



April 2023 Newsletter

Bruce & Bruce provides a wide range of actuarial and consulting services to help organizations reach their financial goals and risk objectives through the development of customized and cost-effective solutions.

Trending Topics in the Insurance Industry

We Cannot Stress Enough the Importance of Stress Testing

The recent failures of Silicon Valley Bank and Signature Bank clarify the need for policymakers to carefully consider the impact of their decisions on the financial system and the broader economy. You may think we are alluding to the Fed's raising of the federal funds rate by nearly 500 basis points since March 2022. However, another key contributor to this debacle was the relief given to small and medium-sized banks in that they would not have to undergo the same extensive testing that larger banks do under the Dodd-Frank Act.

Bruce & Bruce believes it is critical for insurance companies **of all sizes** to perform extensive stress and scenario testing. As such, an organization can better identify major risk exposures and determine capital adequacy under various economic scenarios.

Some benefits of stress and scenario testing are as follows:

- Provides insight into the impact of low frequency, high severity events on your company's financial position and operations. This can lead to meaningful change in, or reinforce comfort with, your organization's current risk appetite and tolerances.
- Having results from a multitude of stress and economic scenarios leads to better risk-based decision-making processes. For example, determining how much capital to hold or which lines of business are core vs. non-core.
- Stress testing is a risk management tool that, when properly utilized, can greatly enhance a company's ERM framework and assist in detecting emerging risks.
- Additionally, these tests lead to more proactive risk identification and action plans. Planning ahead helps one think through complex issues, anticipate unintended consequences, and reduce/eliminate emotional responses, which often include bias.
- It is clear (from what happened recently in the banking sector) that detailed stress testing as part of an effective ERM program enables companies to act proactively instead of being reactive.

Trending Topics in the Insurance Industry (continued)

We Cannot Stress Enough the Importance of Stress Testing (continued)

Rating agencies and regulators are focused on ERM in their rating and examination processes. These rating agencies have their own models to assess capital adequacy but companies themselves should not rely solely on these models. This is why the Own Risk and Solvency Assessment (ORSA) process was developed – to represent an insurer's "own" assessment of its current and future risks.

ORSA went into effect in January 2015. Under the Model Act, large and medium-sized U.S. insurers and insurance groups are required to regularly perform an ORSA and file a confidential ORSA Summary Report. Bruce and Bruce believes that all insurers, regardless of size, can benefit from an ORSA-type process. This process should be a component of a developed ERM framework. There is no standard way of conducting this process/assessment – the regulators leave it to each insurer to decide. This is where an actuarial consultant can help. Bruce and Bruce believes the following items should be considered:

- Focus on the purpose, which is to understand your organization's risks, improve your ERM framework, and, when necessary, recalibrate your exposure to risk. This requires you to tailor the process to your specific business, that is, what is appropriate for your company's size, scale, and complexity.
- Engage a wide range of stakeholders throughout the process, including the management team and the board. Create an open and transparent process and give an honest perspective. When communicating with regulators and rating agencies, be sure not to exaggerate how well you are managing risks.
- Describe the organization's top risks in specific terms, supplemented with explicit risk metrics, tolerances, and limits. Risk management is a discipline that requires a good deal of expertise to address adequately.
- Develop a risk appetite statement that clearly states the appropriate amount of capital the business owns or should own. And as mentioned earlier, incorporate stress and scenario testing as part of organizational capital adequacy processes. Beyond the risk of insufficient capital during times of stress, consider other forms of risk, including reputational, liquidity, and operational. The ERM team is responsible for the aggregation of all risks as well as the interactions between risks.
- Describe specific areas where your organization needs to improve its ERM process. Risk management is a never-ending task requiring continual evolution and improvement. New risks continually arise, and old ones morph in nature, size, and impact.
- Demonstrate a competent understanding of your organization's risks and ERM challenges. Remember that regulators and rating agencies are not expecting perfection; it is an iterative process.
- Finally, build an effective reporting process around risk management. Consider investing in technology that enables high-level reporting and allows stakeholders to drill down into necessary details by product line, business unit and risk.

For more detailed information, check out the NAIC ORSA Guidance Manual on the [NAIC website](#)

Andrew Edelsberg (aedelsberg@bruceandbruce.com) is credited with writing the above article. Feel free to reach out to Andrew if you have any questions or would like to learn more.

Trending Topics in the Insurance Industry (continued)

Benefits of Asset Segregation

The rapid change in the yield curve in 2022 proved to many financial institutions, yet again, the effectiveness of an ALM practice as a tool to manage risks. At the end of 2021, the two- and ten-year treasury rates were 0.73% and 1.52%, respectively, compared to year-end 2022 where rates increased to 4.41% and 3.88%, respectively. With most of the players in the financial business field piling up unrealized losses from the drop in the value of the assets, an ALM practice would have minimized the actual losses charged against the surplus. We observed the Market Value (MV) to Book Value (BV) drop roughly 15%-25%, with the MV being materially below the BV.

Silicon Valley Bank is a good example of when companies could have benefited from a more robust ALM framework and ERM culture. Regular stress testing and, most importantly, management actions on the results of the tests would have helped prepare for the likely shift in the market from a low to a high-rate environment in one year.

Switching our focus from banks to insurance companies, a lot of small to medium size insurance companies continue to apply a total portfolio approach to manage their lines of business. The total portfolio approach may be sufficient if the following checks and balances are met:

1. Each line of business has similar risk characteristics,
2. The company is small, and
3. It aligns with the company strategy.

The above are not the only checks, but in our view, they are the most important ones.

On a total portfolio basis, a company should already have some ALM embedded in the asset portfolio. It is also understandable that one of the primary mandates of any company is to manage its expenses, especially if the company does not have economies of scale that it can rely on. If you already have some level of ALM embedded in your asset portfolio and your CFT looks good, you may ask yourself, why would we move to segregation of assets between lines of business and potentially increase our expenses? Those investment managers and actuaries are expensive!

Below are a few scenarios that demonstrate when a company can benefit from asset segregation.

1. Improved Pricing.

Many insurance providers offer annuity and life products. Those two lines of business may have different liability cashflow characteristics. Annuities are sensitive to interest rate changes while life insurance may not be as interest rate sensitive. For example, MYGA's and Whole Life products. Furthermore, depending on the company's target market, the duration of liabilities of these two lines of business are very different. Segregating assets would allow for better pricing by minimizing the cost of capital (due to managing assets and liabilities cashflows more closely).

2. Redundant Reserves.

Improvement in the management of asset and liability cashflows may result in releasing a portion of existing Asset Adequacy reserves. Asset Adequacy reserves are established to cover the shortfall of asset cashflows. In other words, a scenario when assets do not generate enough cashflow to cover liabilities at any point in time. As a result, a company may be forced to sell an asset during an adverse economic environment (i.e., generating losses and charges against surplus). Segregating assets effectively should reduce the number of projected shortfalls, therefore, a portion or even a full asset adequacy reserve may become redundant and hence can be released.

Trending Topics in the Insurance Industry (continued)

Benefits of Asset Segregation (continued)

3. Company Strategy.

Segregating assets may improve the crediting strategy on annuities. If rates are sharply rising, and the total asset portfolio has a longer duration and a substantially lower rate than the new money rate, then by segregating assets, a company may achieve new money yield on the segregated portfolio much faster. This will allow for a faster response to market fluctuations without significantly jeopardizing the profit spread.

In conclusion, the segregation of assets by line of business has its pros and cons. Depending on the company structure, segregation may improve a company's balance sheet position, advance risk management, and eliminate some roadblocks in pursuing business ambitions. The cons are mainly in the form of increased expenses (investment and actuarial expense).

Bruce and Bruce strongly recommends discussing with your actuaries, investment managers and accounting professionals whether or not asset segmentation would benefit your company.

Vladimir Krepiy (vkrepkiy@bruceandbruce.com) is credited with writing the above article. Feel free to reach out to Vlad if you have any questions or would like to learn more.

Navigating Higher Interest Rates

Since 2022, the sharp increase in interest rates has brought improved savings opportunities for Americans and higher-yielding investment opportunities for insurance companies. The real interest rate is at levels we have not seen for 15 years. It wasn't long ago that annuity writers struggled with the challenge of attracting new business when rates had been extremely low for so long. Now that insurers can offer more attractive rates, they are facing new challenges around managing their in-force annuity business. This article addresses some of those challenges and some steps to consider taking in response to them.

Because of the higher rates, market values of many insurer's portfolios are now lower than book values. At the same time, their current policyholders can find better rates in the market, either from other annuity writers, or from banks or through direct investments in fixed income. This means increased risk of surrenders, and the real possibility of selling assets at a loss position to cover outflows. At the same time, new business sales may have fallen due to the other savings options available. So, a key question is: how does an insurer preserve in-force business in this environment?

Below are some steps to take and levers available when navigating this rate environment.

A key first step is to analyze your annuity block's recent surrender experience and try to gauge what may happen if nothing is done. Some key drivers include credited rates, guarantee rates, surrender charges, distribution channels, and relationships/affiliations of policyholders. It's also critical to estimate exposure in rising scenarios, if you believe there's a good chance they may transpire, since at some point generous guarantee rates may not mean much when compared to sizable yield pickups. For the first time in more than 10 years, annuity writers have fresh data on surrenders in a rising rate environment.

Among conservation moves, increasing rates on in-force business is the most obvious. While this may lower spreads, there's often an increase level where the spread reduction is preferable to losses from surrenders. A key consideration here is what the portfolio will be earning, and what level of increase is supportable.

Related to portfolios, segmentation of portfolios may be an option. Selecting portfolios where assets better match the products they back, such as annuities or traditional life, may result in a portfolio that has higher yields or lower potential losses behind the annuity block, and would support both higher credited rates and mitigate losses if there's a ramp up in surrenders.

Trending Topics in the Insurance Industry (continued)

Navigating Higher Interest Rates (continued)

Reinvesting some of the portfolio in higher yielding assets, if done regularly, may improve portfolio yields over time. This may include selling off some currently held assets to purchase higher yielding assets.

New business can also impact this situation. Bringing in new money may allow you to take advantage of investment opportunities to enhance the overall portfolio yield.

Finally, there may be reinsurance opportunities out there, and depending on the structure, they may result in lower risk and an increase to surplus.

Every annuity writer is in a unique situation, and the opportunities, risks, and solutions have to be evaluated on an individual basis.

If you would like to discuss any of the options addressed above, please reach out to Bruce and Bruce.

Robert Dennison (rdennison@bruceandbruce.com) is credited with writing the above article. Feel free to reach out to Robert if you have any questions or would like to learn more.

Trending Topics in the Retirement Plan Space

PBGC Premiums – Cost Savings Case Study

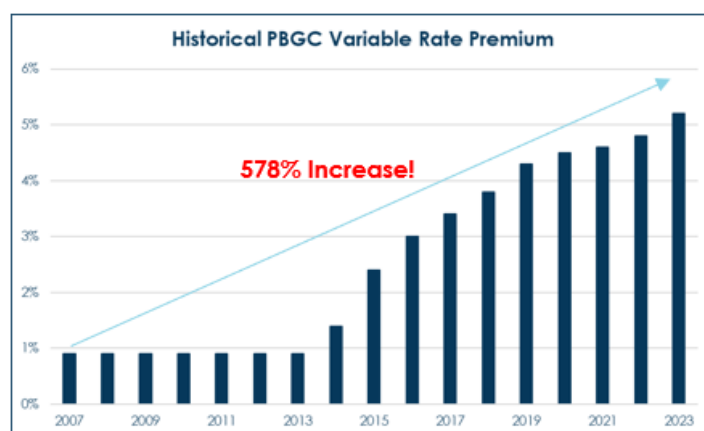
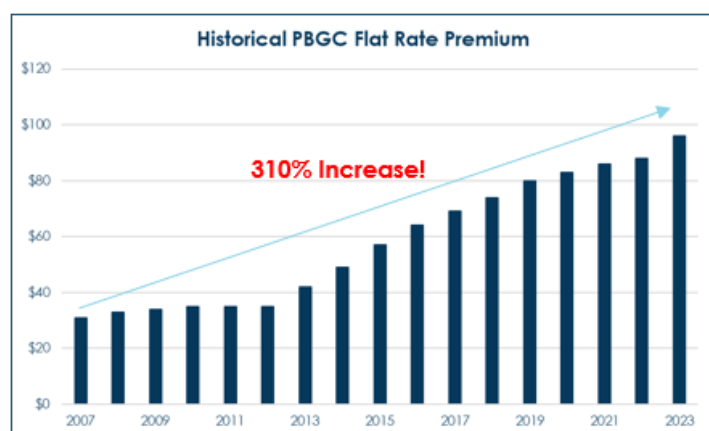
If you're at all familiar with defined benefit pension plans, I guarantee you've heard of the Pension Benefit Guarantee Corporation (or PBGC).

The PBGC is a federal insurance program, like the FDIC is for banks, but the PBGC provides insurance to defined benefit pension plans. If a company were to go bankrupt, the PBGC steps in to make sure participants' pension benefits can be paid (up to a certain limit).

Almost all defined benefit pension plans are required to be enrolled in the PBGC insurance programs. There are two annual premiums required of the PBGC insurance program, a per-participant premium, called the Flat Rate Premium, which is \$96 per participant (in 2023) and a "funded status premium", called the Variable Rate Premium, which is a 5.2% charge (in 2023) on any unfunded liability.

These annual premiums are typically the largest administrative expense for defined benefit pension plans. Given this, retirement plan actuaries are constantly looking for ways to reduce these premiums. Additionally, these premiums are usually a sunk cost as most companies will not utilize the PBGC insurance program.

As shown in the charts below, over the past 16+ years, these premiums have increased dramatically. Companies need to be aware of these changes and take action to reduce these costs.



Trending Topics in the Retirement Plan Space (continued)

PBGC Premiums – Cost Savings Case Study (continued)

Many companies do not know that the PBGC has two different interest rate methods for measuring the PBGC liability when determining the Variable Rate Premium, the Standard Method and the Alternative Method. The PBGC allows companies to switch methods once every five years. Keep in mind the higher the interest rate assumption, the lower the PBGC liability.

The Standard Method¹ makes use of spot segment rates. Below are the interest rates in effect for 2023 and 2022. You can see the impact from the recent rise in interest rates.

- 2023: 4.84% (for years 0 – 5) / 5.15% (for years 5 – 20) / 4.85% (for years 20+)
- 2022: 1.16% (for years 0 – 5) / 2.72% (for years 5 – 20) / 3.10% (for years 20+)

The Alternative Method¹ makes use of a 24-month average of the spot segment rates. Below are the interest rates in effect for 2023 and 2022. You can again see how the 24-month average has changed from the recent rise in interest rates.

- 2023: 2.13% (for years 0 – 5) / 3.62% (for years 5 – 20) / 3.93% (for years 20+)
- 2022: 0.88% (for years 0 – 5) / 2.61% (for years 5 – 20) / 3.27% (for years 20+)

Over the recent years, most defined benefit pension plans have been following the Alternative Method as this method has been producing the lowest PBGC liability (and helps protect from drastic changes in interest rates given the 24-month average of interest rates).

One of Bruce & Bruce's clients was following the Alternative Method and was eligible to switch interest rate methods. The initial 2023 PBGC funded status, following the Alternative Method, was \$800,000 underfunded, which resulted in an initial Variable Rate Premium of \$41,600 (\$800,000 X 5.2%).

By switching to the Standard Method, the pension plan became overfunded on a PBGC basis, and the Variable Rate Premium was reduced to \$0 (thus a \$41,600 savings!!).

In summary, if you have a defined benefit pension plan, you should be looking at the Variable Rate Premium under both interest rate methods every year to make sure you are aware of any cost savings opportunities.

Other PBGC Premium Reduction Strategies:

The only way to reduce the PBGC Flat Rate Premium is to reduce the number of participants covered by the defined benefit pension plan. Many companies have reduced the number of participants by offering a lump sum to participants (either through a temporary election window or adding it as a permanent plan feature). Many companies have also purchased an annuity contract (transferring the liability from the pension plan to the insurance company) for plan participants. Given the recent rise in interest rates, both lump payments and the cost to purchase an annuity contract have decreased.

The only other way (other than changing the interest rate method discussed above) to reduce the PBGC Variable Rate Premium is to improve the funded status of the pension plan. This can be accomplished by contributing additional funds to the pension plan. Additional funds can come from company assets, or some companies have borrowed money (when interest rates were low) and contributed it to the pension plan.

Reach out to Bruce & Bruce today to find out more about PBGC Premiums and other cost savings ideas!

Jonathan Rhoda (jrhoda@bruceandbruce.com) is credited with writing the above article. Feel free to reach out to Jonathan if you have any questions or would like to learn more.

¹Interest rates shown are for calendar plan years.

Bruce & Bruce Employee Highlight



Angelo Calcagno

Data Analyst, Treasurer

Angelo has been with Bruce & Bruce for 4 years as a Data Analyst and Treasurer. He has a wide variety of duties at Bruce & Bruce, but he is primarily responsible for process automation, maintaining databases, cleaning data, and managing Bruce & Bruce's finances.

Angelo graduated from the University of Illinois Chicago (UIC) where he earned a Bachelor of Science in Business Management. He lives locally in the suburbs of Chicago. In his free time, Angelo enjoys camping and hiking with friends. Given Illinois is known for its flat lands and plains, he enjoys traveling to locations with diverse terrain. The picture at the top of the newsletter was taken by Angelo at Mount Rainier National Park.

Reach out to Angelo (acalcagno@bruceandbruce.com) if you have any questions!

Where you can find Bruce & Bruce:

- SOA ReFocus Conference (March 2023)
- AM Best Review & Preview (March 2023)
- LIC Webinar Presentation – Optimizing Balance Sheet Risk & Fostering Growth (April 2023)
- AQS Symposium (April 2023)
- LIC ERM Committee Meeting (May 2023)
- AFA Spring Symposium (May 2023)
- Fraternal Society of Greater Pittsburgh (May 2023)

About Bruce & Bruce

Bruce & Bruce has been providing value-added actuarial services for life and health companies since 1929. We are experts in insurance products and retirement plans and provide guidance in these areas to help foster the success and growth of your business. Our consulting services include, but are not limited to the following: Actuarial, Marketing, Life Insurance and Annuity Product Development, Reserve Calculations, Compliance, Financial Reporting, Rating Agency, Strategic Advisory, and Retirement Plan Solutions.

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