benefits, even under stressed scenarios.

2. Although many insurance companies have dramatically improved their risk management capabilities and are now actively managing their risk profile to improve risk diversification, current regulatory approaches for dealing with diversification are inadequate and need to be updated.
3. A set of core principles and policies can form the basis of a framework for the treatment of diversification and group effects within European insurance regulations. This framework is defined to strike a balance between the needs of local regulators and the manner in which multinational groups are managed. It maintains the basis of local regulation—namely that local regulators will analyze local entities in the same way as the subsidiaries of groups. This framework also enables smaller insurers to benefit by giving them full credit for risk transfer arrangements where these are in place, which allows them to benefit from the diversification within others' balance sheets.

The principles and policies cover four main areas:

1. Recognition of diversification within both standardized and internal models.
2. Mandatory lead supervisor for groups with single authorization of internal models.
3. Replacement of current insurance groups directive with separate explicit risk-based group solvency test.
4. Admissibility of risk transfer, whether intra-group or outside the group, and formalized capital support.

Within each of these areas, the roles and responsibilities of groups, solo entities and regulators, appropriate disclosure standards and additional risk modeling requirements are described in more detail in the paper.

Six Guiding Principles

For the purposes of distinguishing between the approaches adopted by different regulators and rating agencies, the CRO Forum has classified diversification benefits into four distinct categories:

- Level 1 – Within risk types
- Level 2 – Across risk types
- Level 3 – Across entities, within a given geography
- Level 4 – Across geographies or jurisdictions

With these categories in mind, the CRO Forum proposed the first principle:

Principle 1

Risk diversification is a critical component of successful risk management for insurance companies; conversely, risk concentration is one of the major drivers of insurance company default. Furthermore, diversification effects (at the proposed levels 1-4) are uniquely determined by a company's portfolio mix and legal entity structure. Consequently, incorporation of the effects of risk diversification into solvency frameworks is critical for the purpose of rewarding strong risk management and discouraging risk concentration.

In the paper a set of four key areas were presented for the development of a new capital adequacy framework:

- The need for a robust measurement framework.
- The need for demonstrable links between measurement and management.
- The need of recognition of capital mobility and risk transfer.
- The need for a balance between local and group capital requirements and a revised group solvency test.

In recognition of these important conditions that define the extent to which insurers are able to understand and demonstrate the impact of diversifying strategies and to use them to manage their portfolio of risk, the CRO Forum put forth the second principle:

Principle 2

Diversification effects must be recognized when risk factors, their dependencies and the company's exposure to them are:

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- *Identifiable*
- *Supported by empirical, technical, scientific or expert opinion of causal linkages*
- *An active consideration in business decision-making*
- *And, where capital / risk mobility does not impose barriers to diversification being realizable*

The next chapter of the paper discusses the capital mobility and risk transfer, particularly in a group. An important position with respect to diversification effects within a group is the following:

“In case diversification benefits arise across multiple entities within the same group, consideration also needs to be given to the extent to which capital can move between the different entities. Consideration of the extent to which capital is truly mobile within a group is critically important to understanding group solvency.”

In the view of CRO Forum, the criteria used to assess internal risk transfer should be no different from the criteria used to assess external risk transfer, and identical credit in terms of capital relief should be given for identical quantum of risk transferred. This leads to the third principle:

Principle 3

For the purpose of recognizing diversification effects, capital mobility and risk transfer should be recognized if financial resources are available to back policyholder and other creditors' claims:

- *With sufficient economic value.*
- *As they fall due.*

The next part of the paper is about the balance between local and group capital requirements. At a solo level, in theory any individual legal entity can benefit from the wider diversification benefits that come from belonging to a group.

Achieving a consistency between the solo and group test requires a practical consideration of where and how the benefits arise. The CRO Forum believes that each of these levels should be incorporated in any solo test.

For the group test it is a combination of portfolios of risk across the constituent parts of the group that defines the overall risk profile. Those effects are arising within risk types (Level 1), across risk types (Level 2), across entities (Level 3) and across regulatory jurisdictions (Level 4) and impacts the group risk profile. Each of these should be recognized in the group test.

CRO Forum's perspective proposal is based on this the following principles:

Principle 4

Capital requirements at the solo entity level should reflect:

- *The diversification within that local entity, recognizing formalized risk transfer and capital support.*
- *The formalized support, where present, provided by transferability of capital between a group and the local entity, taking into account the credit risk of the group.*

Principle 5

Capital requirements for an insurance group must be assessed separately from those of the individual entities within the group, using models to explicitly reflect:

- *The diversification effects specific to that group, taking any constraints to capital mobility into account.*
- *The capital implications of both group legal structure and any intra-group agreements.*

It is seen as very important that the necessary balance involves coordination between solo and group supervision. In Europe, the concept of co-operation between member states is already well established in the Insurance Groups Directive and further supported by CEIOPS in the Helsinki protocol.

The CRO Forum believed that a strengthening of the existing approach is needed and thus requires the appointment of a lead supervisor. It is imperative for Solvency II that the role of the lead supervisor becomes a mandatory feature of the supervision of groups, rather than elective.

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Risk management is not seen as a separate and distinct process, but a natural part of all our business and operational processes.

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This leads to the next principle:

Principle 6

Coordination between supervisors of local entities and groups is essential to ensure an efficient, competitive European insurance market.

It is essential that for each group, there is a mandatory lead supervisor who understands the aggregate risk profile for the group, facilitates coordination across individual supervisors, ensures that it runs smoothly and has the ability to take decisions when a consensus among supervisors is not forthcoming.

In the following part of the paper, the CRO Forum recommended policies for incorporating diversification effects in solvency regulation. These policies included:

- Policy 1a – Recognition of diversification in required capital calculations.
- Policy 1b – Recognition of risk transfer in required capital calculations.
- Policy 1c – Recognition of capital support in available financial resources assessment.
- Policy 2a – Recognition of diversification in required capital calculations.
- Policy 2b – Recognition of risk transfer in required capital calculations.
- Policy 2c – Recognition of capital support in available financial resources assessment.
- Policy 3 – Risk modeling requirements
- Policy 4 – Supervision

The Way Forward

In the paper the CRO Forum has highlighted the importance of diversifying strategies for risk management in the insurance industry. They have also presented a set of core principles to form the basis of European insurance regulation that incorporates diversification in a consistent manner and a policy framework that promotes sound risk measurement and management practices, in a way that can be implemented and supervised with confidence.

The CRO Forum recognizes that the evolution of the Solvency II project is still at a relatively early stage and there is a wide range of issues that could affect its future evolution. However, the

CRO Forum strongly believes that the Solvency II project represents an important opportunity to build a forward-thinking insurance regulatory system, fostering the most sophisticated risk management practices leading to the strongest and most efficient insurance companies worldwide. Such a system would align regulatory capital requirements with the risk profile of the insurer. Recognition of diversification in a consistent, transparent way, is an important step in this process. The CRO Forum welcomes and encourages an open dialogue on this important topic.

For further information, or for a copy of the CRO Forum studies, please contact:

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