Legislative Fiscal Office

Ken Rocco
Legislative Fiscal Officer

Daron Hill
Deputy Legislative Fiscal Officer

900 Court Street NE
H-178 State Capitol
Salem, Oregon 97301
503-986-1828

Budget Information Brief / 2014-2

2013-15 PERS Rate Collar

Employer contribution rates for the Public Employees Retirement System (PERS) are set by the five-member PERS Board and are calculated as a percentage of an employee's eligible payroll costs. One of several objectives of the Board is to provide predictable and stable rates while maintaining adequate long-term funding for the system.[1] The Board uses an actuarial methodology termed "rate collaring" to help manage (biennial) employer contribution rate fluctuations.

This budget brief provides background on the PERS rate collar.

Definition

In general, a rate collar is simply a means to limit an extraordinary increase, or decrease, in PERS employer contribution rates from one biennium to the next, within a set boundary or "collar." The singular reason rate collaring is viewed as important is because limiting extraordinary changes in employer contribution rates provides more certainty to state and local budgeting.

Why Employer Rates Fluctuate

Employer rate fluctuations are caused principally by investment return volatility. Since investment earnings represent the largest share of system funding (est. 71%), large variations in earnings either below or above the assumed earnings rate impact employer contribution rates, the other major source of system funding now that the 6% member contribution was redirected to the Individual Account Program by 2003 legislative reform.[2]

Rate collaring is generally triggered by major changes in investment returns, either negative or positive, and is used to spread the impact of those changes over two to three biennia.

Rate "Smoothing" Alternatives

There are essentially four options available to "manage" investment return volatility and the resulting changes to employer contribution rates. They include: (1) use of reserves from previous period earnings, which requires setting aside substantial amounts of assets that are then excluded from the actuarial valuations used to set employer rates; (2) asset smoothing, which spreads investment gains and losses over a defined period of time; (3) average contributions, which averages employer contributions over a defined period of time; and (4) rate collaring.

Investment volatility could also be managed with a more conservative investment portfolio, such as that used by the State Accident Insurance Fund (SAIF), however, such a portfolio for the Oregon Public

[1] The PERS Board sets rates using six principles: transparency, predicable and stable rates, protected fund status, equitable across generations, actuarially sound, and Governmental Accounting Standards Board compliant.
[2] In other words, member contributions are no longer included in actuarial valuations and employer rate setting.

Employees Retirement Fund (OPERF) would lessen investment returns over the long-term. For example, the ten year annualized return for OPERF through September 30, 2013 was 8.51%, while the ten year annualized return for SAIF over that same time period was 5.84%.

Rate Collar Decision

In 2004, the PERS Board determined rate collaring to be the most effective and transparent means for providing employer rate stability while also ensuring adequate system funding. The Board's rate collar methodology was implemented beginning with the valuation of 2005 investment earnings, which was the valuation used to set employer rates for the 2007-09 biennium.

Key to understanding the relationship between investment earnings, rate collaring, and employer rates is that, for asset valuation purposes, and due to the timing of the budget, actual biennial employer rate setting is based on the two most recently concluded calendar year investment returns. For example, 2011-13 rates were set by the Board in 2010 based on market returns from 2008 and 2009, which precedes the implementation of adopted employer rates by 18 months.

Prior to rate collaring, the Board used a four-year asset smoothing methodology to "manage" large changes in employer rates from 2000 to 2004, and prior to that a "gain-loss reserve;" however, since assets in the "gain-loss" reserve were included in actuarial valuations at that time, it failed to mitigate volatility in employer rates.

The Board's shift away from asset smoothing to rate collaring was for several reasons. Asset smoothing is viewed as the least transparent of the "smoothing" methodologies. Rate collaring allows for assets to fully reflect their fair market value. While better, rate collaring itself is still imperfect as it is slow to adjust to significant investment earnings changes.

In 2005, after the Board adopted its rate collaring methodology and the Oregon Supreme Court upheld significant provisions of the 2003 PERS reforms, the Board distributed about $1.2 billion, or 82%, of its Contingency Reserve Account's $1.4 billion balance (leaving only $250 million in that reserve for ongoing litigation uncertainties) and fully deployed the $460 million from the Capital Preservation Reserve.[3] These decisions reflect a key principle of rate collaring, which is that such a policy practically eliminates the need for reserve funding. This means more investment earnings can be credited to member regular accounts, the Benefits-In-Force reserve used to pay retiree benefits, and employer accounts, rather than held in reserve accounts which are now excluded from actuarial calculations of employer rates. Maximizing earnings crediting to these accounts, and including as many assets as prudent within actuarial valuations, results in lower employer rates than would otherwise occur.

Rate Collar Methodology

The PERS Board rate collar methodology limits the biennium to biennium change in employer contribution rates to no more than the greater of three percent of payroll or 20% of the current contribution rate.

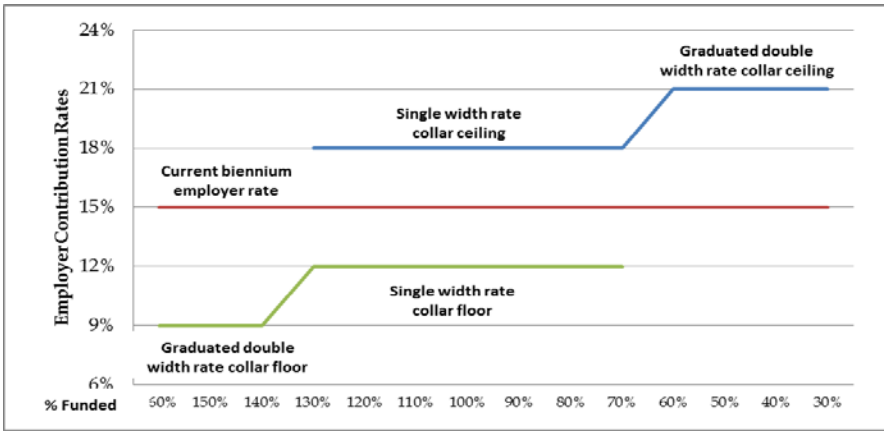
For example, if the current biennium's employer rate is 15%, the next biennium's rate cannot be more than 18% or less than 12%. In operation, the rate collar constrains an employer rate increase from one biennium to the next to keep it at or below the upper bound of the rate collar or conversely it constrains an employer rate decrease to keep it from falling below the lower bound of the collar. This is an example of a single width rate collar.

[3] The 2005 deployment reduced employer rates by 1.5% and was in response to the resolution of litigation challenging the 2003 PERS reforms.

PERS rate collar methodology also allows the width of the collar to increase when funded status (which is dependent upon the level of funding or the ratio of assets to liabilities) drops below 70%, or increases above 130%, with the width of the rate collar doubling at a funded status of 60% or 140%. The funded status is determined for each actuarial grouping of employers ("pool") and for independent employer on a pre-employer side account basis. [4] Employer side accounts are pre-funded contributions consisting primarily of pension obligation bond proceeds.

For a double width rate collar, the biennium to biennium change in employer contribution rates is constrained to the greater of 6% of payroll or 40% of the current contribution rate if the funded status drops to 60% or below or increases to 140% or above.

For example, as illustrated in the below chart, if the current biennium's employer rate is 15%, and funding level is below 60% or above 140%, the next biennium's rate cannot be less than 9% or more than 21%. If funded status for the particular actuarial pool or independent employer falls somewhere between 70% and 60%, or between 130% and 140%, the size of the collar is increased from single width to double width on a graduated scale.



Prior to the Board's recent adoption of updated actuarial methods and assumptions, the funded status trigger for the double width rate collar was 70% and 130%, which made the double width collar easier to trigger than under the new methodology. The PERS actuary recommended this change after stress testing it under a wide variety of dynamic future investment return scenarios.

Rate Collar Implementations

PERS has had to implement both the single width and double width rate collars since the methodology was instituted.

During the 2007-09 biennium, the double width rate collar was implemented for the statutory judges member benefit program. This collar *added* 14.89% to prevent a significant employer rate *decrease*. During the 2011-13 biennium, a double width rate collar was needed for statutory judges, but this time a 16.27% *reduction* was needed to prevent a significant employer *increase*. During the 2013-15 biennium, a double width rate collar was again needed for statutory judges, but this time a 22.03% *reduction* was needed to prevent a significant employer *increase*.

The first major system wide rate collaring (single and double) was triggered during the 2011-13 biennium (i.e., based on actual investment returns from calendar years 2008 and 2009). In general, a 3.98% *reduction* was needed to reduce a portion of a significant employer *increase*. Rate collaring

[4] The rate pools are: school districts; judges; and the State and Local Government Rate Pool. Remaining employers are non-pooled independent employers.

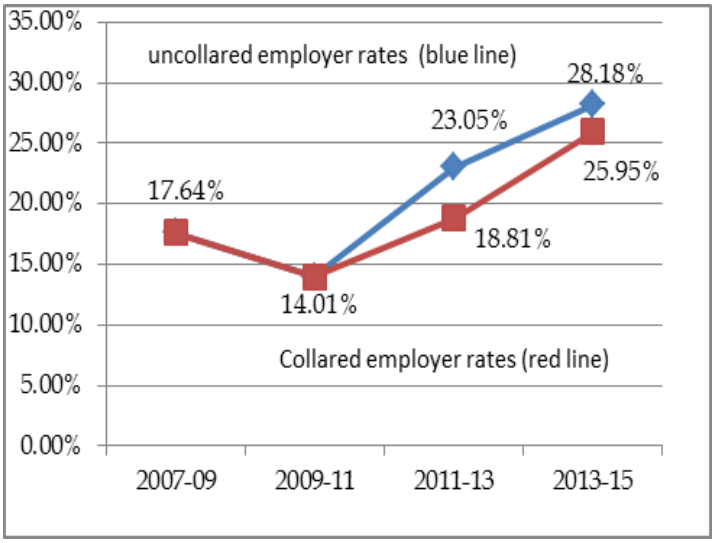
continued during the 2013-15 biennium to again reduce a portion of a significant rate *increase* (-2.30%) and is expected to continue into the 2015-17 biennium (and possibly the 2017-19 biennium) with a -2.17% rate collar.

The triggering event for rate collaring in these three biennia can be traced to investment losses experienced during calendar year 2008 (assets declined -27.18% in value, or about $17 billion). This market correction was so significant that it would have necessitated an almost doubling of employer rates for the 2011-13 biennium had rate collaring not been in place. With state and local budgets already under significant pressure from declining revenues and having to institute reductions due to the post-2008 recession, a doubling of PERS contribution costs at this time would have required deeper reductions to operating program budgets in order to fund the additional PERS expense.

The PERS Board's response was to spread what would have otherwise been a significant one-time employer rate increase across three biennia, beginning in 2011-13.

The following is a graphical illustration of the rate collar using the School District rate pool as an example. The rates shown are *before* any adjustment for employer side accounts or an employer's "pick-up" of an employee's contribution.

The graph shows that school district employer rates, on average, were slated to increase from 14.01% in the 2009-11 biennium to 23.05% in the 2011-13 biennium. This would have been a 9% of payroll increase. Rate collaring reduced the rate increase to 4.24% of payroll, or from 23.05% to 18.81%. In dollar terms, the budgetary impact to schools of the rate collar is estimated to be $242 million.



Rate collaring reduced 2013-15 rates by 2.23% of payroll, or from 28.18% to 25.95%. In dollar terms, the budgetary impact to schools of the rate collar is estimated to be $134 million.

School District rate pool collaring for the 2015-17 biennium has yet to be finalized, but system wide rate collaring is projected to be -2.17% of payroll, as noted earlier. This projection is based on actual investment returns through October 2013 and will be updated once the calendar year 2013 actual investment returns are available.

Practical Effect of Rate Collaring

The practical effect of rate collaring is to defer or postpone a portion of an employer's contribution from one biennium into future biennia *and* also reflect the loss of investment earnings that would have been earned had the full employer contribution been made. More specifically, rate collaring reduces (i.e., defers) a portion of an employer's rate increase that would have otherwise been required based on its unfunded liabilities. A rate collar methodology is considered actuarially sound because it assumes compensating rate increases in future biennia and is designed to only spread, rather than eliminate, a rate increase.

By deferring some portion of a rate increase from one biennium to the next, the absolute cost for recovering from the unfunded liability increases, if future experience follows the actuary's assumptions.

The repayment of a rate collared amount occurs over the course of a normal amortization period (16 or 20 years) in the form of higher employer rates.

Employer rates generally increase in the biennium following a rate collar. Therefore, typical rate collaring should not be viewed as a single biennium event. Once rate collaring has been triggered, it can only be eliminated if inordinate investment returns are achieved or benefit levels are changed in future biennia.

While similar, it is important to differentiate a rate collar from a rate deferral. The distinction is subtle. Both are payment "holidays" or deferrals; both increase future unfunded liabilities; and both increase future employer rates. Rate collaring, however, is an actuarially approved methodology whereas a rate deferral is a budgetary policy decision.

Rate Collar Calculation

There is no single, system wide rate collar; rather, collaring is calculated separately for each rate pool and for each independent employer, and for three of four benefit programs, which include Tier 1, Tier 2, and the Oregon Public Service Retirement Plan. The Individual Account Program (IAP), as an account-based program, is excluded from rate collaring because it is funded solely by member contributions and has no unfunded liabilities. The collar is calculated based on a composite rate for each pool or independent employer that includes both general service and police and fire employees, if any.

The rate collar does not affect other elements of what might be considered employers' costs for PERS, such as the "picking up" of an employee's 6% IAP contribution or debt service on a pension obligation bonds. In other words, these cost factors have no impact on the rate collar calculation. Also, the retiree health insurance employer rates, are not subject to the collar.

Reform Legislation and Supreme Court Decisions

Recent PERS reform legislation lowered the long-term liabilities of the PERS system by $5 billion as measured using the Board's recently adopted actuarial methods and assumptions (including the reduction in the assumed earnings rate from 8% to 7.75%).[5] This was done on a post-collared basis as PERS did not recalculate the original 2013-15 rate collar. The effect of reform legislation will essentially eliminate the need for a rate collar beginning with the 2017-19 biennium, *if* the 2014 and 2015 investment earnings assumptions are met.

Legal challenges to recent PERS legislation, however, could impact future rate collaring, depending upon their outcome. For example, if the Oregon Supreme Court were to overturn the 2013 PERS reform legislation, then the liability reductions would return to the rate-setting valuation process and employer rates would have to increase, which could trigger rate collaring into the future.

Conclusion

Prior to 2001, there had been a general sustained period of strong investment returns that muted the rate smoothing discussion. However, after the market downturns in 2000, 2001 and 2002, the PERS Board recognized the need for a more robust, efficient, and transparent rate smoothing methodology than asset smoothing, even with the 2003 legislative reforms of the PERS benefit system.

The Board's adoption of its rate collaring policy was fortuitous as it pre-dated the 2008 financial crisis. The "stress-testing" of the rate collar, as a result of the 2008 crisis, is anticipated to continue for the third biennium in a row into 2015-17 and possibly into the 2017-19 biennium.

[5] SB 822 (2013) and SB 861 and SB 862 (2013 1st special session)

Also, rate collaring has practically eliminated the need for reserve funding.

Rate collaring appears to serve its intended purpose of limiting the impact of investment volatility on employer contribution rates, presumably better than other smoothing methodologies. This has afforded state and local governments the ability to maintain *some* additional level of operational funding during the post-financial crisis recessionary period. The price, however, is in the form of marginally higher long-term employer rates.

For additional information, contact:
John Borden at john.f.borden@state.or.us or 503-986-1842

This brief is available on the Legislative Fiscal Office website at www.oregonlegislature.gov/lfo