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CORRESPONDENCE MEMORANDUM

DATE: June 10, 2008

TO: Employee Trust Funds Board

FROM: Bob Conlin, Deputy Secretary
Bob Willett, Controller

SUBJECT: Design of the Wisconsin Retirement System Investment Funds: Core vs. Variable

This memo is for information and discussion purposes. No action is required.

At the March Employee Trust Funds Board (Board) meeting, members expressed a desire to continue discussions about the design of the investment alternatives available in the Wisconsin Retirement System (WRS). In particular, the Board sought further discussion about the future of the Variable Fund and direction on how best to reach the various decision points necessary to address the issue.

A discussion about the design of the WRS, its investment alternatives, and the future of the Variable Fund involves questions of policy. The first policy question that must be addressed is: Should the WRS have a fund in addition to the Core Fund? This memo provides information to help the Board address this question.

We anticipate that at the September meeting the Board's discussion will involve the next logical decision points based upon the way the Board chooses to answer this first issue. For example, if the Board decides that the WRS should have a fund in addition to the Core Fund, the Board would discuss the specifics of the other offering, such as the purpose of the fund, the types of investments to be held in the fund, and the administration of the fund in terms of its availability to participants. If, on the other hand, the Board answers the question in the negative, the Board will likely discuss what should be done with the Variable Fund.

Should the WRS have a fund in addition to the Core Fund?

Background

Last fall, the Legislative Audit Bureau (LAB) noted in an audit of the State of Wisconsin Investment Board (SWIB) that the asset mix in the Variable Fund, particularly a lower allocation of international stocks, has resulted in lower investment performance of equities in the Variable Fund versus the Core Fund. SWIB sought comments from the various retirement boards in order to help in its biennial asset allocation exercise. SWIB noted that it was concerned with its ability to appropriately balance risk and return given the current statutory parameters of the

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Variable Fund, which generally limit the Variable Fund's investments to equities. Preliminary discussions were held with the retirement boards in December 2007.

Based on those discussions, and internal and external reviews conducted by SWIB and its staff, SWIB modified its asset allocation strategy for the Variable Fund by directing a higher percentage of Variable Fund assets to international equities. By the end of 2008, approximately 69% of the Variable Fund will be allocated to domestic stocks (down from a previous allocation of about 79%), 30% to international stocks (up from a previous allocation of about 20%), and 1% to a multi-asset category that includes a mixture of domestic and international stocks in index funds to provide liquidity.

During the December 2007 discussions, the retirement boards decided that a broader review of the policy and legal limitations of the Variable Fund was appropriate. Further discussion was held at the March 2008 Board meeting.

Important Considerations

It should be noted that the purpose of the WRS is to "aid public employees in protecting themselves and their beneficiaries against the financial hardships of old age, disability, [and] death." Generally, for career public employees who retire at their normal retirement age, the formula retirement benefit will, when combined with Social Security, produce a total retirement income of between 50% and 85% of a participant's pre-retirement gross earnings.

The following additional points are important in any discussion of whether the WRS should have a fund other than the Core Fund:

The Funds

1. The Public Employee Trust Fund currently consists of the Core Fund and the Variable Fund. A participant may elect to have 50% of his or her WRS contributions invested in the Variable Fund. A participant has one opportunity to elect participation in the Variable Fund. If a participant who has elected to participate in the Variable Fund cancels his or her participation, he or she may not participate again.

2. According to LAB, the Variable Fund appears to be unique among public pension funds.

3. The Core Fund and Variable Fund were created in 1958, at a time when the existing retirement plans for Wisconsin public employees were predominantly defined contribution plans. The Core Fund, then called the Fixed Fund, was invested predominantly in fixed income investments, like bonds. The Variable Fund was created to balance out the conservative nature of the Core Fund by investing predominantly in equities, such as stocks. The stated purpose of the Variable Fund at its creation was to make the Public Employee Trust Fund a well-balanced, broadly diversified investment program that would provide retirement benefits that would fluctuate in proportion to changes in the general economy, thereby providing some measure of financial protection for participants' benefits during periods of high inflation.

4. Currently, the WRS is primarily a defined benefit plan (with elements of a defined contribution plan).

5. Generally, current law authorizes SWIB to manage the money and property of the Core Fund in any manner that does not violate SWIB's fiduciary standard. Assets of the Variable Fund, however, must be invested primarily in equities, including stocks, real estate or other recognized forms of equities.

6. Today, the Core Fund has evolved into a well-diversified fund in its own right, with approximately 60% of holdings in stocks, 30% in fixed income, and the remainder in private equity, real estate and multi-asset holdings. The Variable Fund, however, remains invested predominantly in stocks.

7. The Core and Variable Fund asset mixes interact with one another to determine the total risk and return trade-off. As part of its asset allocation modeling process, SWIB examined a hypothetical participant with a 65% Core and 35% Variable account. This "participant" served as a rough proxy for an average participant in the Variable Fund. The Variable Fund allocation options used in the modeling included a variety of splits for domestic and international stock. In no case did the combined Core and Variable allocation rest on the "efficient frontier" – that is, the point where the risk and return trade-off is deemed optimal. This is a result of the limitation on asset options available for the Variable Fund. Thus, what started out in 1958 as an attempt to allow for a better-diversified portfolio option now limits diversification.

8. The potential additional return produced by the Variable Fund over long periods is marginal, when compared to the diversified Core Fund.

Affect on Benefits

9. In the WRS, a participant's retirement annuity will be based on either a formula or money purchase calculation. The participant will automatically receive the higher of the two calculations.

10. Participation in the Variable Fund affects each of these calculations differently. Under the money purchase calculation, a participant's Core Fund and Variable Fund account balances are multiplied by a money purchase factor relative to his or her age. Under the formula calculation, an adjustment is made to a participant's annuity based on the variable excess or deficiency in the participant's account when he or she retires. The excess or deficiency is based on a comparison of the actual balance of the Variable Fund account with what the balance would be had the contributions been invested solely in the Core Fund. The excess or deficiency is then multiplied by the money purchase factor based on the participant's age at the time the annuity begins. The result is a Variable Fund adjustment that increases or decreases the formula annuity. Anecdotal evidence indicates that participants generally do not have a good understanding of how this Variable adjustment works.

11. In the WRS, retirement annuities can increase or decrease from year to year depending upon investment returns in the Core and Variable Funds. A Core Fund portion of an annuity can never be reduced below its original amount. However, the Variable Fund portion of an annuity may decrease to less than the initial monthly Variable Fund amount.

12. Interest is credited to the WRS accounts of active and inactive participants. The amount of interest credited depends upon investment returns in the Core and Variable Funds.

13. From approximately 1984 through 1999, interest crediting in the Core Fund for newly-enrolled WRS members was limited to 5%, regardless of investment returns. That limit is no longer in place.

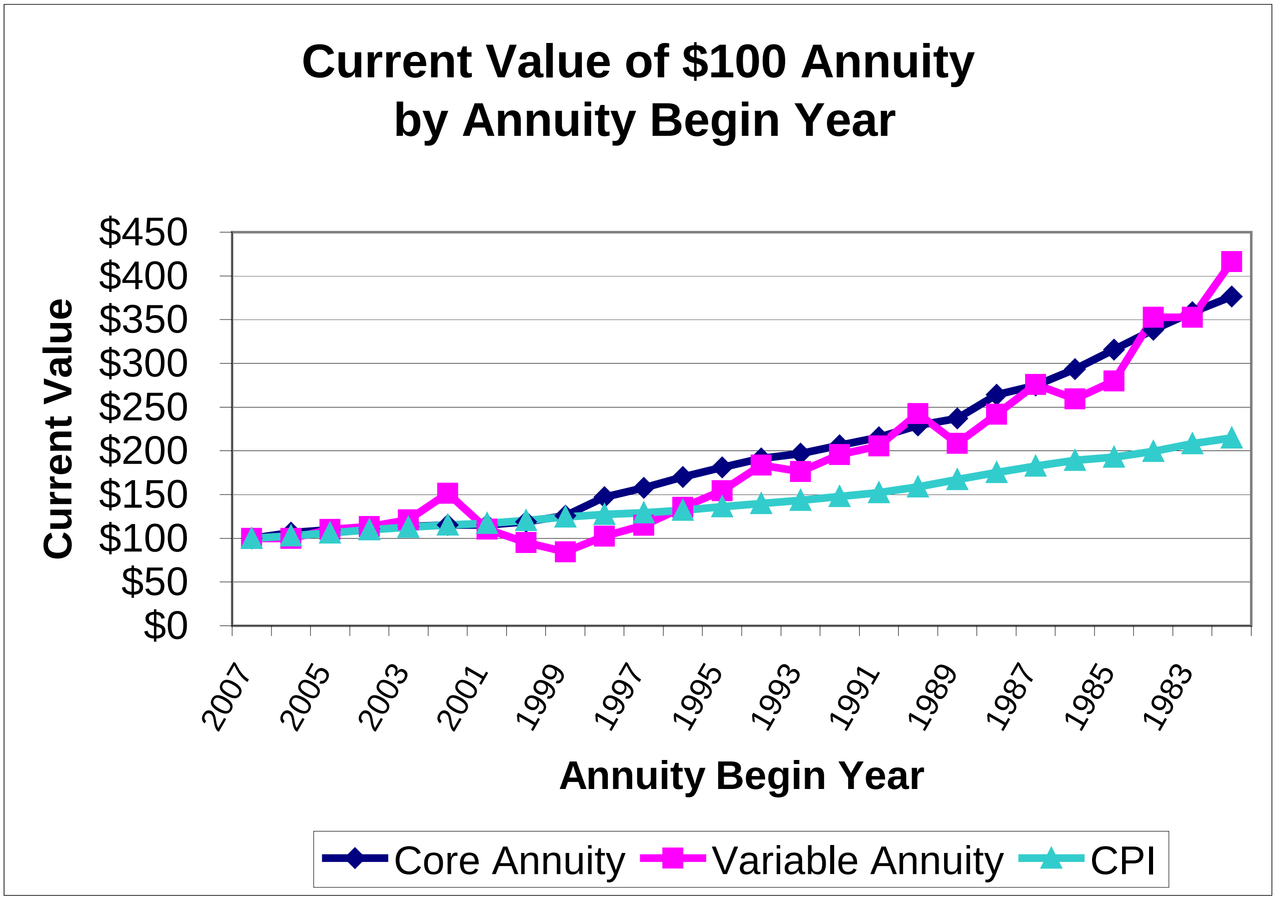
14. Investment returns in the Core Fund are smoothed over a five-year period. Smoothing tends to reduce the year to year volatility in credited interest and annuity dividends. Returns in the Variable Fund are not smoothed and the credited interest and annuity adjustments can fluctuate widely from year-to-year.

15. The chart on the next page identifies SWIB's Core and Variable fund investment returns, effective rates credited to the accounts of active employees, and dividends or adjustments made to retirees' annuities for the last 20 years.

WISCONSIN RETIREMENT SYSTEM Credited Effective Rates and Corresponding Dividends/Adjustments 1987 - 2007						
CORE TRUST FUND				**VARIABLE TRUST FUND**		
YEAR	**SWIB TOTAL RATE OF RETURN**	**EFFECTIVE RATE** *(Credited to active employees)*	**DIVIDEND** *(Paid to retirees)*	**SWIB TOTAL RATE OF RETURN**	**EFFECTIVE RATE** *(Credited to active employees)*	**ADJUSTMENT** *(Impacts retirees' accounts)*
2007	8.7%	13.1%	6.6%	5.6%	6.0%	0.0%
2006	15.8%	9.8%	3.0%	17.6%	18.0%	10.0%
2005	8.6%	6.5%	0.8%	8.3%	9.0%	3.0%
2004	12.8%	8.5%	2.6%	12.7%	12.0%	7.0%
2003	24.2%	7.4%	1.4%	32.7%	34.0%	25.0%
2002	-8.8%	5.0%	0.0%	-21.9%	-23.0% (loss)	-27.0% (loss)
2001	-2.3%	8.4%	3.3%	-8.3%	-9.0% (loss)	-14.0% (loss)
2000	-0.8%	10.9%	5.7%	-7.2%	-7.0% (loss)	-11.0% (loss)
1999**	15.7%	24.1%	17.1%	27.8%	28.0%	21.0%
1998	14.6%	13.1%	7.2%	17.5%	18.0%	12.0%
1997	17.2%	12.8%	7.7%	21.6%	23.0%	18.0%
1996	14.4%	12.5%	6.6%	19.8%	20.0%	14.0%
1995	23.1%	11.3%	5.6%	25.6%	27.0%	19.0%
1994	-0.6%	7.7%	2.8%	0.8%	0.0%	-4.0% (loss)
1993	15.0%	11.0%	4.9%	16.5%	17.0%	11.0%
1992	9.7%	10.2%	4.4%	10.7%	11.0%	5.0%
1991	20.4%	12.1%	6.3%	27.1%	28.0%	18.0%
1990	-1.5%	8.6%	3.6%	-11.3%	-11.0% (loss)	-14.0% (loss)
1989*	19.2%	18.1%	11.3%	22.6%	24.0%	16.0%
1988	14.4%	10.2%	4.1%	21.7%	22.0%	14.0%
1987*	2.2%	14.0%	6.7%	-1.1%	-1.0% (loss)	-6.0% (loss)

**Rates credited in 1987 and 1989 were distorted by one-time accounting changes.*
*** Results include a special one-time recognition of past earnings created by 1999 WI Act 11.*

16. The following chart compares increases accumulated if $100 was invested over 20 years based on the percent of the Core Fund dividend, Variable Fund adjustment and Consumer Price Index increase.



17. Although the Core Fund's evolution in its investment mix may enable it to achieve in one fund what the creators of the Variable Fund hoped to achieve in two, the benefits of the improved investment returns (and stability) generally flow to employers through reduced contribution rates and to annuitants through stable dividends. Because there is no opportunity to accrue a Variable excess in the Core Fund, active participants taking a formula annuity who are not participating in the Variable Fund generally do not benefit from the Core Fund's evolution. They are not able to accumulate an excess and cannot improve their formula benefit. However, they also don't run the risk of having lower benefits due to a Variable deficiency.

Participation in Variable

18. At the beginning of June 2008, there were about 112,000 participants in the Variable Fund. About 60% of these were active employees, about 32% were annuitants, and about 9% were inactives.

19. Since the Variable fund was reopened in 2001, over 1,000 new participants elect to participate each year. The number of new participants is trending higher since 2003, as shown in the chart below.

New Variable Fund Participants by Year	
2001*	62,991
2002	1,736
2003	1,020
2004	1,195
2005	1,278
2006	1,402
2007	1,705

* Variable fund reopened to new participants.

20. A participant may elect to cancel participation in the Variable Fund at any time, but the cancellation is only effective on the first of the year after the Department receives the cancellation. Once cancelled, Variable Fund interest is applied to the participant's Variable Fund account and the account is transferred to the participant's Core Fund account. After the transfer, the Department still keeps track of any Variable Fund excess or deficiency that may exist at the time of cancellation. From the point of cancellation forward, Core Fund interest is credited each year. If a participant cancels Variable Fund participation with a deficiency, the deficiency will grow as Core Fund effective rate interest is credited to the deficiency.

21. The number of Variable Fund cancellations by year since 1999 and the number of cancellations that resulted in a Variable deficiency during that period are identified below:

Variable Fund Cancellations by Year		
	Total Cancellations	Cancellations with Deficiency
1999	49	0
2000	171	0
2001	433	11
2002	1,796	778
2003	1,481	15
2004	609	4
2005	647	6
2006	676	0
2007	970	13

22. Participants with a deficiency who want to cancel Variable Fund participation may do so conditionally. This means that their participation won't be cancelled until such time as the participant no longer has a deficiency.

Other

23. Current WRS members may have a right to continue participation in the Variable Fund. Members who have not exercised this option may have a limited right to do so in the future.

24. Supplemental tax-advantaged retirement savings alternatives, like section 457 deferred compensation plans, section 403(b) tax sheltered annuities and various IRA options, are widely available today for public employees. Often, these alternatives allow participants to choose a wide range of investment options.

Decision Points

1. Primary Question: Is there still a need to provide an option other than the Core Fund in the WRS?

2. Secondary Questions: If the answer is yes, what would be the purpose of that option? If the answer is no, what is the best way to eliminate the Variable Fund as an option?