



Pension Benefit
Guaranty Corporation

Analysis of Single-Employer Pension Plan Partial Risk Transfers

**(Based on Risk Transfer Data Reported in the 2015-
2018 PBGC Premium Filings)**

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SUMMARY

PBGC first required single-employer pension plans to report Risk Transfer Activity (RTA) on the 2015 Comprehensive Premium Filing. This report examines risk transfer data reported on PBGC premium filings from 2015 through 2018. The information reported includes the number of pension plans that engaged in risk transfer activities and the number of participants affected by these activities (i.e. the number of participants who received a distribution from their pension plan in the form of a lump sum cash out or an annuity purchased from a private insurance company). The participants who received a cash out distribution or an annuity no longer have accrued benefits in their pension plans and thus, are no longer covered by PBGC insurance. The risk transfer data reported to PBGC does not include the amount of liabilities transferred as part of the RTA.

Risk transfers are one of the methods used by plan sponsors to reduce the financial risks associated with sponsoring a defined benefit pension plan. Risk transfer transactions reduce some or all the pension plan liability and risk by offering lumpsum options to participants or by purchasing annuities from insurance companies to provide participants' promised benefits.

Further information on RTA data collected from PBGC premium filings can be found in [PBGC's 2018 Data Tables](#).

Major Findings:

- 8.0 percent of PBGC-covered plans performed an RTA during the 2015-2018 study period.
- 44.8 percent of large plans (greater than 1,000 participants) performed an RTA during the study period.
- 92.6 percent of plans that performed an RTA during the study period provided a lump sum option, compared to only 18.8 percent of plans that opted to purchase annuities.¹
- 2.4 million participants received either a lump sum distribution or an annuity as part of a risk transfer transaction during the study period, and thus are no longer participating in their pension plan or covered by PBGC insurance. These participants represent 7.9 percent of the 30.9 million² participants in PBGC-covered plans during the 2014 plan year.
- 63.0 percent of all participants affected by an RTA during the study period received a distribution from their plan through the election of a lump sum.
- Plans paying PBGC's Variable-Rate Premiums (VRPs) at the per-participant cap were three times as likely to perform an RTA during the period as all other plans (i.e. those paying a lower or no VRP).
- Plans sponsored by financially weak companies (i.e. plans that PBGC considers reasonably possible to terminate) performed RTAs at similar rates to other plans.

¹ Some plans offered lump sums and purchased annuities during the period. Since RTAs are not mutually exclusive, the sum of plans offering lump sums or purchasing annuities does not equal 100%.

² 30.9 million participants in 2014 plan year as reported in PBGC's data tables: <https://www.pbgc.gov/prac/data-books>

Background

Pension plans perform an RTA by offering lump sum options to participants or by purchasing annuities from insurance companies. When plans perform an RTA, PBGC's premium filing instructions³ require plans to report the type of RTA performed and number of participants affected.

Lump sums paid in the course of routine plan operations, in conjunction with a plan termination, upon a participant's separation from service, under mandatory cash-out provisions, or as part of an incentive program to encourage participants to retire early are not considered RTAs. Annuity purchases made during routine plan operations, in conjunction with a plan termination, or that remain in the plan as a "buy-in" are also not considered RTAs.

The reduction in the plan participant population through RTAs represents a loss of future premium income to PBGC, but the reduction in plan liabilities can also reduce future insurance claims to PBGC. The dollar value of future premium income losses and potential gains through reduced insurance claims is difficult to measure, but this report presents some factors to consider regarding the impact of RTAs on the Single-Employer Insurance Program.

Reported Results

System-Wide

The table below summarizes the number of single-employer plans reporting risk transfers from 2015 through 2018.

Table 1 – Total Number of Plans Performing Partial Risk Transfer Activities from 2015-2018

Risk Transfer Activity	2015 ⁴	2016	2017	2018	Total 2015-2018 ⁵
Plans Offering Lump Sums	960	585	768	447	2,290
Plans Purchasing Annuities	91	76	159	213	466
Plans Performing any RTA ⁶	1,024	643	891	623	2,473

³ PBGC's annual Comprehensive Premium Filing Instructions are available at pbgc.gov/prac/prem/premium-filing-payment-and-instructions.

⁴ Risk transfer reporting on the 2015 premium filing covered a period of approximately 19.5 months.

⁵ The total number of plans reporting an RTA from 2015-2018 is not the sum of the plans reporting an RTA in each year, because some plans performed an RTA in multiple years and as such were not double counted in the total column.

⁶ Some plans offered lump sums and purchased annuities in the same year, so the number of plans performing any RTA does not equal the sum of plans offering lump sums and purchasing annuities.

The table below summarizes the number of participants in single-employer plans involved in risk transfers from 2015 through 2018.

Table 2 – Total Number of Participants in Partial Risk Transfer Activities from 2015-2018

Risk Transfer Activity	2015	2016	2017	2018	Total
Lump Sums					
Terminated Vested Participants Offered Lump Sums	1,299,783	651,902	819,496	442,001	3,213,182
Terminated Vested Participants Electing Lump Sums	639,609	304,106	368,232	186,220	1,498,167
Retired Participants Offered Lump Sums ⁷	76,683	31,522 ⁸	N/A	N/A	108,205
Retired Participants Electing Lump Sums	30,373	12,124	N/A	N/A	42,497
Annuity Purchases					
Annuities Purchased for Terminated Vested Participants	1,669	2,746	2,030	3,498	9,943
Annuities Purchased for Retirees	74,947	167,651	251,637	399,618	893,853
Total Number of Participants Removed from the Single-Employer Program	746,598	486,627	621,889	589,336	2,444,460

This study does not examine standard terminations (termination of fully funded plans in their entirety via close out by purchasing annuities or paying lump sums in satisfaction of all plan benefit liabilities). It is helpful, however, to compare the number of plans and participants affected by partial risk transfers versus standard terminations. Approximately 5,100 plans, covering approximately 690,000 participants, made final distributions in a standard termination between January 1, 2014 and August 16, 2018, roughly the same period covered in this study (see [Information Collected](#) below). The number of terminated plans during the period was more than double the number of plans performing a partial RTA but affected less than 30% of the number of participants. This suggests that standard plan terminations are prevalent among smaller plans but are not as big of a factor in the total reduction of participants in PBGC-insured pension plans.

Across the four-year study period, plans showed a proclivity for offering lump sums as a form of risk transfer over purchasing annuities. Ninety-three percent of plans with RTAs employed a lump sum offer, compared to nineteen percent that purchased annuities. However, there was a shift in 2018 towards

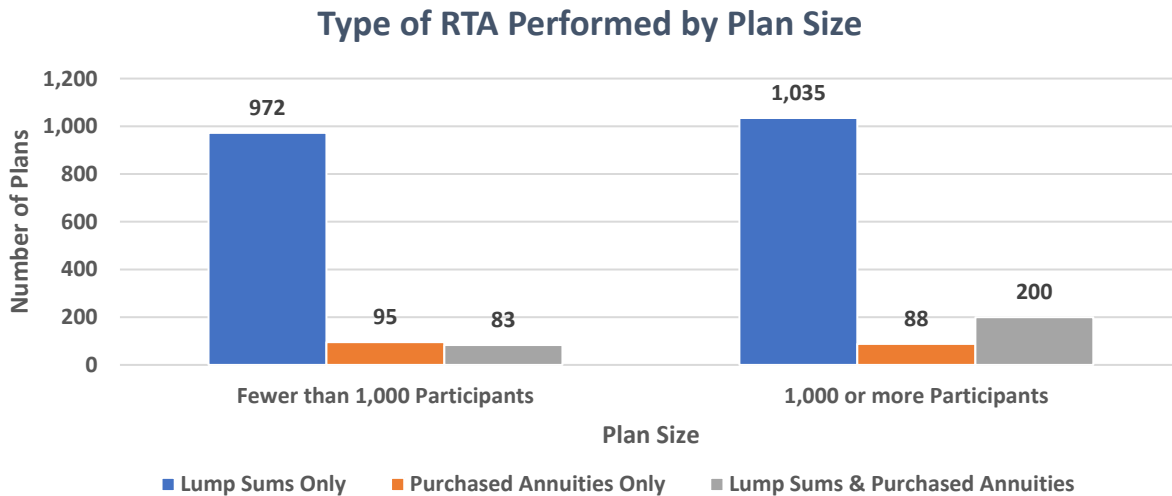
⁷ IRS Ruling 2015-49 proposed an amendment to Section 401(a)(9) of the Code to disallow replacing in-pay annuities with lump sums, with certain exceptions for plans that had taken steps towards offering a lump sum window prior to that date. Therefore, in-pay lump sum reporting was removed from the premium filing instructions after 2015. The IRS subsequently announced in Ruling 2019-18 that it would not make such an amendment and thus, plans may resume offering lump sums to retired participants.

⁸ One large plan's reported lump sum offers and elections on the 2016 premium filing included lump sums to both retirees and terminated vested participants, since they had taken steps towards offering a lump sum window to retirees prior to IRS Ruling 2015-49. The number of retiree lump sum offers and elections by that plan are included in the 2016 data, even though retiree lump sum reporting was no longer an option on the 2016 premium filing.

annuity purchases. The proportion of plans with RTAs that employed a purchased annuity in 2018 was up to thirty-four percent.

Figure 1, on the next page, shows the number of small (fewer than 1,000 participants) and large (greater than or equal to 1,000 participants)⁹ plans that offered lump sums to terminated vested (TV) participants, the number of plans that purchased annuities (to TV participants, retirees, or both), and the number of plans that offered lump sums and purchased annuities from 2015-2018.

Figure 1 – Both Small and Large Plans Offered More Lump Sum Options Than Annuity Purchases



As shown in Figure 1, lump sum offers are the most common form of RTA. However, lump sum offers are subject to a participant’s election, whereas an annuity purchase is not. As a result, sponsors know with certainty the number of participants who will leave the plan when making an annuity purchase. The plan-weighted average participant removal from lump sum offers during the period was 13.1%, compared to 25.9% for purchased annuities.

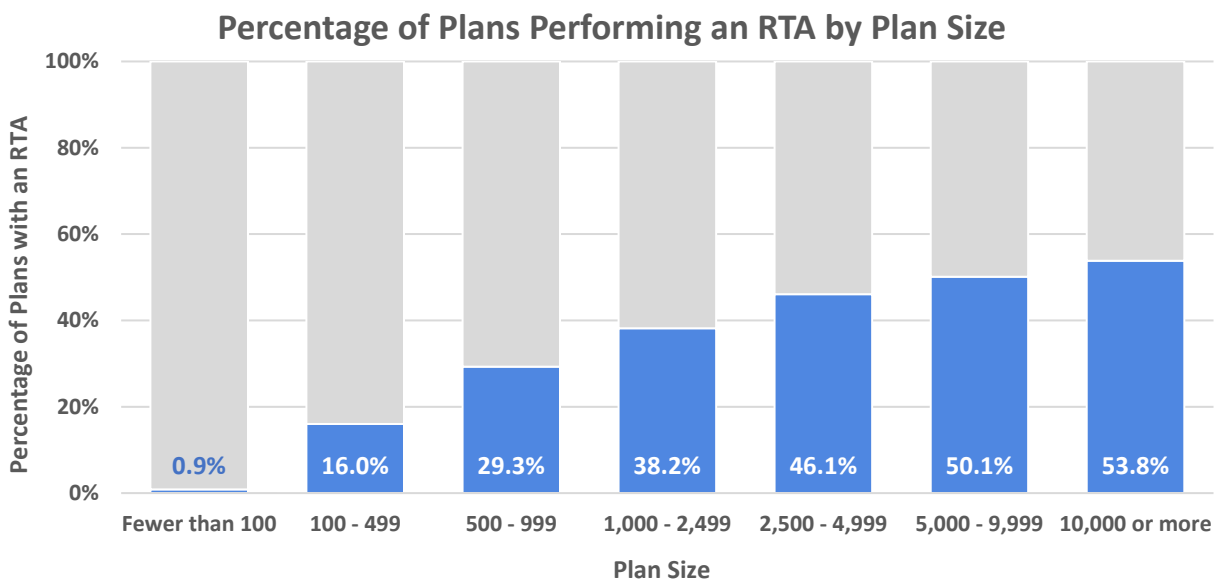
Plan Characteristics

The reported risk transfer data shows that, in aggregate, a relatively small number of plans performed an RTA during the 2015-2018 period.¹⁰ However, as shown in Figure 2, a greater proportion of large plans¹¹ performed RTAs than small plans. The idea that large plans are more likely to perform RTAs than small plans was supported with statistical testing.

⁹ When analyzing plans by size over the period from 2015-2018, plans were categorized by their largest participant count during the period.

¹⁰ Some plans reported RTAs in more than one year from 2015-2018. Such plans were only counted as one unique plan that performed an RTA when analyzing plan incidence rates during the period.

Figure 2 – A Greater Proportion of Large Plans Performed RTAs than Small Plans



Although the number of small plans dwarfs that of large plans, large plans represent most of the participants and liabilities in plans covered by PBGC’s Single-Employer Program, as well as the majority of participants who leave their plans through RTAs.

Table 3 below shows the number of plans and participants by size category during the 2015-2018 period.

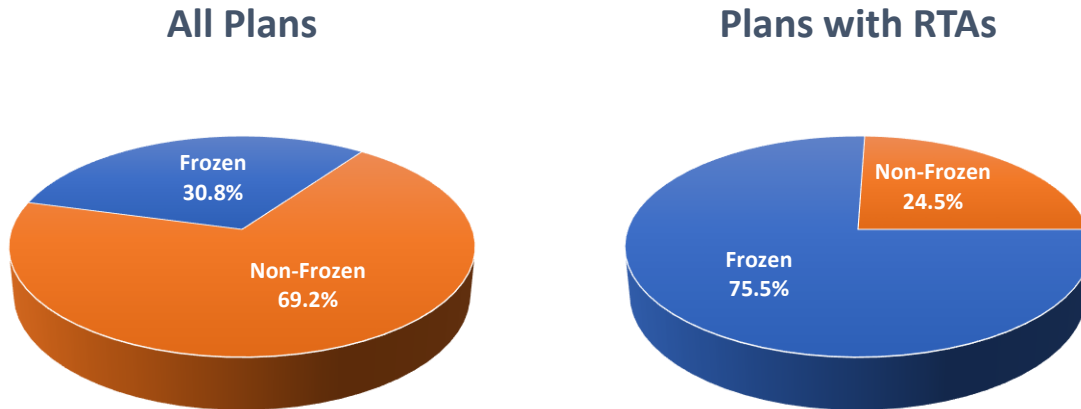
Table 3 – Plan and Participant Counts Categorized by Plan Size¹²

Plan Size	Number of Participants						
	Less than 100	100 – 499	500 – 999	1,000 – 2,499	2,500 – 4,999	5,000 – 9,999	10,000 or more
All Plans	22,991	3,792	1,167	1,273	662	473	548
Plans with RTAs	200	608	342	486	305	237	295
Participants in All Plans	442,468	1,136,237	857,335	2,129,559	2,446,405	3,426,163	21,366,112
Participants Removed through RTAs	2,247	33,679	46,507	143,992	189,331	315,443	1,713,261
% of All RTA Participants Removed	0.1%	1.4%	1.9%	5.9%	7.7%	12.9%	70.1%

¹² Plan and participant counts are based on unique counts reported on PBGC premium filings during the 2015-2018 period. Since not all plans that submitted filings during the period submitted filings in all three years, the total number of plans and participants from 2015-2018 will exceed the number of plans and participants reported in any individual year.

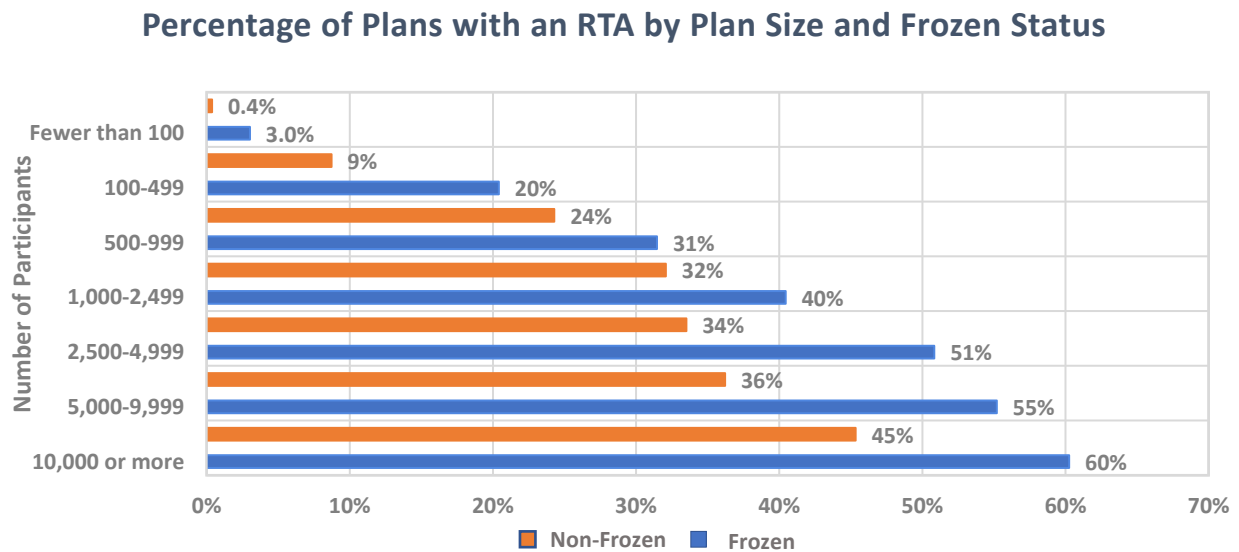
A plan's frozen status may also be a factor in whether it performs an RTA. While plans with an accrual and/or participation freeze (full or partial) represent less than a third of all plans in the 2015-2018 period, they comprise three fourths of the plans that performed an RTA.

Figure 3 – Plans Performing RTAs are More Likely to be Frozen than the General Population of Plans



Comparing RTA rates by frozen status *and* plan size shows that large plans have performed more RTAs than small plans regardless of frozen status, and that within each plan size category, frozen plans have performed RTAs at a higher rate than non-frozen plans.

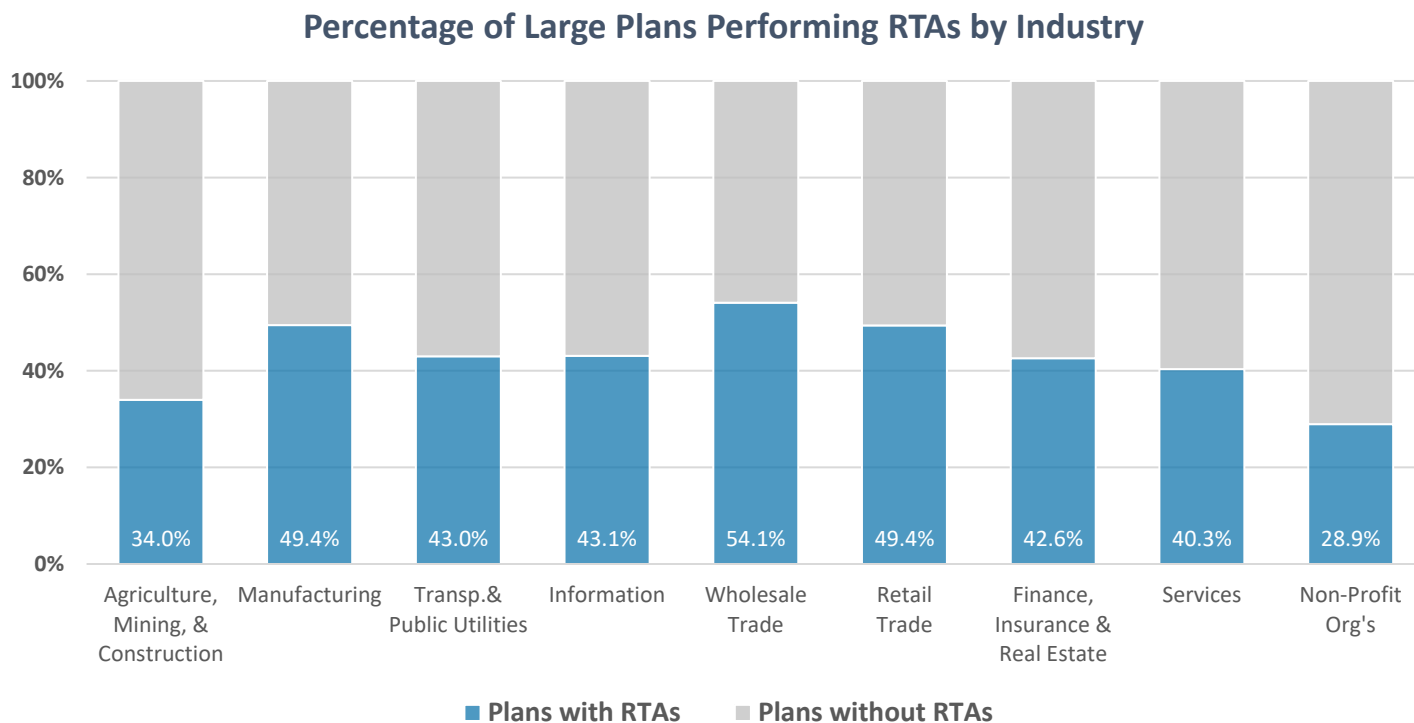
Figure 4 – Frozen Plans Performed RTAs at a Greater Rate than Non-Frozen Plans, Regardless of Size



The orange and blue bars in the chart above represent the percentage of plans, within the specified plan size and frozen status, that performed an RTA from 2015-2018. For example, of the 236 non-frozen plans with 10,000 or more participants, 107 (45 percent) performed an RTA. However, of the 312 frozen or partially frozen plans with 10,000 or more participants, 188 (60 percent) performed an RTA.

Another dimension on which RTA incidence rates vary is by the sponsor's industry. For example, 18.1 percent of Manufacturing plans performed an RTA between 2015-2018, compared to only 4.9 percent of plans in the Finance, Insurance, & Real Estate industry. However, a greater proportion of Manufacturing plans are large plans as compared to the Finance, Insurance, & Real Estate industry. RTA incidence rates by industry are less disparate when looking at large plans only. Among large plans, 49.4 percent of Manufacturing plans performed an RTA compared to 42.6 percent of Finance, Insurance, & Real Estate plans. The RTA incidence rates by industry among large plans are presented below.

Figure 5 – A Significant Percentage of Large Plans Performed RTAs Regardless of Industry



Potential Consequences for PBGC

Flat-Rate Premium Income

Single-Employer pension plans pay a flat-rate premium for each participant in the plan. The flat-rate premium rate is indexed to changes in the National Average Wage Index. For 2019, the flat-rate premium was \$80 per participant. For illustrative purposes, assuming participants leaving the Single-Employer Program through RTAs would not have left the system by some other cause, the 2,444,460 participants removed through RTAs from 2015-2018 (see Table 2) represent a flat-rate premium income loss to PBGC of \$196 million for the 2019 premium payment year. This represents 8.7% of the \$2,236 million flat-rate premium income PBGC's Single-Employer Program is estimated to receive from plans for the 2019 premium payment year¹³.

However, there are other factors to consider when projecting flat-rate premium income loss from RTAs. Participants removed from the system through RTAs would have eventually left the system by some other

¹³ Estimated flat-rate premium income for the 2019 premium payment year is based on actual premium receipts through August 2020 and estimated premium receipts based on the prior year's premium payment pattern.

reason, so the flat-rate premium income lost due to a participant’s removal is not an annual loss in perpetuity. Participant counts in single-employer plans are reduced for other non-RTA reasons, such as mortality, election of a lump sum or an annuity purchase not associated with an RTA, and plan termination.

Plan incidence and participant removal rates through RTAs reported from 2015-2018 may not remain steady in the future. Some factors that could impact RTA incidence rates in the future include pension liability discount rates, annuity pricing, PBGC premium rates, plan funding levels, and a smaller pool of participants after an RTA has already been performed.

Variable-Rate Premium (VRP) Income

In addition to the flat rate premium, underfunded single-employer pension plans pay a variable-rate premium based on the amount of the plan’s underfunding, up to a cap based on the plan’s participant count. The VRP rate is indexed to changes in the National Average Wage Index. For the 2019 premium filing year, the VRP rate was \$43 per \$1,000 of unfunded vested benefits, with a cap of \$541 per participant.

Reducing the VRP may be a factor in a sponsor’s decision to perform an RTA, particularly if the plan is paying VRPs at or near the per-participant cap. Plans paying premiums at the VRP cap performed RTAs at a greater rate, proportionally, than all other plans (i.e. plans paying a lower no VRP).

Table 4 – Plans Performing RTAs Based on Status at VRP Cap

Year	Plans at VRP Cap			Plans paying no VRP or less than the VRP Cap		
	Total Count	RTA Count	% Total	Total Count	RTA Count	% Total
2015	1,448	137	9.5%	22,870	886	3.9%
2016	2,036	130	6.4%	22,660	513	2.3%
2017	2,165	240	11.1%	22,719	651	3.0%
2018	2,029	168	8.3%	23,054	454	2.0%

Plans paying VRPs at the per-participant cap performed RTAs at a rate more than three times greater than all other plans (8.79 percent vs 2.74 percent from 2015-2018). However, VRPs appear to be more impactful on a small plan’s likelihood of performing an RTA than a large plan. While small plans at the VRP cap performed RTAs at a rate approximately four times greater than all other small plans (5.70 percent vs 1.43 percent), incidence rates among large plans were relatively unaffected by the VRP cap (19.69 percent vs 17.46 percent).

The impact of RTAs on PBGC’s VRP income is not easily determined, since a plan’s underfunding (and subsequent VRPs) are determined by factors not directly related to the RTA. However, one source of rough estimation is the participant reduction in plans paying the per-participant VRP cap. Using the simplified assumption that plans paying the VRP cap in the year in which they performed an RTA will continue to pay the cap in the subsequent year (and would have continued to pay the cap had they not performed an RTA), the VRP income lost from those plans will roughly equal VRP cap multiplied by the number of participants removed through an RTA.

According to 2018 premium filings, 168 plans that were paying the VRP cap performed an RTA, removing a total of 117,050 participants. Using the simplified assumption above, those 117,050 participants represent a “loss” of premium collections of \$63 million, based on the \$541 per-participant VRP cap

applicable to the 2019 premium filing year. This represents only 1.3% of the \$4,774¹⁴ million VRP income PBGC's Single-Employer Program is estimated to receive from plans for the 2019 premium payment year. However, not all plans performing RTAs are currently at the VRP cap. It is possible that the removal of participants through RTAs could cause a plan not at the VRP cap to hit the cap, resulting in additional lost income for PBGC. Thus, the \$63 million income loss from the simplified calculations of plans currently at the VRP cap may represent only a portion of total VRP loss due to RTAs. Also, as noted for flat-rate premiums above, plan incidence and participant removal rates through RTAs reported from 2015-2018 may not remain steady in the future.

Change in PBGC's Risk Profile

While RTAs represent a loss of future premium income to PBGC's Single-Employer Program, they also reduce the participant population and the benefits that PBGC is responsible for insuring. This raises the question of whether, on balance, PBGC's future net financial position is strengthened or weakened by RTA activity.

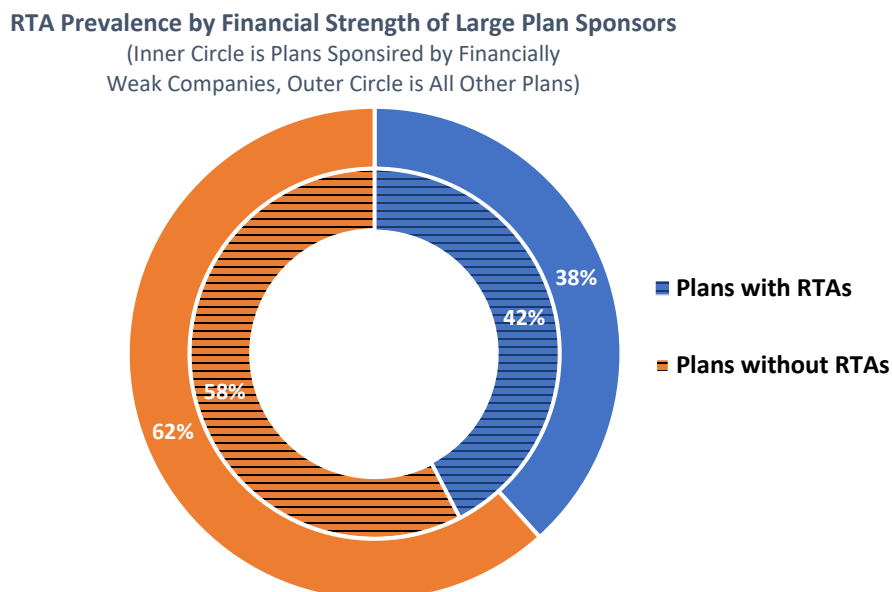
Two factors to consider are whether a plan performing an RTA is more or less likely to present a claim to PBGC after the RTA is completed, and how the RTA affects the PBGC's exposure (i.e. the plan's unfunded guaranteed benefits).

To examine whether plans performing RTAs are more or less likely to present claims to PBGC, we compared the RTA rate among large plans sponsored by financially weak companies (i.e. the plans PBGC classifies as reasonably possible to terminate) to the RTA rate among other large plans (plans for which the risk of termination is remote). Plans classified as reasonably possible to terminate are generally defined as single-employer plans with at least \$50 million in unfunded vested liabilities that are sponsored by companies whose credit quality is below investment grade. There were 576 large plans considered reasonably possible to terminate during the study period, compared to 2,380 large plans that were not considered reasonably possible to terminate.

The RTA rate among large plans sponsored by financially weak companies does not significantly differ from the RTA rate among other large plans (47.0% vs 44.2%). Additionally, the proportion of total participants removed through RTAs, during the study period, was similar between plans sponsored by financially weak companies and other plans. This suggests that, while healthy and troubled plan sponsors may have different reasons for performing an RTA, participants are being removed from plans of each group at the same proportion.

¹⁴ Estimated VRP income for the 2019 premium payment year is based on actual premium receipts through August 2020 and estimated premium receipts based on the prior year's premium payment pattern.

Figure 6 – Plans Sponsored by Financially Weak Companies and All Other Plans Performed RTAs at a Similar Rate



As for whether RTAs impact the size of a potential future claim to PBGC, we do not currently have enough data to determine trends in claim size following an RTA.

Data Availability, Limitations, and Adjustments

Information Collected

PBGC first required single-employer pension plans to report their RTAs on the 2015 PBGC Comprehensive Premium Filing. This report relies on premium filing data for the 2015 through 2018 premium filing years. The premium filings only requested the number of participants offered lump sums, the number of participants who elected a lump sum, the number of not-in-pay status participants for whom the plan purchased annuities, and the number of in-pay status participants for whom the plan purchased annuities.

The PBGC premium filing instructions request information regarding RTAs performed during the current plan year or, if it was not reported on the prior premium filing, the prior plan year. Plans are instructed to disregard lump sum windows ending or annuity purchases made less than 60 days before the premium filing is made. Premium filings are due the 15th day of the 10th full calendar month of the plan year.

Example: A plan has a calendar-year plan year and always submits its premium filing on the due date, generally October 15th. It reports RTAs performed during the prior plan year or current plan year, excluding RTAs reported on prior filings and RTAs performed less than 60 days before the premium filing is made. Since 2015 was the first year PBGC requested RTA reporting, the plan reports all RTAs performed from January 1, 2014 through August 16, 2015.¹⁵ The 2016 premium filing reports RTAs from August 17, 2015 through August 16, 2016, and subsequent premium filings report RTAs during the same August-to-August period.

¹⁵ The 2015 filing was the first filing to request RTA information, so it includes a longer reporting period for RTAs (approximately 19.5 months) than subsequent filings. Data for 2015 is presented as reported and not annualized unless otherwise noted.

Accordingly, PBGC collected 55.5 months of RTA data from the 2015 through 2018 premium filings (January 1, 2014 through August 16, 2018). The period covered may differ for plans that have a non-calendar-year plan year or file prior to the due date, but the length of the period covered should be approximately 53.5 months for all plans that are not new or newly covered, did not terminate or merge with another plan, and did not change plan years during the period.

Participant Count Adjustments

The participant count date for the PBGC premium filing is the last day of the plan year preceding the plan year of the filing. As explained above, the RTAs are generally reported over the period beginning 60 days before the prior premium due date through 60 days before the current premium due date. Since the participant count date is within the RTA reporting period, the exact participant count, as of the date the RTA was performed, could not be determined with the data available. This timing mismatch can distort results when exploring the RTAs.

Several options were examined to adjust participant counts to account for the timing mismatch. Ultimately, the method we used was to add the number of participants removed through the RTA back into the current year's participant count when participant counts for an RTA exceeded the corresponding participant count on the premium filing (this method assumes that the RTA happened prior to the premium filing participant count date). This approach was the least distortive method that consistently addressed the issue.

Example: A plan reports 500 participants on its 2017 premium filing, 200 of whom are Terminated Vested participants (TVs). It also reports that it offered lump sums to 300 TVs, 150 of whom accepted. Since the plan offered lump sums to more TVs (300) than it reported in its participant count (200), it is likely that the lump sum offer occurred prior to the participant count date. Therefore, the number of participants who accepted a lump sum offer (150) were added back to the TV count and participant count, for a total of 350 TVs and 650 participants at the time of the lump sum offer. These adjusted totals were used to determine plan sizes and offer rates.

Beginning with the Comprehensive Premium Filing Instructions for 2020 Plan Years, PBGC is requesting data for RTAs performed in the prior plan year, rather than up through 60 days before the premium filing date. This adjustment will better align the RTA participant counts with the plan participant counts and allow for more complete analysis of participant risk transfer rates in the future.

Data Excluded

On the comprehensive premium filing, plans report if a premium filing will be their final filing due to plan termination by distribution of plan assets, PBGC trusteeship, merger/consolidation, or cessation of PBGC coverage. These plans were not examined in this study.

Manual Adjustments

Two minor manual adjustments to the data were made to correct for publicly known discrepancies. These discrepancies included a small plan reporting significantly more lump sum offers than participants that have ever been in the plan, and a large plan reporting that included its in-pay lump sum offers and elections within its not-in-pay lump sum reporting.

Conclusion

Many factors influence the future incidence of RTAs such as:

- Movement of interest rates, which affect the value of a pension plan's vested liabilities, the value of plan assets, the value of lump sum distributions, and the pricing of insurance company annuities,

- Changes in PBGC premium rates (both flat rate and variable rate),
- Pension plan funding levels due to financial market performance and changes in interest rates used to value plan funding liabilities, and
- Diminished pools of participants from plans after RTA have been implemented.

Increasing pension plan costs primarily due to the declines in interest rates may influence plan sponsors (both those who have performed an RTA in the past and those who have not) to continue looking at ways to reduce pension plan risk and reduce pension liabilities.

PBGC will continue to monitor and analyze trends in pension de-risking and risk transfer, including study of the effects on future premium income and potential changes in future insurance claims.