

THE PBGC

PREMIUM BURDEN REPORT



2021





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INTRODUCTION

We are proud to present our fifth annual report on the PBGC Premium Burden, a comprehensive analysis of the experience of roughly 4,500 US pension plans. We began this project to alert pension sponsors to skyrocketing PBGC premiums, which in recent years have become the leading obstacle to sound pension management for thousands of employers. Since 2008, single-employer plan sponsors have paid over \$50 billion in PBGC premiums, including \$30 billion in just the past five years.

Most employers have taken steps to manage this growing burden by settling liabilities (annuity purchases and lump sum offers) and making voluntary contributions. Since 2012, the number of participants covered by PBGC insurance fell by 26%, from more than 32 million to 24 million, while plan sponsors made \$550 billion in contributions. We expect these trends to continue in 2021 and beyond.

A key message of our reports over the past five years is that paying attention to rules relating to the timing and recording of plan contributions, management of 'funding balances', and strategic elections between 'Standard' and 'Alternative' methods for calculating PBGC premiums (what we call 'best practices') can substantially reduce premiums owed with little to no change in sponsor behavior.

Sponsors have made significant progress over the past five years, but hundreds of employers have yet to adopt these best practices and, as a result, they continue to pay millions more in premiums than they need to, year-in and year-out. Our research shows that employers have paid \$500 million more in premiums than they needed to since 2012. Missed savings in 2019 alone were \$34 million. And these missed opportunities were completely avoidable.

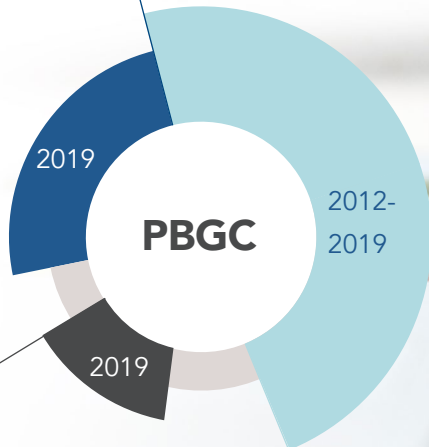
Smaller employers are more likely to fail to adopt best practices, but larger employers are not immune. Our analysis has identified a single large plan whose failure to take these simple steps has resulted in \$11.7 million in unnecessary premiums since 2012, including \$2.2 million in 2019.

The plan above is one of 270 plans that have chronically paid more than they needed to. While the overall trends in managing premiums are encouraging, these plans are bucking the trend, and the price they pay by not adopting best practices continues to grow.



PREMIUMS PAID

\$34 million
in missed
savings



\$11.7 million
in unnecessary
premium payments
by a single large number

over
\$500 million
in unnecessary
premium payments

For 2019, more than 100 employers elected to move from the 'Alternative' to the 'Standard' method for calculating premiums. This was a sensible decision for many employers since it reduced 2019 premiums. However, in some cases, this election is proving to be costly, increasing 2020 and 2021 premiums by more than the 2019 reduction. Sponsors that adopted a more strategic view with respect to these elections avoided this trap.

The reverse of this strategy (moving from 'Standard' to 'Alternative') was available to many sponsors in 2020. Our analysis concluded that, in most cases, this move made sense for sponsors and will likely reduce overall premiums by adopting this strategy.

In 2020, sponsors enjoyed relief on contribution timing rules – basically, they could defer all required

contributions until year-end and include these contributions "for" the 2019 plan year, reducing 2020 premiums. Our analysis indicates that many sponsors took full advantage of the relaxed rules, contributing to a drop in total premiums paid in 2020 vs. 2019.

Looking ahead, we expect premiums to remain level in 2021, helped by strong 2020 asset performance offset by lower interest rates and relentlessly rising premium rates.

As stated, most pension sponsors have taken significant steps to rein in premiums by reducing headcounts, funding, and adopting best practices, but hundreds of plan sponsors have yet to pick the low-hanging fruit of best practices, and for these sponsors, the burden continues to grow.

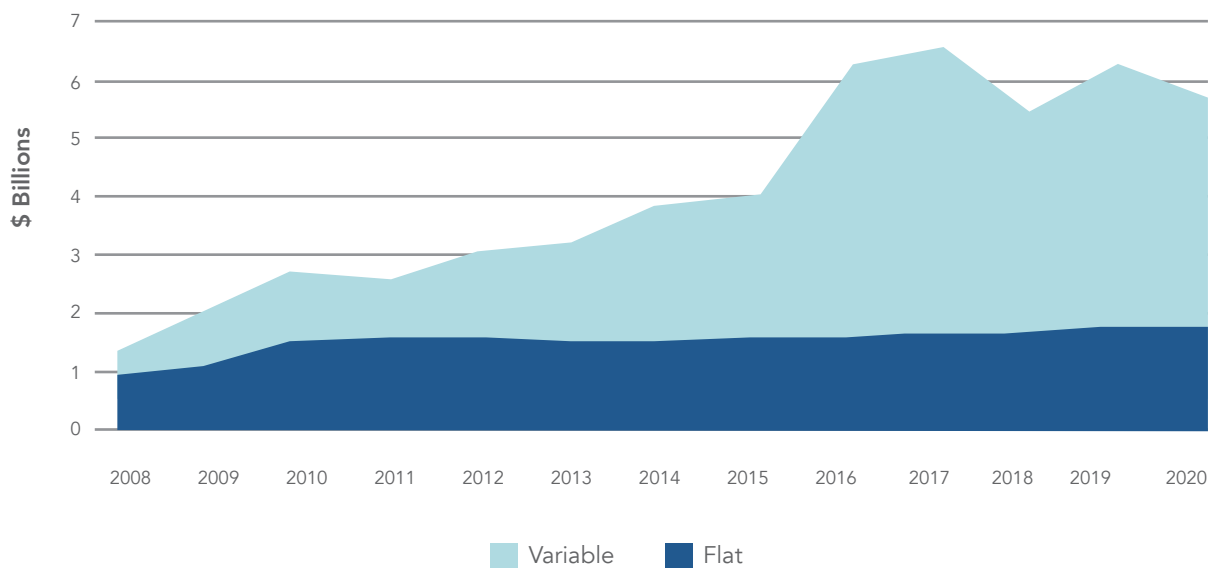
SECTION 1

PREMIUM PAYMENT TRENDS

Total Premiums

In 2008, pension sponsors paid \$1.3 billion in premiums to the PBGC single-employer program, composed of \$1.1 billion in “flat-rate” premiums and just \$0.2 billion in “variable-rate” premiums. Since then, flat-rate premiums have risen steadily, while variable-rate premiums have exploded, increasing by a factor of 20 between 2008 and 2017 to \$4.9 billion, before coming down somewhat since then. The graph below shows the pattern of historical premium payments:

SINGLE-EMPLOYER PBGC PREMIUMS



Total premiums paid have levelled out in the past five years, but this is due in large part to a massive reaction from plan sponsors, including settling liabilities for millions of participants and making large, voluntary pension contributions. Total premiums paid in 2020 were \$1.1 billion lower than in 2017, despite the flat-rate premium increasing from \$69 to \$83 per participant and the variable-rate premium increasing from 3.4% to 4.5% of unfunded liability since then. Whether by design or not, the PBGC premium regime has been much more relevant to pension

management than the minimum funding rules for most sponsors. The results above cover roughly 23,000 single-employer plans subject to PBGC premiums during 2008-2020.

More than 75% of these plans cover fewer than 250 participants each, but these plans pay less than 4% of the premiums in the PBGC single-employer program. The analysis presented in this report will focus only on the roughly 4,500 plans that cover at least 250 participants¹.

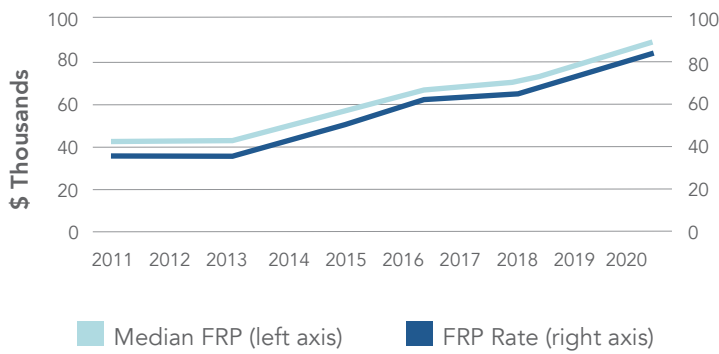
¹ Our analysis is based on publicly available information found in IRS Form 5500s from the Department of Labor, PBGC 2020 Annual Report and PBGC's historical premium database.

THE FLAT-RATE PREMIUM (FRP) AND VARIABLE-RATE PREMIUM (VRP)

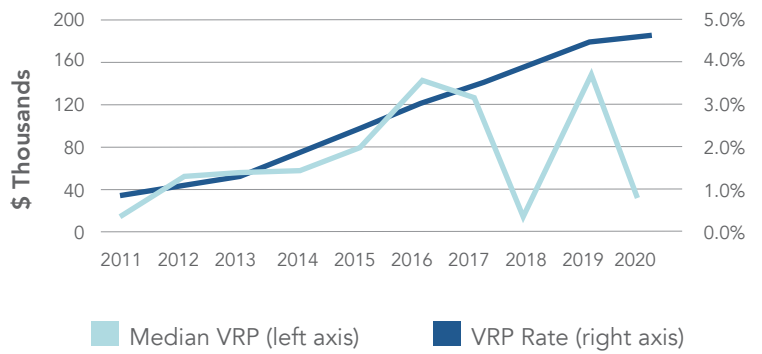
PBGC premiums for single-employer plans are calculated as the sum of (a) a flat-rate premium (\$86 per participant in 2021) plus (b) a variable-rate premium (4.6% of unfunded PBGC liability in 2021, with a cap of \$582 per participant.)

Not surprisingly, flat-rate premiums have moved in tandem with higher rates. Variable-rate premiums tracked premium rates through 2017, but since then, they have fallen, reflecting improved pension funding, as shown below:

Flat-Rate Premium



Variable-Rate Premium



The FRP rate more than doubled between 2011 and 2020 (from \$35 to \$83 per participant), and the median plan saw its FRP double as well (from \$42,000 in 2011 to \$88,000 in 2020.)

For the VRP, premium rates have increased by a factor of five since 2011 (from 0.9% to 4.5%). The median plan sponsor saw variable premiums rising in step with higher premium rates through 2017, but since then, variable premiums have trended down. Sponsor action (voluntary contributions, headcount reductions), along with above-average investment returns, are to credit for reversing

this trend. Note, strong asset performance in 2020, along with ongoing settlement activity, is expected to help offset 2021 premium increases.

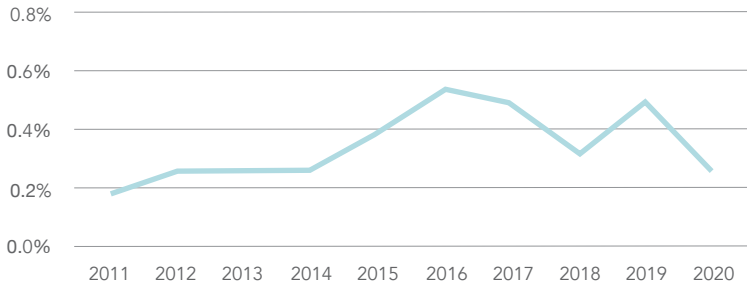
In 2008, the VRP made up just 18% of total premiums, increasing to 73% in 2016 and 2017 before falling back to 67% in 2020. However, the incidence of variable-rate premiums is very uneven: in 2020, almost half of plans paid no variable-rate premium, while 20% of plans paid the "maximum" variable premium of \$561 per participant, about 6.8 times as much as the flat-rate premium.

Overall, 422 paid more than \$1 million in variable-rate premiums in 2020, 94 plans paid more than \$5 million, and 42 plans paid more than \$10 million.

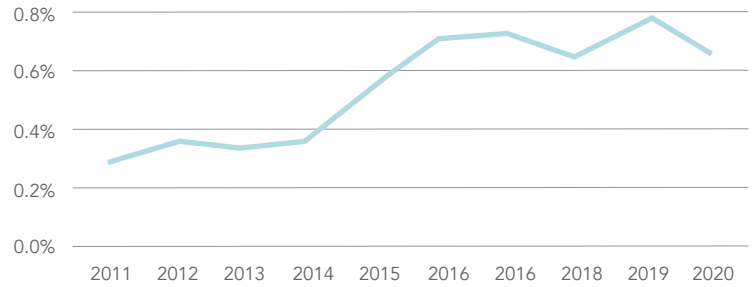
PREMIUMS AS A % OF PLAN ASSETS

Below we express median historical PBGC premiums as a percent of plan assets. These graphs underscore the headwinds of higher costs to plan sponsors.

**PBGC Premiums as a % of Assets
Median Plan**



**PBGC Premiums as a % of Assets
Median for Plans with a VRP**



The graph on the left shows the median plan premium was 0.3% of assets or less through 2014, jumping to above 0.5% beginning in 2015 before falling back below 0.3% of assets in 2020.

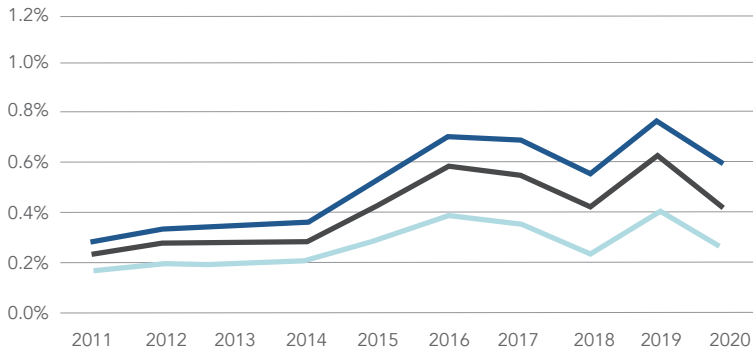
The graph on the right zeroes in on plans that pay VRPs – half of all plans in 2020. Among this group, we see a similar pattern through 2014, but since then, premiums more than doubled, peaking just below 0.8% of assets in 2019 before dropping below 0.7% of assets in 2020.

For 2020, 593 plans paid premiums of at least 1% of plan assets. In a world of 3% interest rates, PBGC premiums continue to represent a debilitating cost wedge for these pension sponsors.

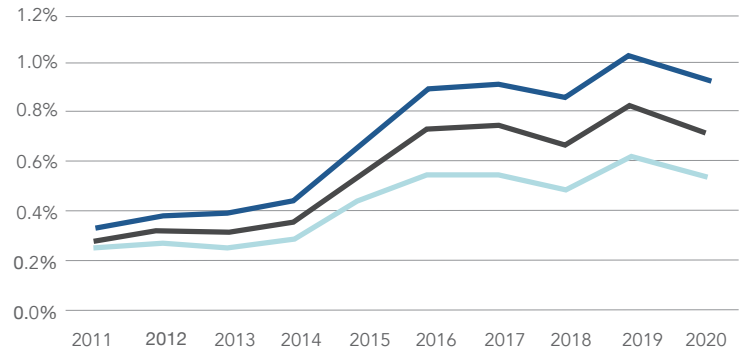
**IN 2020, 593 PLANS PAID
PREMIUMS OF AT LEAST 1%
OF PLAN ASSETS.**

The graphs below break down plans by size. For this purpose, we define “Small” plans as those with 250-999 participants, “Medium” plans as those with 1,000-9,999 participants, and “Large” plans as those with at least 10,000 participants. Average (not median) premiums per year by plan size are shown, both for our universe of plans (left graph) and the relevant subset of plans that are paying a VRP (right graph).

**PBGC Premiums as a % of Assets
Average For All Plans**



**PBGC Premiums as a % of Assets
Average For All Plans with a VRP**



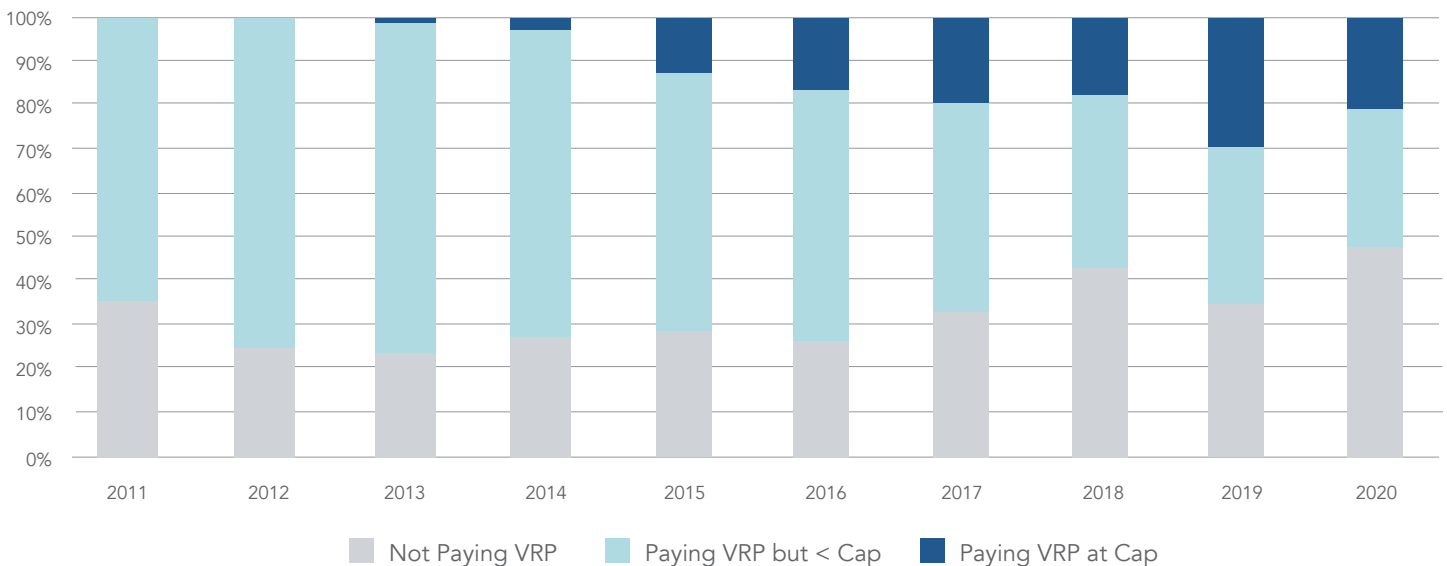
■ Small ■ Medium ■ Large

Small plans face the most serious headwinds from PBGC premiums, with premiums averaging over 0.9% of plan assets in 2020 for plans paying a VRP. But Large plans are suffering too – Large plans paying a VRP saw average premiums during 2016-2020 of more than 0.5% of assets. For an underfunded plan with \$5 billion in assets, that’s \$25 million in annual overhead.

CLASSIFICATION OF PLANS BY PREMIUM STATUS AND SIZE

2013 legislation added a “VRP cap” intended to limit premiums for the least well-funded plans. The chart below groups plans as follows: (a) those that did not owe a VRP, (b) those that did owe a VRP but were not affected by the VRP cap, and (c) those affected by the VRP cap:

VRP CLASSIFICATION



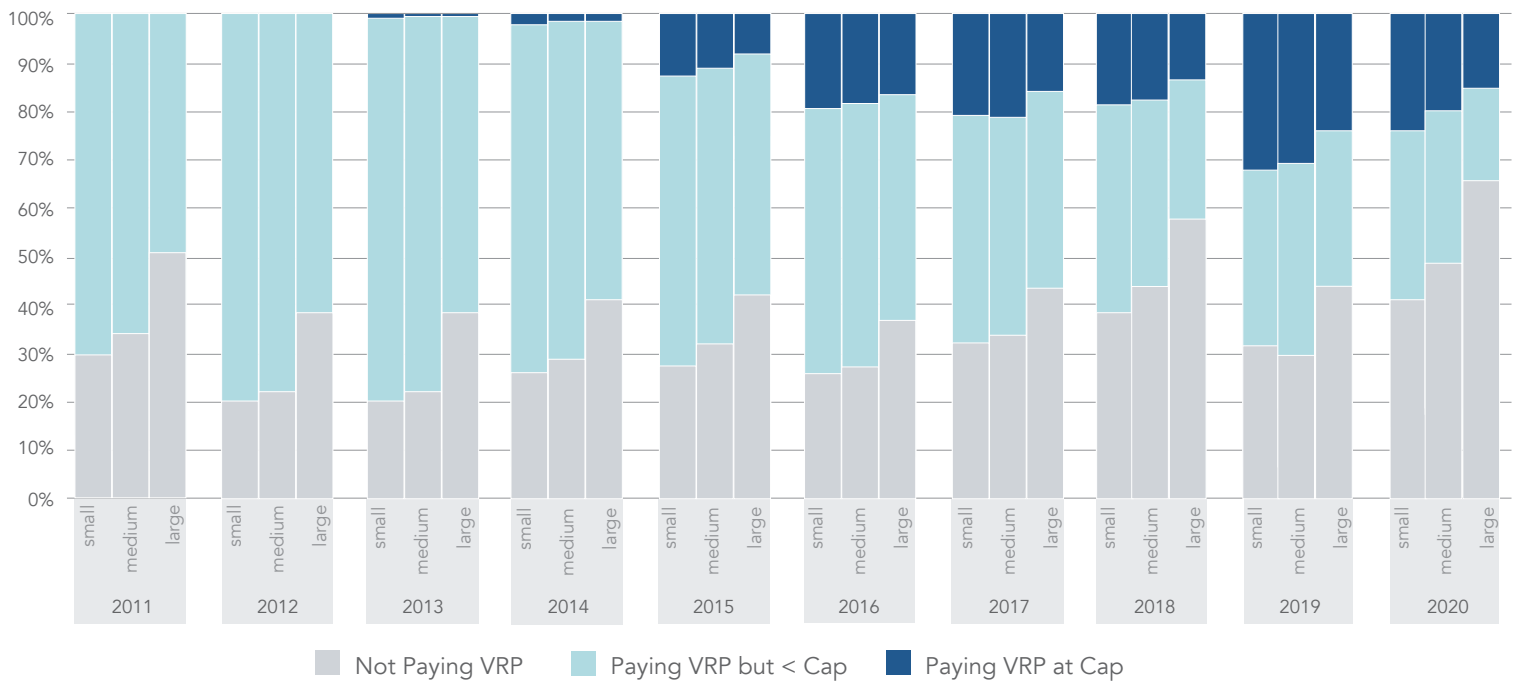
■ Not Paying VRP ■ Paying VRP but < Cap ■ Paying VRP at Cap

A minority of plans (as low as 22% in 2013, but 48% in 2020), are overfunded and didn't owe any VRP. At the other extreme, 21% of plans saw premiums limited by the VRP cap in 2020 (dark blue bars), a high percentage. In general, these plans are not the focus of this paper.

Rather, it is the plans in the middle (orange bars), about 30% of plans in 2020 (along with a small number of plans at the VRP cap that made contributions that could have reduced premiums), for whom adopting best practices regarding timing and recording of pension contributions translates to millions of dollars in lower PBGC premiums, as we discuss in Section 2.

The graphs below break down the same classification by plan size:

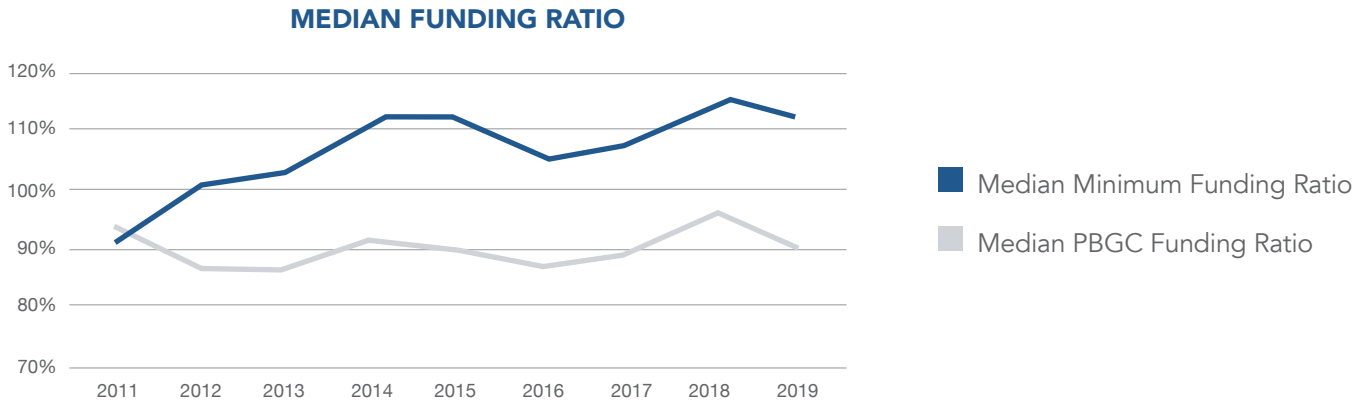
VRP CLASSIFICATION BY PLAN SIZE



Large plans are better funded than others; in 2020, 65% of large plans avoided the VRP altogether, while only 15% of such plans were severely underfunded and subject to the VRP cap. Among plans of all sizes, 20%-30% are still in the middle – these are the plans that stand to benefit from adopting simple best practices.

PREMIUMS VS CONTRIBUTIONS

Legislation that increased PBGC premiums also provided relief to pension sponsors on minimum funding requirements, allowing plans to measure liabilities using above-market interest rates starting in 2012. Importantly, this relief does not apply to measuring liabilities for VRP purposes. The graph below shows the median funded ratio for our universe of plans since 2011 under these two bases:



Prior to 2012, the PBGC funding ratio was modestly higher than the minimum funding ratio because the PBGC calculation ignores non-vested benefits. However, since 2012, the ratios diverge by as much as 25%.

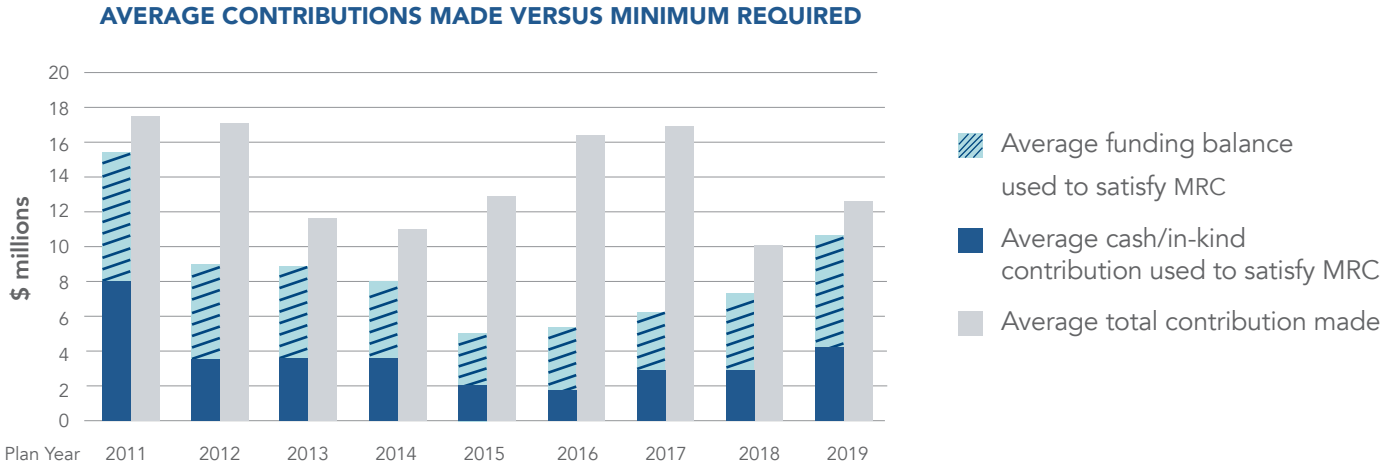
This divergence can be a source of confusion for plan sponsors, many of whom find their plans overfunded for minimum funding purposes but underfunded for PBGC purposes. As discussed later in this report, many plan sponsors' funding policies seemed to be focused more on PBGC

funding levels than just making minimum required contributions.

In 2020, the government passed another round of pension funding relief, which will increase plans' minimum funding ratio again. This legislation will be helpful to the roughly 10% of plans that only make minimum contributions, but for most plans, the new law provides more room for plans to continue settling liabilities without falling below 80% funded on a minimum basis.

HISTORICAL FUNDING PATTERNS

The graph below shows the trend since 2011 in minimum required contributions (MRC), the trend in applying ‘funding balances’² to meet minimum funding requirements, and the trend in total contributions made by plan year:



The blue bars (solid plus shaded) represent required contributions, while the orange bars reflect actual contributions made. We can see the impact of funding relief legislation in the size of the blue bars, which fell significantly beginning in 2012. Plans reduced contributions in 2013-2015, but funding continued to run well above annual requirements. In 2016 and 2017, voluntary contributions reached record levels, motivated in part by a reduction in corporate tax rates beginning in 2018 that provided extra incentive (on top of PBGC savings) for sponsors to accelerate pension funding in years prior to 2018.

As discussed in previous reports, the chart shows that plan sponsors are increasingly using ‘funding balances’² to satisfy funding requirements and also making actual contributions consistently in excess of requirements (roughly 55% of plans annually made voluntary contributions above minimum requirements).

The strategy of using funding balances allows plan sponsors to recognize some pension contributions earlier than they otherwise would for purposes of measuring plan funded status, including the calculation of PBGC premiums.

² Funding balances are the sum of the plan’s Carryover Balance and Prefunding Balance. They can be created when contributions exceed the minimum required.

The pattern in the graph shows how, since 2011, plan sponsors have been more apt to both (a) apply funding balances to satisfy funding requirements (the shaded portion of the blue bar), and (b) make large voluntary contributions in excess of required amounts. Both trends provide evidence that pension sponsors are improving their ability to tailor a pension funding strategy to a world of mounting PBGC premium costs.

In recent years, many pension sponsors have come to adopt the best practices we have been preaching for decades, but others continue to leave a lot of easy money on the table. In the next section, we explore in more detail a simple strategy that can reduce premiums for hundreds of plan sponsors, including dramatic savings in some cases.

(We have included an Appendix which provides additional details on data used to create the graphs in this Section 1).

2018 SPONSOR INCREASE

VOLUNTARY CONTRIBUTIONS

reached record levels
with a

CHANGE IN CORPORATE TAX RATES





SECTION 2

MISSED OPPORTUNITIES DUE TO CONTRIBUTION RECORDING AND TIMING

In this section, we look at a very specific issue: plans that didn't optimize their contribution recording and timing for PBGC purposes. The discussion is a bit technical – but very important. Most, if not all, plan sponsors rely on guidance in navigating these contribution timing rules. Unfortunately, it appears they are not always receiving the guidance they need in this regard. As a result, hundreds of plans are failing to take simple actions that would reduce premiums

BETWEEN 2012 AND 2019

failure to adopt best practices

**CAUSED PLAN SPONSORS
TO PAY**

\$1.1 billion
more in premiums

Minimizing PBGC premiums depends on plans' maximizing the use of 'grace period' contributions – amounts contributed to a plan after the end of the plan year but still attributable to that plan year. This is what we call best practices. Failure to adopt best practices around quarterly contribution requirements and applying funding balance has caused plan sponsors to pay higher PBGC premiums than necessary due to not maximizing and getting full credit for grace period contributions. In many cases, all or part of contributions made to satisfy quarterly contribution requirements could have been characterized as grace period contributions but weren't. So, plans often report lower asset values than they could have and, as a result, pay higher premiums than they need to.

The good news is that more and more sponsors are catching on to this strategy: in 2012, 1,912 plans paid \$82 million in premiums that could have been easily avoided, but by 2019, only 570 plans missed opportunities, and total overpayments were just \$34 million. That's a 70% drop in plans making overpayments and a 58% drop in overpaid premiums. Given that the "penalty" for not adopting best practices increased by almost a factor of five during this period (from 0.9% to 4.3% of unfunded liability), it is clear that best practices have become an increasingly important part of pension sponsor's toolkit for managing pension costs.

RECORDING ERRORS

The simplest strategy involves no change in plan funding pattern at all, merely an assessment of plans' ability to record grace period contributions for the prior year. Sometimes this can't be done – plans that are less than 80% funded must make cash contributions to satisfy funding requirements, and other plans that don't satisfy prior year requirements until the funding deadline (September 15th for most plans) can't record grace period contributions optimally.

But lots of plans could have adopted best practices to reduce premiums by simply recording grace period contributions for the prior year but failed to do so. We view these "recording errors" as the most egregious failure to adopt best practices for premium management and the easiest to correct.

MODESTLY ACCELERATED FUNDING SCHEDULE

Beyond fixing recording errors, best practices involve modest acceleration of pension contributions to minimize PBGC premiums. In particular, we recommend (for a calendar year plan that was at least 80% funded in the prior year):

- Accelerating quarterly contributions due on October 15th to September 15th and recording those contributions for the prior year.
- Accelerating quarterly contributions due on January 15th to September 15th and recording those contributions for the prior year.
- Accelerating residual minimum required contributions due on September 15th to April 15th, which allows plans to record April 15th and July 15th contributions for the prior year.
- Accelerating voluntary year-end contributions to September 15th and recording those contributions for the prior year.

The accelerations above are modest – from as little as one month to five months at the most. And, other than voluntary year-end contributions, these contribution amounts are usually known months in advance.

But the payoff to plan sponsors could be huge. Our analysis indicates that failure to adopt these best practices has caused plan sponsors to pay \$1.1 billion more in premiums between 2012 and 2019 than they needed to.

YEAR-END VOLUNTARY CONTRIBUTIONS

More than half of these missed savings (\$630 million) are related to accelerating voluntary year-end contributions. Accelerating these contributions can be challenging – often, year-end funding decisions are driven by financial results that are not known three months earlier.

But for plans that can make a reasonable estimate of this number and fund the contribution by September 15th, the impact on PBGC premiums can be enormous. For 2018 and 2019, the impact of accelerating voluntary year-end contributions to September 15th was much less significant than in prior years, due at least in part to the fact that sponsors accelerated contribution in 2017 to take advantage the higher corporate tax rate applicable to that year.

Employers who can manage to estimate and accelerate voluntary year-end contributions stand to reduce their 2021 PBGC premium by 4.6% of the amount contributed, e.g. \$4.6 million for a \$100 million contribution.

With respect to accelerating voluntary year-end pension contributions, there are some complications but, given the dollar amounts at stake, we think it is worth employers' time to give some thought to this.

SIMPLE ACCELERATION STRATEGIES

The other acceleration strategies are more straightforward, as they generally involve contribution amounts known well in advance. Among these, accelerating October 15th contributions to September 15th is the easiest – a mere one-month acceleration that produces a near-instant “rebate” (4.6% in 2021).

For some employers, accelerating required September 15th contributions to April 15th can significantly reduce premiums by freeing up April 15 and July 15 contributions to be recorded for the prior year.

And accelerating required January contributions to the previous September is very much like the October acceleration, except that it involves bringing forward a contribution by four months rather than one.

EMPLOYERS WHO CAN MANAGE THIS STAND TO REDUCE THEIR 2021 PBGC PREMIUM BY 4.6% OF THE AMOUNT CONTRIBUTED, E.G. \$4.6 MILLION FOR A \$100 MILLION CONTRIBUTION.



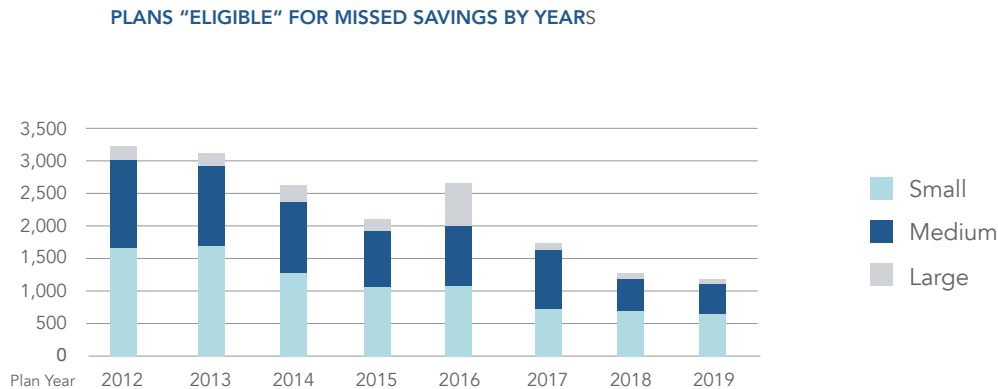
ANALYSIS OF MISSED SAVINGS OPPORTUNITIES

Sponsors are increasingly adopting best practices in response to higher premium rates, but our analysis indicates that hundreds of plans continue to overpay premiums by more than \$50 million annually, with more than half of “eligible” plan sponsors overpaying in some fashion. All because they failed to adopt simple best practices with respect to the recording and timing of plan contributions.

For this analysis, we identified plans from our universe that:

1. Paid a variable rate premium for a plan year,
2. Made contributions for the plan year,
3. Were not subject to the VRP cap, or made enough contributions to bring the plan under the cap

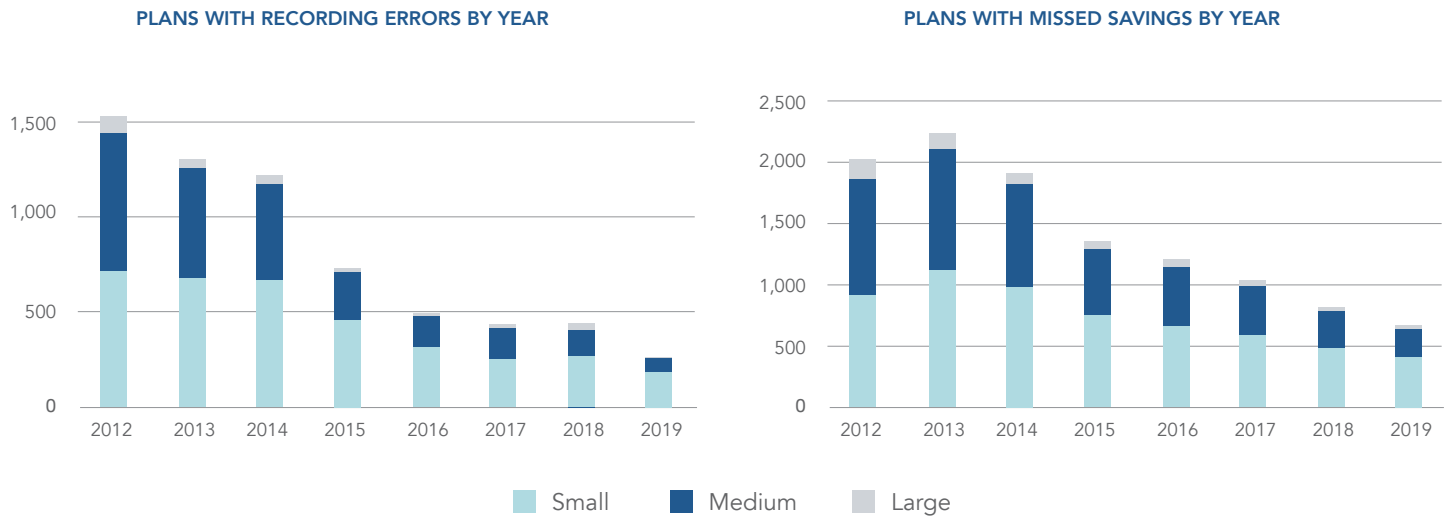
The number of plans satisfying each of these conditions each year is shown below:



The graph shows a sharp downward trend in the number of “eligible” plans since 2012, due (as discussed in Section 1) to the fact that 70% of plans either paid no variable premium in 2020 or the premium was limited by the VRP cap, and of the remaining 30% of plans, some did not make any contributions to which best practices could be applied. (Note that 2019 data in this section is preliminary, based on estimates for some non-calendar-year plans.)

Between 2012 and 2019, the number of eligible plans fell 67%, with Small, Medium, and Large plans falling 62%, 70%, and 74%, respectively.

The charts below show the number of “eligible” plans that suffered a recording error between 2012 and 2019: (left) or missed any savings opportunity (right):



The likelihood of suffering recording errors fell 82% between 2012 and 2019, from 1,532 plans in 2012 to just 268 plans in 2019. The drop was most dramatic among Large plans (94%). In 2019, only 6 large plans made recording errors, compared to 92 such plans in 2012. Medium and Small plans saw dramatically lower incidence of recording errors too, seeing drops of 90% and 73%, respectively.

Across the board, on top of a 67% drop in the number of plans exposed to the risk of recording errors, we see that the likelihood of making recording errors has dropped by 48%. Among Small, Medium, and Large plans, the likelihood of a recording error fell 29%, 68%, and 77%, respectively.

Given that recording errors can be fixed with almost no effort, this improvement is not surprising. At this point, it is very unusual (and potentially embarrassing) for a Large plan to suffer a recording error, but 69 Medium employers and 189 Small employers have yet to adopt this simple strategy.

When we look at the broader category of missed savings opportunities, the trends are a bit less encouraging. The number of plans that fail to adopt best practices has fallen 67%, from 2,040 to 679, since 2012, in step with the fall in the number of “eligible” plans. So, overall, the likelihood of missing a savings opportunity has been pretty stable (63% in 2012, 62% in 2019).

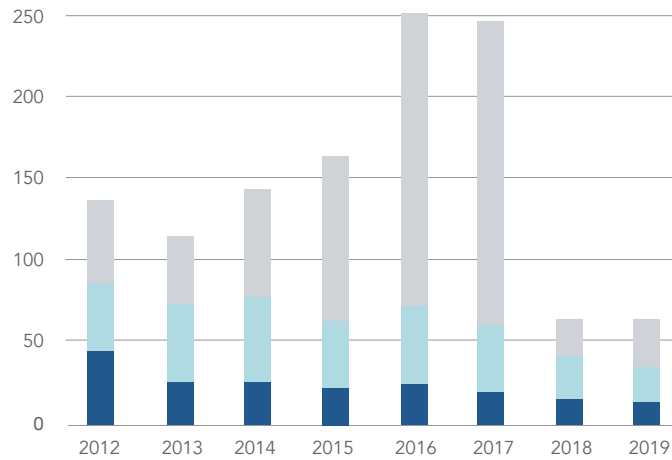
Once again, Large plans have made the most progress, but 25 Large plans (40% of “eligible” Large plans) missed some 2019 savings opportunity, along with 230 Medium plans (55% of “eligible” Medium plans) and 418 Small plans (69% of “eligible” Small plans.) While much progress has been made, much remains to be done.

The positive trends discussed above must be set against relentless premium increases, which are baked into current law. The variable premium rate charged by PBGC increased from 0.9% in 2012 to 4.3% in 2019. This means that a failure to adopt best practices that cost a plan \$100 in 2012 cost the plan \$477 in 2019. The stakes keep going up.

When we put it all together, we see positive trends in terms of total overpayments per year. The first graph below summarizes the impact of all sources of missed savings during 2012-2019, while the second graph below ignores the impact of voluntary year-end contributions, which are less straightforward:

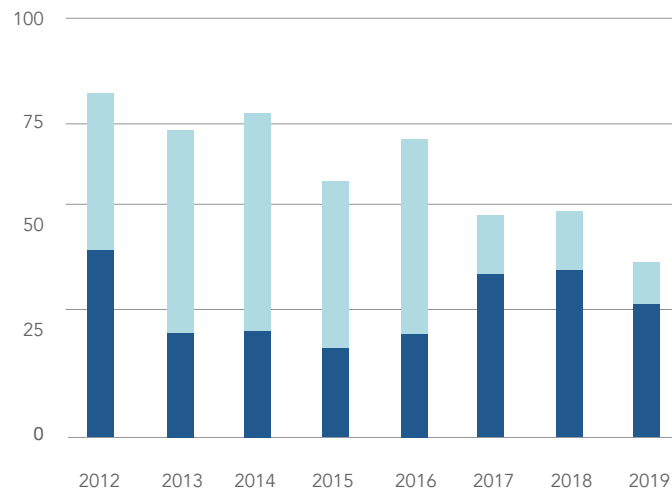
Total Missed Savings by Year (\$millions)

- Year-end voluntary
- Simple acceleration
- Recording error



Total Missed Savings by Year (\$millions)

- Simple acceleration
- Recording error



As we mentioned, voluntary year-end contributions decreased a lot after 2017, but even if we focus on the straightforward opportunities shown on the graph on the right, plans have paid \$500 million in premiums during 2012-2019 that could have been avoided by accelerating known contributions a couple months and recording grace period contributions for the prior year.

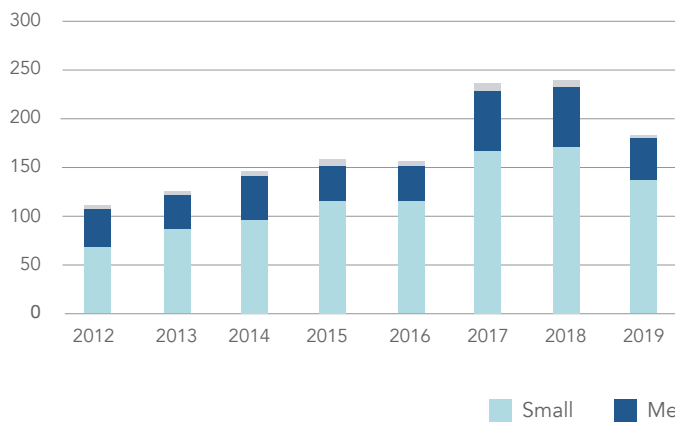
Recording error opportunities – the true low-hanging fruit here – peaked at \$44 million in 2012, tumbling 71% to \$13 million in 2019. Overpayments associated with simple acceleration strategies rose from \$38 million in 2012 to \$52 million in 2014 before falling to \$21 million in 2019.

CHRONIC OVERPAYMENTS

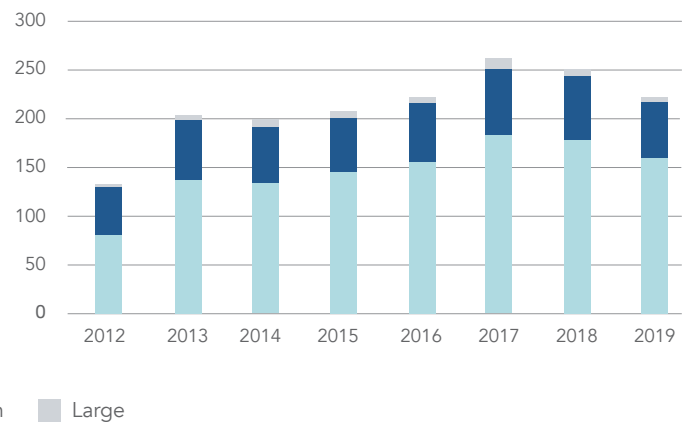
The 679 plans that missed savings in 2019 include a subset of 270 plans that pay too much in premiums year in and year out. For these plans, the cost of failure to adopt best practices continues to grow in step with higher premium rates. While these plans make up less than 6% of total plans and less than 2% of total pension assets, they accounted for 46% of all simple acceleration oversights (and a whopping 76% of all recording errors) during 2019.

192 Small plans (9% of all Small plans), along with 68 Medium (4% of all Medium plans) and 10 Large plans (2% of all Large plans) are chronic overpayers. The chart on the left shows the number of these plans that suffered a recording error each year, while the chart on the right includes plans with any kind of overpayment:

CHRONIC PLANS WITH RECORDING ERRORS BY YEARS

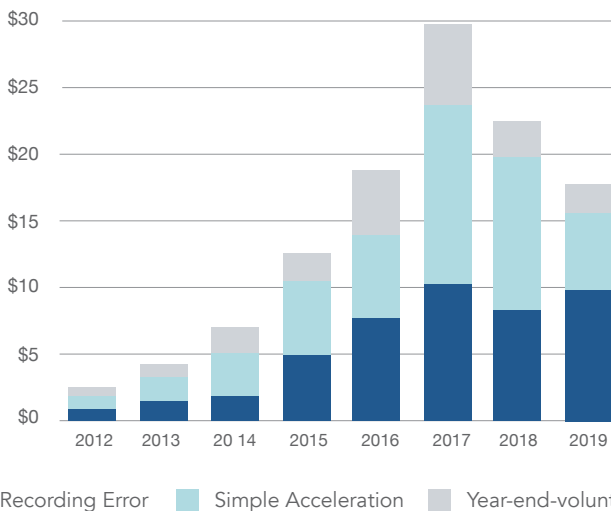


CHRONIC PLANS WITH MISSED SAVINGS BY YEAR

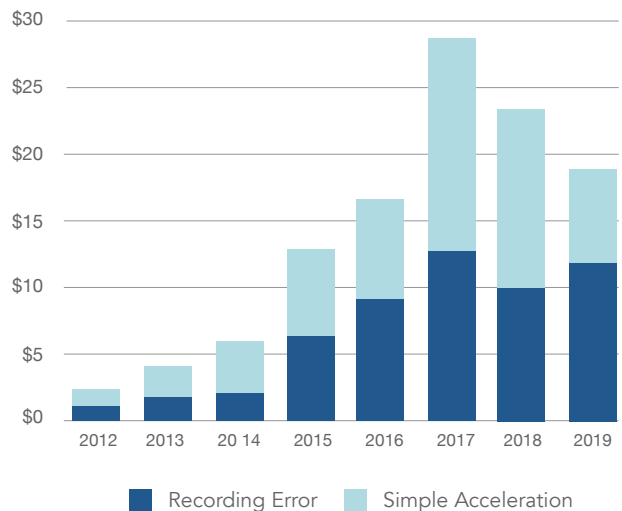


For chronic overpayers, the likelihood of overpayments has continued to rise, in contrast to the experience of the broader universe. When we look at the amount of savings missed by these plans, we see a similar pattern:

MISSED SAVINGS BY YEAR: CHRONIC OVERPAYERS (\$ MILLIONS)



MISSED SAVINGS BY YEAR: CHRONIC OVERPAYERS (\$ MILLIONS)

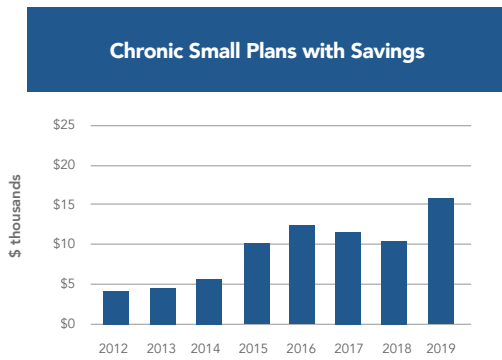


Adopting best practices in 2012 would have saved these plans just \$2 million, but, by 2017, the cost rose to \$29 million, before declining the past two years. Still, in 2019, these plans paid more than \$17 million in unnecessary premiums, including almost \$10 million in recording errors.

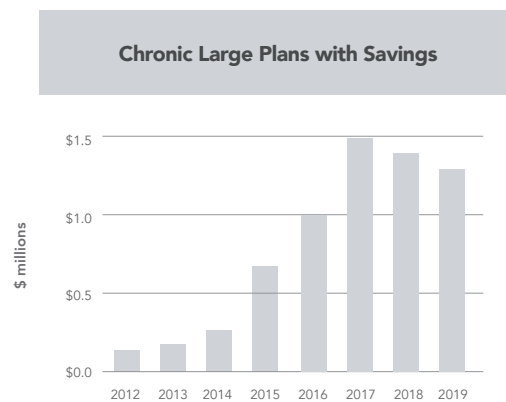
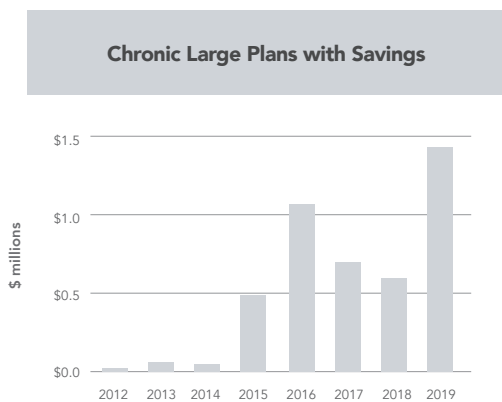
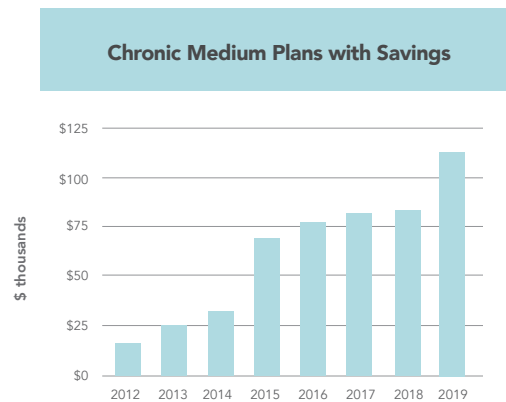
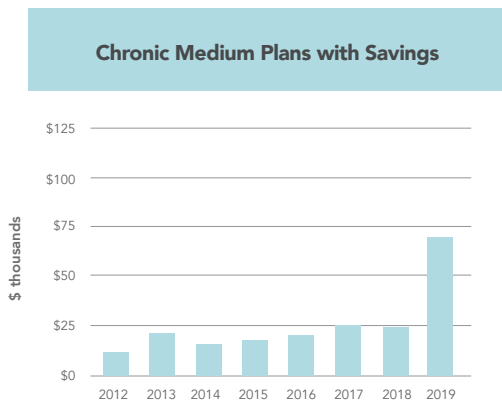
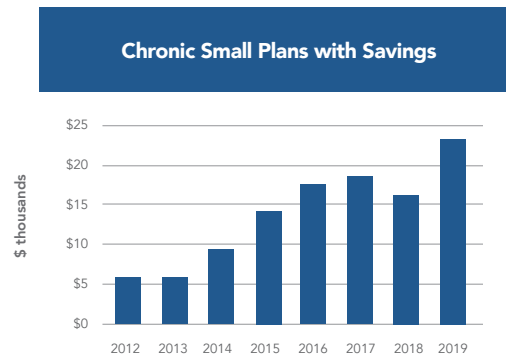
For 2019, the story can be summed up as: fewer plans are missing savings, but, among plans that continue to miss savings, overpayments are as high or higher than ever.

The graphs below express savings opportunities in terms of average dollar amounts for chronic overpayers based on our three plan sizes. Due to scaling issues, we graph Small, Medium, and Large plans separately. The graphs on the left show average recording errors, while the graphs on the right show the impact of adopting simple acceleration strategies in addition to recording errors:

AVERAGE MISSED SAVINGS - RECORDING ERROR



AVERAGE MISSED SAVINGS - BEST PRACTICES



In 2019, 136 chronic Small plans suffered recording errors averaging more than \$16,000 per plan, 43 chronic Medium plans overpaid by an average of \$68,000, and even three chronic Large plans overpaid an average of \$1.4 million each due to recording errors.

When we also consider the impact of simple acceleration strategies, the picture is even worse. In 2019, 157 chronic Small plans paid an average of \$23,000 more in 2019 premiums than they needed to, 56 chronic Medium plans paid an average of \$115,000 more than they needed to, and four chronic Large employers overpaid by an average of \$1.3 million.

These overpayments represent meaningful dollars to each and every one of these plans, they are easy to fix, most employers have adopted strategies to avoid this result, and yet hundreds of plan sponsors continue to overpay in this fashion.

So, while pension sponsors have in general significantly improved their practices, a subset of plans has yet to adopt best practices, and, for them, the price keeps going up.

As we documented in our 2019 report, pension plans sponsored by hospitals have been especially plagued by the PBGC premium burden and more likely than other employers to overpay premiums by not adopting best practices. Not surprisingly, hospitals are also overrepresented in the subset of plans that chronically overpay premiums.

Hospitals make up about 10% of all plans included in this report, but they represent 17% of chronic overpayers (46 hospitals) and 20% of total overpayment dollars. No other industry has been as slow to adopt best practices, and none has paid a greater price for this failure.



10%
Hospitals are 10% of all plans



17%
chronic overpayers



20%
total overpayment dollars

SECTION 3

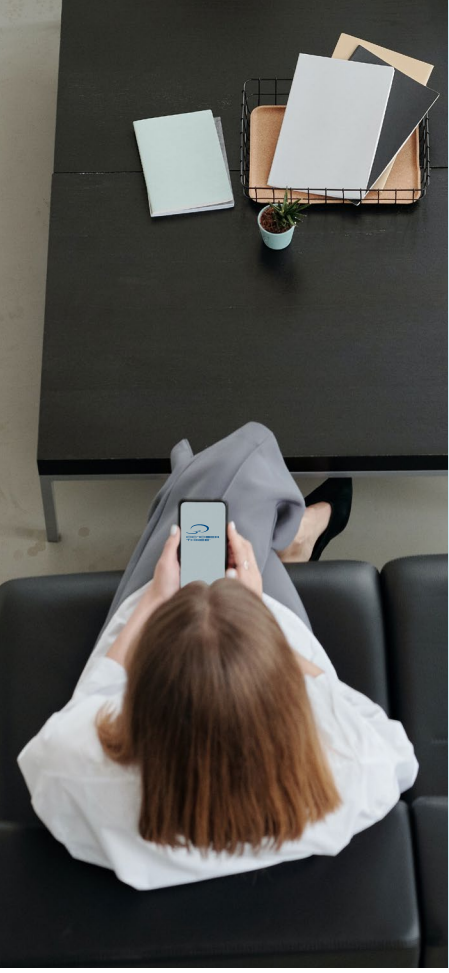
OTHER TRENDS IN MANAGING PREMIUMS

PREMIUMS ARE INCREASINGLY DRIVING FUNDING DECISIONS

Large pension plans have been quicker to respond to the rising PBGC premium burden than others. In general, Large plans have been mostly successful in funding pension shortfalls voluntarily and adopting best practices for timing and recording of pension contributions.

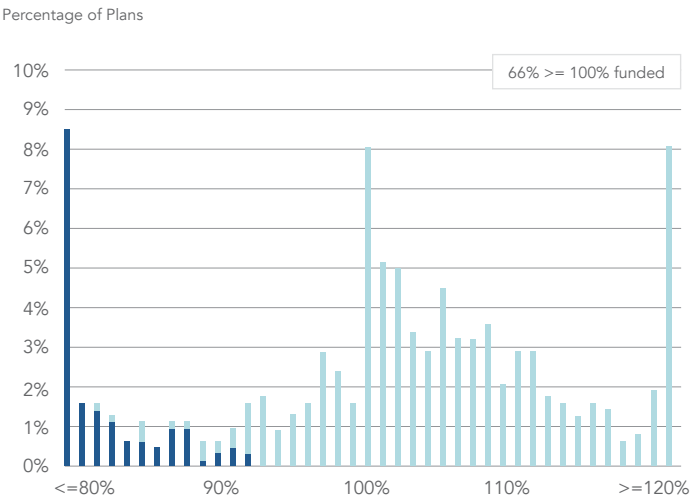
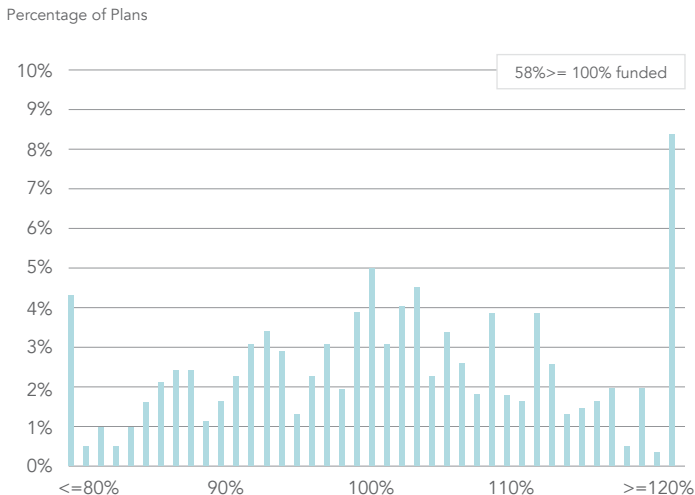
This should not be surprising. Large employers have more sophisticated internal resources and access to the best external advice to pursue optimal strategies. In our view, other sponsors can look to these Large plans as a model for their own behavior.

The graphs below focus on many of the largest single-employer plans in America – 621 plans in our data for all years 2011-2020 with at least \$400 million in assets for 2020, excluding plans chronically below 80% or above 120% funded. The first graph shows the distribution of these plans by “PBGC Funded Ratio” (plan assets divided by PBGC Funding Target) in 2011, and the second graph looks at the same ratio in 2020:



2011 DISTRIBUTION BY PBGC FUNDED RATIO
(based on 621 plans with at least \$400 million in assets)

2020 DISTRIBUTION BY PBGC FUNDED RATIO
(based on 621 plans with at least \$400 million in assets)



■ At VRP Cap ■ Not at VRP Cap

OBSERVATIONS:

- In 2020, 18% of these plans saw PBGC premiums limited by the VRP cap. This means that these plans cannot reduce PBGC premiums by making additional contributions, in effect discouraging these plans from making greater contributions than required.
- The median funded status for the total group increased from 101% in 2011 to 102% in 2020, an impressive achievement given the headwinds of declining interest rates.
- The 2011 distribution was fairly uniform between 85% and 110% funding levels, while the 2020 distribution is bunched around the 100% funded level. For example, 29% of these plans were funded between 100% and 105% in 2020 compared to just 22% in 2011.
- None of this could have been predicted from minimum funding rules. Clearly, more and more employers are using the PBGC Funding Target as a de facto funding threshold, which should not be surprising, given the penalty for underfunding is 4.6% in 2021 and indexed to average wage increases in future years.



OTHER PREMIUM MANAGEMENT STRATEGIES

Plan sponsors have been busily settling liabilities over the past several years, via lump sum windows for deferred vested participants and annuity purchases for retired lives. Since 2012, millions of participants have been removed from the pension system in this way.

In our view, it is difficult to justify employers' continued underwriting of small benefits to participants in the face of PBGC premium overhead that represents a material percentage of the benefit liability.

Higher PBGC premiums are part of the motivation for this trend. Headcount premiums (\$86 per participant in 2021, increasing in the future) can create significant overhead costs, particularly for participants with small benefits.

Plans that are at the VRP cap benefit massively from reducing headcounts, since they save \$668 in 2021 premiums for each participant settled in 2020.

We expect the trend toward settling pension liabilities will continue in 2021 and beyond. Capital market volatility combined with burgeoning premiums combine to make this a compelling strategy for pension sponsors. Funding relief legislation in 2021 provides even more elbow room for sponsors to settle pension liabilities without triggering consequences related to falling below 80% funded.

FINAL THOUGHTS



Pension sponsors deserve credit for taking aggressive action to manage the PBGC Premium Burden over the past five years. It's impossible to imagine a strategy for managing pension finances that doesn't squarely tackle this burden, and thousands of pension sponsors, including the vast majority of Large plans, have done just that.

However, hundreds of plan sponsors continue to overlook the best practices discussed in section 2, which can also take a meaningful bite out of premiums for a fraction of the effort associated with other strategies. Sponsors who aren't applying best practices should consider this as a simple first step.

SECTION 4

APPENDIX

The following exhibits provide additional detail on the data used to provide statistics in Section 1.

Our universe includes single-employer plans with at least 250 participants in any year from 2016 to 2020. For breakdown by Plan size, we define “Small” plans as those with 250-999 participants, “Medium” plans as those with 1,000-9,999 participants, and “Large” plans as those with at least 10,000 participants. Plans are recharacterized by plan size based on population every year between 2010-2019.

2020 numbers shown only represent plans that have filed its 2020 PBGC forms by June 6, 2021.

EXHIBIT 1: NUMBER OF PLANS – BY PLAN SIZE

YEAR	SMALL	MEDIUM	LARGE	TOTAL
2011	2,138	1,837	491	4,744
2012	2,184	2,119	494	4,797
2013	2,237	2,122	487	4,846
2014	2,282	2,117	477	4,876
2015	2,361	2,105	464	4,930
2016	2,452	2,094	465	5,011
2017	2,366	1,988	447	4,801
2018	2,217	1,906	426	4,549
2019	2,107	1,792	415	4,314
2020	1,837	1,573	367	3,777

EXHIBIT 2: TOTAL NUMBER OF PARTICIPANTS (IN THOUSANDS) – BY PLAN SIZE

YEAR	SMALL	MEDIUM	LARGE	TOTAL
2011	1,131	6,768	19,473	27,372
2012	1,148	6,795	19,493	27,437
2013	1,148	6,804	19,034	27,009
2014	1,192	6,813	18,712	26,716
2015	1,215	6,736	18,130	26,080
2016	1,246	6,604	17,535	25,385
2017	1,206	6,248	16,482	23,936
2018	1,139	5,975	15,676	22,790
2019	1,083	5,658	15,094	21,835
2020	942	4,865	12,702	18,509

EXHIBIT 3: VRP CLASSIFICATION – BY PLAN SIZE

SMALL

YEAR	NOT PAYING VRP	PAYING VRP BUT < CAP	PAYING VRP AT CAP	TOTAL
2011	635	1,503	0	2,138
2012	438	1,746	0	2,184
2013	423	1,792	22	2,237
2014	588	1,646	48	2,282
2015	667	1,409	285	2,361
2016	621	1,384	447	2,452
2017	737	1,150	479	2,366
2018	858	924	435	2,217
2019	708	753	646	2,107
2020	794	627	416	1,837

MEDIUM

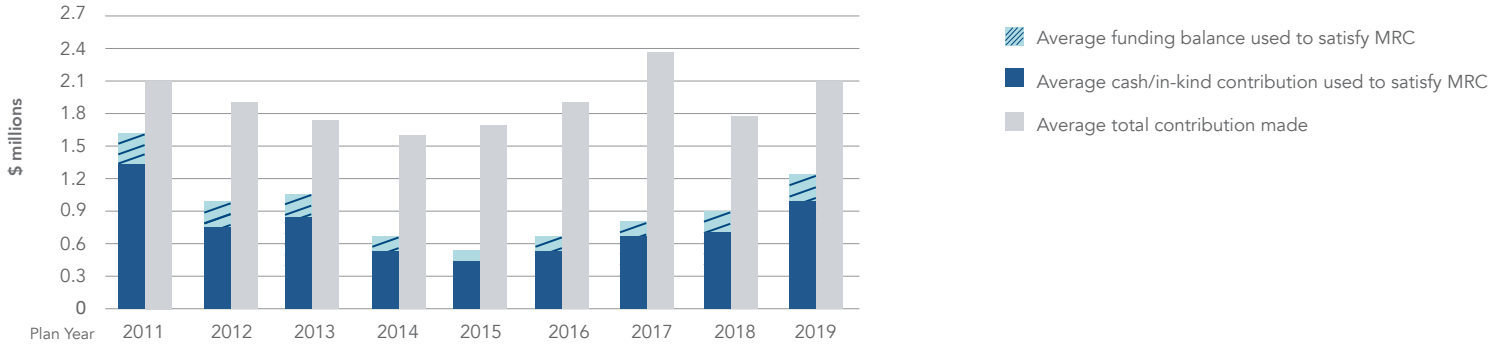
YEAR	NOT PAYING VRP	PAYING VRP BUT < CAP	PAYING VRP AT CAP	TOTAL
2011	723	1,392	0	2,115
2012	478	1,641	0	2,119
2013	478	1,631	13	2,122
2014	583	1,498	36	2,117
2015	571	1,295	239	2,105
2016	544	1,174	376	2,094
2017	653	927	408	1,988
2018	827	716	363	1,906
2019	595	669	528	1,792
2020	788	475	310	1,573

LARGE

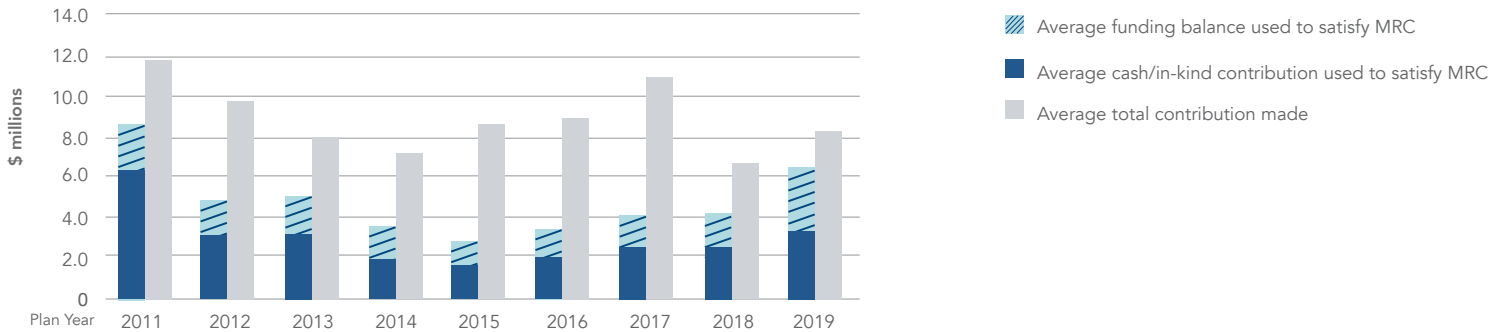
YEAR	NOT PAYING VRP	PAYING VRP BUT < CAP	PAYING VRP AT CAP	TOTAL
2011	248	243	0	491
2012	190	304	0	494
2013	187	297	3	487
2014	221	248	8	477
2015	182	242	40	464
2016	173	216	76	465
2017	198	180	69	447
2018	240	129	57	426
2019	183	133	99	415
2020	239	71	57	367

EXHIBIT 4: AVERAGE CONTRIBUTIONS MADE VERSUS MINIMUM REQUIRED CONTRIBUTIONS (MRC) – BY PLAN SIZE

AVERAGE CONTRIBUTIONS MADE VERSUS MINIMUM REQUIRED
SMALL PLANS



AVERAGE CONTRIBUTIONS MADE VERSUS MINIMUM REQUIRED
MEDIUM PLANS



AVERAGE CONTRIBUTIONS MADE VERSUS MINIMUM REQUIRED
LARGE PLANS

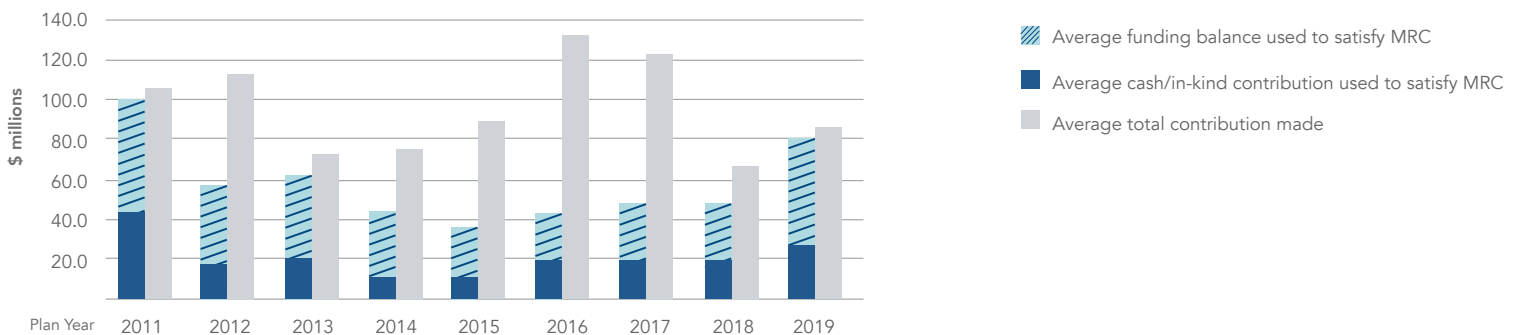
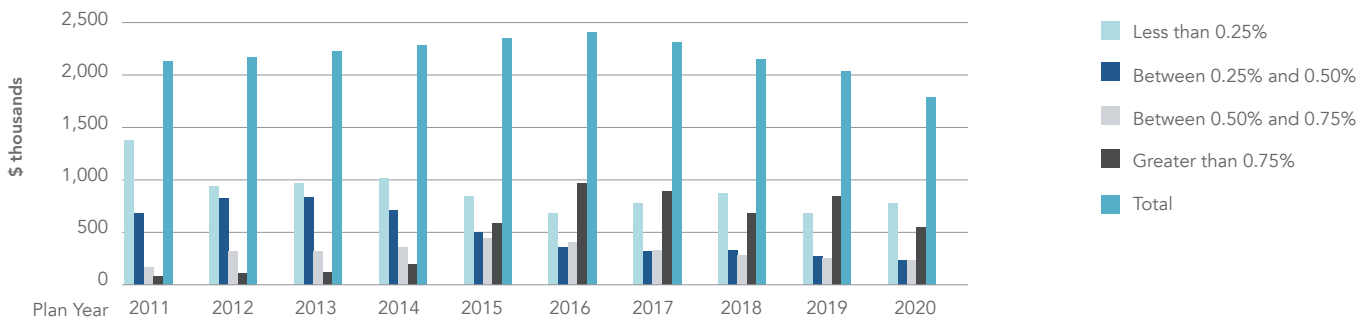


EXHIBIT 5: AVERAGE CONTRIBUTIONS MADE VERSUS MINIMUM REQUIRED CONTRIBUTIONS – BY CATEGORY

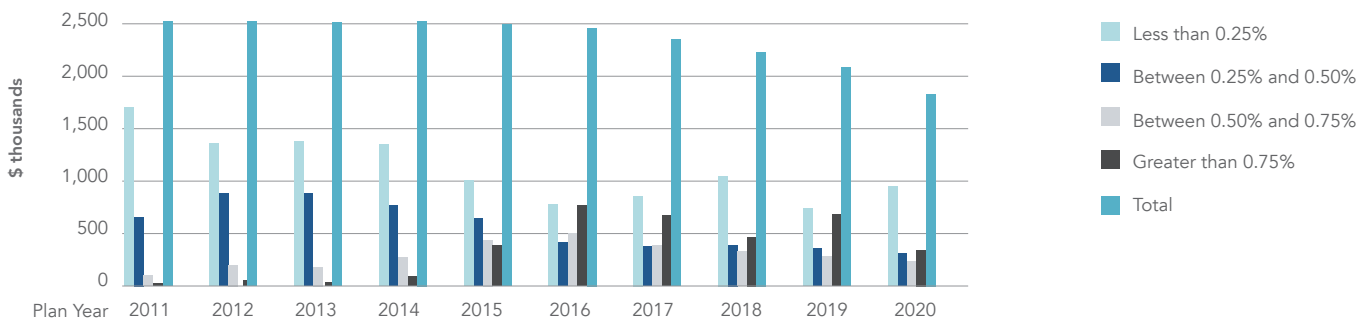
	PERCENTAGE OF PLANS							
	2012	2013	2014	2015	2016	2017	2018	2019
1. No Minimum Required Contribution								
a. No Contributions Made	9%	13%	21%	25%	21%	19%	23%	20%
b. Made Cash/In-Kind Contribution	18%	13%	27%	30%	26%	22%	19%	14%
c. Subtotal	27%	26%	48%	55%	47%	41%	42%	34%
2. Made Only Minimum Required Contribution								
a. Used Only Funding Balances	7%	9%	8%	6%	8%	9%	13%	16%
b. Used Only Contribution	6%	5%	4%	3%	3%	3%	4%	5%
c. Used Both Funding Balance and Contributions	2%	4%	2%	2%	3%	3%	3%	4%
d. Subtotal	15%	18%	14%	11%	14%	15%	20%	25%
3. Had Minimum Required but Made Excess Contributions								
a. Made Only Cash/In-Kind Contribution	43%	41%	24%	23%	28%	30%	25%	28%
b. Used Both Funding Balance and Contributions	15%	15%	14%	11%	11%	14%	13%	13%
c. Subtotal	58%	56%	38%	34%	39%	44%	38%	41%
4. Total Plans	100%	100%	100%	100%	100%	100%	100%	100%

EXHIBIT 6: NUMBER OF PLANS WITH TOTAL PBGC PREMIUMS AS A PERCENT OF ASSETS – BY PLAN SIZE (ONLY INCLUDES PLANS THAT FILLED OUT VARIABLE PREMIUM SECTION OF FILING)

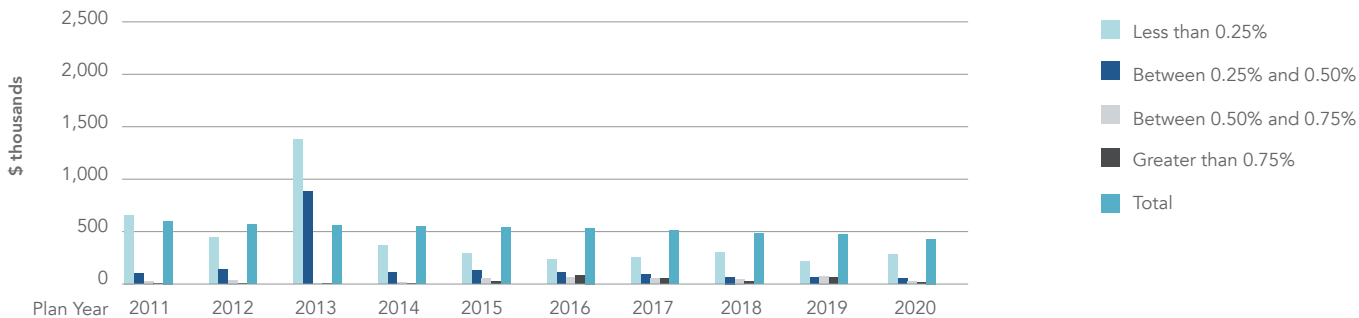
SMALL PLANS



MEDIUM PLANS



LARGE PLANS



ABOUT OCTOBER THREE

In an industry where confusion and skepticism run high, October Three is building a refreshingly new approach – one based on innovation, understanding and transparency. We believe that by shedding light on alternative solutions in the Defined Benefit arena, we can help our clients move from a sense of powerlessness and negativity to one of empowerment.

A primary focus of the consultants at October Three is the design and administration of comprehensive retirement benefits for employees that minimize the financial risks and volatility concerns employers face. Through effective plan design strategies, October Three believes successful financial outcomes are achievable for employers and employees alike.