

MILLIMAN WEBINAR

DEFINED BENEFIT PLANS

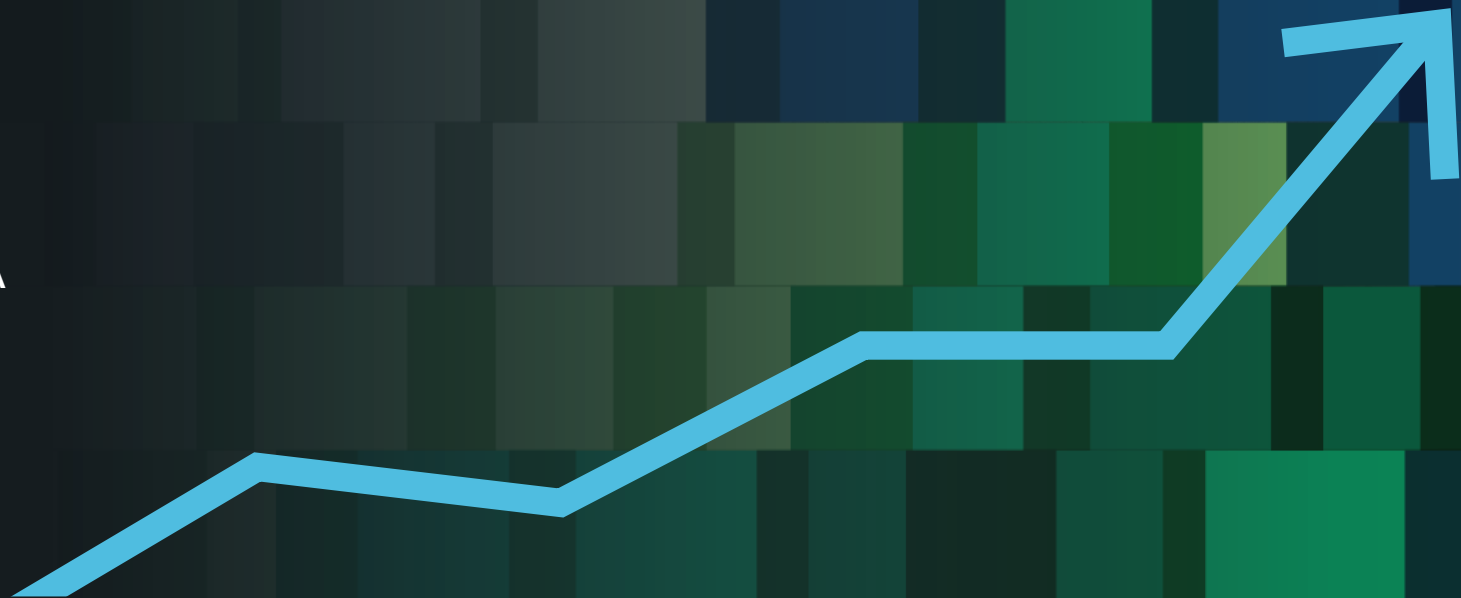
# DB decoded: Critical updates impacting defined benefit plans

10 a.m. – 11 a.m. E.T.  
March 23, 2021

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Principal & Consulting Actuary

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Consulting Actuary



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# Today's speakers



Moderator

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# Agenda

## DB plan landscape

- Number of participants, plans, and costs
- Milliman 100 funded percentage

## Current trends

- Covid-19: Impacts & legislation
- Plan management
- De-risking

## Future expectations in light of Covid-19



# DB plan landscape

## Information from PBGC, Department of Labor, and Bureau of Labor Statistics

<https://www.pbgc.gov/prac/data-books>, **2018 Pension Insurance Data Tables** <https://www.dol.gov/sites/dolgov/files/EBSA/researchers/statistics/retirement-bulletins/private-pension-plan-bulletin-historical-tables-and-graphs.pdf>

<https://www.dol.gov/sites/dolgov/files/EBSA/researchers/statistics/retirement-bulletins/private-pension-plan-bulletin-historical-tables-and-graphs.pdf>  
<https://www.bls.gov/charts/employer-costs-for-employee-compensation/costs-private-industry.htm>

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# Single employer DB plan landscape

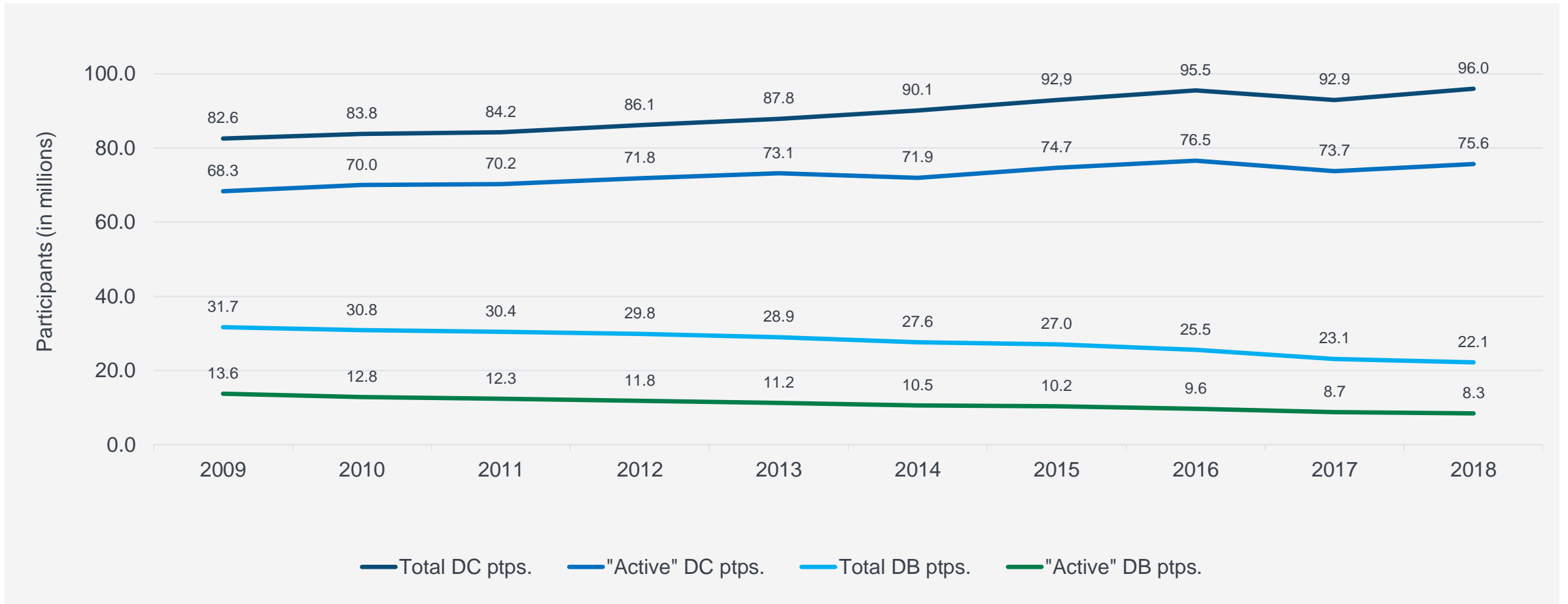
Plan sponsors are moving from defined benefit to defined contribution

Current employees 9 times more likely to have access to a defined contribution plan than a defined benefit plan

Of those in DB, half are in open DB plans (new hires still participate, all ptps. earn service)

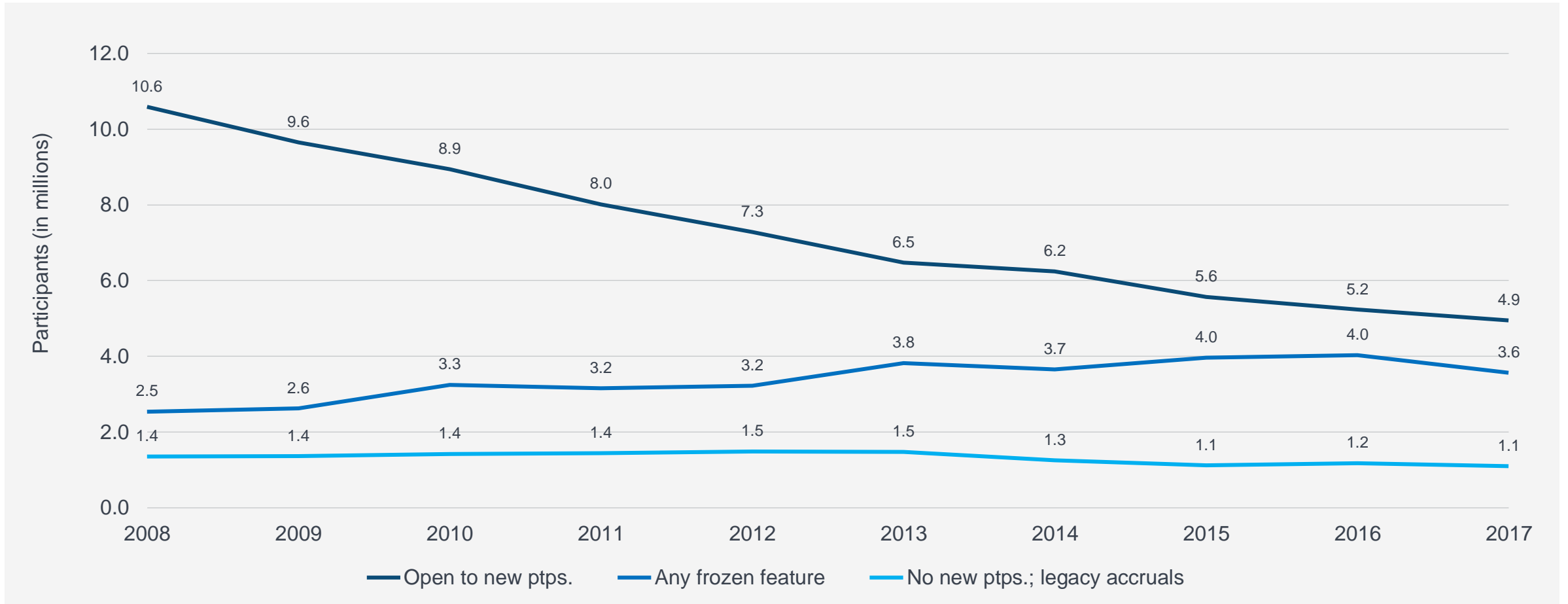
Recent DB plan growth fueled sponsors adding hybrid plans

# DOL: Number of participants in single employer plans

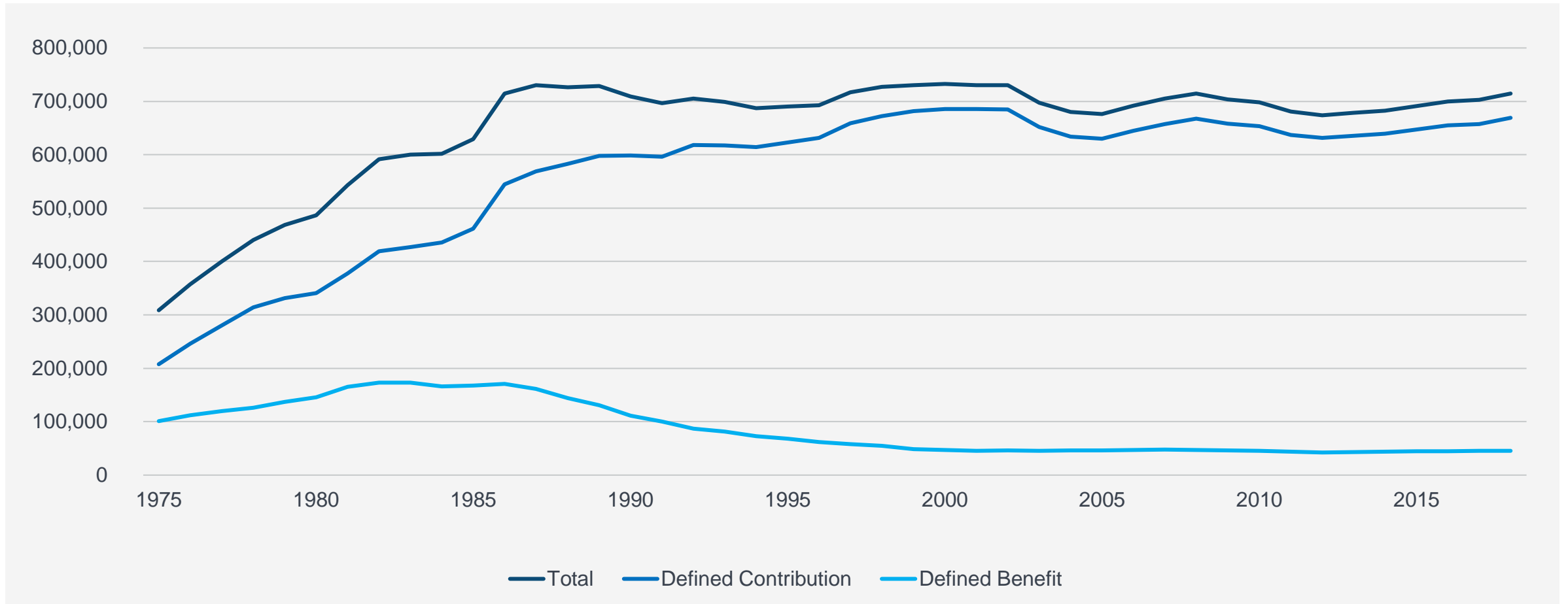




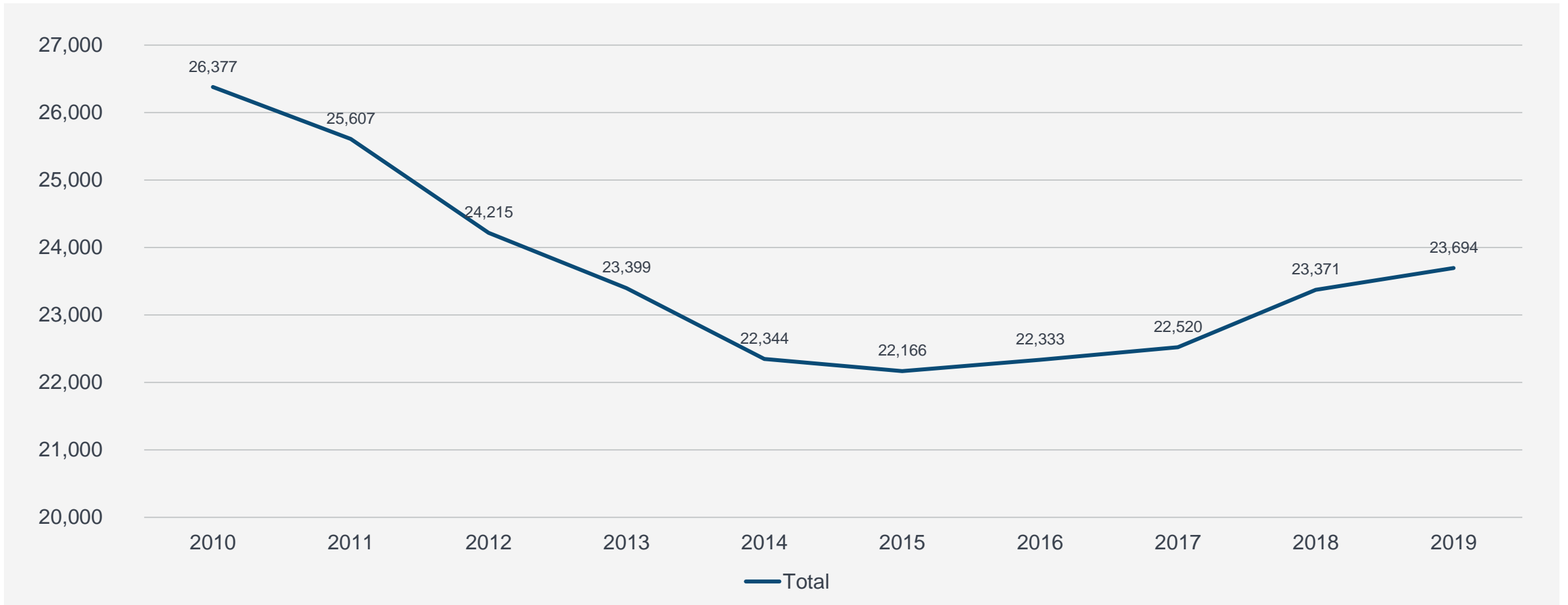
# PBGC: Active participants by status of benefit accrual



# DOL: Number of single employer plans



# PBGC: Number of single employer DB plans



# DB plan formula comparison

## Final average pay

- Benefits for all years of service are based on final average pay (back-loaded)
- **Employer bears all risks – longevity, future compensation, assets**
- Participants experience “traditional” pension

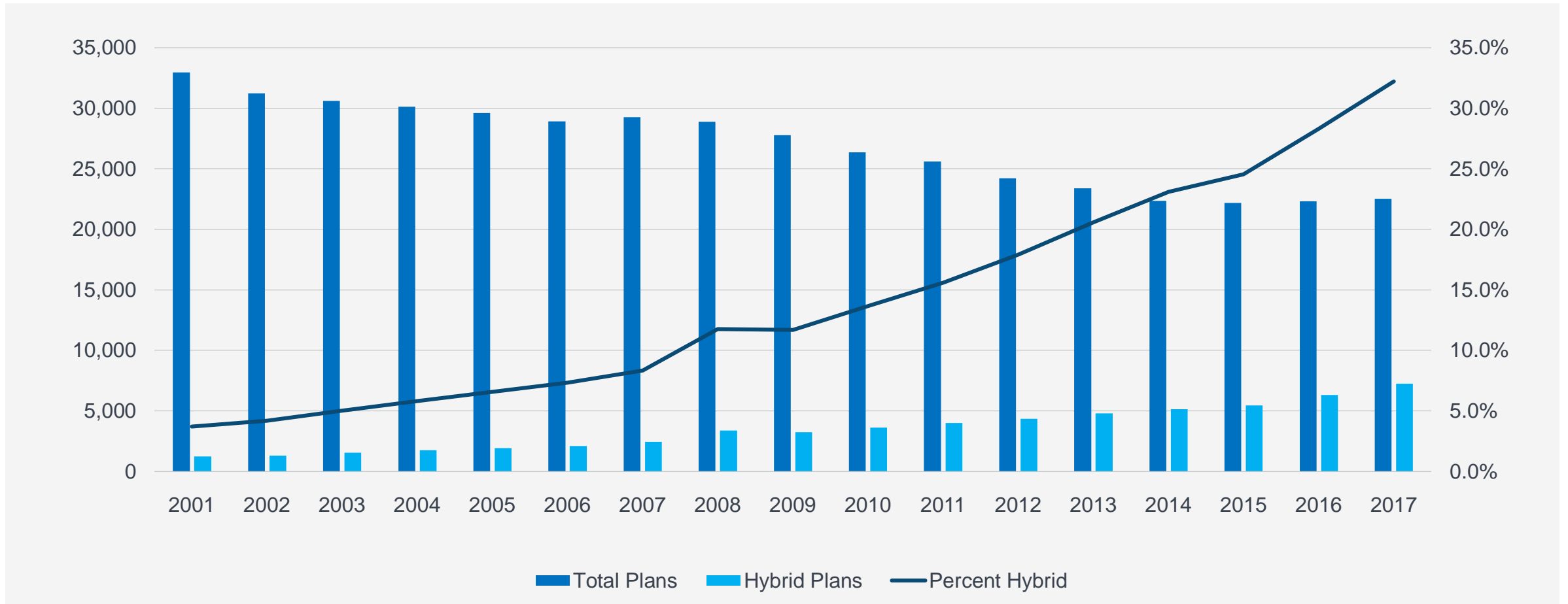
## Career average pay

- Each year’s accrual based on current pay
- Lower cost for employer **& future compensation risk eliminated**
- Participants experience “traditional” pension

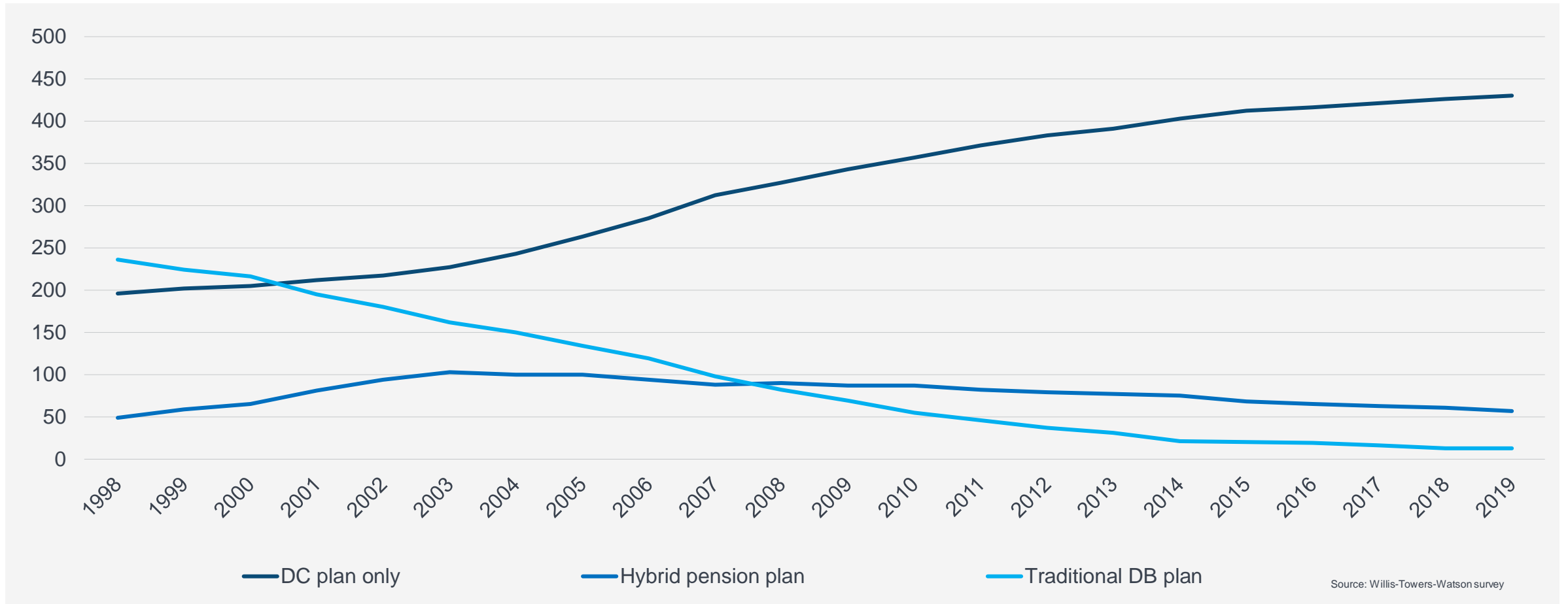
## Hybrid

- **Employer shares risks with participants**
- Employer cost is lower and less volatile
- Example: Cash Balance
  - Benefit is a hypothetical account, accumulation of pay credits and interest
  - Longevity risk mainly eliminated as most participants choose LS
  - Participant experience is more like a DC plan
  - Often less expensive than the same % of pay provided in a DC plan

# PBGC: Number of single employer hybrid DB plans

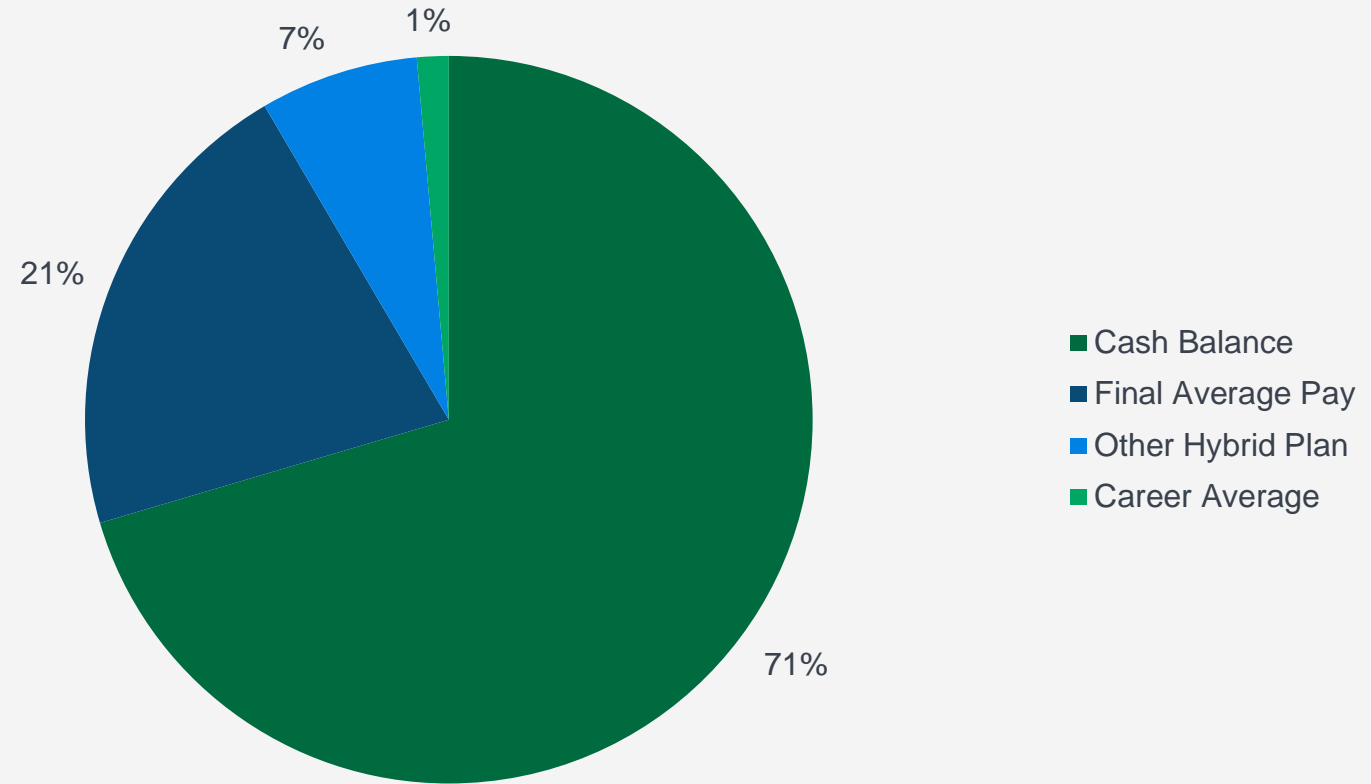


# Retirement plan sponsorship within Fortune 500 Companies



# 70 Fortune 500 Companies with DB plans

55 with hybrid plans



Source: Willis-Towers-Watson survey

# Employer costs

**Average labor cost for each worker is roughly \$36 per hour (BLS Sept. 2020)**

- 70% to wages and salary (\$25)
- 30% to benefits (\$11)

**Retirement (DB + DC) roughly 3.5% of average hourly labor cost (\$1.27)**

**Majority of benefits attributable to employee insurance programs**

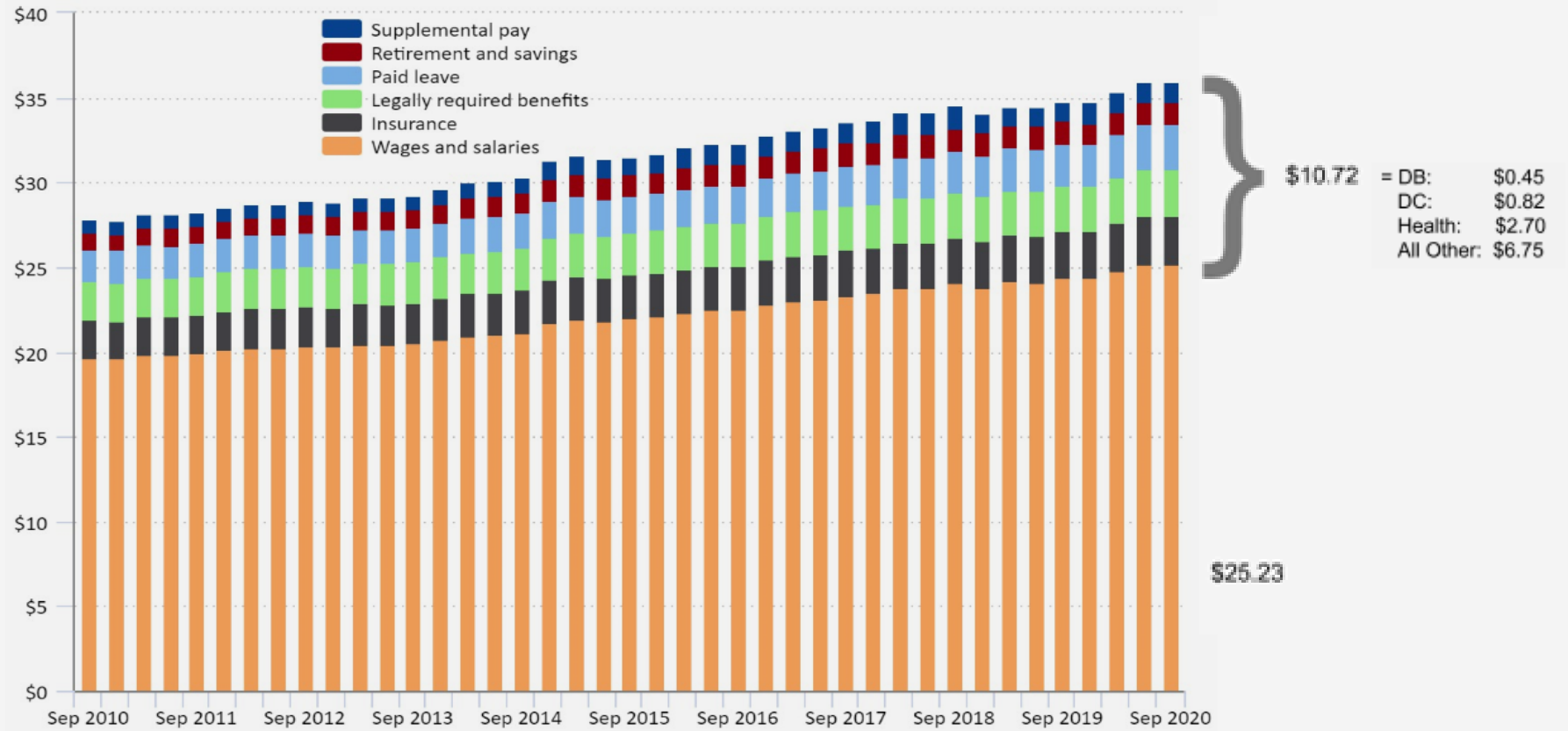
- Health insurance accounts for 95% of insurance expenditure (\$2.70)

**Sponsor commitments to defined contribution plans increasing**



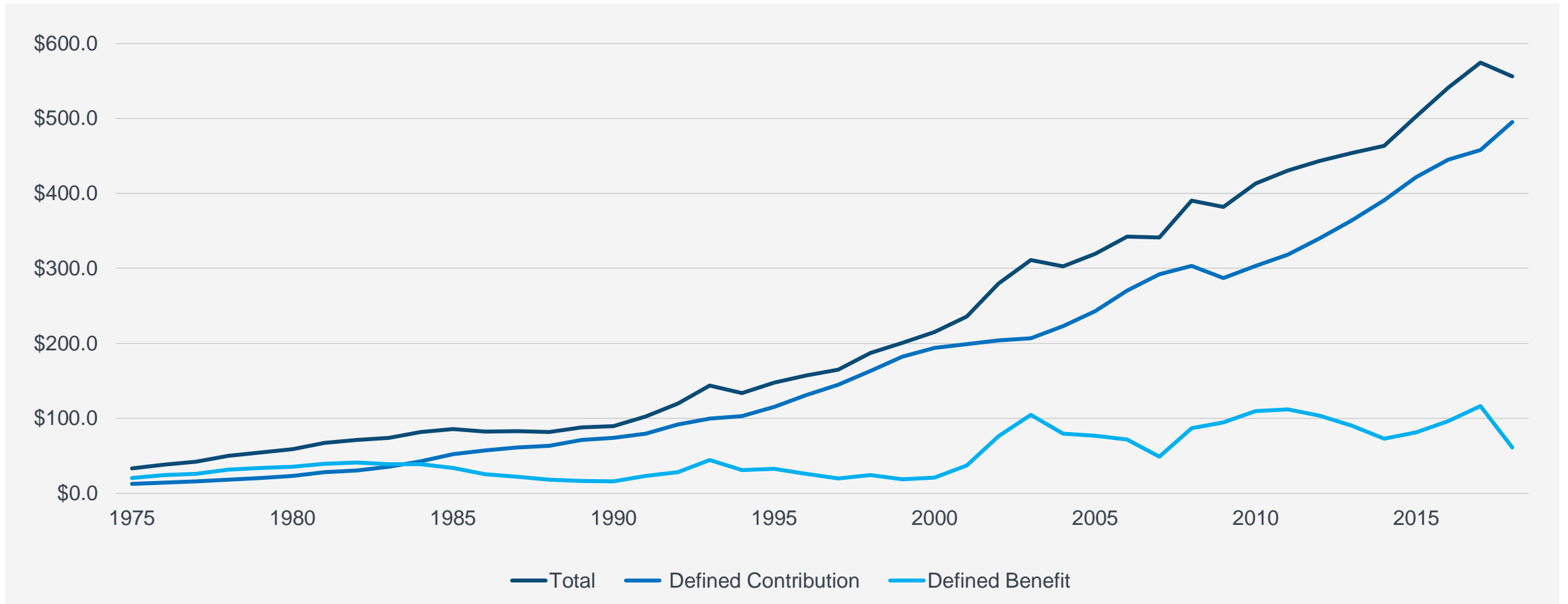
# BLS: Average employee compensation cost per hour worked

Private industry workers only (2010 – 2020)



# DOL: Single employer plan contributions (1975 – 2018)

(\$ billions)



# Milliman 100 pension study

We have been estimating the average funded ratio of the largest 100 private employer DB plans since Dec 1999. Over the last 10 years, 44 companies have rotated in and out since we rank them straight up and down from the proxy statements the company publishes.

The Jan. 31 ratio was published as 89.8%, bringing plans back to similar funded levels seen at the end of 2019. This despite declining interest rates which have increased PBO as much as 10%.



# DB Plan management – Current trends and Covid-19 impacts

# Covid-19

## Covid-19 – we are all affected

- Some need to hire to meet service demands
- Some struggling to keep the lights on
- Use of DB plans on workforce management

## Impact on DB Plans\*

- More involvement from C-suite executives (42%)
- Borrowed to fund the pension plan (40%)
- Take advantage of contribution deferral under CARES (89%)

## Prompted new legislation

- Cares Act – deferral of contributions
- Heroes Act passed by the House in May – proposed additional funding relief
- American Rescue Plan Act

\* MetLife 2020 Pension Risk Transfer Poll

## DB Plan risks

### Many types of risk in a DB Plan

- Interest rate
- Investment
- PBGC / insurance
- Mortality / other demographics
- Legislative

**Primary drivers of risk management activity are interest rate, investment, and insurance risk**

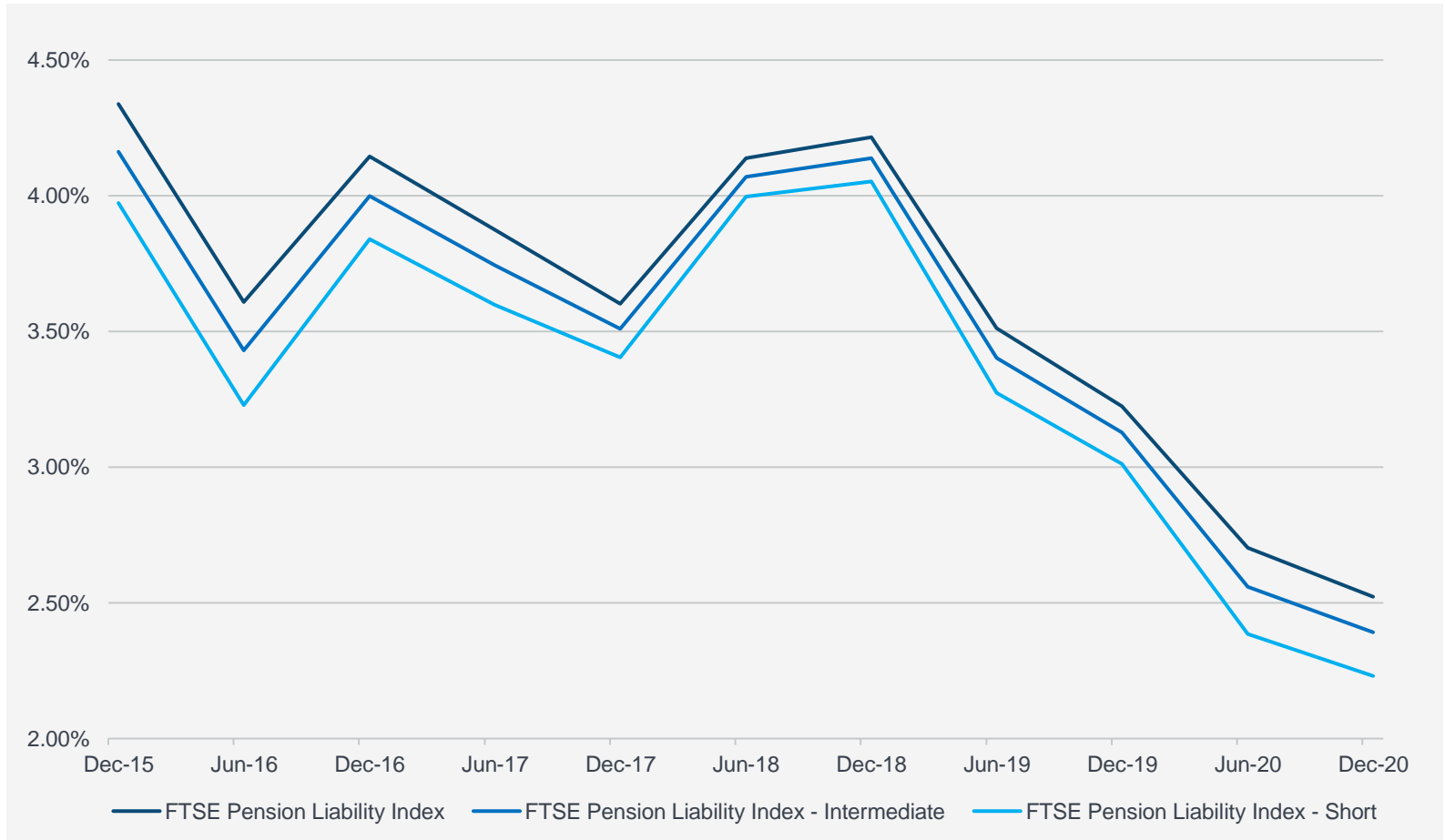


# Interest Rate Risk

## FTSE Pension discount curves: 12/31/2015 to 12/31/2020

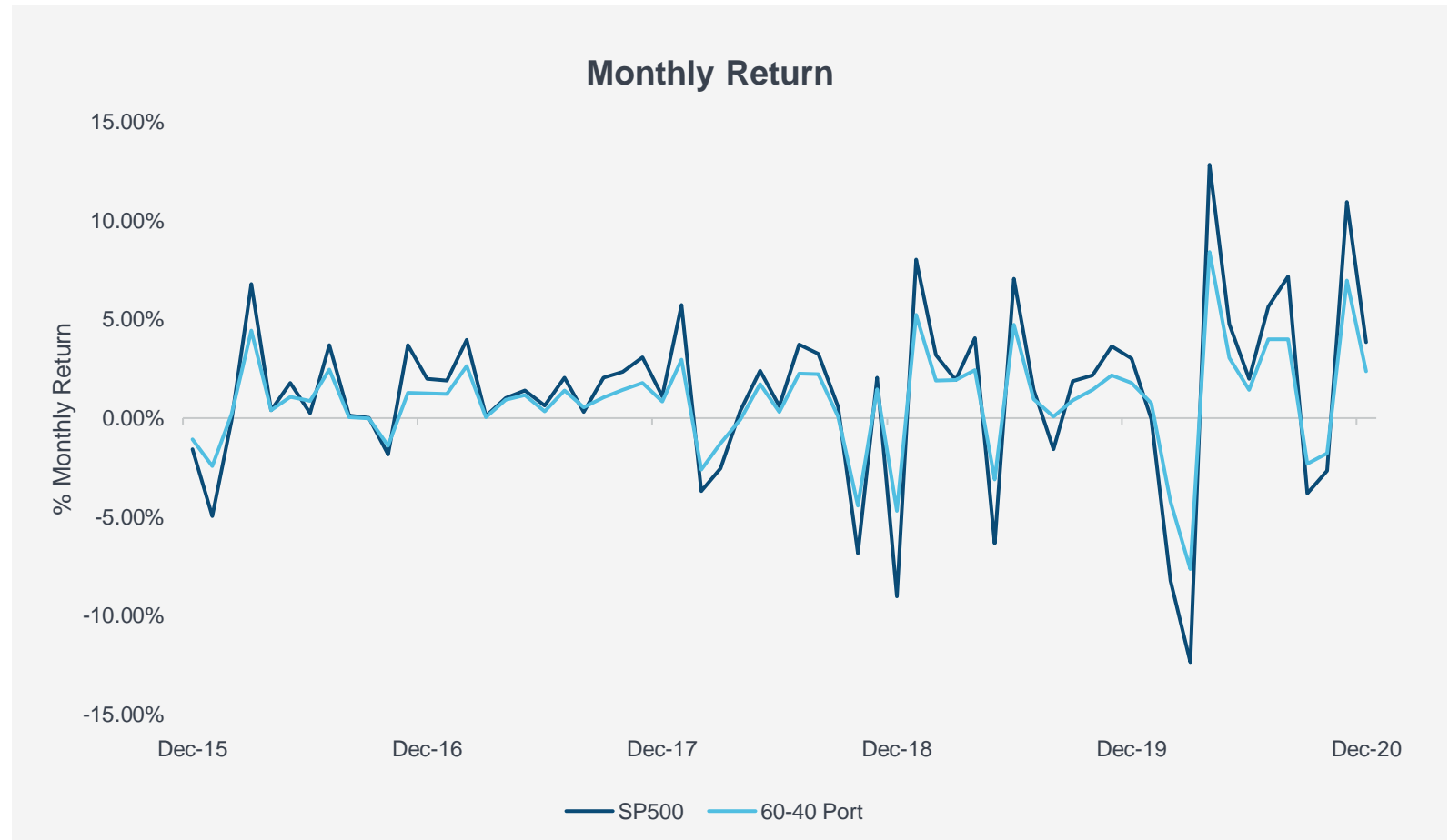
(C) 2018 London Stock Exchange Group PLC and its applicable group undertakings

- Discount rates down by about 160 bps over past two years
- Result: Liability increases of 25% or more



# Investment Risk

Despite the volatility, for calendar year plans, the 60-40 portfolio produced returns over 8% each year except for 2018 when returns were negative. Measurement date is key.



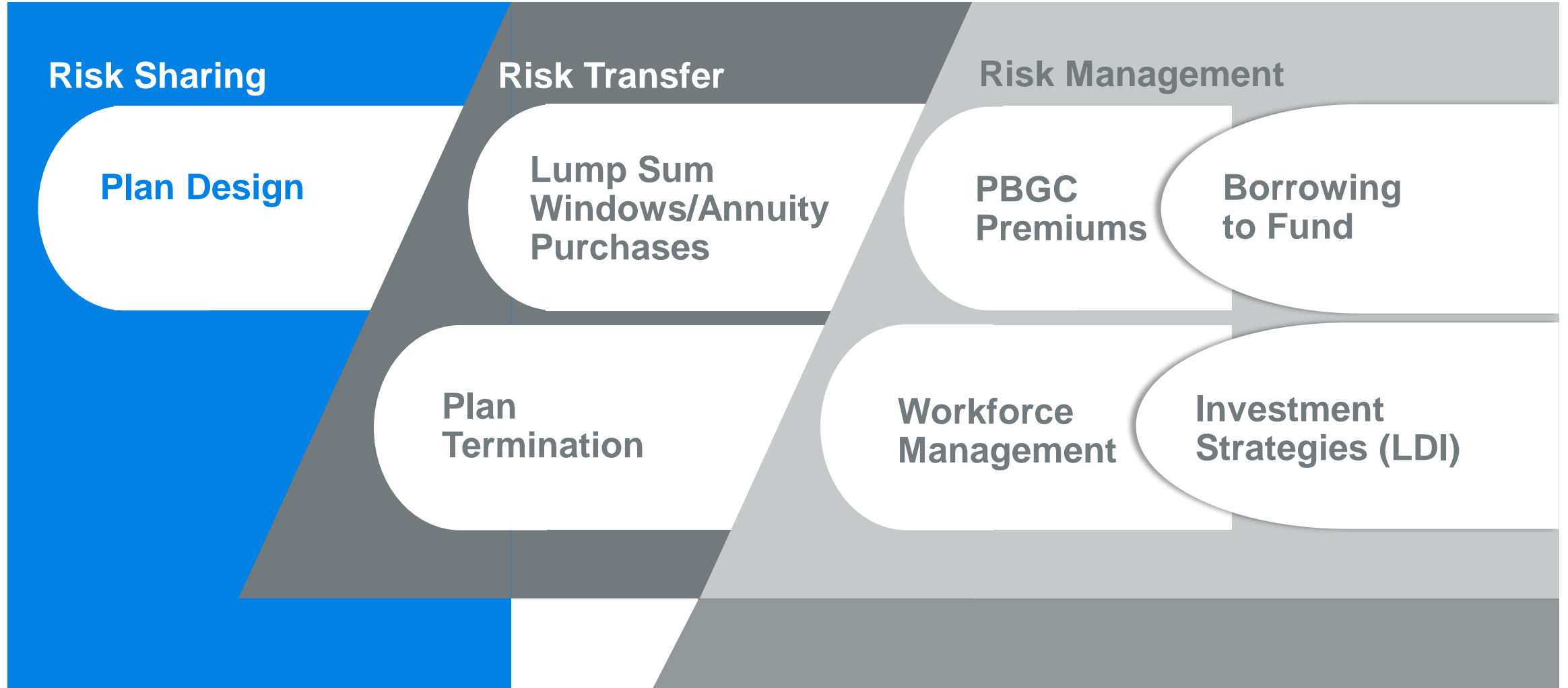


## PBGC Insurance Risk

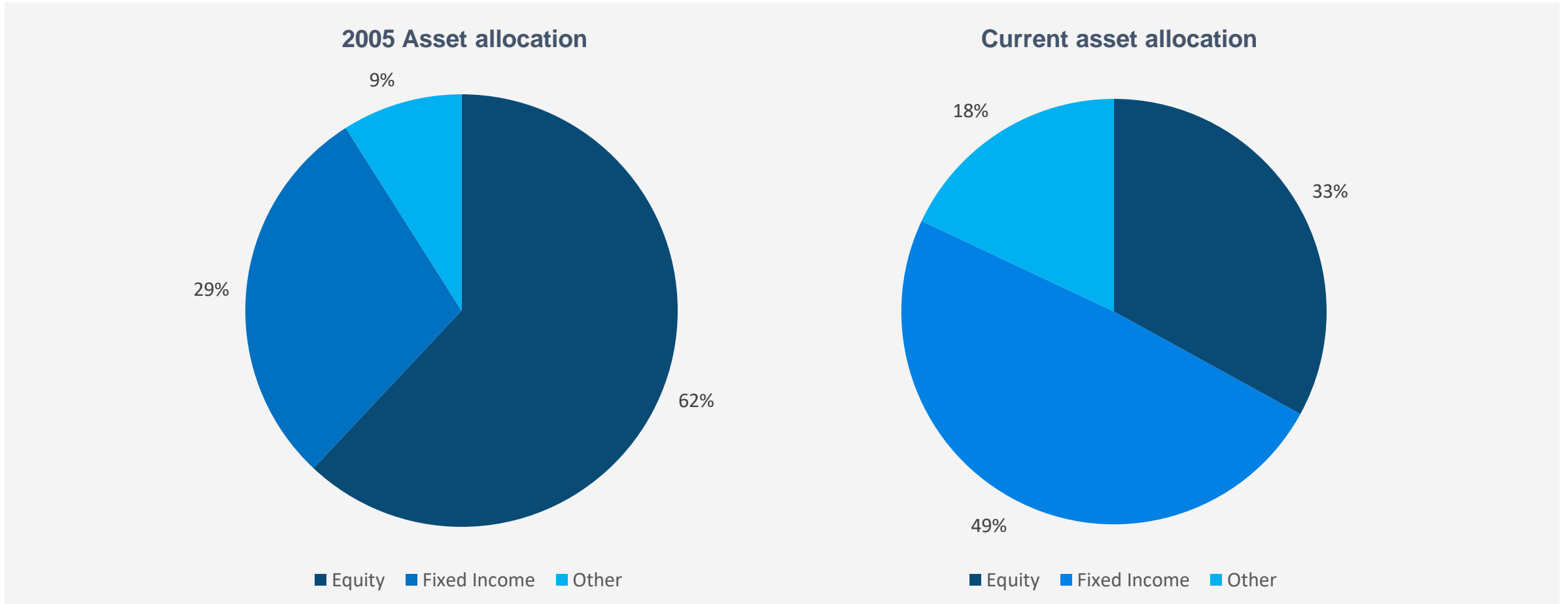
Premiums pose significant cost risk for underfunded plans

|                        | Flat rate premium         | Variable rate premium |                         |
|------------------------|---------------------------|-----------------------|-------------------------|
| Plan year beginning in | Flat rate per participant | % of UVBs             | Per participant VRP cap |
| 2005                   | \$19                      | 0.9%                  | No cap                  |
| 2010                   | \$35                      | 0.9%                  | No cap                  |
| 2015                   | \$57                      | 2.40%                 | \$418                   |
| 2020                   | \$83                      | 4.50%                 | \$561                   |
| 2021                   | \$86                      | 4.60%                 | \$582                   |

# Risk Management



# Allocation in the Milliman 100 of DB Plan assets



## Trends in de-risking – U.S. and U.K.

Pensions & Investments has reported 56 pension risk transfers in 2020. This is already a yearly record. Activity was led by 24 buy-ins, also a yearly record. Buyouts and lump-sum transfers remain strong in 2020. Activity was split almost evenly by the two main markets of the U.S. and U.K. The U.S. represented all lump-sum activity.



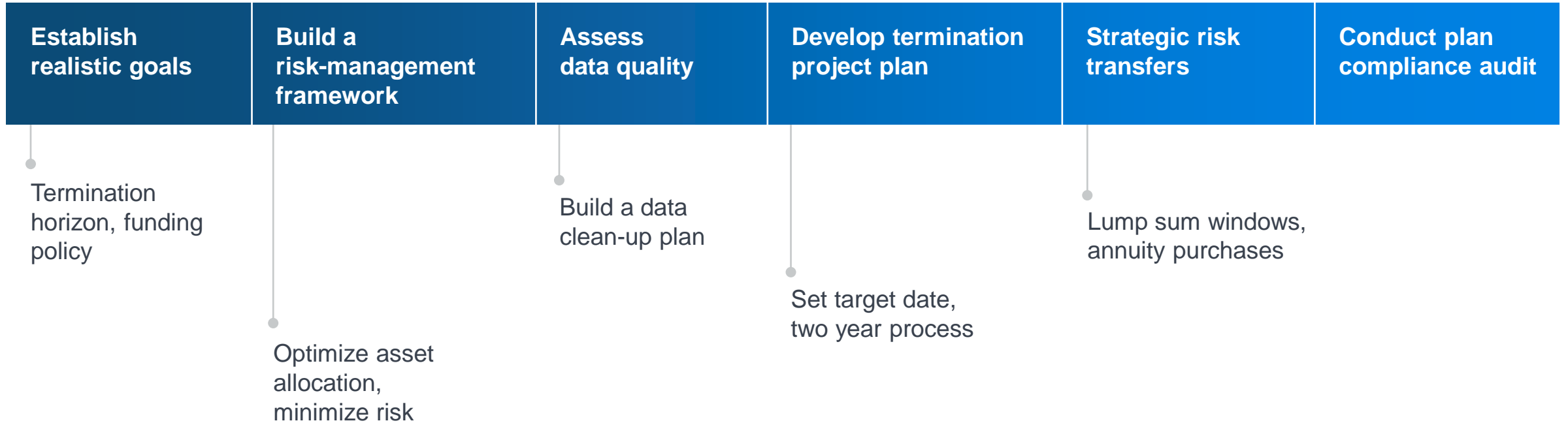
Source: Retrieved from <https://www.pionline.com/interactive/pensions-risk-transfer-activity-continues-2020#:~:text=Pensions>, Nov 12, 2020

## 2020 Pension Risk Transfer Activity

| Company                     | Type                       | Settlement amount (\$ billion) |
|-----------------------------|----------------------------|--------------------------------|
| Lockheed Martin Corporation | Annuity Buy-out and Buy-in | \$2.2                          |
| General Electric            | Annuity Buy-out            | \$1.7                          |
| Dow                         | Annuity Buy-out            | \$0.7                          |
| Weyerhaeuser                | Annuity Buy-out            | \$0.8                          |
| Baxter                      | Lump Sum                   | \$0.3                          |

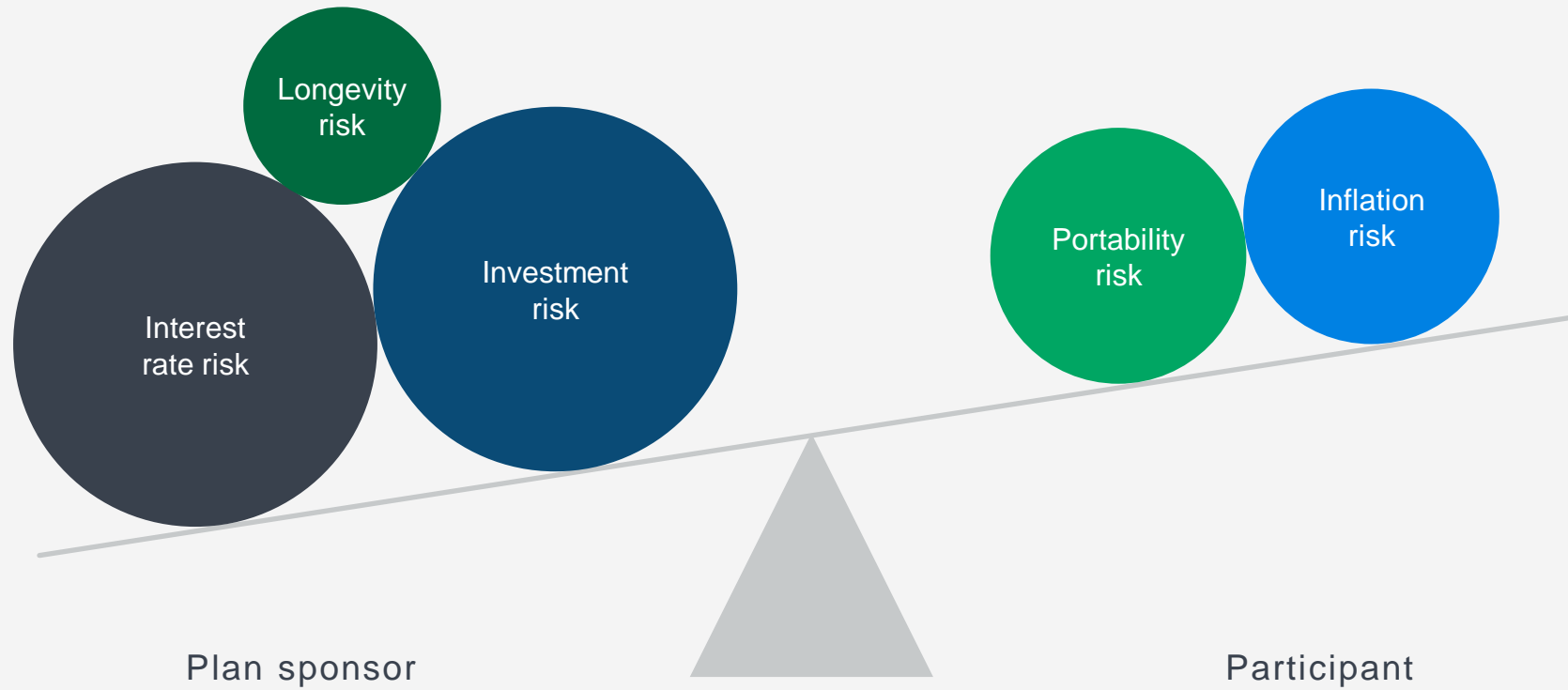
# Exit strategies & risk management

A disciplined and structured path to termination



# Traditional defined benefit plan risk allocation

Plan Sponsor bears most of the risks



# What if “DB or DC” is a false choice?

Rethinking your retirement plans

**What would we want if we could start from scratch? A plan that:**

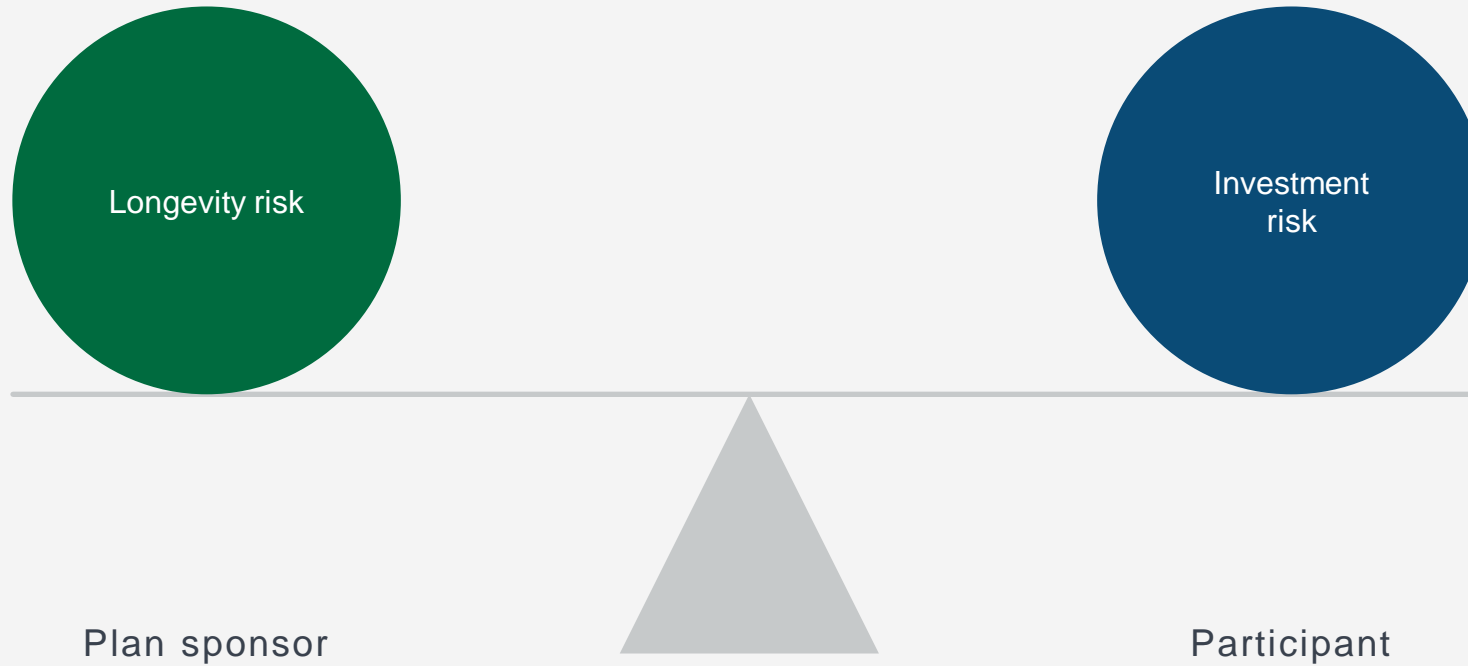
- Stays fully funded in all market conditions
- Has predictable contributions
- Produces balance sheet stability
- Provides benefits with lifelong income and inflation protection
- Improves ability to attract and retain top talent
- Facilitates an orderly exit from the workforce





# Sustainable Income Plan

Risks are shared in a rational way



● Portability risk minimized

● Inflation risk minimized

● Interest rate risk minimized

# Future expectations

# Future expectations

- Funding relief
- Workforce management challenges
- Mortality – impact of COVID?
- Risk transfer activity
  - Annuity purchase
  - Risk sharing plan designs

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# Thank you

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