


What is Integrated Risk and Performance Management:

Economic Theory Perspective

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Integrated Risk and Performance Management (IRPM)

What is it?


"Integrated Risk and Performance Management" Defined: Utilizing the Company's ERM and ECM processes within the Company strategic, tactical, and operational management processes in order to achieve increased returns and more efficient use of capital

Observations:

- It's a management and governance process
- It's a vision to which an effective ERM and ECM process is a prerequisite
- If design of ERM and ECM processes don't begin with IRPM process as an objective or vision, it is unlikely they can be utilized when built to execute an effective IRPM process
- To effectively operate an IRPM process, it needs to be embedded into critical management processes, such as, (and more):
 - Strategic planning
 - Operational planning
 - Performance monitoring
 - Critical decisions, such as reinsurance purchases
 - Incentive programs
- Buy-in is required throughout the organization for IRPM to operate effectively
- The demands this would place on the economic capital modeling process would exceed the ability of most of those operating today:
 - Such as systematic evaluation of a wide range of possible actions
 - Quality and stability of the model

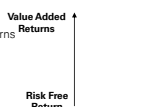
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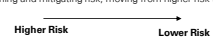
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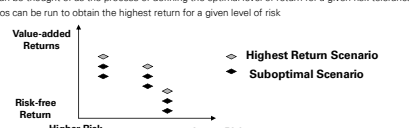


Moving to More Efficient Capital Usage – Building the Efficient Frontier

- Business management and planning is often focused on seeking higher returns


- And ERM often is focused on defining and mitigating risk, moving from higher risk to lower risk


- IRPM can be thought of as the process of defining the optimal level of return for a given risk tolerance
- Scenarios can be run to obtain the highest return for a given level of risk



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Building the Efficient Frontier

- Ran "directional" or "notional" scenarios to understand marginal movements
 - Usually not within the business constraints, so not part of efficient frontier
 - Examples, write same volume of premium but all HO, or all in one state
- Considered the main planning variables and business constraints:
 - Growth by line and state restricted to 10% overall, 35% up or down by line
 - Use of Catastrophe Reinsurance depending on the scenario, high use, medium use, no use
 - Reinsurance priced at approximately 35% loss ratio to catastrophe reinsurer
- Ran scenarios based on hypothesized efficient frontier
 - Evaluated results, designed additional scenarios, ran these scenarios and repeated the process

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Some Initial Runs: "No Growth" (no change in the portfolio) with Reinsurance Options

Return is the ratio of net income to booked surplus

Risk is measured by ratio of Economic Capital to booked Surplus

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Adding Flat Growth

Proportional growth across the portfolio changes the frontier only slightly

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