CALSTRS

Regular Meeting

Item Number 4c – Open Session

Subject: Actuarial Valuation of the Cash Balance Benefit 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 Cash Balance Benefit Program

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

PowerPoint(s):

Summary of Valuation Results for the Cash Balance Benefit 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 Cash Balance Benefit Program and to consider the adoption of an additional earnings credit of 11.65%.

SUMMARY

The attached report is the annual actuarial valuation of the Cash Balance Benefit Program required as per section 26211 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 Cash Balance Benefit Program between the June 30, 2020 and June 30, 2021 actuarial valuations.

Summary of Key Results for Cash Balance Benefit Program

	June 30, 2021 Valuation	June 30, 2020 Valuation
Actuarial Obligation	$331 Million	$318 Million[1]
Actuarial Value of Assets	$483 Million	$375 Million
Unfunded Actuarial Obligation / (Actuarial Surplus)	($152 Million)	($57 Million)
Funded Ratio	146.0%	117.9%

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 Cash Balance Benefit Program, the investment return was calculated to be 27.5%, significantly exceeding the Minimum Interest Rate credited to the member's account of 2.44% and the assumed rate of return of 6.50%. For more details on the changes in the surplus, please refer to table 4 on page 12 of the attached report.

For the Cash Balance Benefit Program, the assumed investment return is lower than the assumed return of 7.00% for the Defined Benefit Program since the assets of the Cash Balance Benefit Program are invested differently. As per board policy, the Cash Balance Benefit Program assets are not invested in private equity and real estate. As a result, the assets of the Cash Balance Benefit Program are expected, on average, to earn 0.5% less each year than the assets of the Defined Benefit Program.

The funded ratio for the Cash Balance Benefit 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 Cash Balance Benefit 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 26605 of the Education Code allows the board to declare an additional earnings credit for members of the Cash Balance Benefit 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] Includes the $10 million value of the additional earnings credit adopted by the board in June of 2021.

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.

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

The standard deviation for the Cash Balance Benefit Program was set at 11.0% 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 111.0%. For the second threshold, the funded ratio would have to exceed 122.0% following the first threshold allocation. As of June 30, 2021, the Cash Balance Benefit Program had a funded ratio of 146.0%, which exceeds the first threshold. After the first allocation, the funded ratio is 140.5% 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 11.65% has been calculated as the sum of 4.06% under the first allocation step and 7.59% under the second allocation step. Awarding an 11.65% additional earnings credit will reduce the funded status of the program from 146.0% down to 131.2% and the actuarial surplus by $37 million, from $152 million down to about $115 million. 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 11.65% 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 11.65% be awarded for the Cash Balance Benefit Program.