CALSTRS

Regular Meeting

Item Number 4b – Open Session

Subject: Actuarial Valuation of the Defined Benefit Supplement Program and Consideration for the Adoption of an Additional Earnings Credit

Presenter(s): David Lamoureux and Rick Reed from CalSTRS / Nick Collier and Scott Preppernau from Milliman

Item Type: Action

Date & Time: May 4, 2022 – 5 minutes

Attachment(s):

Attachment 1 – June 30, 2021 Actuarial Valuation for the Defined Benefit Supplement Program

Attachment 2 – Proposed Resolution for the Adoption of an Additional Earnings Credit

PowerPoint(s):

Summary of Valuation Results for the Defined Benefit Supplement Program

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PURPOSE

The purpose of this item is to present the results of the June 30, 2021 actuarial valuation of the Defined Benefit Supplement Program and to consider the adoption of an additional earnings credit of 13.21%.

SUMMARY

The attached report is the annual actuarial valuation of the Defined Benefit Supplement Program required as per Section 22311.5 of the Education Code. The actuarial valuation provides a snapshot of the fund's assets and liabilities as of June 30, 2021.

Funded Ratio

The funded ratio of a pension plan is defined as the ratio of a plan's assets to its actuarial obligation. The following table compares key information about the funded ratio of the Defined Benefit Supplement Program between the June 30, 2020 and June 30, 2021 actuarial valuations.

Summary of Key Results for Defined Benefit Supplement Program

	June 30, 2021 Valuation	June 30, 2020 Valuation
Actuarial Obligation	$11.8 Billion	$11.7 Billion[1]
Actuarial Value of Assets	$17.8 Billion	$14.2 Billion
Unfunded Actuarial Obligation / (Actuarial Surplus)	($6.0 Billion)	($2.5 Billion)
Funded Ratio	150.6%	121.8%

As illustrated, both the funded ratio and the actuarial surplus have increased substantially since the 2020 valuation. These increases were primarily a result of the large investment return for fiscal year 2020-21. Based on the cash flows of the Defined Benefit Supplement Program, the investment return was calculated to be 27.0%. which significantly exceeded the Minimum Interest Rate credited to the member's account of 2.44% and the assumed rate of return of 7%. For more details on the changes in the surplus, please refer to table 4 on page 12 of the attached report.

The funded ratio for the Defined Benefit Supplement Program is based on the market value of assets. This differs from the Defined Benefit Program which uses an actuarial value of assets which smooths the volatility in the investment markets by reflecting only one-third of the net accumulated investment gains and losses in a year. For the Defined Benefit Supplement Program the volatility of the investment market is managed by establishing a Gain and Loss Reserve, which, if positive, includes investment earnings in excess of the amount needed to fund the program liabilities and, if negative, reflects an unfunded actuarial obligation of the program. If, in any year, investment earnings are less than necessary, any positive balance in the Gain and Loss Reserve is used to fund the Minimum Interest Rate. If the balance in the Gain and Loss Reserve is sufficient to properly protect the program against investment losses, any remaining actuarial surplus can be used to fund an additional earnings credit.

Additional Earnings Credit

Section 25006 of the Education Code allows the board to declare and additional earnings credit for members of the Defined Benefit Supplement Program. The board has adopted a policy stating that additional earnings credits may be awarded if the funded ratio of the program surpasses certain thresholds. The thresholds are determined using a two-step allocation process.

1. The first step in the process allocates the excess of the actuarial surplus over the standard deviation of the expected long-term rate of return on the investment portfolio, limited to the difference between the minimum interest rate from the previous valuation and the long-term assumed rate of earnings.
2. The second step in the process allocates 50% of the remaining actuarial surplus over two times the standard deviation of the expected long-term rate of return on the investment portfolio.

[1] Includes the $369 million value of the additional earnings credit adopted by the board in June of 2021.

The additional earnings credit awarded would be the sum of the allocation from the two steps.

The standard deviation for the Defined Benefit Supplement Program was set at 13.1% when the board adopted the most recent experience study in January 2020. This means the board is asked to consider an additional earnings credit only when the program has a funded status greater than 113.1%. For the second threshold, the funded ratio would have to exceed 126.2% following the first threshold allocation. As of June 30, 2021, the Defined Benefit Supplement Program had a funded ratio of 150.6%, which exceeds the first threshold. After the first allocation, the funded ratio is 145.1% which also exceeds the second threshold. This is the first time since the board adopted this policy on awarding additional credits in which the second threshold has come into play.

As per the board policy, a total additional earnings credit of 13.21% has been calculated as the sum of 4.56% under the first allocation step and 8.65% under the second allocation step. Awarding a 13.21% additional earnings credit will reduce the funded status of the program from 150.6% down to 135.6% and the actuarial surplus by $1.3 billion, from about $6.0 billion down to about $4.7 billion. Although it is possible an unfunded actuarial obligation could develop in the future if plan experience is worse than expected, it is worth nothing that both the funded status and the actuarial surplus would still be the highest they have ever been for this program, even after granting the additional earnings credit calculated under board policy. For more details on the calculation of the recommended additional earnings credit refer to table 6 on page 14 of the attached report.

If awarded, the additional earnings credit of 13.21% will be applied to the June 30, 2021, account balance for members who have not yet retired as of the day of the board's decision.

RECOMMENDATION

Staff recommends that an additional earnings credit of 13.21% be awarded for the Defined Benefit Supplement Program.