Risk Transfer Study
Plan Years 2009 – 2013

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December 2015

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Risk Transfer Analytics Study

- Risk Transfer
  - To plan participants through payment of lump sums
  - To insurance companies through purchase of annuities
  - Standard terminations ultimate form of risk transfer

- Study identified plans that appear to have executed Risk Transfer Events (RTEs) by
  - Large numbers of lump sum payments
  - Bulk purchases of annuities

Prior to 2015, IRS, DOL, and PBGC did not require employers to report lump-sum payment or annuity purchase transactions
Therefore, for this study, risk-transfer occurrence had to be inferred from certain measures reported on Form 5500.

Source Data

Listing of Form 5500 Filings

- Study based on listing of Form 5500 data compiled by PBGC for years 2009 – 2013
- The listing contains a total of 3,590 plans with over 1,000 participants
  - Including 911 cash balance plans

To keep scope of study manageable, restricted it to plans with 1000 or more participants.
Source data compiled in November 2014.
Expected to include all 1/1/2013 plan years (due date 10/15/14).
Missing most 2013 filings with plan years starting after 1/1/2013.
Listing consists of data for pension plans that filed a regular Form 5500 (i.e., not a 5500-SF).

Validation Data

- Risk transfer criteria were validated against a database of recent RTEs compiled by PBGC from publicly available sources
  - Press releases
  - Newspaper articles

PBGC database is limited because the majority of risk-transfer events were not reported by media.

Risk Transfer Criteria

Overview

- Criteria to determine that RTE occurred
  - Large numbers of participants receiving lump sums
  - Marked decreases in terminated vested participant counts
  - Marked decreases in retiree counts

- Criteria were designed such that they
  - Hold true for most plans on PBGC RTE database
  - Are relatively rare occurrences for plans in Source Data

Each plan year is considered independently, and if any of three criteria are satisfied for the plan year, a risk transfer event is considered to have occurred. Events that overlap two plan years may not be identified if the individual plan years do not independently satisfy criteria.

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Risk Transfer Criteria

Lump Sum Criterion

- Criterion designed to exclude routine lump sum payments in cash balance plans

- Satisfied for a given year if 1) OR 2) below is true
  1. Lump sum percentage (number of lump sums divided by sum of active and Terminated Vested (TV) counts) is at least 25%
  2. Lump sum percentage is at least 10% and is at least 5 times the median lump sum percentage for the plan

Number of lump sums from Form 5500, Schedule R, line 3.
Active and TV counts from Form 5500, Schedule SB.
The median lump-sum percentage is obtained by looking at the plan's lump-sum percentage in each of the available 5500 filings.

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Risk Transfer Criteria

- Terminated Vested Count Criterion
  - Satisfied for a given year if decrease in terminated vested count during year is at least 30%

- Retiree Count Criterion
  - Satisfied for a given year if decrease in retiree count during year is at least 10%

Terminated vested (TV) and retiree decrease measured by looking at TV and retiree count for the current and following year from Form 5500, Schedule SB. The exception is for a plan's final year filing (and for the final year of the study) where end-of-year TV and retiree counts come from Form 5500.

Risk Transfer Criteria

Terminations and Final Filings with Spin-offs

- Final Form 5500 filing may be due to plan termination or spin-off to an ongoing plan
  - Final filing shows all participant counts at year end as zero
- In order to avoid counting a spin-off to an ongoing plan as a RTE, we excluded events if
  - 'Final Filing' box on the Form 5500 was checked and
  - Schedule H indicated that assets were transferred to another plan and
  - The plan did not qualify as a RTE under the lump sum criterion
- This check resulted in elimination of 233 plans from RTE count
- Final filings that did not have asset transfer and that satisfied risk transfer criteria represent plan terminations and were counted as RTEs

Plan terminations counted as Risk Transfer Events could be either standard, distress or involuntary terminations.

Risk Transfer Criteria

Impact of Partial Spin-Offs

- Of the events that initially satisfied risk transfer criteria, approximately 80 involved a partial transfer to another plan with no 'Final Filing' check but non-zero transfer of assets. Such events could represent
  - A spin-off
  - A risk transfer followed by, or combined with, a spin-off
  - A spin-off followed by a risk transfer (for example, a termination) of the receiving plan
- Further adjustment using information from financial statement disclosures was made to initial results for spin-offs
  - Events that represented a spin-off alone excluded entirely
  - For events that represented a combination of a spin-off and RTE, only the drop associated with the RTE was counted

Significant RTEs may be described in financial statement disclosures.
RTE may have triggered settlement accounting and effect may be included in the financial statements.
Review of financial statements was labor intensive and time consuming.

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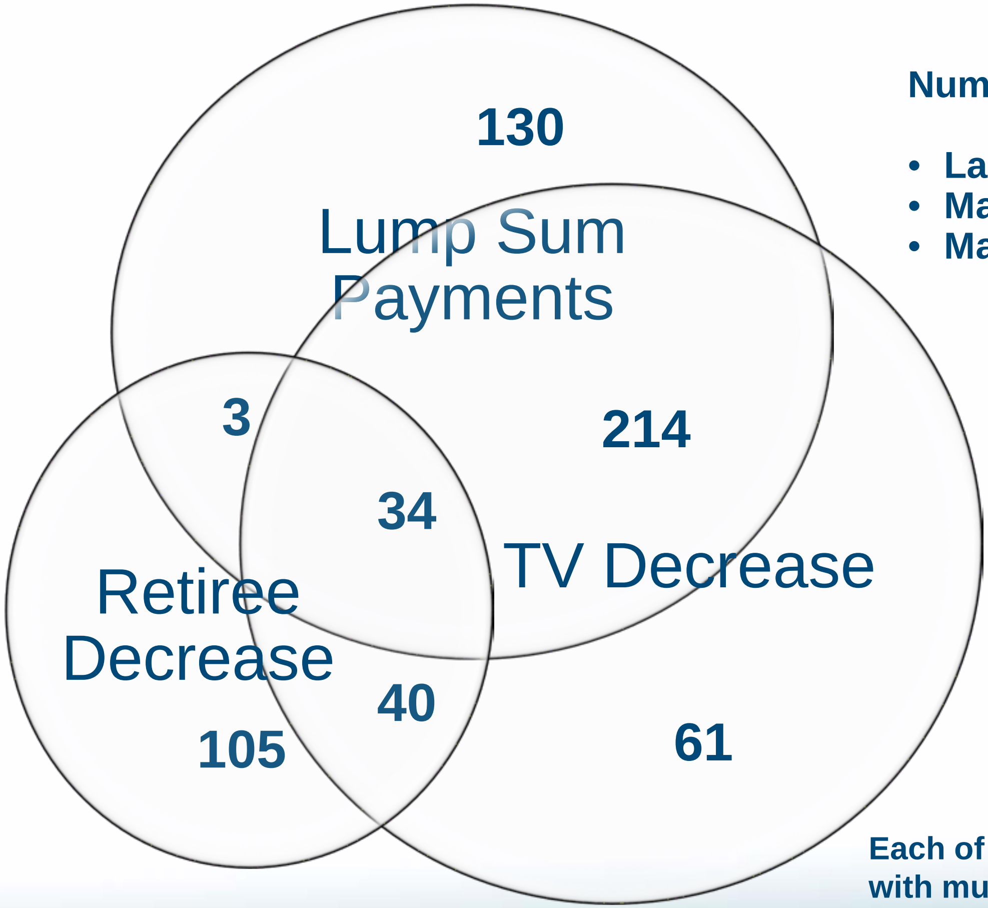
Risk Transfer Incidence Rates

	Total	With RTEs	5 Year Risk Transfer Rate
All Plans (1000+ Ps)	3590	534	14.9%
Cash Balance Plans	911	145	15.9%
Collectively Bargained (CB) Plans	971	135	13.9%
Non-CB plans	2619	399	15.2%

Only plans with 1,000+ participants are counted in analysis.
Plan included if it had 1,000 or more participants for any of the years 2009 through 2013.
Standard Terminations – Based on PBGC's records for case closed date between January 2009 and November 2014, 50 of the 534 plans that had RTEs were determined to have gone through a standard termination.
There is a total of 587 events (i.e., plan years that satisfy criteria) corresponding to the 534 plans with RTEs
- 47 plans have 2 or more events (44 with 2 events and 3 with 3 events)

Results

Estimated Events by Risk Transfer Criteria



Number of events with:

- **Large number of LS payments: 381**
- **Marked decrease in TV count: 349**
- **Marked decrease in retiree count: 182**

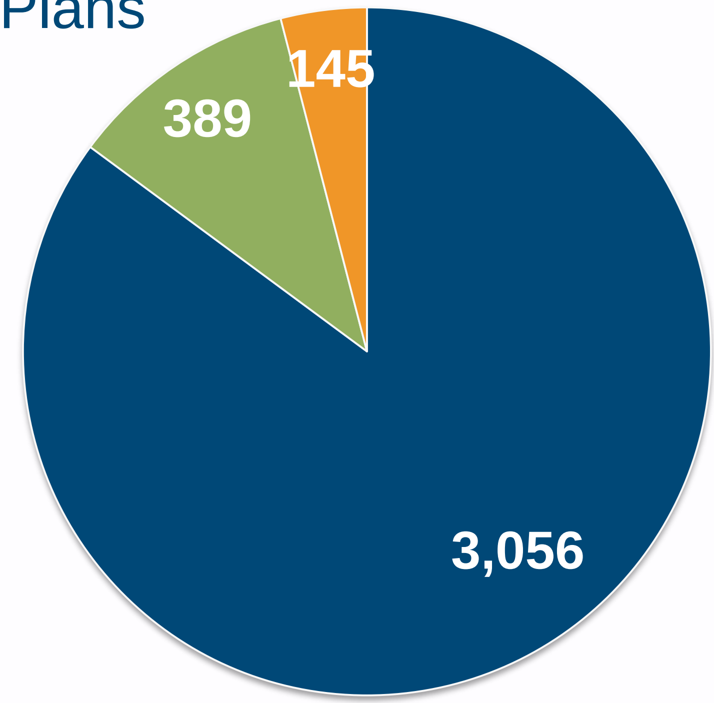
Each of the events is shown separately above. Plans with multiple events are shown once for each event.

Many more RTEs were targeted towards terminated vested than retirees.
In 2012, Treasury issued Private Letter Rulings (PLRs) to two large employers giving them the green light to pay lump sums to retirees in pay status. Since then, Treasury issued only a few other such PLRs granting the payment of lump sums to retirees in payment status.
In July 2015, Treasury Issued Notice 2015-49 prohibiting the payment of lump sums to retirees in pay status.
The diagram above shows that even in the period under study when retiree lump sums were permitted, most of the retiree risk transfer events did not involve lump sums, i.e., they involved the purchase of annuities from an insurer.

Estimated Risk Transfer Activity in Large Plans (2009 – 2013)

by Number of Plans

Among plans with at least 1,000 participants at any point during 2009 – 2013



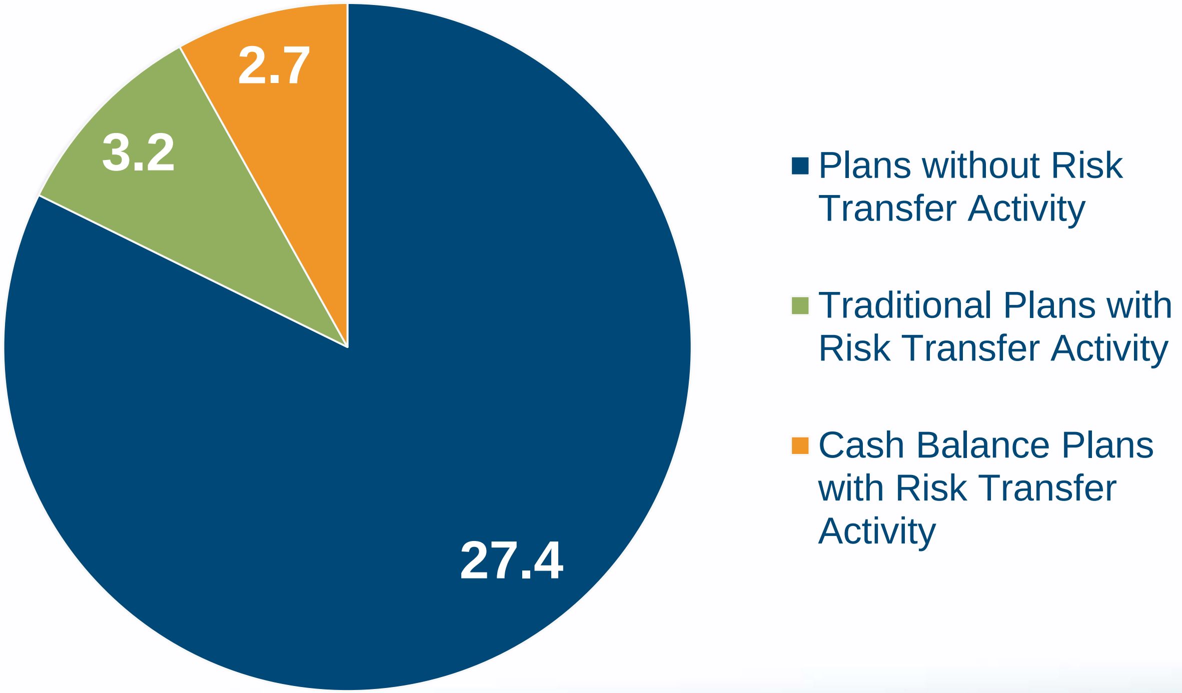
- Plans without Risk Transfer Activity
- Traditional Plans with Risk Transfer Activity
- Cash Balance Plans with Risk Transfer Activity

RTEs for 14.9% of plans (534/3590) over the 5 year period based on plan count.

Estimated Risk Transfer Activity in Large Plans (2009 – 2013)

by Plan Participant Count (in millions)

Among plans with at least 1,000 participants at any point during 2009 – 2013. Count shown is the median participant count during 2009 – 2013



RTEs covered 17.7% (5.9/33.3) of participants over the period. This count is higher than RTE for 14.9% of plans seen from previous slide. This suggests that plans with risk transfer events are larger than plans without such events.

As a matter of fact, plans with RTEs have an average participant size of about 11,000 (5,900,000/534).

Plans that did not have a RTE have an average participant size of about 9,000 (27,400,000/3056).

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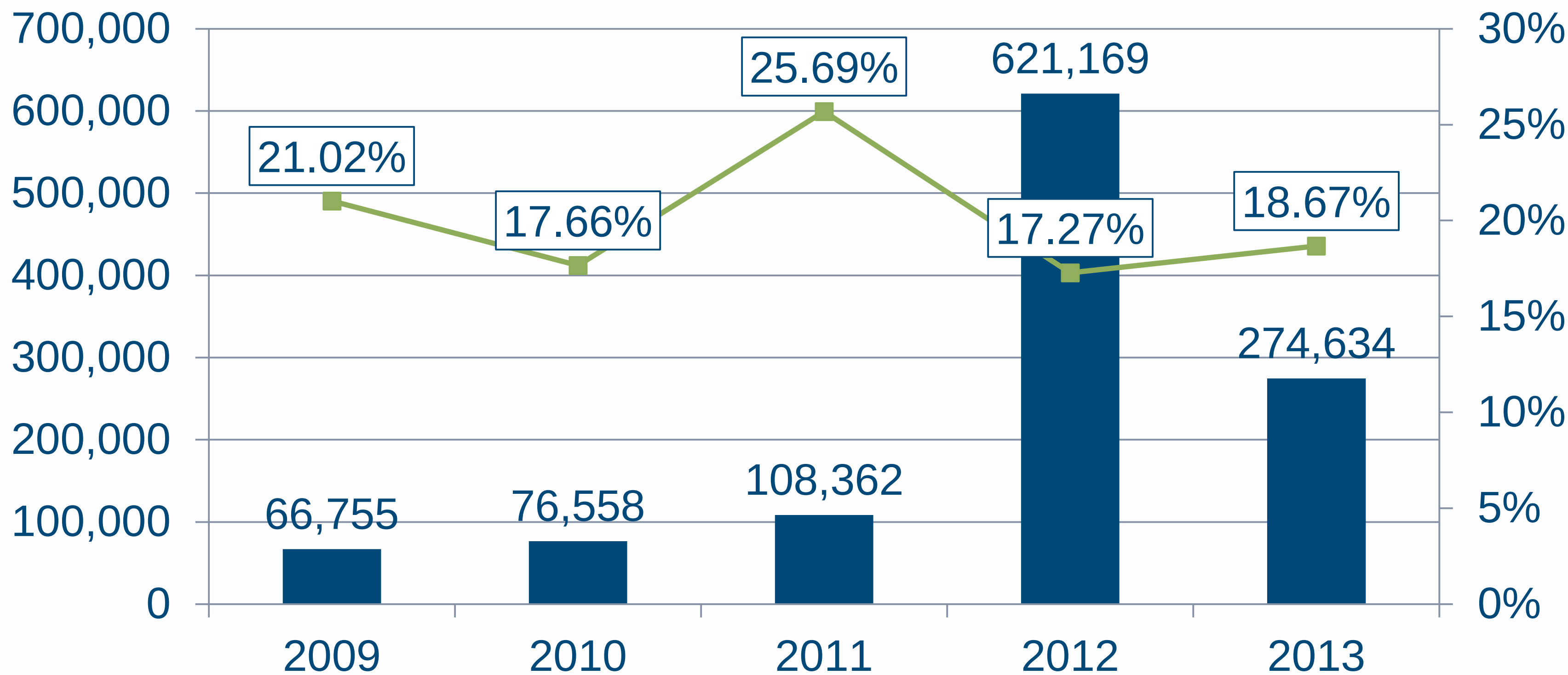
Impact of Estimated Risk Transfer Activity

Estimated Count & Percentage Decrease in Participants due to Risk Transfers



Bars show decrease in participant count for plans with a risk transfer. Drop in count is the sum of a) drop in TV count for plans that meet either the LS or TV criterion and b) drop in retiree count for plans that meet the retiree criterion. Line shows percentage decrease in count. It is measured as the count drop from the bars divided by the beginning of year count for all plans with risk transfer activity.

This slide shows the significant impact that RTEs can have in reducing the plan size.
For 2012 for example, plan size was reduced on average by 17% for plans that had a RTE and the total drop in participant count for all plans with a RTE in 2012 was 621,169.
For year 2009 through 2013, RTEs accounted for a total drop of 1,147,748 participants.

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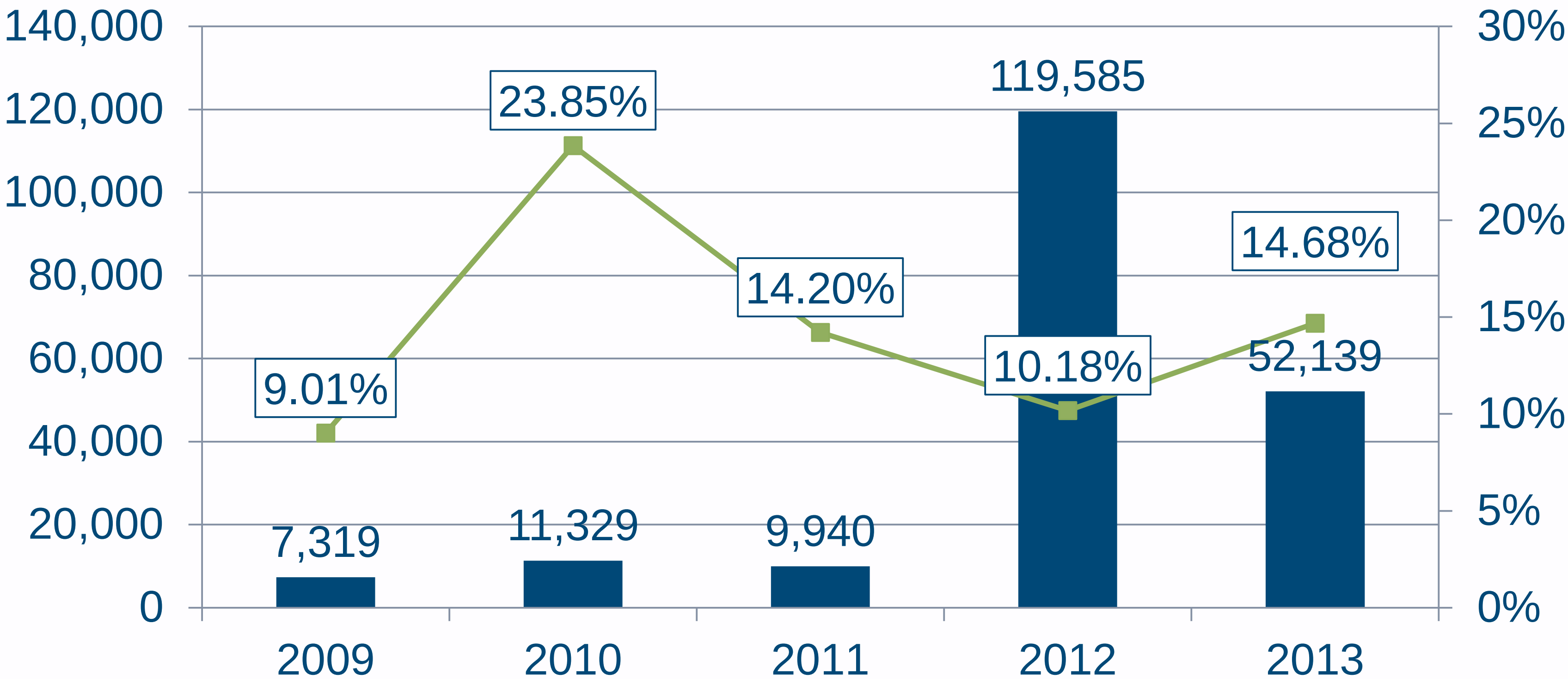
Impact of Estimated Risk Transfer Activity

Estimated Count & Percentage Decrease in Participants due to Risk Transfers for Collectively Bargained Plans



Bars show decrease in participant count for collectively bargained plans with a risk transfer. Drop in count is the sum of a) drop in TV count for plans that meet either the LS or TV criterion and b) drop in retiree count for plans that meet the retiree criterion. Line shows percentage decrease in count. It is measured as the count drop from the bars divided by the beginning of year count for all plans with risk transfer activity.

This slide shows the same metrics as the preceding slide but for Collectively Bargained (CB) plans only.
For CB plans, the total drop in participant counts for plans with RTEs between 2009-2013 was 200,132.
The percentage decrease in plan size was also smaller for CB plans. For example for 2012 the average drop in plan size for CB plans was 10% compared to 17% for all plans that had a RTE.

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Top 20 RTEs versus Total 2009 – 2013

	Top 20 Events	All RTEs
Assets	$140 Billion	$365 Billion
Participants BOY	1,937,924	6,240,004
Terminated Vested Reduction	218,328	807,906
Retiree Reduction	195,641	338,572
Total Participant Reduction	413,969	1,147,478
Reduction as % of Participants BOY	21%	18%

The Top 20 RTEs represent 3.4% of all 587 events. However, since the Top 20 events are comprised of very large pension plans, they account for a disproportionate large fraction (36%) of the participants decreased by the RTEs.

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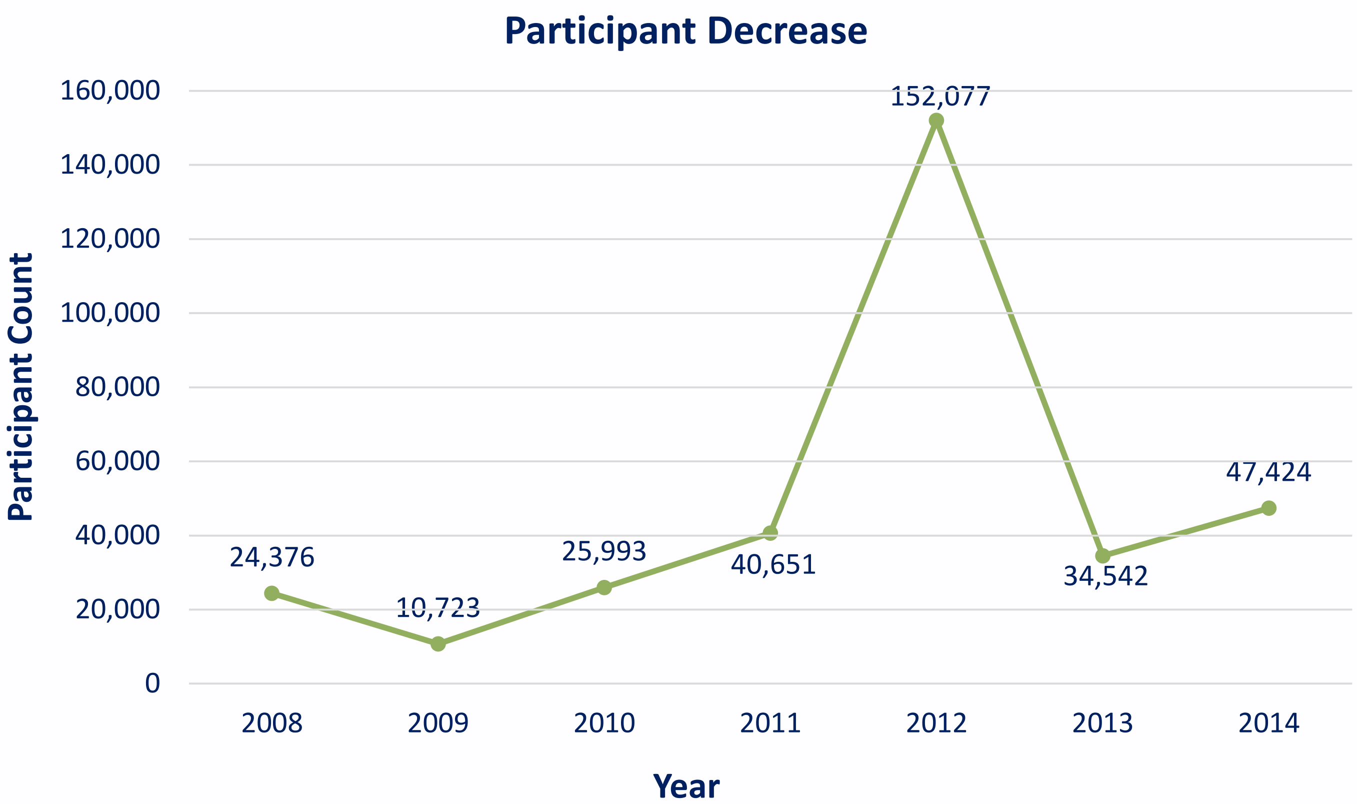
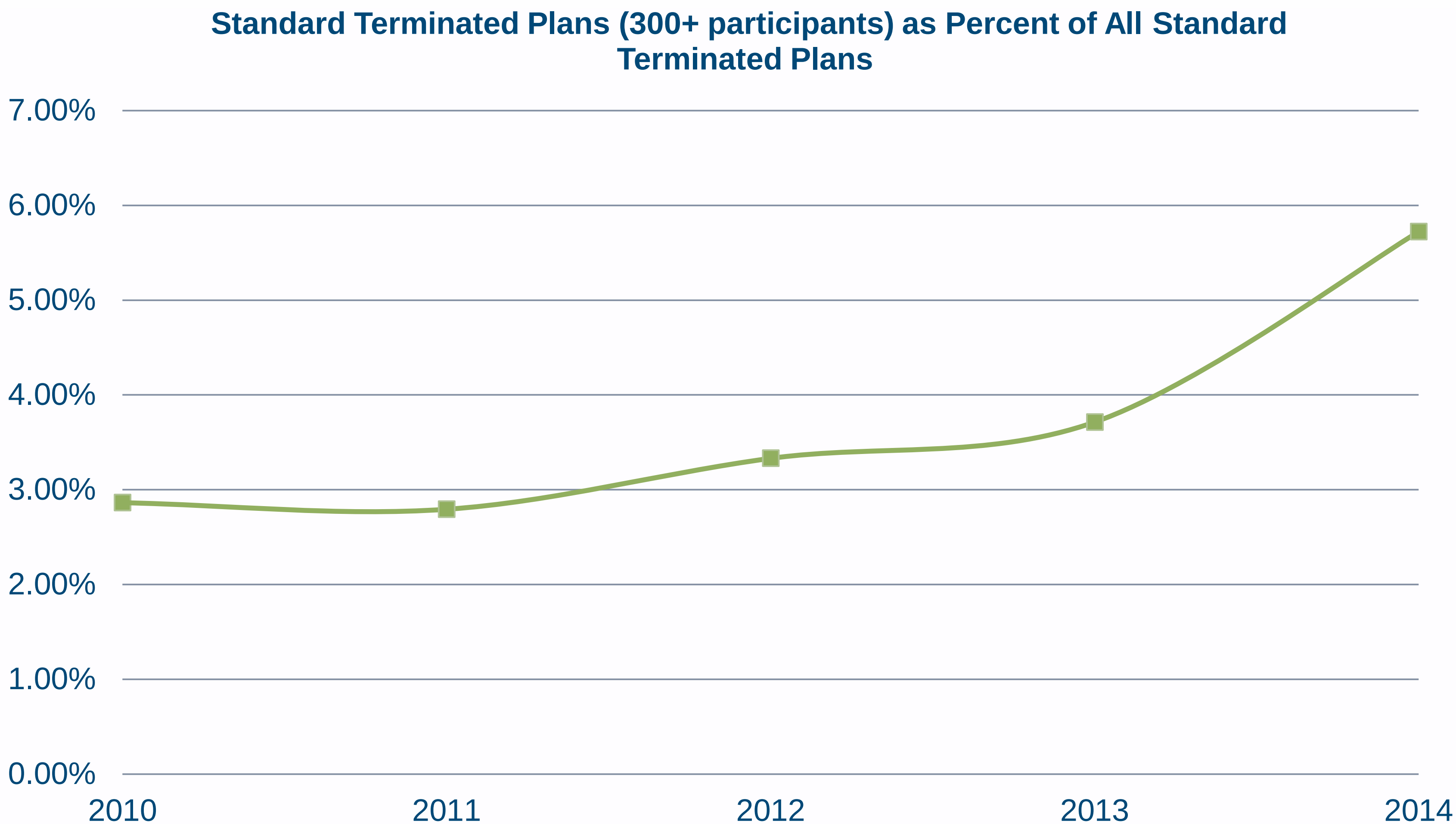
Top 5 Standard Terminations by Year of Termination



Participant counts for standard terminations based on employers' PBGC termination filings

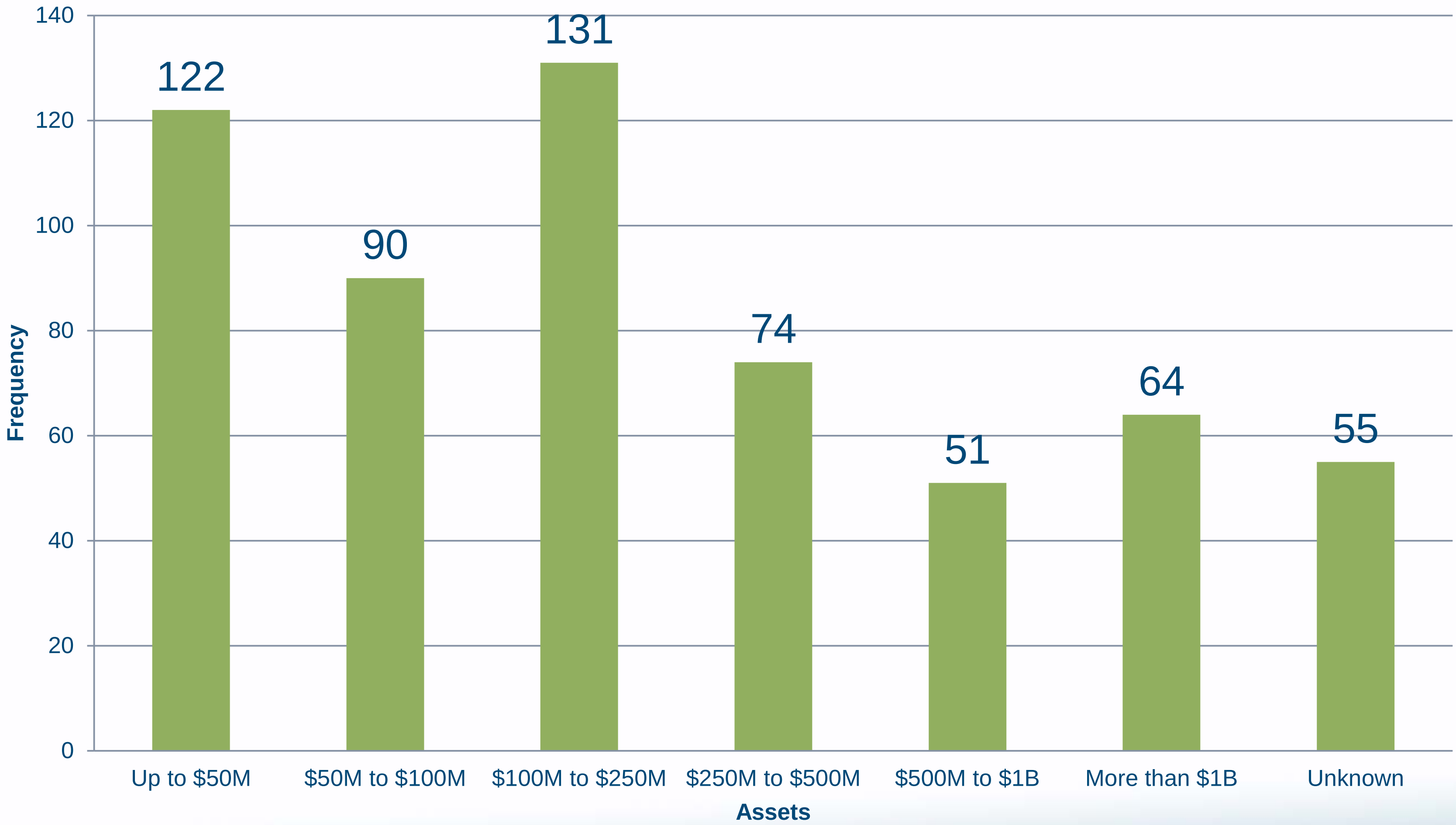
Year of termination based on intended DOPT in Form 500 filing with the PBGC. The spike for 2012 is due to the General Motors (GM) standard termination. Even ignoring the large GM termination, there has been an upward trend in the number of participants affected by standard terminations over the years.

Standard Terminations by Plan Year



In the last five years, there has been an upward trend in the plan size of standard terminations.
This slide reviews experience for plans with 300+ participants. PBGC's policy is to audit standard terminations for all plans with 300+ participants. However, for plans with under 300 participants, only a statistical sample is selected for audit.

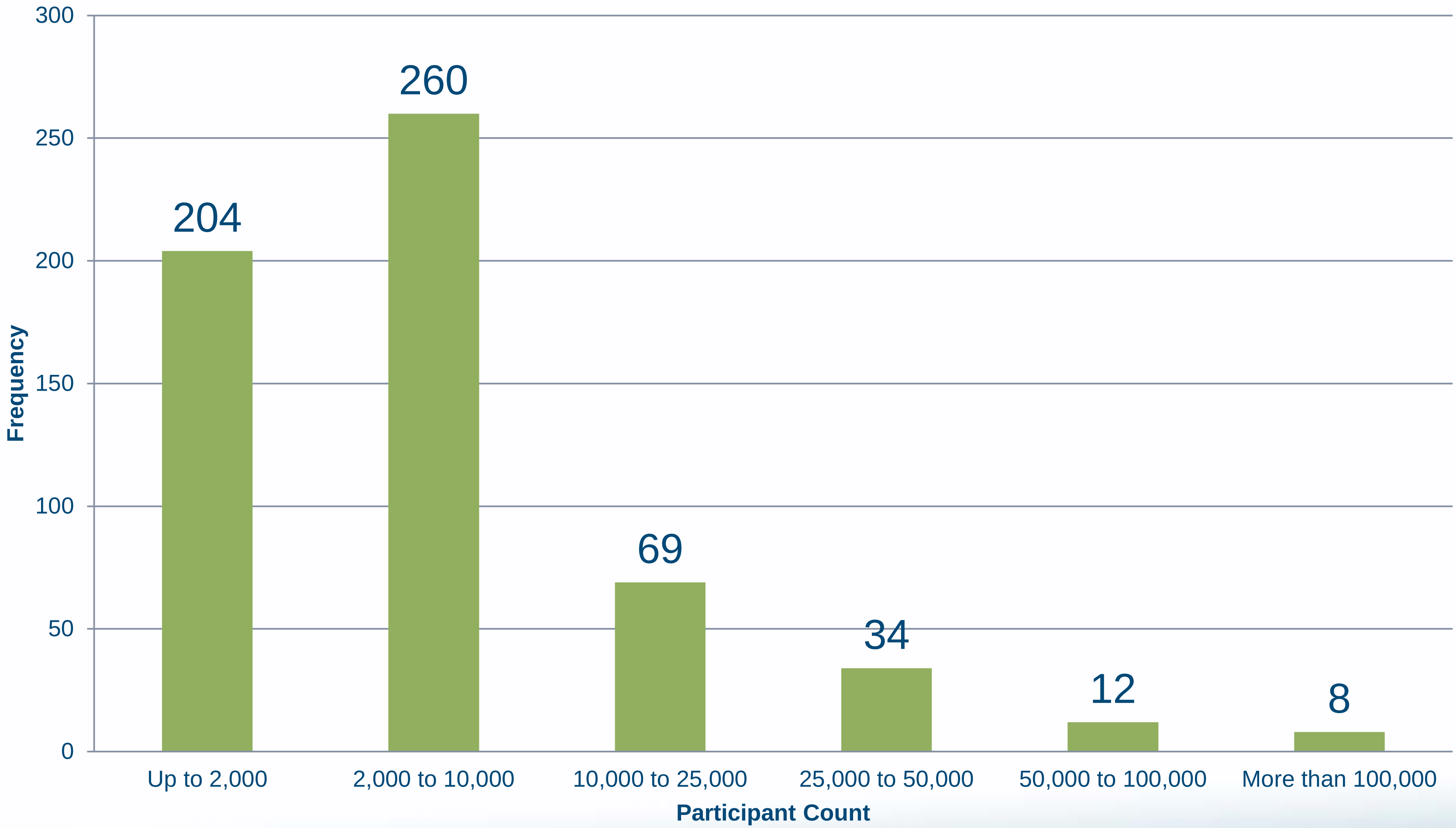
Estimated RTEs by Asset Level



Median asset size for plans with Risk Transfer Events is $144 Million.

Estimated RTEs by Participant Count

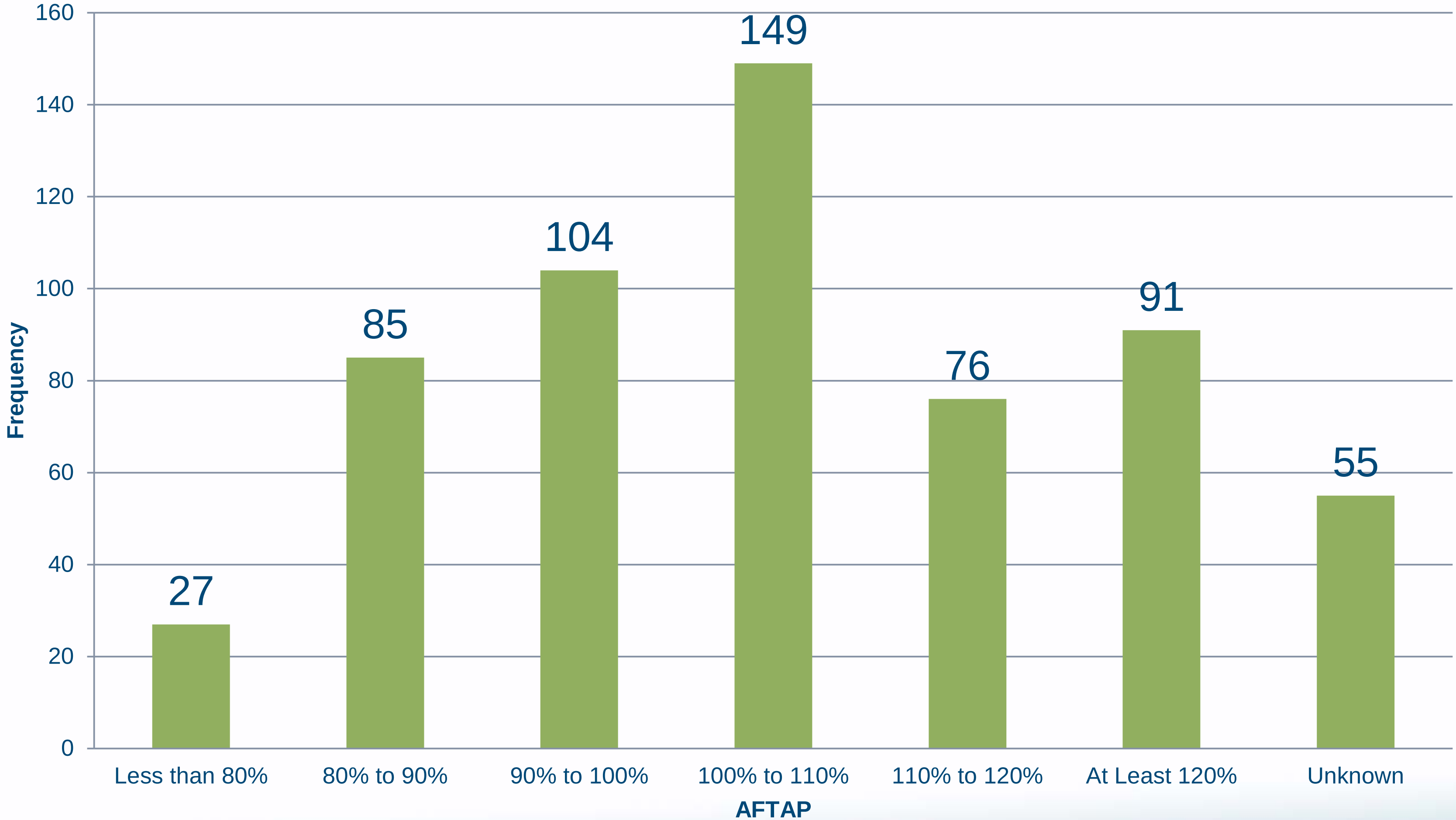
(as of the beginning of the year of the event)



Median participant count for plans with Risk Transfer Events is 3,145.

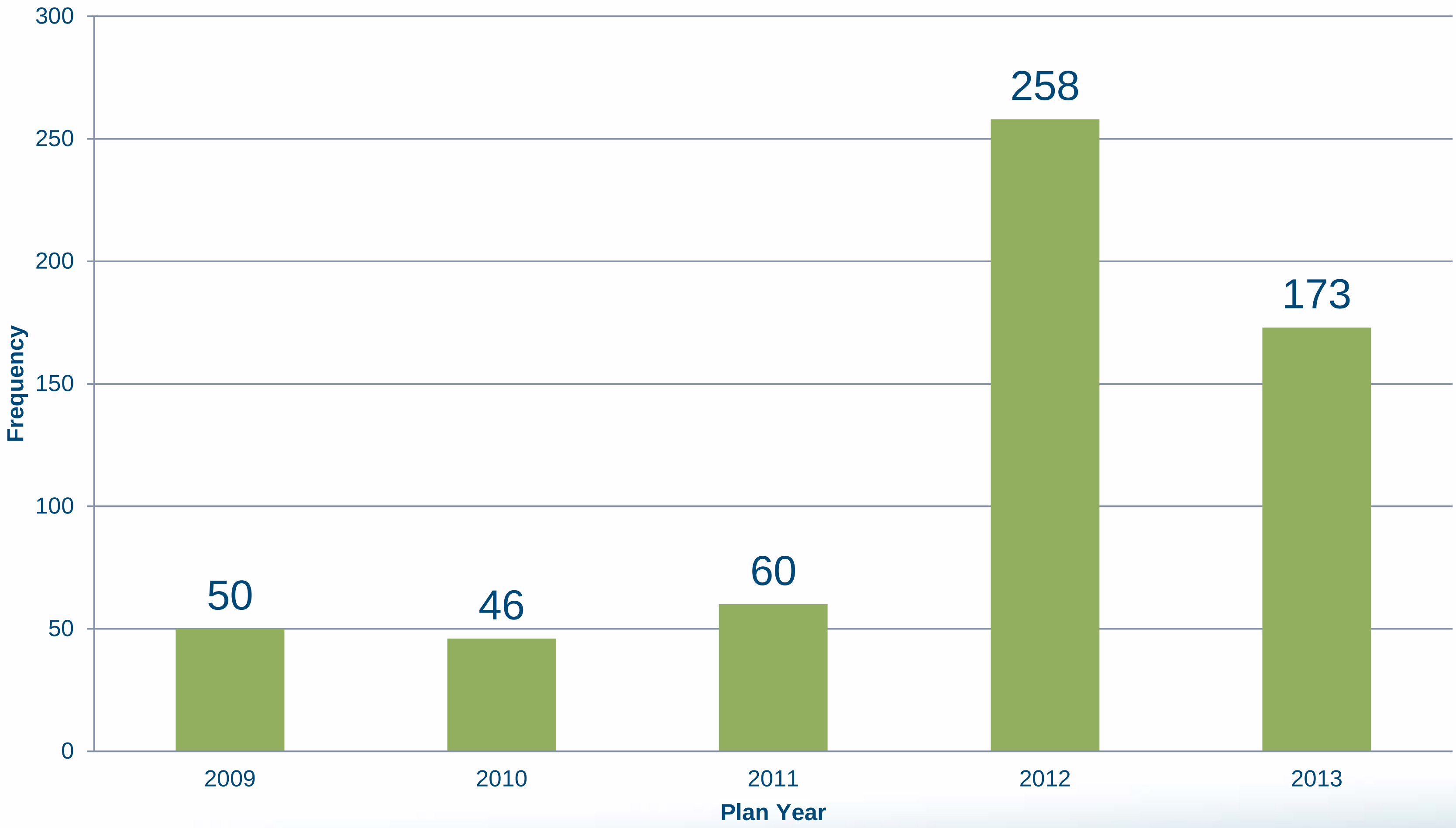
Estimated RTEs by AFTAP

*Adjusted Funding Target Attainment Percentage



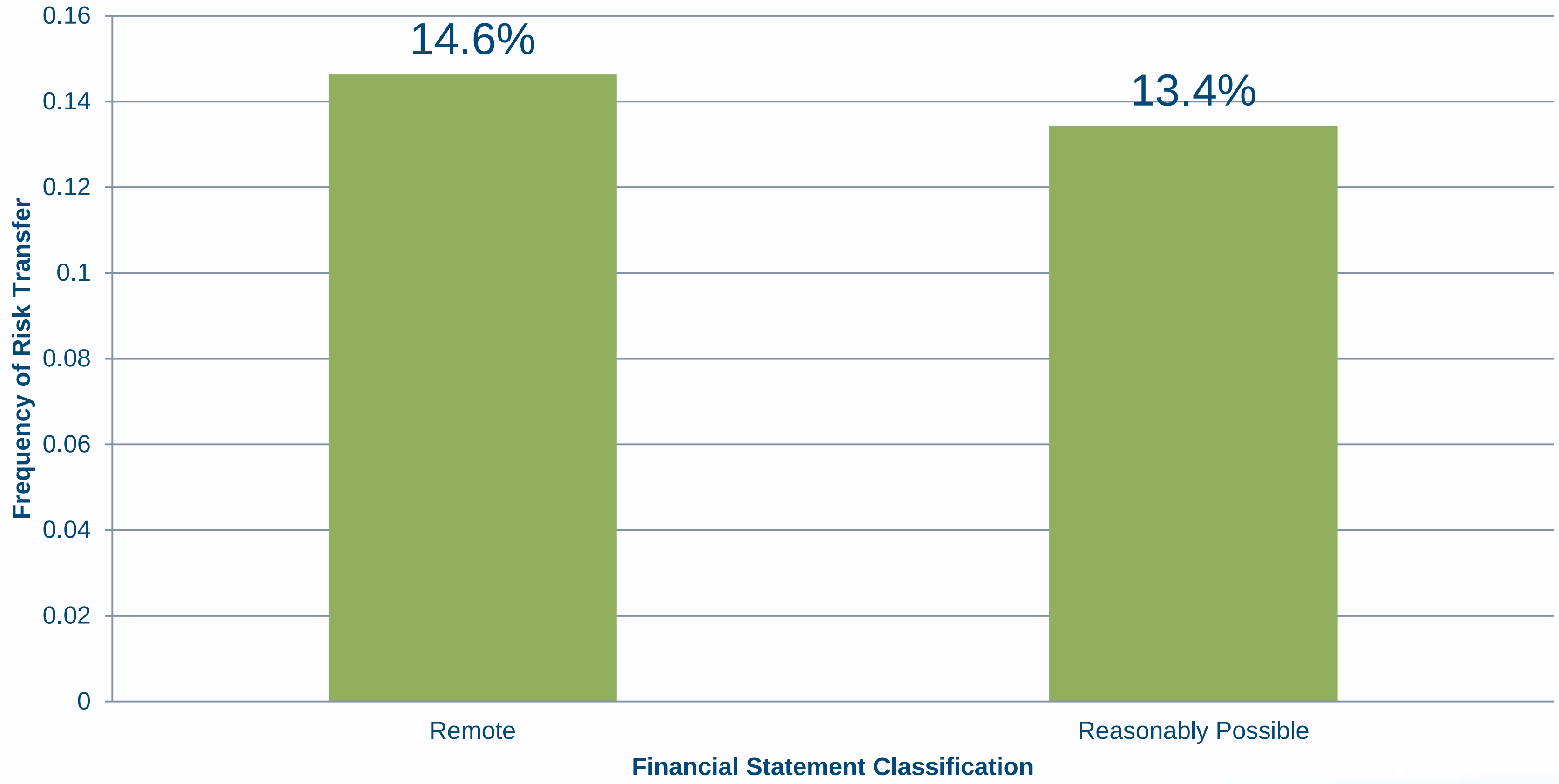
Median Adjusted Funding Target Attainment Percentage (AFTAP) for plans with Risk Transfer Events is 102%
AFTAP is a measure of the funded status of a pension plan using funding basis (rather than PBGC termination basis) interest rates.
AFTAP greater than 120% for about 16% of risk transferring plans (91 of 587 events), which indicates some of these plans may be able to do a standard termination in future with little or no additional funding, especially if interest rates rise.

Estimated RTEs by Plan Year



Risk transfer activity spiked in 2012 with several very large transactions.
RTE activity also high in 2013 although not as large as 2012.
Study shows 258 risk transfer events in 2012 plan year
- Much higher than count of 42 plans in 2012 from PBGC database.

Frequency of Risk Transfer by PBGC Financial Statement Classification



Liabilities for Reasonably Possible (RP) companies are not booked but are disclosed in footnotes to PBGC's Annual Financial Statement.

Companies in PBGC's monitoring inventory not in liquidation proceedings or in the process of being considered for distress or PBGC initiated termination AND not classified as RPs are classified as Remote.

A company is classified as Reasonably Possible if it has $50M or more in Unfunded Vested Liability (PBGC Premium basis) and meets one of the following criteria:

Has a below investment grade (lower than BAA3 Moody's or BBA- Standard and Poor's); Has a DUNS Financial Stress Score below 1477.

Is in Chapter 11 bankruptcy; Has missed minimum funding or applied for a minimum funding waiver; Is otherwise showing financial difficulties.

RTEs were only slightly less likely in RP plans (plans that might pose a risk to PBGC) than in plans classified as Remote (plans unlikely to pose a risk to PBGC).

Risk Transfer Criteria

Sensitivity to Lower Thresholds

- Study thresholds
  - Lump Sums as proportion of participants – 25%
  - Terminated vested count decrease – 30%
  - Retiree count decrease – 10%
- We tested impact of modifying thresholds to
  - Lump Sums as proportion of participants – 20%
  - Terminated vested count decrease – 25%
  - Retiree count decrease – 7.5%
- Modified thresholds would have increased RTEs
  - From 587 to 657 or 12%

Thresholds were conservative. Lower thresholds would have increased the RTEs but not significantly changed the results.

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Observations

- Of 3,590 large plans, 534 (or 15%) appeared to have RTEs during 2009 – 2013
- From 2009 – 2013 there was reduction of 1.1 million participants (of about 33.3 million participants) due to risk transfer
  - Most of the reduction is in non-collectively bargained plans (947,000 of 1.1 million participants)
- Very few risk transferring plans were involved in immediate standard plan terminations (50 of 534 plans)
  - However, the standard terminations were concentrated in the largest plans and led to a large associated participant drop
- Average drop in participant count for plans with RTEs of 18%

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Observations – Pattern of RTEs

- Focused more on TVs than retirees (349 events versus 182)
- Only slightly less likely in RP plans that might pose a risk to PBGC than plans classified as Remote (13.4% versus 14.6%)
- About equally common between collectively bargained (CB) and non-CB plans
    - However total and percent decreases in participants for non-CB plans were much greater than for CB plans
- About equally prevalent between traditional and cash balance plans
- More prevalent in larger plans – average size of plan with risk transfer is 30% greater than without (11,000 participants versus 9,000)
- 9 of the top 10 retiree-only risk transferring plans involved annuity purchase without plan termination

Observations – RTEs by Year

- Press data indicates likely high level of RTE activity in 2014 and 2015 (through September 2015)

- We believe Study criteria result in a conservative estimate of extent of risk transfer activity; actual activity likely to be greater