Finance & Administration Committee

California Public Employees' Retirement System

Agenda Item 7a

November 18, 2014

ITEM NAME: Asset Liability Management - Funding Levels and Risk Report

PROGRAM: Actuarial

ITEM TYPE: Information

EXECUTIVE SUMMARY

This report is intended to assist the CalPERS Board of Administration in assessing the funded status of the Public Employees Retirement System and its overall soundness and sustainability.

Current contribution levels are high relative to historical levels and, for almost all employers, scheduled to increase further as our amortization policies phase in previous asset losses. For many plans, the contribution rates have never been as high as they are now and they are expected to remain high for an extended period. The report shows that most plans are between 60 and 80 percent funded on a going concern basis as of June 30, 2013. These levels are expected to improve somewhat as a result of the good investment results in the 2013-14 fiscal year. The funded status would be lower in the situation where an agency has opted to terminate as the funded status is different on a termination basis; this is shown in the report.

Public pension plans at CalPERS and across the nation have been maturing. This maturation means that more assets are being accumulated relative to employers' payrolls. The higher asset to payroll ratios, combined with expected investment volatility will produce substantial contribution volatility. This will impose considerable strain on employers and this strain is expected to continue to increase over time as the plans continue to mature.

In contrast to the longer-term trend to increasing levels of risk described above, a number of recent actions by the Board, combined with good investment markets in the last two years and other factors, have resulted in an improvement in one of the most important risk measures. The probability of reaching very low funded status has been reduced. Despite this, the probability of falling below 50% funded at some point in the next 30 years is still about 30% (varying by plan) and additional changes would be required to further lower the risk level.

Reducing the risk in the funding of pensions will be challenging and difficult because it will involve tradeoffs between short and long-term considerations. Staff proposes presenting a workshop in early 2015 at which time we will present options for mitigating the risks outlined in the report.

STRATEGIC PLAN
This agenda item supports Strategic Plan Goal A - to improve the long-term pension and health benefit sustainability. It specifically addresses two of the objectives under that goal – to fund the system through an integrated view of pension assets and liabilities and to educate employers and other stakeholders to make informed decisions about retirement security and health care.

BACKGROUND
As a result of a review of Board governance a few years ago, the Board has delegated to the Finance & Administration Committee the authority to oversee the financial soundness of the overall CalPERS system, including an annual review of unfunded liabilities and overall pension soundness and sustainability. The Actuarial Office has prepared the attached report to assist the board in assessing the funding levels and risks to the system.

This is the third report on funding levels and risks. The last report was as of June 30, 2012 and was presented to the Board in early 2013. To make the report timelier, staff is presenting it right after the completion of the annual valuation reports for the public agencies. This has allowed the results to be updated by two years (to June 30, 2014) rather than by a single year (to June 30, 2013).

ANALYSIS
A number of CalPERS Pension Beliefs are relevant to this agenda item. These include:

- *Pension Belief 1 – A retirement system must meet the needs of members and employers to be successful.* In order to meet the needs of the members, the funds needed to pay the benefits must be properly funded and the funded status measures in the report address this issue. In order to meet the needs of employers, contributions must be affordable and not change too quickly for employers' budgets to absorb. This is reflected in the risk measures in the report.
- *Pension Belief 5 – Funding policies should be applied in a fair, consistent manner, accommodate investment return fluctuations and support rate stability.* This agenda item is essentially an examination of the extent to which the funding policies accommodate investment return fluctuations and support rate stability.
- *Pension Belief 9 – Sound understanding and deployment of enterprise-wide risk management is essential to the ongoing success of a retirement system.* By measuring and reporting on funding levels and risks, this report is intended to enable risk management of the risks associated with the funding of the system.

The report presents information on the results of the June 30, 2013 annual actuarial valuations. For public agencies, these valuations set the required contribution rates for the 2015-16 fiscal year.

Contributions Levels

Contribution levels have continued to increase over the last year. While most employers saw relatively modest increases in their required contributions, some employers in risk pools with high retiree to active member ratios are seeing significant increases in their required contributions. This is a result of the combining of risk pools in response to the Public Employee Pension Reform Act (PEPRA) and the new accounting standards.

In addition, many employers have been reducing their payrolls. Since the required contribution to pay off the unfunded liability is not related to their payroll, this is having the effect of increasing the UAL contribution rate as a percent of the (reduced) payroll. Most employers who saw significant increases in their contribution rates were affected by one of these two factors.

The report shows that current contribution levels are high and, for almost all employers, scheduled to increase further as our amortization policies phase in previous asset losses. For many plans, the contribution rates have never been as high as they are now. Current contribution levels already exceed 30% of payroll for over 100 miscellaneous plans. Safety plans generally have higher contribution levels with over 150 plans having contribution levels of more than 40% of payroll. Employers are reporting that these contribution levels are putting significant strain on their budgets and limiting their ability to provide services to the people in their jurisdictions.

Funded Status

As of June 30, 2013, the system was about 70 percent funded. As a result of the 18 percent investment return in 2013-14, staff estimates the funded status to be about 77 percent on June 30, 2014[1]. Most plans in the system were between 60 percent and 80 percent funded as of June 30, 2013.

The funded status on a hypothetical termination basis was, for most plans, in the 40 percent to 60 percent range. This is expected to improve as a result of the good investment return in 2013-14 and as a result of higher yields on treasury bonds.

Risk Measures

The asset to payroll ratio for most miscellaneous plans is between 4 and 5 but there are a significant number of plans with ratios above this level. For many safety plans

[1] The estimated funded status as of June 30, 2014 reflects changes to actuarial assumptions and the known investment gain in 2013-2014.

the asset to payroll ratio is between 7 and 9. This shows a significant exposure of employer contributions levels to investment volatility.

The Asset Liability Management risk measures show that there remains considerable risk in the funding of the system. There is a substantial risk that, at some point over the foreseeable future, there will be periods of low funded status and high employer contribution rates. Should this coincide with a period of financial weakness for employers or if such a period occurs before we recover from the current funding shortfall, the consequences will be very difficult to bear.

Changing Pension Environment

Public pension plans, both at CalPERS and more generally, continue to mature. The report shows how the ratio of active members to retirees has fallen and is expected to continue to fall in the future. This means that contribution volatility will continue to increase in the absence of offsetting changes.

The occurrence of municipal bankruptcies in the last few years and other anecdotal evidence has shown that employers have been under high levels of financial stress in recent years.

Changes to accounting standards (GASB Statement 68) may affect employers' willingness to accept the current level of risks associated with the sponsoring of a defined benefit pension plan as the magnitude of unfunded liabilities and pension expenses are now reported on the basic financial statements. This may result in pressure to change their risk profile by making changes to actuarial or investment policies and/or benefit levels.

Risk Mitigation

In recent years, a number of factors lowered the probability of reaching very low funded status. These factors include:

- The Public Employees' Pension Reform Act (PEPRA) became effective on January 1, 2013. By limiting benefits for new hires and requiring a minimum contribution equal to the normal cost, this bill reduced the risk to the funding of the system.
- In April 2013, the CalPERS Board approved new amortization and smoothing policies that were aimed at returning the System to fully funded status within 30 years[2]
- In February 2014, the CalPERS Board adopted a new asset allocation and changes to actuarial assumptions. Inclusion of projected mortality

[2] While the policies are aimed at returning the system to fully funded status in 30 years, this still requires that all assumptions, including the investment return assumption, are met. There is significant risk associated with achieving full funding as outlined in the attached report. And even if full funding is achieved, there would still be significant risk in the system – as was demonstrated between June 30, 2007 and June 30, 2009 when funded status fell by 40%.

improvements in the future helps to ensure that the system is appropriately funded.

- In both of the last two fiscal years, investment returns have been good, resulting in improved funding levels and a lowering of risk.

In addition to these factors, some employers have become concerned about funding risk and have begun accelerated funding of their unfunded liability to mitigate their risk.

Although the factors outlined above have helped reduce the risks outlined in the report, these actions may not be enough. Additional changes would be required to further mitigate the risks.
Additional steps that could be taken to further mitigate funding risks include:

- *Margins for conservatism*: This could be accomplished by either lowering the discount rate or by changing other actuarial assumptions to include additional conservatism.
- *Systematic De-risking*: This would involve changing the asset allocation gradually over time to lower investment risk and reduce the funding risks outlined in the report.
- *Flexible De-risking*: This would involve changing the asset allocation but only when good investment returns permit this to occur without increasing employer rates beyond their expected levels.
- *Multiple Asset Allocation Choices*: This would involve providing employers with the ability to choose from a range of asset allocations (e.g. high, medium and low risk). This option has been requested by a number of employers.
- *Risk Sharing Options*: While the Board does not have the ability to change the benefit structure or member contribution rates, the level of risk could be reduced by either benefit design or various forms of employee/employer cost sharing. This would require legislative changes.

It is likely that any effective plan of risk mitigation will require a multi-faceted approach that combines a number of different elements similar to those described above.

Conclusion

Overall, the report highlights that employers are exposed to a considerable amount of contribution rate volatility and a risk of further changes in funded status. Contribution rates are expected to remain high for an extended period unless there is a period of exceptional returns in the markets.

To be a leader on retirement security issues, consistent with Pension Belief 11, CalPERS must be seen as both sound and sustainable. Accordingly, it needs to avail itself of the best possible risk mitigation techniques. If we do so, we will also be able to do our part in addressing Pension Belief 3 which states that “Inadequate financial

preparation for retirement is a growing national concern; therefore, all employees should have effective means to pursue retirement security."

The ALM risk measures shown in the attached report anticipate a wide range of possible future scenarios some good and some poor. The risk measures show that excellent investment returns cannot be counted on to bring plans at CalPERS back to 100% funded. Due to the last couple of years of good investment returns, the strain on employers is not as great as had been anticipated only a couple of years ago. This offers an opportunity to take action on risk issues – hopefully before any new period of financial stress puts employers into situations that can have no good outcome for members.

Reducing the risk in the funding of pensions will be challenging and difficult because it will involve tradeoffs between short and long-term considerations. Staff proposes presenting a workshop in early 2015 at which time we will present options for mitigating the risks outlined in the report.

BENEFITS/RISKS
This agenda item and the attached report should enhance the understanding of the risks inherent in the funding of the system. Such an understanding is necessary for effective management and mitigation of those risks.

ATTACHMENTS
Attachment 1 – Annual Review of Funding Levels and Risks

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