# Collaborative Approaches in Implementation

## Risk Based Capital Regime

ALAM SINGH OBSERVES THAT FOR SUCCESSFUL IMPLEMENTATION OF RISK BASED CAPITAL REGIME, A COLLABORATIVE APPROACH IS VERY ESSENTIAL AS HAS BEEN EVIDENCED BY THE EXPERIENCE OF VARIOUS COUNTRIES THAT HAVE ALREADY BROUGHT IN THESE REFORMS.

Traditionally insurance regulators mandated simple formula based minimal capital standards based on percentage of premium or claims. Due to the varying risk characteristics of the insurers, the regulators in some countries started to debate if this captured the true risk profile of the insurers. Surprisingly, the usual harbinger of financial and regulatory innovations, the USA, was not at the forefront of evaluating this alternative model. Unknown by many, Finland was experimenting with a variation of the risk based capital (RBC) approach as early as the mid-1950's. Canada modernized statutory financial reporting in 1978 by introducing the valuation actuary concept and adopted risk-based minimum capital requirement in 1989. Although some discussions on RBC were happening in the 1970's in the US; prior to the 1980s, not many people in the US discussed capital from the view point of solvency. This changed in the 1980's as insurers such as Baldwin United, Executive Life, First Capital and Mutual Benefit experienced solvency issues.

The National Association of Insurance Commissioners (NAIC) started to seriously evaluate the option of adopting a risk-based approach to measure capital adequacy in the late 1980's. Some state regulators, such as New York, Wisconsin and Minnesota, had undertaken earlier initiatives in pursuing this direction than others in the US. Agencies such as S&P and Moody were also involved by the start of the 1990's. By 1993, a life RBC formula had been finalised and insurers in the US had a new mechanism to calculate their minimum capital requirements based on their risk profiles via a prescribed formula. The P&C formula was finalized in 1994 and a health formula was developed by 1998. A hallmark of the process was enhanced dialogue within the industry; and between the industry and the regulator. The early advocates of RBC clearly acknowledged that it was a minimum standard monitoring tool and not a method for companies to establish "optimal" levels of capital for comfortable business operation. Since RBC was done via a formula, its limitations were frequently debated. Due to the fact that the initial RBC formula in the US was partially a political compromise, it is understandable that it had some shortcomings. However, its credentials as a more progressive mechanism than simpler formula-based minimal capital standards became accepted by the late 1990's as more insurance markets started to evaluate or implement RBC measures and solvency frameworks.

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Now, it is clearly understood that no solvency monitoring mechanism is perfect, and all such efforts should be viewed as continuous and ever evolving. Improved versions of RBC are emerging, as insurance regulators start to learn from markets where the RBC solvency regimes have already been implemented. In addition, new concepts and theories, such as the Economic Capital model (EC) that features risk simulations specific to

each company, are also emerging. These evolutions are the result of experience and enhanced dialogue. Therefore, when India defines a roadmap for implementing an RBC framework, it should take full cognizance of what is happening in other markets. The underlying concepts continue to evolve and the process of determining the most appropriate mechanism for defining capital adequacy is an ongoing process.

As one studies the evolution and history of RBC, it is apparent that this new approach to solvency monitoring significantly increased the amount of collaboration and dialogue between industry and the regulator. Such dialogue is cited as a critical factor for smooth implementation and this may be the single most critical factor in ensuring that the process of implementing RBC delivers the expected results in India. Therefore, it would be in our best interests to learn from the processes that took place in various countries. New best practices in consultation and regulation development are being set continuously, the Quantitative Impact Study (QIS) groups and Chief Risk Officers (CRO) forums formed to discuss and debate the Solvency II implementation in the EU, are such examples. Since the learnings of the collaborative process followed in North America and the EU may not translate well to India due to various factors such as the state of development of financial services and maturity of the regulatory regime, this article will discuss the process as it took place in select Asian markets and detail what the insurers and regulators may wish to focus on, separately or jointly.

## Consultative Route Towards RBC implementation

***Malaysia***

The process of developing the RBC framework began in 2002 in Malaysia. Several working groups were formed, and Bank Negara Malaysia (BNM), the Central Bank of Malaysia, released two concept papers in 2004 and 2005 to the industry written by the working groups. The regulator proactively asked for feedback from the industry stakeholders and experts. Based on the comments received, the framework was developed, finalized and issued by BNM in April 2007.

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The working groups included the RBC committee, responsible for the overall framework as well as several specialist subcommittees. New valuation bases for both life and general insurance were developed. BNM also required the industry to submit various test survey results based on working requirements to gauge and fine-tune the final formula. BNM also ensured that the framework took into consideration the developments on the international front and the various papers released from the International Association of Insurance Supervisors (IAIS), the International Actuarial Association (IAA), Solvency II, and International Accounting Standards Board (IASB).

***Singapore***

The Monetary Authority of Singapore (MAS) announced the RBC concept in a 2001 exposure draft. Work groups consisting of insurance practitioners and representatives from the actuarial and accounting professions were formed to look into various valuation and capital treatment issues. Three discussion papers were issued between July 2001 to December 2002 on the valuation of assets and liabilities, capital requirements for life insurance business, and capital requirements for general insurance business. MAS also engaged insurance companies in carrying out tests on the proposed framework since mid-2002. Careful consideration was given to the feedback received during that consultation phase. Necessary changes were subsequently made to the Insurance (Amendment) Bill.

On 23 August 2004, MAS implemented the new risk-based capital (RBC) framework for insurers in Singapore. Compliance with the framework became a mandatory requirement for all direct insurers with effect from 1 January 2005.

MAS had conducted industry briefings and several rounds of testing to assess the robustness of the new framework. They also conducted visits to the companies to assess their valuation processes and the readiness of their systems to implement the framework. The Authority worked closely with the insurance industry in formulating the proposed RBC framework. The new approach encourages insurance companies in Singapore to manage their financial risk more actively, thus raising overall prudential standards in the industry.

***India: Moving Jointly Towards a RBC Based Regime***

A gradual approach towards implementing an RBC framework would be ideal; as such an approach will enable insurers to be best prepared towards adopting such measures. The regulator, insurers and other industry experts should work closely while developing the framework. To ensure that insurers successfully implement an RBC framework, it is essential that IRDA works closely with the

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senior management of insurance companies. The first step would be to organise training programs and conferences to enhance the senior management's understanding of the implications for their business so they can start planning immediately. Insurers should focus on identifying existing gaps in their risk and capital management plans. Timely planning will reduce implementation costs also as any last minute compliance programs are always very costly. Later IRDA should ask all insurers to clarify their implementation planning, progress made and governance arrangements, including naming the individual responsible for RBC implementation. Also, they should help insurers in the approval process for their internal models. The roles of actuaries will be very critical and IRDA must involve them closely in all discussions. Insurers should have in place sound actuarial reserving practices including best estimates and risk margins. Mandatory actuarial reserving was introduced four years prior to the introduction of the RBC system in Singapore and Australia.

## Steps to be considered by the Regulator

- **Defining Standardized Industry Wide Models:** Valuation of assets and liabilities is the core of any RBC framework. By initially defining a standard formula for valuation and subsequent calculation of risk based capital, there will be consistency in the calculation of Capital Requirements for all insurers. This will serve as a guide for the insurers to develop their own internal models which would be reflective of their individual risk characteristics. However, the validity that can be ascribed to internal models is highly debatable unless they are subject to the Regulator's review. If active industry training is planned to ensure that these models are well developed and if the Regulator can provide quality feedback on the models, then they may achieve the desired reliability. Enhancing the Regulator's capabilities so that they can provide the necessary feedback to industry on internal models can take time and should be started very early in the process. The Regulator will then be in a position to give guidance to help insurers with their preparations in doing their analyses and in developing their own internal models. It must be remembered that the Regulator will need to develop and evaluate models across different lines of business (life, general and health) so the challenge is even bigger.
- **Working Committee:** Working Committees / groups consisting of representatives from the regulatory body (IRDA), insurers, accounting profession (ICAI), actuarial profession (IAI) and other industry experts must be responsible for the time bound development of the standard formula, gauging its effect through impact assessment studies and enabling the insurers to formulate their own internal models. They must regularly report publicly on the progress. If the goal is to have a RBC regime in place within the next 3 - 4 years, then this direction may already be behind schedule. Ideally, discussion papers should have been issued to the industry and feedback should have been collected already. This view is based on the experience of other countries where it has taken 4-5 years from the start of the consultative process to the first full year of RBC reporting and compliance.
- **Impact Assessment Studies:** Quantitative assessment of the proposed Standard Model could be carried out in phases during the policy-making stage to enable insurers to prepare. A RBC policy will involve a number of changes to the way in which insurance companies calculate their regulatory capital. Consequently, insurers will incur costs both in implementing the changes and in maintaining ongoing requirements. Ahead of the implementation it would be prudent to estimate the likely additional costs that insurers will face as a result.
- **Accounting Guidelines:** The Accounting Authorities (ICAI) could be consulted for defining appropriate guidelines for recognizing, recording and reporting of balance sheet items, such that they reflect the level of risk for the insurers. Accounting guidelines for fair value accounting, deciding the market price of assets and actuarial valuation of liabilities are the essential pillars for successful implementation of any RBC framework.
- **Defining Reporting Requirements:** For an effective RBC regime, IRDA may need to re-examine the current reporting procedure in terms of both frequency and disclosure requirements. This should be done in consultation with the industry, so that they know how to organize their systems of governance to achieve those reporting deadlines.
- **Time Lines:** To meet a 4-5 year implementation target, IRDA should soon define the time frame for policy formulation, conducting impact assessment studies, policy implementation and transition from standard model to internal models and

this should be discussed with the insurers to enable them to align their internal process accordingly.

### Steps to be considered by the Insurers

- **Risk Assessment:** Effective risk management and enterprise-wide governance are the cornerstones of a sound RBC system. Insurers should implement a formalized risk management system, based on an evaluation of the whole firm and its risk appetite. Weaknesses in such areas would make insurers susceptible to external trigger events which could cause adverse financial outcomes.
- **Governance Models:** Insurers will need to enhance in-house governance standards and requirements. An effective and permanent internal audit function, which evaluates the internal control system of the firm, is a key element of any Governance Model. The Governance Model should serve two main purposes: it should be conducive for supervisory reporting and public disclosure; and it should enable management of all the risks inherent in the business by addressing deficiencies such as poor information flows, weak risk management process and procedures, as well as behaviour. Insurers may require regulatory feedback as they revise their corporate governance, risk management and regulatory compliance for RBC. This can be demanding for a regulator so additional capacity needs to be developed in advance.
- **Models, Data and Analysis:** Data will be needed from operational, transactional and financial sources for various reasons. The unavailability of appropriate risk data for both management and modeling purposes may be a cause for concern. Data sourcing, management and cleaning abilities need to be well developed. It will be useful for many purposes including developing benchmarks for operational areas and models. Industry benchmarks need to be created through collaborative approaches so that insurers can appropriately quantify if they are below or above industry levels.

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Insurers may wish to use other models in addition to the standard regulatory model. These models should be subjected to stress testing and continuity testing, while model validation and calibration may also be required. Functional teams involving professionals with actuarial, risk management, finance and IT skills would be required for this purpose.

### The road ahead

To ensure optimal utilization of capital under an RBC regime, insurers would need to re-engineer their existing systems, processes and controls. This has implications for the organizational structure and business processes of insurance companies. Insurers would have to align their business and IT strategies and be open to paradigm shifts in the way they do business. For this they would need to create awareness within the organization and ensure full understanding of the implications at all levels of their new Governance Model. Starting early will help reduce costs and avoid any last-minute panic expenses. Insurers will require early dialogue with the regulator to understand how to embed the new risk and capital management framework into the strategic and operational management of the business. Clear but flexible directions from the regulators in terms of appropriate risk management systems, business process re-engineering and data quality and validation requirements, will enable insurers to have a smooth transition to the new risk based capital regime. Progress along the road ahead can only be made on the basis of mutual discussion and recurring parleys between the regulator and the insurer. The process of consultation in both Singapore and Malaysia was very interactive, transparent and time bound. Discussion papers were developed in a public and interactive process and then posted online and regularly presented in open forums. Feedback was sought proactively and all feedback was posted online. In Singapore, the regulator gave detailed online responses to specific points in the feedback. This level of engagement ensured that all stakeholders and experts were fully engaged at all stages and it presented a very healthy process. Once adopted for a specific goal, such processes then generally set a benchmark for all future interaction and efforts to emulate them in India would strengthen the industry-regulator relationship. This is particularly necessary since formulas will need to change over time to accommodate justifiable criticism and changes in the environment. Thus institutionalized mechanisms of dialogue and review are needed not only to incorporate lessons learned, but, also to adapt to scenarios that may emerge in the future.

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