Actuarial Impact of Act 5 of 2017

Presentation to the Pennsylvania School Boards Association

Independent Fiscal Office
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Unfunded Liability Rates Not Affected

Description	FY 2017-18 Rate
Employer Normal Cost Rate	7.70%
Unfunded Accrued Liability Rate	24.04%
Act 120 Collars	n.a.
Health Insurance Rate	0.83%
Total Employer Contribution Rate	32.57%

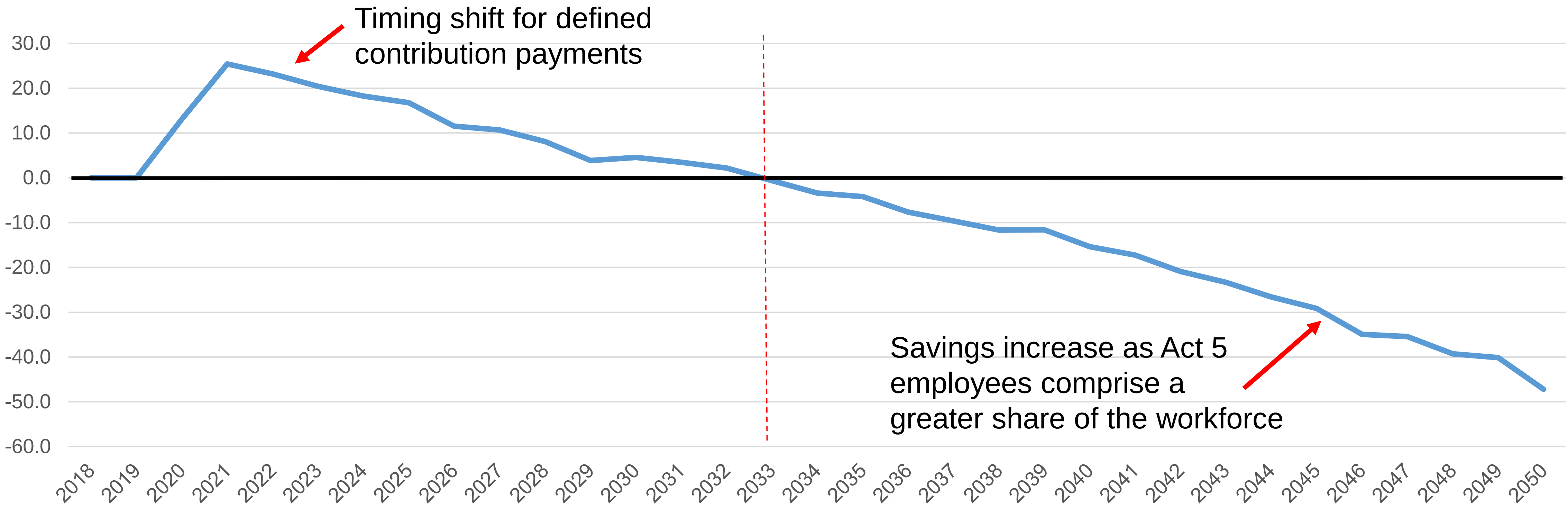
Note: the employer normal cost rate is a blended rate across all benefit classes.
Source: PSERS' June 30, 2016 actuarial valuation.

Lower Normal Costs Under Act 5

Statute	Benefit Classes	Employer Normal Cost	Note
Act 120	T-E and T-F	2.90%	DB rate
Act 5	T-G and T-H	0.54%	DB rate
	T-G and T-H	2.17%	DC rate
	T-G and T-H	2.71%	Total rate

Note: Rates are for new employees as of the 2020 valuation. All rates are blended rates for the listed benefit classes. Excludes the defined contribution-only plan. DB is defined benefit and DC is defined contribution.
Sources: Conduent (PSERS' actuary). Blended rates for Act 5 were computed by the IFO based on data from Conduent.

Annual Change in Employer Contributions Act 5 Compared to Prior Law



Total PSERS employer savings of $217 million through FY 2049-50

Note: dollar amounts in millions on a cash flow basis for fiscal years ending June 30th. Includes employer contributions for PSERS only.
Source: Cost note prepared by Conduent (PSERS' actuary).

Risk Mitigation Under Act 5

- Risk mitigation refers to the reduced sensitivity of employer contributions to a reduction in the investment rate of return.
- Under defined benefit funding, employer rates increase when investment earnings are lower than expected.
- For employees hired under Act 5, the resulting employer rate increase is mitigated when investment earnings fall below expectations.
- Average risk mitigation will be small at first, but it will increase over time as Act 5 employees comprise a greater share of the workforce.

PSERS Risk Mitigation Grows Over Time

Fiscal Years	Average Change in Risk
2019 to 2030	-2.9%
2031 to 2040	-8.2%
2041 to 2050	-29.0%

Source: IFO computations.

- In the final year of the projection (FY 2049-50), the average risk mitigation reaches -49.5%, as nearly all active employees are covered by Act 5.
- An analysis limited to Act 5 employees indicates that the full risk mitigation reaches -53.0%.
- The risk mitigation is worth up to $4 billion in PSERS employer contributions through FY 2049-50 if annual returns are 6.25% instead of 7.25%.

Shared Risk – Shared Gain

- **Act 5 expands employee shared-risk contributions and implements shared-gain contributions.**
  - Triggered if investment rates of return are below/above the assumed rate by 1 percentage point (ppt) or more over specified look-back periods.
  - For new employees, possible 0.75 ppt increase/decrease in <u>employee</u> rate every 3 years; up to 3 ppts cumulatively.
  - Dollar-for-dollar impact on the <u>employer</u> rate.
- **Impact on PSERS employer contributions and risk mitigation.**
  - Maximum "Act 5 employee" impact of $9 billion through FYE 2050.
  - One increment (0.75 ppt) applied to one-half of the projection period would change the estimated risk mitigation by 11 ppts.

Act 5 Benefit Comparisons

	35 Years	25 Years	15 Years
Percentage of Act 120 Benefits			
Default Hybrid Plan	82%	75%	69%
DC-Only Plan	41%	36%	33%
Replacement of Pre-Retirement Income			
Act 120	68%	48%	29%
Default Hybrid Plan	55%	36%	20%
DC-Only Plan	28%	17%	9%

Notes: (1) Computations based on the specified years of service (35, 25 or 15) and retirement at age 65. (2) Reductions applied for retirement before age 67. (3) Defined contribution plans are assumed to return 6% net of fees.
Source: IFO computations.

Other Notes

- **PSERS' Unfunded Actuarial Liability (UAL).**
  - As of the 6/30/2016 valuation, the UAL was $42.7 billion.
  - The UAL is projected to peak at $48.0 billion for the 6/30/2018 valuation.
  - Actuaries project it will decline to $600 million by the 6/30/2048 valuation.
- **Investment fees.**
  - Public Pension Management and Asset Investment Review Commission.
  - Study (1) current investment strategies, (2) costs and benefits of active and passive investments and (3) alternate investment strategies.
  - Goal: develop recommendations to generate $1.5 billion in actuarial savings over 30 years.

Thank you

Presentation to be posted at IFO website.

www.ifo.state.pa.us