State of Wisconsin
Department of Employee Trust Funds
Robert J. Conlin
SECRETARY

801 W Badger Road
PO Box 7931
Madison WI 53707-7931

1-877-533-5020 (toll free)
Fax 608-267-4549
etf.wi.gov

Correspondence Memorandum

Date: November 28, 2016

To: Employee Trust Funds Board

From: Steve Hurley, Director, Office of Policy, Privacy & Compliance

Subject: Dividend Reserve Options

This memorandum is for informational purposes only. No Board action is required.

In 2015 the Board had several discussions about the mitigation of investment market volatility risk in relation to the WRS dividend reserve. Market volatility is a normal part of investing, but can become a concern when it causes wide swings in investment returns from year to year.

The term "dividend reserve" refers to the cumulative amount of all annuity adjustments that have been paid to all annuitants. Many annuities were reduced to their original "floor" amounts after 2008, due to large market losses incurred that year. Despite recovery and positive dividends in 2014 and 2015, the dividend reserve is more vulnerable to investment risk than in the past because, in the event of a future shortfall in the reserve, there is currently a smaller pool of annuities from which dividend reductions may be taken.

In December 2015 ETF presented to the Board a memo, WRS Investment Risk Discussion, which outlined several possible risk mitigation approaches. While recognizing that the available approaches are all problematic, the Board asked ETF to look at the most viable and explore how to improve stability of dividends in the face of market volatility. ETF has worked with the Board's consulting actuary, Gabriel Roeder Smith & Company, to develop basic models of the actuarial effects of measures to improve stability of the dividend reserve when there are swings in investment returns. The approaches include:

- ***Status quo*** – maintain the current controls with no additional measures.
- ***Cap and Reserve (CAR)*** – when possible, limit any positive dividends to the lesser of the annual rate of inflation or 3%, and accumulate a reserve to offset a small amount of negative dividends. Implementation requires statutory change.

Reviewed and approved by Robert J. Conlin, Secretary

Electronically Signed 12/2/16

Board	Mtg Date	Item #
ETF	12.15.16	4D

- ***Delayed Dividend (DD)*** – dividends for new retirees would commence after five years of retirement. Implementation requires statutory change.

Chart 1 shows that under the status quo, the likelihood of depleting the dividend reserve ranges from zero initially to 26% after 10 years, and slowly declines thereafter. CAR reduces the risk of hitting the dividend reserve "floor" by a few percent in this projection.

Chart 1

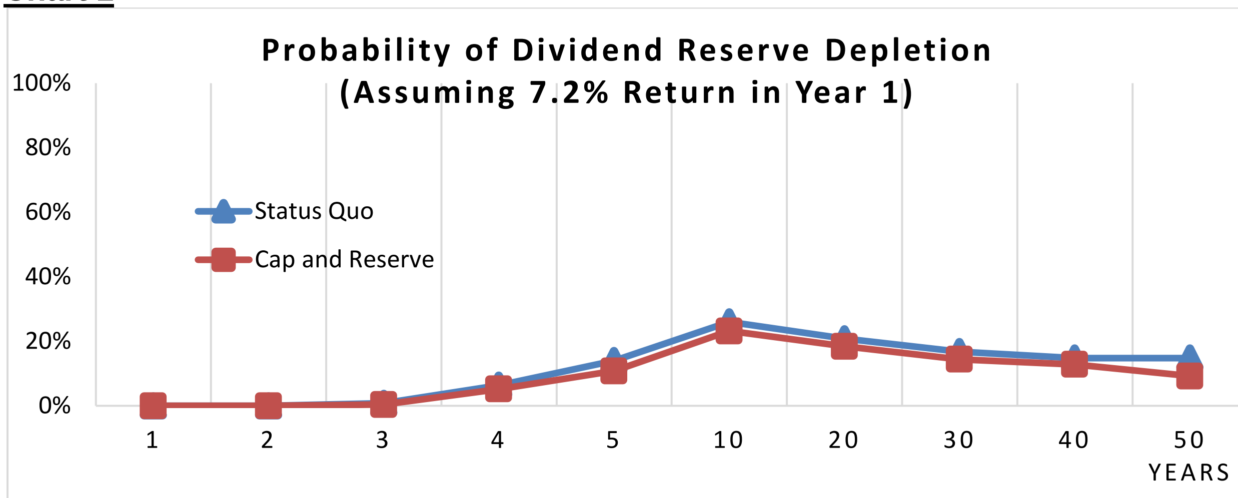
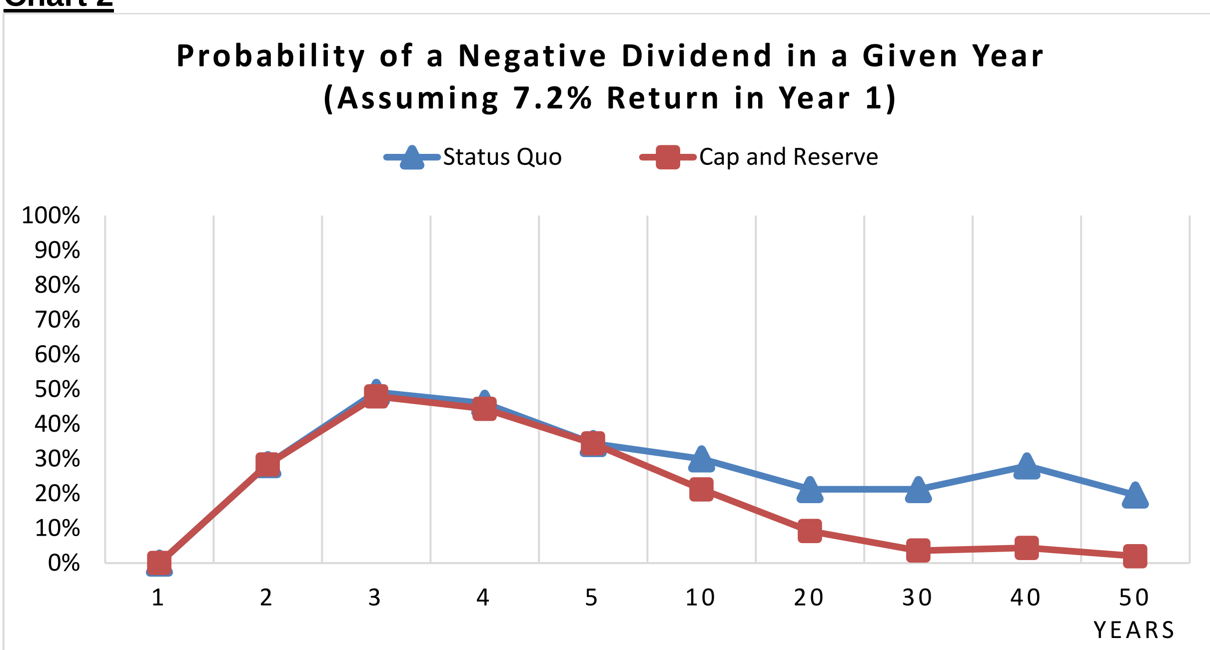


Chart 2 shows that under the status quo, the probability of a negative dividend increases to 49% in three years, and slowly declines thereafter. After 10 years, CAR significantly reduces the risk that a dividend will be negative. The risk reduction is greater in both charts if the CAR and DD measures are combined.

Chart 2



Additional information will be presented at the December 15 Board meeting to help the Board in deciding what remaining steps (if any) it wants taken on this matter. Regardless of the path chosen, this information advances the WRS Funding Policy and assists in better understanding alternatives available regarding the dividend reserve.

Staff will be at the Board meeting to answer any questions.