Actuarial Risk Management
Global Actuarial Consultancy

Strategies & Risk Solutions for Executives

To Our Subscribers

We want to thank our new subscribers and welcome everyone to the sixth issue of the ARM quarterly newsletter! During the past 3 months, our list of subscribers has reached a total of 300! We hope that you all find this publication valuable. With a few short articles meant to provide unique insights, we present ideas about how to address specific problems and introduce potential risks that may not yet be on your radar.

The primary authors are Dave Ingram and Max Rudolph. We have been active participants in the risk management, actuarial, investment and insurance spaces for many years.

Subscribers are encouraged to suggest topics for articles and ask questions of the authors during our follow-up webinars and podcasts. Ever cognizant of regulatory requirements, leveraging them to add value to your company in practical ways, will be our focus.

Published by Actuarial Risk Management (ARM), the Strategic and Risk Solutions for Executives (SRSE) subscription is free to all.

A free webcast is also available and our podcasts covering these topics is called Crossing Thin Ice. If you would like to further engage the authors as consultants or for continuing education purposes, please reach out. More info can be found throughout this newsletter. We hope to help you find a solution that meets your needs!

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We hope you will join us on our journey!

Sign-up to receive future newsletters automatically at https://www.surveymonkey.com/r/AMRSRSE

The content of this newsletter is meant to be educational and thought provoking. Nothing in it should be construed to be investment advice.

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Concentration Risk

Strategic concentration risk There are so many ways to concentrate. Strategic concentration is particularly tempting.

•When things are going well, it makes sense to do more of whatever it is that is working best. That increases concentration.

•Once we learn how to do something right, it makes sense to do more. That increases concentration.

•One supplier is almost always the cheapest, fastest and best quality. So we give them more business. That increases concentration.

•There is often one product with better margins than the rest and it sells better too. So we plan to increase our capacity to make that product. That increases concentration.

•We have access to a new asset class that generates additional returns so add to our exposure. That increases concentration.

•Our best distributor runs rings around the rest. We are working on giving her a larger territory. That increases concentration.

The alternative, the diversifying alternative, just doesn't sound so smart.

•Hold back when things are going well.

•Do more of the things that you haven't quite mastered.

•Buy from the second and third best suppliers.

•Keep up capacity for the lower margin lower selling products.

•Restrict your best distributor from selling too much.

•Limiting exposure to specific products or asset classes.

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Concentration Risk (cont'd)

Why is concentration risk so deadly? The answer to that is pretty simple arithmetic. If your conglomerate amounts to four similar sized separate divisions that do not interact so much, it is quite possible that if one of those businesses fails, the conglomerate will be able to continue operating – wounded but fully able to operate the other three divisions.

But if another venture has just one highly profitable, highly successful business, then it will either live or die with that one business.

In insurance, we see this concentration risk all of the time. If you are an insurer that only writes business throughout the Pacific islands in the 1700s, but you find that your best salesperson is on Easter Island and your highest margin product is business interruption insurance for the carvers of the massive Moai statues. So you do more and more business with your best salesperson selling your best product, until you are essentially writing one product in one location. And then the last tree is used (or rats eat the roots). All of your customers make claims at once. You thought that you were diversified because you had 300 separate customers. But those 300 customers all acted like just one when the trees were gone.

Are you finding these articles thought provoking? Did you know that your company can schedule time with the authors? You drive the agenda or Max and Dave can develop specific continuing education topics for your team.

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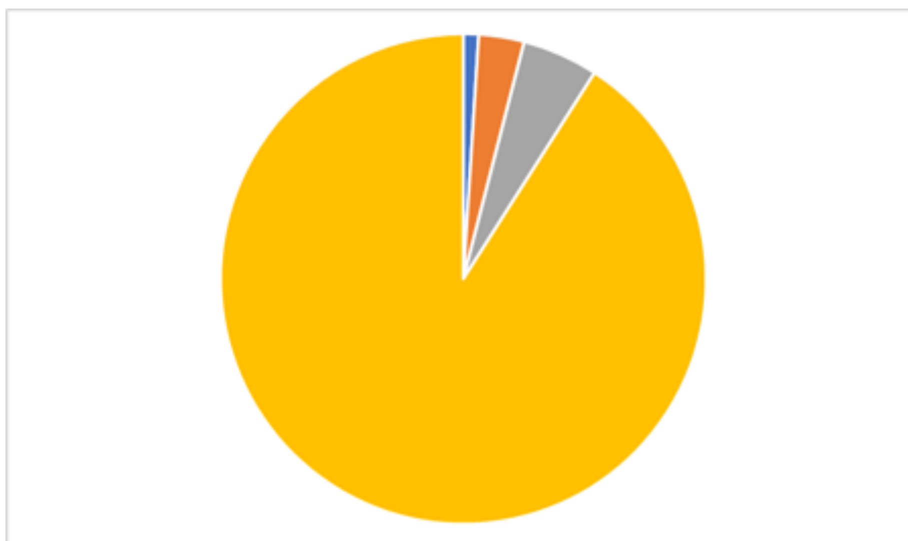
Concentration Risk (cont’d)

Dealing with concentration risk **When a company becomes insolvent, it generally is due to a concentrated position gone bad. This could be due to bad bets on a specific asset class, such as exposure to residential home mortgages leading up to the great financial crisis, mispriced liabilities or reliance on a single distributor who died or left the firm to join a competitor. Some of these concentrated risks can be mitigated, but that typically inflicts a cost to offset the reduced volatility along with often creating counterparty risk.**

How can these risks be anticipated and managed? Most risks can be identified in advance, but which ones threaten solvency? It’s not easy. Bankers in early 2023 all knew that their customers could take their money with no notice, but their stress scenarios came nowhere near 100% withdrawals. If you have a



concentrated bet in your business model you should test what happens if everyone acts in a way that mimics historical worst-case scenarios. Narrative scenarios help by considering assumptions that move in sync with the stressed variable. An example would be a floating rate bond. As interest rates rise, the default rate would also be expected to rise as struggling companies who could pay the interest when rates were low are more likely to default in a higher interest rate environment.

Modelers often use rules of thumb to simplify their models, in some cases holding dynamic assumptions steady rather than rebuilding them periodically from scratch using first principles. When the environment is unstable this can be very dangerous. Many times, the simplest answer is correct – diversify into risks you understand that are not highly correlated with existing exposures! Let’s look at a few concentrated risks and how a stress test might identify other mitigating actions.

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Concentration Risk (cont'd)

Asset classes

Credit risk – bonds and loans rated below investment grade tend to be cyclical, with stable periods of strong returns offset by occasional surges of defaults. Make sure an entire cycle is included when determining assumptions for defaults and recovery rates. A deterministic scenario with immediate defaults will stress the block better than a stochastic scenario set and tell a concise story. Assume the worst default rate in the last cycle for next year. Did you survive?

Market risk (equities) – the key here is to test beyond the level required by the regulator. If the required scenario is 30%, then test 50%. In the US we have seen these types of drops several times in the past century. Do your hedges extend beyond drawdowns required by your regulator?

Collateralized assets – when investors reach for yield, investment bankers always seem ready with products that roll together many high-risk assets that, when combined, magically are modeled as low risk bonds. A stress test that identifies the underlying assets with their characteristics is a good place to start, especially if the investor owns the entire pool. Does the aggregated risk make sense?

The Crossing Thin Ice podcast is now available to download from your favored provider.
Please like, share and subscribe.

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Concentration Risk (cont'd)

Liabilities

The insurance industry in the past has offered options to policy holders without pricing for them, assuming they won't be exercised. The Silicon Valley Bank experience has provided the best type of lesson – one learned by others. In the insurance industry, before a product with guarantees is sold it should be stress tested and compared with the firm's risk appetite statement. Dynamic lapse assumptions should also be tested as they have outsized importance for DAC amortization under GAAP accounting. Have you mitigated the risk of policy holder selection?

Geographic concentration – writing business in one state or one sector creates unanticipated risks. Utilizing a reinsurer or creating a pool with companies doing business elsewhere can help, but be sure due diligence is performed. A poorly priced product can destroy the income statement of other firms in the pool. Be aware of the counterparty risk that has been added. A regional insurer that invests in the same area should be very aware of the overlap in this risk (e.g., one firm held the mortgage for one of the World Trade Center buildings and wrote group life for a major tenant).

Distribution – when a large percentage of business is written through a single person or group that could change affiliation it is necessary to look at incentives. Some insurers will set up profit sharing arrangements or increase retention bonuses. Most companies, when they are starting out, suffer from this risk. Diversifying through recruitment or a merger can help and will simultaneously offset overhead expenses.

Assets and Liabilities

There are three forms of leverage. Borrowing is one, naked derivative positions another, and Asset-Liability mismatch is the third and most dangerous for insurers. Any bet on the future direction of interest rates an insurer has made will be magnified. Boards should spend time understanding this risk so management incentives are aligned, with risk limits and escalating communication for breaches.

Conclusion

Concentrated risks should be identified and communicated. It is easy during times of stability to stop looking for anomalies, but that is a mistake. These discoveries should be discussed at the board level as risk appetite is being set. Stress testing using deterministic scenarios can identify which assumptions matter for solvency but should be reviewed periodically and built from scratch using first principles.

Sign up for the associated June 22 webinar

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Actuarial Risk Management

Strategic Risk Focus for Insurance Company Board Members and Executives

Two-part training program on May 24 and June 7 at 2 pm ET leveraging CGAD requirements to demonstrate the importance of risk management processes and the most common current concerns. Register for free: Part 1 and Part 2

Additionally for a fee, we offer a private session customizing Part 1 and/or Part 2 to incorporate specific information that reflects your company's unique ERM program, key risks and Board role for just your Board members and Executives.

Part 1 (May 24)

ERM & Board Role

- General introduction designed for new board members and executives and as a refresher for current board members and executives who have been less involved in ERM in the past
- Primary components of Insurer ERM Program
- Fundamental Board roles in ERM

Part 2 (June 7)

Current Focus of Insurer ERM Programs

- Provides broad perspective on risks most concerning to over 200 insurance executives for 2023 (identified in ARM's Dangerous Risks Survey) and the level of ERM practice by over 60 insurers (from ARM's ERM Practices Study)
- Essential background for board members to provide meaningful oversight to management in the area of ERM

Free registration for Part 2 here

While Enterprise Risk Management is a continuous process, Own Risk Solvency Assessment (ORSA) and NAIC Corporate Governance Annual Disclosure (CGAD) require insurance company leaders to annually report on their risk management program including direct Board involvement.

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ARM is the leading next generation actuarial and consulting firm and since 2006 continues to work with many Top 30 accounting firms, including BDO USA, LLP and members of the global BDO network.

Insurance companies continue to trust and rely on ARM. You can too. It's that simple.

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Strategies & Risk Solutions for Executives

Now providing three ways for you to get insights, strategies and solutions from ARM consultants to help resolve your risk issues.

Newsletter

- 3 to 6 articles quarterly
- Written by Dave Ingram, Max Rudolph and other ARM consultants focusing on risks faced by insurers and risk management strategies
- Available on the ARM website

Webcast

- One-hour live webcast once each quarter following the newsletter publication
- Webcast includes brief presentations, interviews with authors and live Q&A with your questions answered regarding the newsletter topics

Podcasts

- Two per month
- Delivered by Dave Ingram & Max Rudolph
- Presenting material from the newsletters and webcasts in a totally audio format.
- Available wherever you usually download podcasts

* No charge to subscriptions to all three services

While insurers have been challenging by low interest rates and the pandemic, the next few years will see a radically changing environment for insurers. We will be using this provocative platform to identify emerging risks and delve into what we see as the drivers of future success.

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