

Pension Risk Transfer

Insights from an institutional risk manager about how to successfully de-risk and transfer pension obligations

Massachusetts Mutual Life Insurance Co. (MassMutual)
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The Essence of Risk Management

Successful risk management underpins much of what mankind has accomplished in the past millennium. Most of mankind's greatest exploits, from Apollo 11 landing on the moon and Magellan's circumnavigation of the globe to discovery of disease-eradicating vaccines and the harnessing of electricity to power our increasingly comfortable lifestyles, demanded that people take and manage calculated risks. Without risk, there is no advancement.

Successful management of calculated risks is essential to our daily lives as well, whether we're driving to the store, deciding to take a new job or even planning for retirement. There are inherent risks in nearly everything we do that demand our attention and energy.

The ability to successfully manage risks is also essential to the stewardship of defined benefit (DB) pension plans. A DB plan is a commitment with promises that need to be kept for decades. Pension managers must make decisions about the investment of millions and even billions of dollars with the knowledge that the money will be counted on to provide security for retirees 10, 20 even 50 years into the future.

Achieving such security demands that pension managers navigate a number of risks, including the increasing longevity of pension beneficiaries, the specific benefits available to plan participants, how a specific plan's assets are allocated among different investments as well as the quality of those investments, and general economic conditions, to name a few considerations.

As employers that sponsor DB plans face fast-changing economic and financial realities, they are increasingly looking for new and better ways to manage long-term pension risks and obligations. With the rise of equity markets and the overwhelming popularity of 401(k)s and other defined contribution plans as the retirement plan of choice amongst America's employers, firms are beginning to look for alternatives to managing DB plans.

One increasingly popular method for managing pension risks is the transfer of pension liabilities to professional risk managers such as life insurance companies. Pension risk transfer (PRT) has become more popular during the past few years as companies strive to reduce their financial risks, improve their bottom lines, and focus more on managing their business enterprises.

But not all DB plans are created equal.

Pension managers, in assessing whether a pension is a good candidate for a pension risk transfer, need to evaluate several criteria. It's particularly helpful to understand how insurers evaluate the relative risks of specific pensions and determine the relative costs for assuming its obligations.



- Navigating risks
- · Fast-changing economic realities
- Insider's insights

Risk Transfer and Pensions

A long-term view is especially important for sponsors of DB plans when managing DB risks and liabilities. While PRT can be a highly effective tactic for plan sponsors to reduce risk and shift liabilities off their books, it's possible to increase pension costs and risks if a PRT is not executed with long-term goals in mind.

The relative health of a company's pension funding ratio is an important starting point for any PRT evaluation but other factors can play a big part as well. Sponsors must weigh several other considerations, including the quality of their assets, the makeup of their employee and retiree populations, the quality of their participant data, and longer-term goals before pursuing a PRT. The same considerations can be applied for plan sponsors that want to maintain their pension commitments and continue managing them for the foreseeable future.

Massachusetts Mutual Life Insurance Co. (MassMutual), through a discussion of these issues, seeks to provide an "inside" view of a successful PRT through the eyes of a professional risk manager. Understanding how life insurers view and evaluate different risks, manage risks and ultimately decide whether a specific risk is worth undertaking can be helpful for employers who are considering a PRT or other options in managing their pension obligations.

With longer life spans and extended years in retirement, pension obligations are extending as well. Management of pension risks is inherently a long-term proposition and best undertaken by professionals, who routinely evaluate, price, manage and meet promises that need to be kept for decades. With an eye towards managing mortality risks that often stretch a half century or more, life insurers are best positioned to manage long-term obligations such as pension payments.

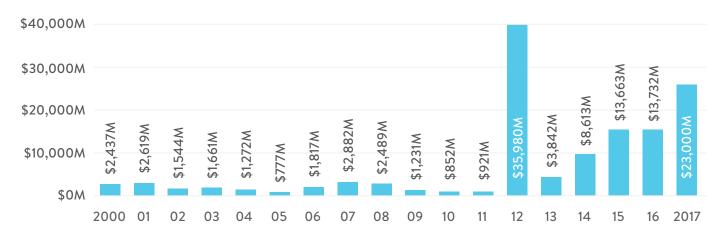


The PRT Market is Growing Rapidly

The PRT market has been growing steadily, especially in recent years as economic and regulatory issues have converged, prompting plan sponsors to reconsider their risk management strategies. Many have concluded that the stewardship of pension assets is better handled not by human resource or finance professionals but by life insurers with deeper resources and skills to focus on the management of long-term risks.

Sales of single premium PRT product sales in the United States hit \$23 billion in 2017, up from \$13.7 billion in 2016, a 68 percent increase, according to a survey of sales by the LIMRA Secure Retirement Institute.¹ PRT sales in 2017 marked the second-largest annual total on record, ranking only behind the \$36 billion in deals reported in 2012, and the growth has continued unabated in 2018 as more employers have moved to shift risk off their balance sheets.

Single-premium pension buyout sales, 2000-17





PRT Tailwinds

- Rising sales
- PBGC premiums
- Improving funding ratios
- Tax opportunity
- · Increasing volatility

Rising Expectations

PRT sales are once again moving at a brisk pace in 2018 due to a confluence of economic, regulatory and other factors. The 10-year bull market helped improve the health of pension funding ratios.² The cooling off of the market and recent volatility has prompted some pension sponsors to secure their gains and leverage improved pension funding ratios to explore the feasibility of a PRT to remove the liabilities from their balance sheet.

Healthy funding ratios give DB plan sponsors more options to manage their long-term liabilities and make it more affordable for companies that want to consider PRT or other risk mitigation strategies.

The extended low-interest-rate environment, which posed challenges for maintaining adequate funding ratios, have become more widely accepted by plan sponsors as the "new normal" and therefore no longer pose a barrier to PRT deals as they did in the past. In some instances, lower interest rates have made borrowing to improve pension funding a more feasible solution as sponsors balance the relative costs of a PRT or plan termination against ongoing, longer-term costs of maintaining a pension.

The wider application of Liability Driven Investing (LDI) strategies have allowed plan sponsors to lock in gains, shifting away from market exposed investing.

Meanwhile, new mortality tables have revised longevity expectations for Americans, providing a more realistic view into the length of pension obligations for both plan sponsors and life insurers. The new tables more closely align pension benefit obligations with insurer pricing.

Window of Opportunity

Tax reform also helped focus sponsors on PRT as U.S. companies had until mid-September 2018 to take advantage of the higher 35 percent corporate tax rate when deducting contributions to DB plans from their taxes. Afterwards, a new 21 percent corporate rate will be applied. That means a \$1 million DB plan contribution made before the deadline will be counted toward the 2017 tax bill and will result in a \$350,000 tax deduction. The value of the deduction fell to \$210,000 for contributions of the same size made under the new tax rules for 2018.

Additionally, the federal government is unintentionally encouraging PRT by passing on higher costs for backstopping pensions to employers. Premiums for the Pension Benefit Guarantee Corp. (PBGC) have climbed dramatically and continue to rise. The PBGC reports that per-participant flat premium rate for plan years beginning in 2018 is \$74 for single-employer plans (up from \$31 in 2007) and \$28 for multiemployer plans (up from \$8 in 2007)³. Meanwhile, the variable-rate premium (VRP) for single-employer plans is \$38 per \$1,000 of unfunded vested benefits (UVBs) for plan years beginning in 2018, up from a 2017 rate of \$9.

As sponsors wrestle with these issues, many chief financial officers are concluding that they do not want to manage long-term financial liabilities and their attendant costs such as DB pensions. They are looking to move long-term financial liabilities and risks off their books.



Sponsor Considerations: A Provider's Primer on Risk

So how should an employer evaluate its own pension plan to determine the right course of action? If a sponsor is committed to offering a pension benefit for the long term, what's the best way to manage those obligations? What criteria should an employer use in evaluating the prospects of a pension being a candidate for a transfer? What factors do insurers consider when evaluating a pension and can those criteria be used to improve an employer's ability to secure the best deal?

Understanding how life insurers evaluate PRT can help DB plan sponsors successfully achieve their objectives. Insurers first and foremost evaluate PRT in terms of long-term risks and price them accordingly. But there are shorter-term considerations for plan sponsors as well.

Short-term Risk Mitigation

Before pursuing a PRT, many companies first opt to better control their pension risks in the short term through administrative and investment tactics.

Freezing a pension plan by limiting eligibility to existing participants already covered under the plan and stopping the accrual of any future benefits immediately contains future risks. Some firms that freeze their DB plan replace the benefit with a defined contribution plan (DC) with matching contributions or, if a DC plan is already in place, begin matching or increase matching contributions. Shifting plan participants from a DB plan to a DC plan helps reduce the volatility and some of the financial risks associated with the cost of managing a DB plan.

Furthering the goal of risk management, some sponsors will then offer deferred participants a lump-sum buyout, eliminating the obligations and attendant risks associated with future payments.

Once a pension plan is frozen, sponsors are encouraged to focus on their investment strategy, carefully matching payment liabilities with investment durations, sometimes reducing exposure to equities or reevaluating the mix of the investments within the portfolio. The practice of Liability Driven Investing (LDI) has increasingly been embraced by plan sponsors that seek to better manage the alignment of plan asset performance with their long-term obligations.

Longer life expectancy, increased operational costs and continued market volatility are driving more plan sponsors to assess targeted settlement actions



- Take the long view
- Analyze the risks
- Set goals

Longer-term View

On a macro level, time and timing can be of great importance. Opting for shorter-term solutions can sometimes be easier and less expensive to achieve. However, shorter-term solutions can also sometimes lead to longer-term problems. Sponsors need to view their pension obligations both broadly and deeply, keeping their eye on their long-term objectives instead of only short-term relief.

Analyzing the inherent risks in a PRT starts with the plan provisions found in the plan document. Essentially, the simpler the benefits available through the plan, the easier it is to manage the risk and the less expensive it is to transfer those risks. That means that the more straightforward a DB plan is, the easier it is for an insurer to evaluate its risks and price it accordingly.

Different risks are also associated with different plan types, such as differences between traditional DB plans and cash balance plans, which allow participants to elect either a stream of income or a lump-sum payment. The greater the uncertainty as to when participants will choose to retire and/or start benefit payments, or whether they will elect a stream of income or opt for a lump-sum, the greater the financial risks and associated costs.

Special features such as cost of living adjustments (COLAs), payment of lump sums, allowing employee contributions and others increase complexity and therefore risk. Insurers have refined their pricing to reflect such provisions as the PRT market has expanded.

Meanwhile, many sponsors remain committed to their plans and may simply want to consult about the best way to manage long-term obligations and maintain the health of the plan. The same rigorous thought process and evaluation employed for PRT applies to a sponsor's evaluation of its relative risks associated with a pension that it intends to maintain indefinitely.

That's why it makes sense for employers to determine their long-term goals before deciding on how to move forward. Risks should be evaluated in terms of long-term liabilities. Does it make sense to remove all or some risks? How will the decision impact the risk management of the plan over the long term?



An Insurer's View: Not All Risks Are Created Equal

There are many considerations when evaluating risks. Insurers view some risks as more attractive than other risks.

Longevity is a critical factor in assessing pension risks. Americans are living significantly longer than they did a century ago, a factor that insurers must consider when evaluating a PRT. In 1900, most people could not expect to live past age 50, according to the Centers for Disease Control and Prevention.⁴

Americans on average can now expect to live 78.6 years, according to the National Center for Health Statistics.⁵ Women can expect to live five years longer than men or 81.1 years compared to 76.1 years.

The increase in longevity, combined with the millions of baby boomers retiring, will mean a much larger population of retirees in the U.S. than ever before.

The Society of Actuaries (SOA) recognized the increases in longevity when it published mortality table RP-2014, replacing RP-2000. The new mortality projections increased expectations for lifespans by 11% for males and 12% for females.⁶

Longer lifespans mean increased pension costs as plan sponsors needed to adjust their expectations for payments to participants over a longer span of years.

The costs are significant as the U.S.
Census Bureau's 2017 National Population
Projections reports that all baby boomers will
be older than age 65 by 2030, meaning that
one in every five Americans will be retirement
age. By 2035, the Census Bureau estimates,
78 million people will be age 65 or older
compared to 76.4 million under age 18.7

Life insurers are looking more closely at mortality as they assess the risks associated with PRT, especially for "jumbo" cases with more than \$500 million in assets. Many insurers now require data for a mortality study in order to better assess the unique mortality risk for specific transactions.

The population of participants (ages, tenure, benefits coverage options, job type, industry, geography) can impact both short-term and long-term risks. For instance, white collar workers typically live longer than blue collar workers as determined by actuarial tables, a fact that insurers consider when measuring longevity risk.



- Living longer
- · Complicating Considerations
- Analyzing Assets
- Timing

Participant Considerations

When evaluating a PRT, insurers look at key considerations related to the makeup of the plan's participants. For instance, transferring pensions for all employees (retirees and deferred) ultimately removes all financial risk off a plan sponsor's balance sheet. Sometimes, it's easier and less expensive to mitigate the risks associated with a specific population of employees (example: retirees vs. deferred annuitants). However, many insurers limit what population of employees are eligible for carve outs.

Carving out only "deferred" annuitants — either terminated vested participants who are no longer employed by the employer or deferred vested participants who remain employed at the firm — but have not yet started pension payments — can be more expensive or, in many cases, not feasible because of higher risk profiles.

Given life insurers' experience with mortality risk, managing the risk from retired participants is relatively straightforward. However, carving out a less-risky participant population can leave a plan sponsor with only higher-risk participants, creating greater uncertainty for costs in the remaining DB plan. Many insurers will not accept only deferred annuitants as it becomes more difficult to assess the inherent risks and liabilities.

Complications from Complexity

A greater the number of benefit options for preretirees to ponder poses greater complexity for the
plan and makes it more challenging to assess and
manage the associated risk. Provisions such as allowing
unrestricted lump-sum payments, early retirements or
late retirements, cost-of-living adjustments (COLAs),
disability payments, supplemental benefits and others
that push payments to undetermined future dates
typically increase risk, create complexity and risks
that increase premiums for pension transfers due to
uncertain timing of cash flows.

The possibility of lump-sum payments also create concerns for insurers about anti-selection as participants who have serious illnesses or who otherwise anticipate shorter life expectancies are more likely to opt for a lump-sum rather than an annuity or stream of income.

Another consideration for managing risk: PRT can sometimes help reduce the population of participants who are eligible to take a lump sum and reduce long-term costs. Encouraging deferred participants to take an immediate lump-sum rather than a future income stream or lump sum can help reduce the relative risk associated with a pension.

Additional complexity stems from available payment options other than a simple life annuity. Options include benefits that are guaranteed over a specific number of years (10 years certain, for example) or joint-and-last-survivor benefits that pay a surviving spouse a specific benefit (100 percent, 75 percent or 50 percent are common). Modeling such benefits and predicting them with any certainty leads insurers to be more conservative with both their risk assessments and premiums.

The relative quality of participant data is of concern as well. Employers need to make sure they can track the whereabouts of participants who may no longer work for your company. Accurate data means smoother administration of plan payments.

If an employer's data is incomplete, robust programs can be put into place and procedures can be implemented to locate participants, including the use of professional data firms that specialize in locating participants and beneficiaries.

Asset Considerations

A pension plan's assets — both the type of assets and how they are allocated among different investment classes — are also considerations when life insurers evaluate a potential PRT. Does the employer intend to transfer liquid assets, assets in kind (AIK) or some combination of the two? It's an important consideration because not all insurers accept AIKs and most that do impose limitations on them.

On one hand, cash is cleaner and makes for an easier transaction. However, not all pension plans have large liquid holdings that are readily available for transfer, which could mean the sale of assets at unpredictable prices due to changing market conditions. As an alternative, some plan sponsors secure loans to boost pension reserves and/or shift assets to insurers.

Some insurers will accept assets in kind. Generally, insurers that accept AIK typically want investment grade assets only. Some may consider high yield bonds. Other considerations: limits on exposure to credit, diversification of assets and duration of assets.

There are advantages to AIK for both plan sponsors and insurers. First, plan sponsors need to liquidate fewer assets — or potentially no assets — to consummate a PRT. That can reduce transaction costs for the sponsor in selling assets on the open market as well as the insurer for purchasing new assets.

If the assets within a pension have relatively high yields — especially when compared to what is currently available on the market — the plan sponsor may realize price savings.

Timing

Timing can affect the costs and ability to consummate a PRT. Life insurers typically have greater financial and operational capacity earlier in the year as opposed to later in the year, when more PRTs are consummated. Following the laws of supply and demand, the increased flow of PRT business at year-end can boost employers' costs as insurers manager a greater number of transactions. If at all possible, it's best to kick-start the process earlier rather than later in the year, potentially leading to more insurers quoting on the business and therefore more competitive pricing.

We understand risk management and we will guide you from an actuarial, investment and administrative perspective.



Due Diligence: Evaluating the Evaluators

While insurers evaluate an employer's pension from many angles, the employer needs to perform due diligence on the evaluators before the process begins. The selection of an insurer for a pension transfer is a fiduciary act and with it comes specific responsibilities.

Department of Labor Interpretive Bulletin 95-1 (DOL 95-1) requires plan sponsors "to obtain the safest annuity available" unless under the circumstances it would be in the interest of participants and beneficiaries to do otherwise.

A fiduciary must evaluate a number of factors relating to a potential annuity provider's claims-paying ability and creditworthiness. Reliance solely on ratings provided by insurance rating agencies would not be sufficient to meet this requirement.

Selecting the Safest Annuity

In selecting the "safest" annuity provider for the purpose of distributing pension benefits, plan sponsors should keep the following in mind:

- Transferring pension assets to an insurer is a transfer of liability and is therefore a fiduciary act.
 That means the plan sponsor must act in the best interest of employees.
- The sponsor must act for the exclusive purpose
 of providing benefits to the participants and
 beneficiaries. While the defraying of plan
 administration expenses can be considered, the
 sponsor as a fiduciary must act with "care, skill,
 prudence and diligence under the prevailing
 circumstances that a prudent person acting
 in a like capacity and familiar with such matters
 would use."
- Sponsors are required to conduct an objective and thorough search for an annuity provider.

The search for a provider or insurer must evaluate factors relating to a potential annuity provider's claims paying ability and creditworthiness, including:

- Quality and diversification of the annuity provider's investment portfolio.
- Size of the insurer relative to the proposed contract.
- Level of the insurer's capital and surplus.
- Lines of business of the annuity provider and other indications of an insurer's exposure to liability.
- Structure of the annuity contract and guarantees supporting the annuities, such as the use of separate accounts.
- Availability of additional protection through state guaranty associations and the extent of their guarantees.
- Use of a qualified, independent expert or consultant is recommended.

In a case where one annuity provider is only marginally safer than another, sponsors can take that factor into account. But there are other considerations when selecting a sound insurer for the purpose of a PRT.



Choosing a Risk Manager

- Perform due diligence
- Consider experience
- Use a consultant

Experience Counts

Sponsors should kick the tires on insurers' experience in managing not just PRT but in administering pension payments as well. Ultimately, the insurer will be handling all payments and administration and will become the primary contact for retirees, pre-retirees and beneficiaries. Choosing an experienced, capable administrator will ultimately help keep pension participants satisfied and reduce potential calls to the employer about complaints.

Not all insurers have deep experience managing pension benefits; fewer still have experience that stretches back decades. Also while many insurers have experience with PRTs, a fewer number of larger insurers have longer, deeper experience that translates into a smoother process. Typically, the biggest sponsors consummating a PRT gravitate towards the larger and more experienced insurers.

Ultimately, sponsors need to work closely with their pension consultant and establish a consultative relationship with their insurer. Again, understanding how insurers view the risks associated with PRTs and assess their relative viability is a starting point for potential success.

Conclusions

Risk-taking has been the impetus for human advancement for millennia. Those who were best able to ascertain the relative levels of risks before them and manage those risks accordingly ultimately scored the biggest achievements that helped move society forward.

There is a parallel in the world of pension management. Those who are most able to understand and evaluate the risks before them and make decisions accordingly are most likely to be successful in the long run.



- ¹ LIMRA International, Secure Retirement Institute, Group Annuity Risk Transfer Survey, Fourth Quarter 2017 https://www.limra.com/Research/Abstracts/PDF/2018/180227-01-qr.aspx
- ² 2018 Corporate Pension Funding Study, Milliman http://us.milliman.com/uploadedFiles/insight/Periodicals/corporate-pfs/2018-corporate-pension-funding-study.pdf
- ³ Pension Benefit Guarantee Corp. (PBGC), Premium Rates https://www.pbgc.gov/prac/prem/premium-rates
- ⁴ Vital Statistics of the United States, 1890-1938, Centers for Disease Control and Prevention https://www.cdc.gov/nchs/products/vsus/vsus_1890_1938.htm
- ⁵ Mortality in the United States, 2016, National Center for Health Statistics, December 2017 https://www.cdc.gov/nchs/data/databriefs/db293.pdf
- ⁶ Society of Actuaries, RP-2014 Mortality Tables Report https://www.soa.org/experience-studies/2014/research-2014-rp/
- ⁷Older People Projected to Outnumber Children for First Time in U.S. History March 13, 2018, United States Census Bureau https://www.census.gov/newsroom/press-releases/2018/cb18-41-population-projections.html

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