



\$20 billion club strategy

2017 update

The largest corporate defined benefit (DB) sponsors in the United States don't follow industry trends – they set them. They generally have the best access to service providers with the latest innovative strategies, and have experienced staffs focusing on the DB plan. Some of the plans, like those sponsored by DuPont and GE, began over 100 years ago,¹ and have experienced many waves of change. Gathering and understanding the policy and strategy trends among these 19 jumbo-sized sponsors helps us not only observe current trends, but also provides a glimpse into where the industry may be headed.²

Based on our analysis of the FYE 2016 annual filings, it is clear that these corporations are using all of the tools in the toolbox to get more control of the costs and risks associated with sponsoring a DB plan in the 21st century. We'll look at these tools under four headings in this note:

1. Plan design
2. Funding policy
3. Investment policy
4. Risk transfer



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In the current low rate and return environment, sponsors ought to focus on areas they can control, which are found in their plan design, funding, investment and risk transfer policies. Doing so will help promote stability, reduce surprises and place the sponsors in control of their DB plans' endgame.

Plan design

Plan design dictates the promised benefits to participants. Changing, reducing or even eliminating benefits has become a common approach to reducing pension costs. At least half the members of the \$20 billion club, including IBM, AT&T and Boeing, incorporate a "hybrid" design (e.g., cash balance or pension equity) into their plans.³ Typically the primary goal of modifying the plan design is to reduce cost, but there are also benefits such as improved mobility, transparency and participant comprehension.

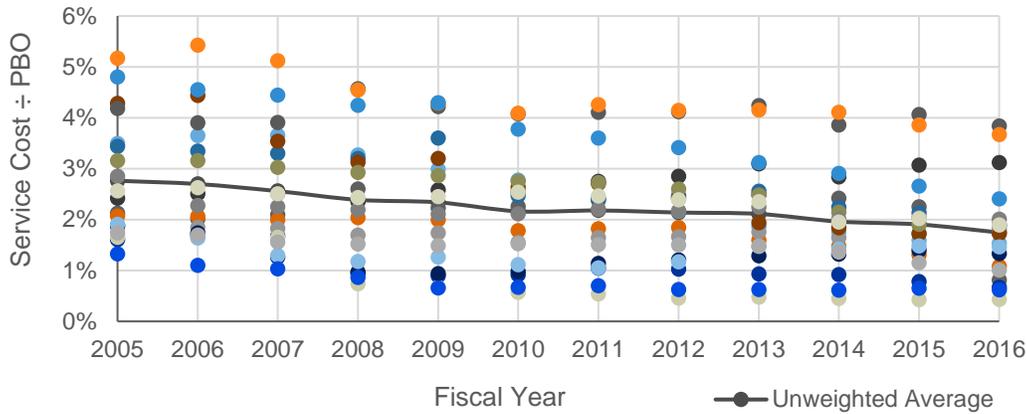
Notable activity in 2016

UPS	Closed its main plan to non-union new entrants ⁴
DuPont	Announced it will freeze its plans in 2018 (previously closed in 2007) ⁵
Lockheed Martin	Partial freeze became effective, with a full freeze effective in 2020 ⁶

Key statistic: Falling service cost

To illustrate the overall trend toward plans closing and freezing, Figure 1 looks at how service cost has declined relative to total plan liabilities over time. For a typical open and ongoing plan, the service cost could be 3% to 5% of liability. For a frozen plan, the ratio will be 0%, and closed plans typically fall in between. In 2005, the service cost ratio among these companies ranged between 1.3% and 5.2%. In 2016, the range dropped to between 0.4% and 3.8%, with an average decrease of about 1%.⁷ This highlights the combined cumulative effect of plan redesigns, closures and freezes.

Exhibit 1: Service cost relative to PBO 2005-2016



Source: 10-k filings

The industry trend on plan design

Sponsors continue to adjust, reduce or eliminate DB benefits by adopting hybrid plan designs (often cash balance plans), closing plans to new entrants or freezing benefit accruals to manage and reduce pension costs.

Funding policy

The funding policy guides the sponsor in making contribution decisions. While the official funding policy of publicly listed DB sponsors is to pay at least the minimum required contribution, in recent years, it has become far more common to make additional discretionary contributions above that required minimum. In fact, half of these sponsors publicly disclosed that they have no significant U.S. contribution requirement, despite most contributing more than that.

While funding relief continues to deflate contribution requirements, eventually sponsors will need to make up for funding deficits in U.S. plans. There are also penalties for underfunding such as Pension Benefit Guaranty Corporation (PBGC) variable rate premiums, which have risen dramatically in recent years.⁸ The severity of these premiums is starting to gain attention from \$20 billion club sponsors to varying degrees. Another factor to consider is mortality assumptions for funding purposes, which also impact PBGC variable rate premiums in 2018.⁹

Notable activity in 2016^{10 11}

2016 contributions of \$18 billion exceed 2015 contributions of \$13 billion

2017 contributions expected to be \$15 billion

Nine of 19 sponsors mentioned the impact of mortality assumption changes on plan liabilities

Exxon, UPS & GM Contributions exceeding \$2 billion each in 2016¹²

GM & United Technologies No contribution requirements expected for the next five years to U.S. plans¹³

Pfizer Stated that paying additional contributions would help to reduce their PBGC premiums

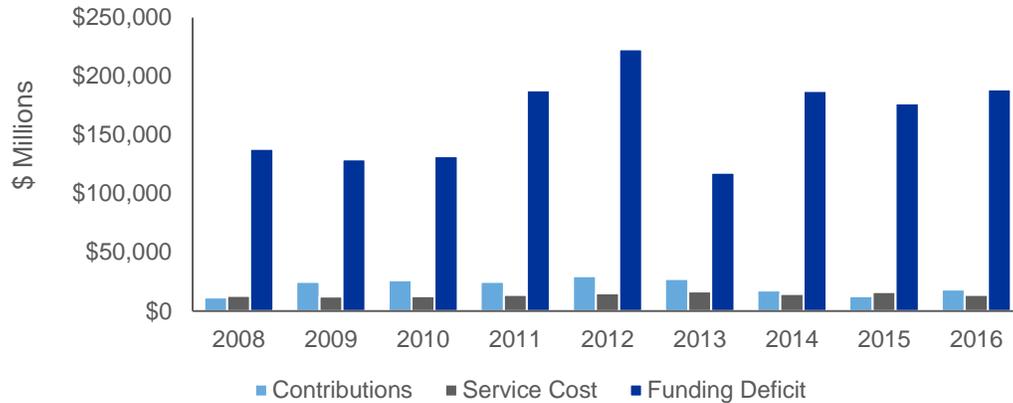
GM & Raytheon Stated that PBGC premiums do not pose significant risk to either company

FedEx Issued \$1.2 billion in debt, of which \$1 billion will be contributed to the pension plan¹⁴

Key statistic: Contributions relative to service cost and funding deficit

Total contributions exceeding \$18 billion may seem large, but let's consider them relative to the aggregated service cost and funding deficit of these plans. Service cost is the new liability generated each year due to new benefits. Only contributions in excess of service cost work to reduce the funding deficit. Total 2015 contributions did not exceed service cost, which led to higher funding deficits in aggregate. In 2016, these sponsors contributed slightly more than aggregate service cost, but made little headway toward filling their funding deficits.

Exhibit 2: Total contributions & service cost relative to funding deficit



Source: 10-k filings

The industry trend on funding policy

Many DB sponsors continue to take advantage of funding relief. Contributions scarcely cover service cost and do not (in aggregate) meaningfully address funding deficits. However, pressures from rising PBGC premiums, mortality used for contribution requirements and the phase-out of funding relief may reverse this trend.

Investment policy

The asset allocations of these sponsors have diverged over the last several years,¹⁵ with the most noteworthy change being the shift from an asset-only focus to an asset-liability focus. Since 2010, at least six of the 19 sponsors have shifted 10% or more of their portfolio to fixed income from return-seeking assets. Ford, GM and Exxon have shifted the most to fixed income, but Verizon, Honeywell and GE have also made meaningful changes in that direction.

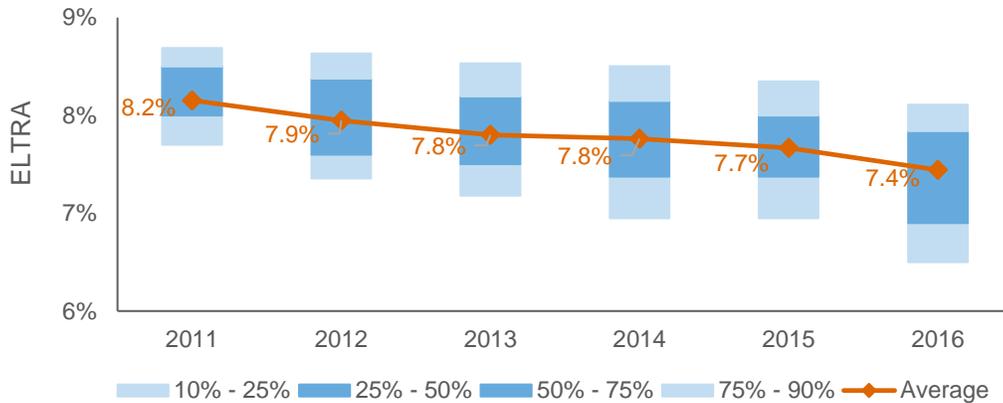
Notable activity in 2016¹⁶

UPS	Allocated additional 6% to fixed income assets
FedEx	Allocated additional 4% to fixed income assets
Lockheed Martin	Allocated additional 3% to fixed income assets
Northrop Grumman	Allocated 4% away from fixed income assets
IBM	Increased fixed income allocation target from 56% to 70%
Johnson and Johnson	Increased fixed income allocation target from 21% to 25%
Ford	Increased fixed income allocation target from 77% to 80% for U.S. plans ¹⁷

Key statistic: Expected long-term return on assets (ELTRA)

In 2011, every member of the \$20 billion club maintained an ELTRA assumption between 7.5% and 8.75%.¹⁸ By 2016, five companies had decreased the ELTRA assumption to below 7%.¹⁹ In the last five years, the overall average decrease in ELTRA was 70 bps. The change in average ELTRA from 2015 to 2016 was the largest during that period at 23 bps.²⁰ No sponsor meaningfully increased their ELTRA in 2016, and FedEx made the largest change with a reduction of 125 bps (see Figure 3).

Exhibit 3: ELTRA assumption since 2011



Source: 10-k filings

The industry trend on investment policy

DB sponsors continue to shift toward a more liability driven investing (LDI) strategy. Due to a combination of increased fixed income and lower market return expectations, ELTRA assumptions are shifting lower.

Risk transfer

Many sponsors continue to pursue lump sum cash-outs and annuity purchases to help reduce costs and manage liabilities. This trend has been prevalent since 2012, but it now may have even greater advantages due to increased flat rate PBGC premiums and upcoming mortality changes for lump sum purposes in 2018. Among members of the \$20 billion club, there were a few noteworthy risk transfers.

Notable activity in 2016²¹

United Technologies	\$775 million annuity purchase to retirees with benefits less than \$300/month ²²
Verizon	\$935 million lump sum cash-out
UPS	\$685 million lump sum cash-out
DuPont	\$550 million lump sum cash-out

The industry trend on risk transfer

DB sponsors are pursuing annuity purchases, especially to retirees with small benefits, in addition to ongoing lump sum window offers. The desire to reduce PBGC premiums (and to extend offers prior to lump sum mortality being updated in 2018) is often stated as objectives for these transactions.

Final thoughts

Many corporate sponsors have taken steps to reduce the cost and risk of their DB plans. These trends continued in 2016 with new plans closing or freezing, and a higher overall shift to liability-hedging fixed income. However, contributions are lagging and funded status continues to stagnate. In the current low rate and return environment, sponsors ought to focus on areas they can control, which are found in their plan design, funding, investment and risk transfer policies. Doing so will help promote stability, reduce surprises and place the sponsors in control of their DB plans' endgame.

¹ Based on 5500 filings

² See also Collie, "Discount rates fall and shortfalls increase for the \$20 billion club in 2016," Russell Investments Research, 2017.

³ According to 5500 filings. For information on cash balance plans and their investment strategies, see Owens, Sylvanus, Jaugietis, "LDI for Cash Balance Plans," Russell Investments, 2014.

⁴ UPS 12/31/2016 10-k filing

⁵ In a plan closure, new hires will not receive DB benefits (often in favor of enhanced defined contribution benefits), but existing employees continue to accrue. With a plan freeze, all future benefit accruals are curtailed for new *and* existing employees.

⁶ Based on FYE 2016 10-k filings

⁷ Based on 10-k filings

⁸ Source: PBGC. See also Collie, "PBGC premiums in their historical context: ouch!," Russell Investments Fiduciary Matters blog, January 30, 2017; and Owens, "Extended funding relief + higher PBGC premiums = a lethal combination," Russell Investments Fiduciary Matters blog, December 9, 2015.

⁹ See Owens, "The full impact of mortality improvement hasn't been felt yet by DB sponsors," Russell Investments Fiduciary Matters blog, June 29, 2016.

¹⁰ Based on 10-k filings

¹¹ Northrop Grumman also mentioned PBGC premiums in passing as a legislative risk.

¹² No sponsor paid more than \$2 billion in contributions in 2015.

¹³ Based on 10-k filings

¹⁴ Based on 10-Q filing

¹⁵ See Collie, "The Pension Plan Herd Has Broken Up," Fiduciary Matters blog, March 24, 2016.

¹⁶ Based on 10-k filings

¹⁷ First targeted the 20/80 allocation in 2011 (according to the FYE 2011 10-k filing)

¹⁸ Based on FYE 2011 10-k filings

¹⁹ Based on FYE 2016 10-k filings

²⁰ Based on 10-k filings from FYE 2011 to 2016

²¹ Based on 10-k filings

²² See United Technologies press release, "United Technologies to Reduce Pension Liabilities," October 6, 2016.

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