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Securing Your Pension Promises by Mitigating Risk and Creating Shareholder Value

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Today's Discussion

Today's market

The increasing cost of hope

Corporate finance implications

Looking forward: tax reform



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Means and Markets Have Aligned

- Equities have gained over 14%, and the 10-year UST has increased by 25bps since the election¹
- Funded status is 83.0% as of August 31, 2017, up from 75.6% one year ago²
- Costs of maintaining a plan continue to rise
 - PBGC premiums: **flat-rate** from \$69 today to \$80 in 2019
variable-rate from 3.4% today to at least 4.2% in 2019

¹ S&P Capital IQ as of 8/29/2017 ² Milliman 100 Pension Funding Index

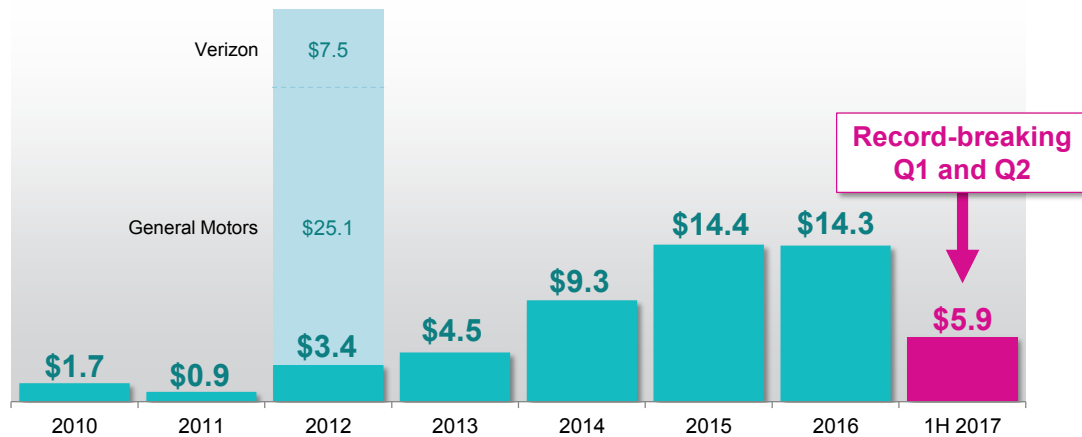


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A Vibrant U.S. PRT Market



In USD billions. Source: LIMRA Group Annuity Risk Transfer Survey, 2Q17. Includes single premium buy-outs, buy-ins and terminal funding.



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A Vibrant U.S. PRT Market

2016 PRT Market Players by Size

Market Size	Transactions	Bidders	Liability
Small (<\$100M)	359	14	\$3.9B
Mid (\$100M-\$1B)	26	9	\$7.3B
Jumbo (>\$1B)	1	5	\$2.5B
Total	386	15	\$13.7B

Significant Buy-outs Since 2012

Over \$50 billion and 450,000 participants

- | | |
|----------------------|-----------------------------|
| General Motors | J.C. Penney |
| Verizon | PPG |
| Bristol-Myers Squibb | WestRock Co. |
| Motorola Solutions | United Technologies Corp. |
| Kimberly-Clark | Sears Holdings Corp. (2017) |
| Philips | Hartford Financial (2017) |
| Timken | International Paper (2017) |

Source: Obtained through company filings and other publicly available sources.



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The Increasing Cost of Hope

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PBGC Premiums

PBGC premiums, for a plan with liability of \$1B¹ and 11,000 employees, will increase 580% between 2013 and 2019.

	2013	2017	2019	
PBGC Funded Status	95%	95%	90%	5% increase in liabilities for mortality change in 2018
Flat Rate Premium (Number of employees) x (Per Person Premium)	\$462,000	\$759,000	\$880,000	
Variable Rate Premium (Unfunded Vested Liability) x (Variable Rate)	\$450,000	\$1,700,000	\$4,410,000	
Total PBGC Premium	\$912,000	\$2,459,000	\$5,290,000	
Premium Per Participant	\$83	\$224	\$481	2019 Premium Impact of Mortality Change Pre-Change \$271 Post-Change \$481
Increase Over 2013	n/a	270%	580%	

Source: Prudential analysis



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Mortality Table Updates

IRS has announced a new mortality basis effective January 1, 2018.

New tables will increase liability for three important calculations

- Funding requirements (Target Liability)
- PBGC variable premium
- Calculation of minimum lump sum values

Impact on PRT Market

Will increase PBGC variable premiums for sponsors not at the cap, increasing the value of transferring risk.

The increase in lump sum amounts will likely slow down vested terminated lump sum programs, freeing up company and administration time to focus on PRT transactions as the next most logical risk transfer option.

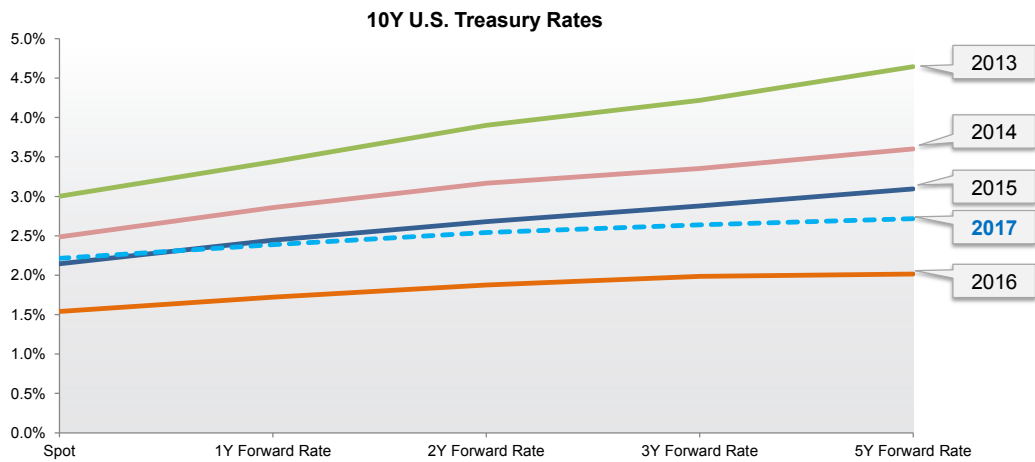


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Market Expects the 10-Year U.S. Treasury to Rise Very Modestly



Source: Barclays Live, as of 8/18/2017

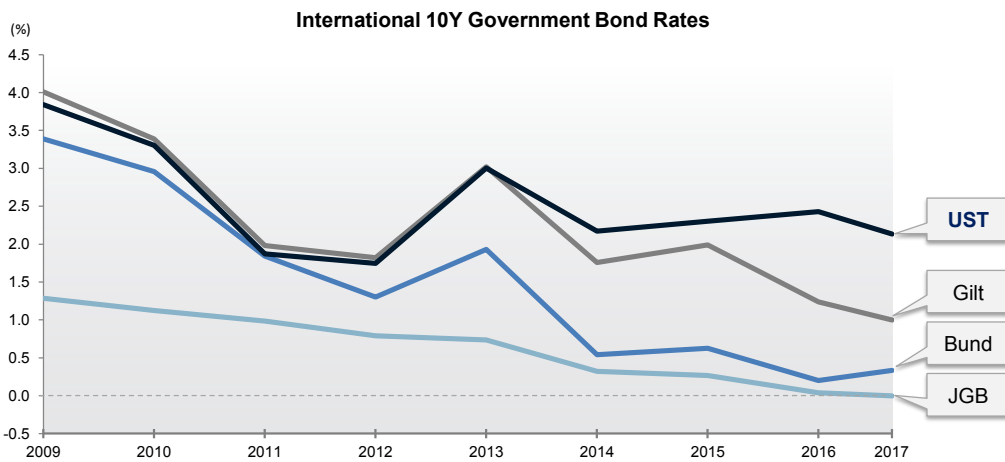


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U.S. Remains the Highest Yielding Country



Source: Barclays Live, as of 8/29/2017



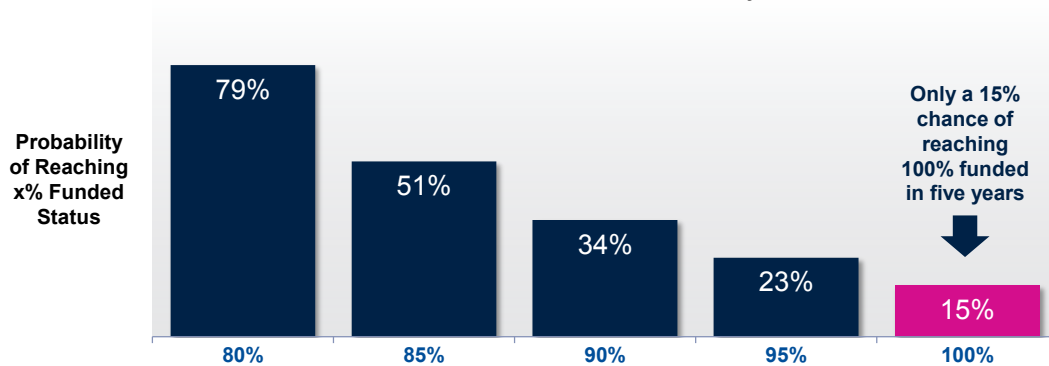
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Capital Markets Alone Will Not Close Funding Gap

Beginning at 80% funded, how likely is a plan to achieve a certain funded status at the end of 5 years?



Plan asset allocation assumed to be 60% equities and 40% fixed income. No contributions were made in this analysis
Retiree population of 65% M and 35% F, Average age of 74. Analysis based on 1,000 Monte Carlo simulations over a 5-year period. Barrie and Hibbert economic scenario generator used to determine the scenarios. Source: Prudential calculations.



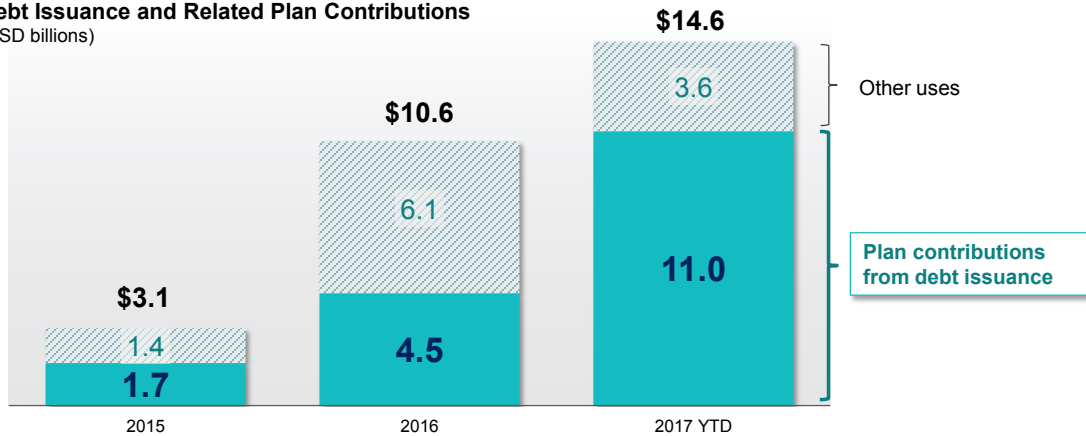
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150% Increase in Voluntary Contributions since 2016

Debt Issuance and Related Plan Contributions
 (USD billions)



Source: As of August 9, 2017. Debt issuance detail and related plan contributions using company SEC filings, plan DOL 5500 filings, company press releases, Bloomberg and Prudential estimates.



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What Can Companies Do? Borrow to Fund Continues to be Viable

Company	Issue Date	Amount Issued	Related Plan Contribution	Company	Issue Date	Amount Issued	Related Plan Contribution
International Paper	8/9/2017	\$1,000	\$1,250	Northrop Grumman Corp.	12/1/2016	\$750	\$20
Valvoline Inc.	8/8/2017	\$400	\$395	CSX Corp.	10/18/2016	\$2,200	\$220
The Kroger Co.	7/24/2017	\$1,500	\$1,000	Altria Group, Inc.	9/16/2016	\$2,000	\$500
E. I. du Pont de Nemours and Company	5/1/2017	\$2,000	\$2,000	Cox Communications, Inc.	9/13/2016	\$1,000	\$1,000 ⁽¹⁾
Verizon Communications	3/16/2017	\$6,500	\$3,400	Premier Health Partners	8/31/2016	\$300	\$217 ⁽²⁾
Delta Air Lines	3/14/2017	\$2,000	\$2,000	International Paper	8/11/2016	\$2,300	\$500
FedEx Corp.	1/6/2017	\$1,200	\$1,000	General Motors Company	2/23/2016	\$2,000	\$2,000

In USD millions; Debt issuance detail and related plan contribution information from company SEC filings, plan DOL 5500 filings, company press releases, Bloomberg, and Prudential estimates. (1) Intended use of proceeds from Fitch and Moody's reports dated 9/8/16. Related plan contribution from the Cox Enterprises, Inc. Pension Plan 2015 DOL Form 5500 filing dated 10/16/16. (2) Intended use of proceeds from Fitch report dated 8/10/16. Related plan contribution from the Premier Health Partners Employee Retirement Plan 2015 DOL Form 5500 filing dated 10/11/16.



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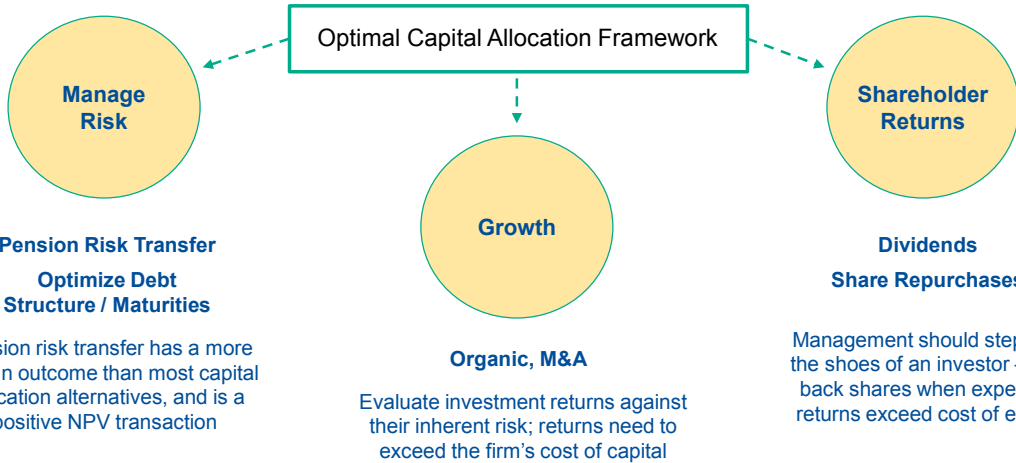
Corporate Finance Implications

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PRT's Place in the Capital Allocation Framework

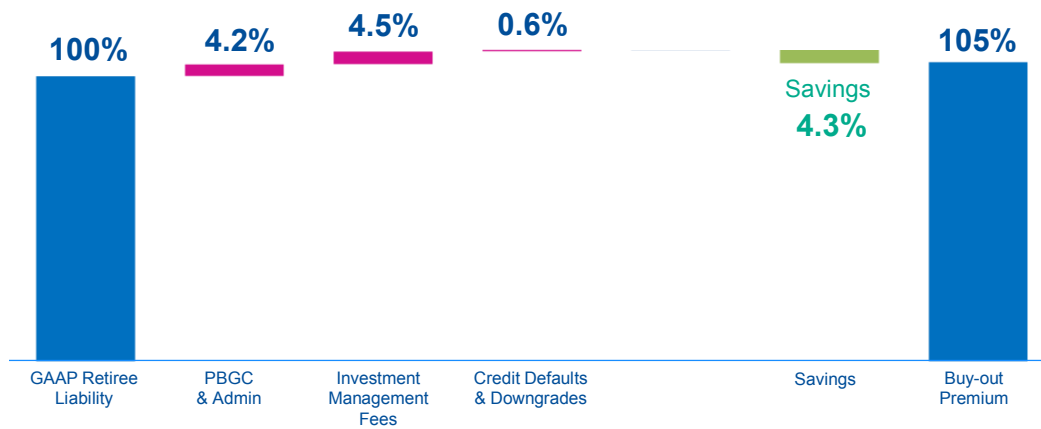


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Pension Risk Transfer is NPV Positive



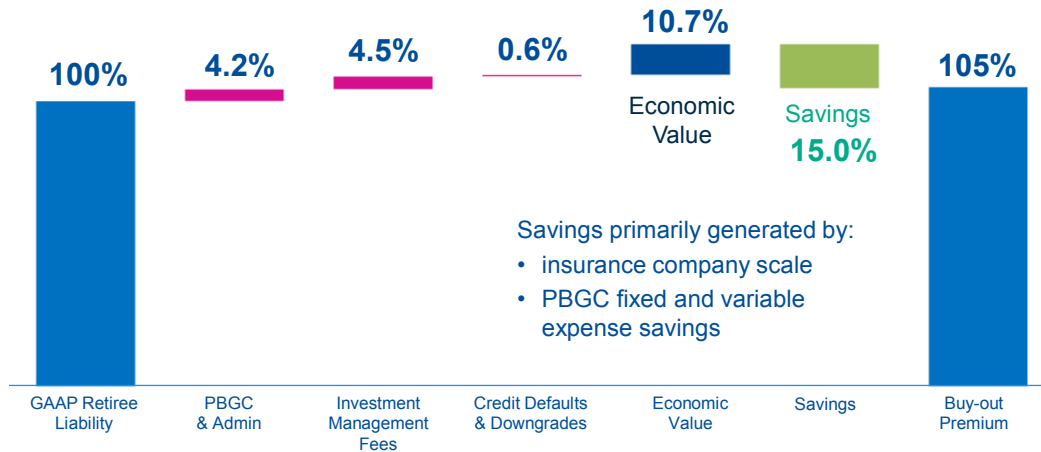
Source: Prudential analysis. Assumes 100% funded plan. GAAP retiree liability reflects RP-2014 mortality table with MP-2016 and Citi Pension Discount Curve. Costs not included in the GAAP retiree obligation include per person administrative expenses of \$40 per year and PBGC per person expenses of \$69 in 2017, both indexed for inflation (2%). GAAP obligations are discounted using rates unadjusted for investment management fees and the risk of credit defaults and migrations. These are estimated at 30 and 4 basis points per annum, respectively. Expenses are discounted using the risk free rate.

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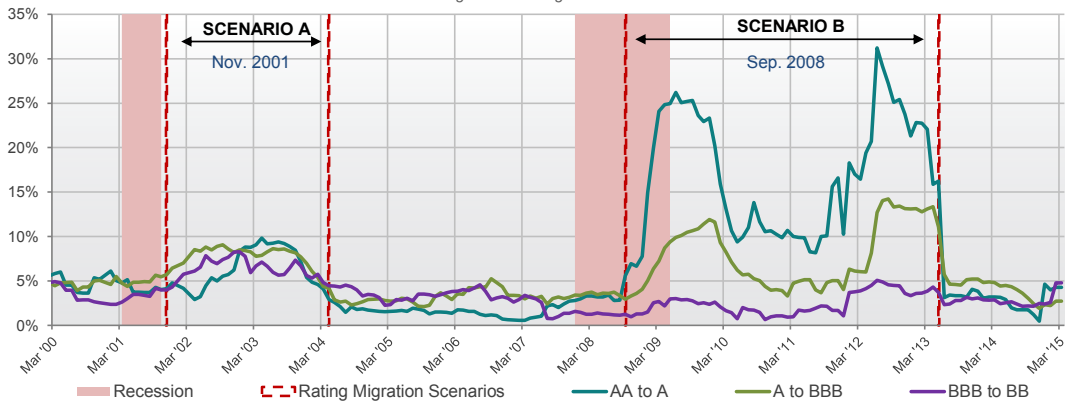
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Insurance Solutions Provide Risk Reduction Under Tail Risk Scenarios

Rating Migration By Credit Quality Following Two Most Recent Recessions
 Trailing 12-Month Migration Rates



Sources: Moody's and Prudential Fixed Income. As of March 31, 2015. Shown for illustrative purposes only.



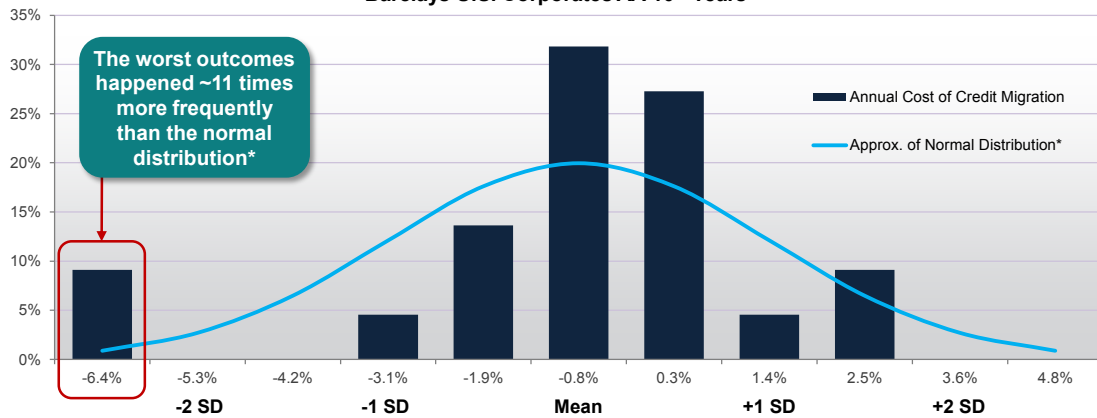
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Credit Migration Has a Fat Downside Tail

Estimated Annual Cost of Credit Migration (1993-2015)
 Barclays U.S. Corporates AA 10+ Years



SD = Standard Deviation. Source: Barclays POINT, PGIM Fixed Income. As of December 31, 2015.
 *Normal distribution with same mean and standard deviation as the annual estimated cost of credit migration.



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Stock Performance Relative to Market

Company Name	Announcement Date	Transaction Size (currency in millions)	Transaction Type	PBO ÷ Market Cap prior to transaction	Performance Relative to Market
General Motors	6/1/2012	\$25,000	Buy-out	386%	1.61%
Verizon Communications, Inc.	10/18/2012	\$8,000	Buy-out	24%	2.61%
Motorola Solutions, Inc.	9/25/2014	\$3,100	Buy-out	59%	2.33%
WestRock Company	9/9/2016	\$2,500	Buy-out	58%	-1.08%
Kimberly-Clark	2/23/2015	\$2,500	Buy-out	17%	0.06%
The Hartford	6/26/2017	\$1,600	Buy-out	30%	1.08%
PPG Industries	6/28/2016	\$1,600	Buy-out	20%	0.12%
Bristol-Myers Squibb	10/1/2014	\$1,400	Buy-out	9%	0.75%
Philips	10/1/2015	\$1,100	Buy-out	9%	1.22%
J.C. Penney	10/2/2015	\$840	Buy-out	166%	5.58%
NCR	11/20/2013	£670	Buy-in	104%	0.59%

Source: Capital IQ. Returns are adjusted for dividends. In USD millions; Announcement day returns relative to relevant market index. Pension overhang defined as PBO ÷ Market Capitalization

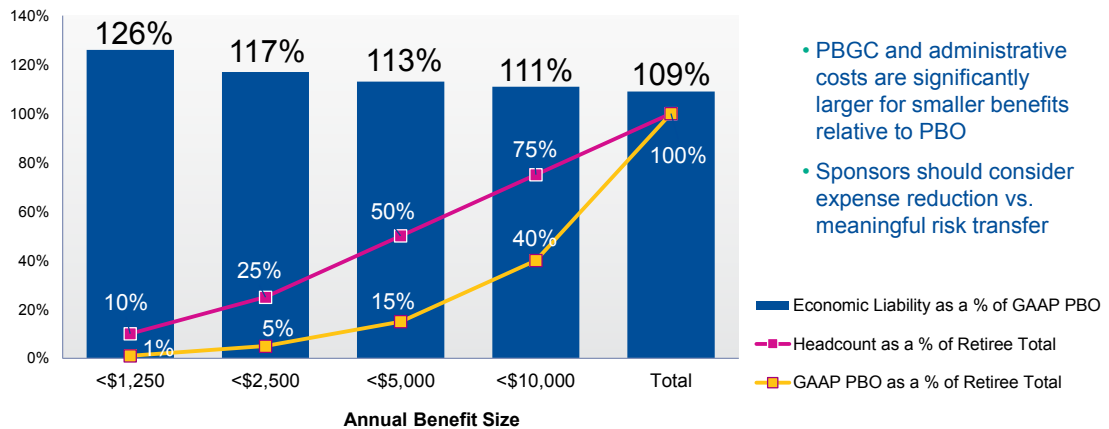


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Evaluating a Retiree Small Benefit Pension Buy-out



- PBGC and administrative costs are significantly larger for smaller benefits relative to PBO
- Sponsors should consider expense reduction vs. meaningful risk transfer

GAAP and economic liabilities reflect RP-2014 mortality table with MP-2016. GAAP liability is calculated by discounting projected cash flows using spot rates along the Citi pension discount curve. Economic liability is calculated by discounting projected cash flows using spot rates along the Citigroup yield curve adjusted for investment management fees and the risk of credit defaults and migrations. These are estimated at 30 and 24 basis points, respectively. Economic liability is calculated assuming per person administrative expenses of \$40 per year and PBGC expenses per person of \$69 in 2017, \$74 in 2018, \$80 in 2019, and indexed thereafter, plus PBGC variable rate premiums of 3.40% of unfunded vested benefits in 2017, 3.80% in 2018 and 4.20% in 2019, and indexed with inflation thereafter, capped at \$517 per person in 2017 and indexed with inflation thereafter. Funded Status for variable rate premium assumed to be 90%. Values are indicative and provided for discussion purposes only. Results are subject to change per market conditions and specific client demographic information.

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Looking Forward: Tax Reform

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Key Tax and Regulatory Reform Proposals

Reduced corporate tax rate

35% U.S. corporate tax rate may be lowered to 15% or 20%¹

Fewer Tax Deductions

GOP Blueprint proposes to limit or eliminate tax deductibility of interest expense

Repatriation

One-time tax on accumulated deferred foreign earnings expected to be between 8.75% to 10%²

Move to a territorial tax system that exempts foreign business earnings of U.S. companies from U.S. taxes

Deregulation

Likely to see a decrease in regulations

¹White House proposal 15%, GOP Blueprint 20%. "A Better Way: Our Vision for a Confident America." Policy paper, Tax Reform Task Force, GOP, June 24, 2016.
²Briefing by Secretary of the Treasury Steven Mnuchin and Director of the National Economic Council Gary Cohn, April 26, 2017.
³Trump's campaign proposal included a 10% tax rate on repatriated earnings. "Tax Reform that will Make America Great Again," <https://assets.donaldjtrump.com/trump-tax-reform.pdf>. GOP Blueprint proposes 8.75%.



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Implications of Reform Proposals

Accelerate Funding

Increase pension contributions before corporate tax rate is reduced

Use Repatriated Cash

Pension contributions can be sourced from repatriated earnings

Increased M&A activity

Pro-growth agenda, rising equity valuation, and availability of overseas cash could drive M&A

Re-evaluate optimal debt equity mix

Companies will re-evaluate capital structure, and may reduce reliance on debt

Accelerate de-risking plans

May result in demand supply imbalance for high quality debt as demand from pension plans/insurers remains strong while new issuance declines



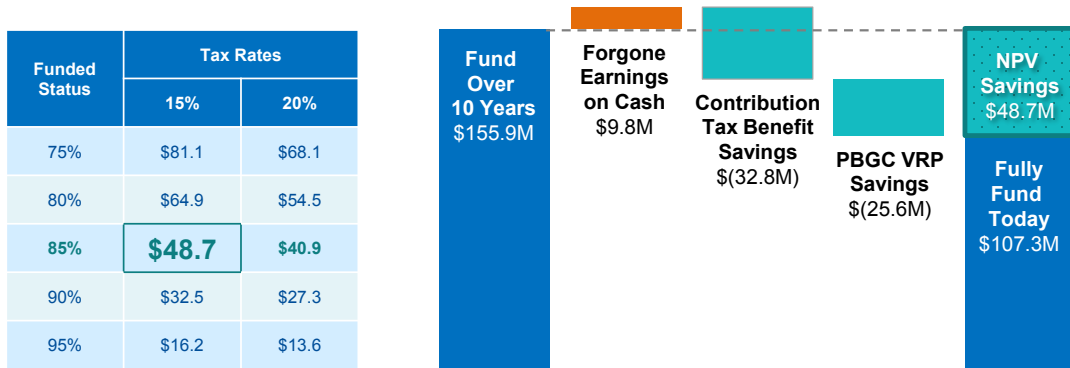
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Economic Benefit of Funding Today

A sponsor with a \$1 billion plan that is 85% funded could generate a \$48.7 million NPV benefit by fully funding its plan today versus funding the plan deficit over a 10-year period.



In USD billions. Prudential analysis.



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40%

are very likely to **increase funding of pension plans** and **execute either a full or partial liability transfer** if tax reform is enacted that lowers corporate tax rates.

Source: "Economic and Regulatory Climate May Spur Pension Risk Transfer Agreements," CFO Research in collaboration with Prudential Financial, Inc., August 2017.



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Connecting the Dots....

Increased cost of maintaining pension plan

Improved funded status situates some companies for de-risking

For underfunded plans, capital markets alone will not close the funded gap

PRT is a positive NPV transaction

Accelerate funding and de-risking ahead of tax reform





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