

**Spurgeon, Melissa - EBSA**

**From:** James Auger [auger.jg@gmail.com]  
**Sent:** Thursday, February 08, 2007 11:26 PM  
**To:** EBSA, E-ORI - EBSA  
**Subject:** QUALIFIED DEFAULT INVESTMENT ALTERNATIVES  
**Attachments:** PPA\_QDIA\_COMMENT.doc; PPA\_QDIA\_ATT.xls

Attached are comments on the proposed regulations by the Department of Labor re: qualified default investment alternatives. Hard copy is being sent via priority mail. In the meantime, if you have any questions, please do not hesitate to call (860-306-9205) or e-mail me at [jake.auger@wamallc.com](mailto:jake.auger@wamallc.com).

Jake Auger, FSA, MAAA  
WAMA Actuarial & Consulting, LLC  
Phone: (860) 306 - 9205  
Fax: (860) 430 - 9525  
E-mail: [jake.auger@wamallc.com](mailto:jake.auger@wamallc.com)



Actuarial & Consulting, LLC

**James G. Auger, FSA, MAAA**

President

51 Ridgecrest Road

Glastonbury, CT 06033

Phone: (860) 306 – 9205

Fax: (860) 430 – 9525

E-mail: [jake.auger@wamallc.com](mailto:jake.auger@wamallc.com)

February 8, 2007

VIA E-MAIL AND OVERNIGHT DELIVERY

Office of Regulations and Interpretations  
Employee Benefits Security Administration  
Room N-5669  
U. S. Department of Labor  
200 Constitution Avenue NW  
Washington, DC 20210

RE: Proposed Default Investment Regulation

On behalf of WAMA Actuarial & Consulting, LLC (WAMA), I appreciate the opportunity to submit comments on the Department of Labor's proposed default investment regulations. I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries with 35 years experience in defined benefit and defined contribution plan markets. Among other positions, I have headed the Portfolio Strategy Group and the Stable Value Products Group for two major insurance companies.

Let me begin by congratulating the Department for the significant thought and effort the Department has brought to bear on this very important issue. I especially applaud the Department's proper focus on identifying qualified default investment alternatives (QDIAs) that will maximize the chance of providing adequate *long-term retirement income*. The appropriateness of any QDIA should be judged only with respect to the ability of that QDIA to provide its investors with adequate retirement income (including the effects of inflation) over what is likely to be a very long time period.

To help clarify my own thinking regarding appropriate QDIAs, I have analyzed how well various investment options would have performed historically in providing inflation-adjusted retirement income. In particular, I looked at five investment options: small cap equities, large cap equities, aggressive target date fund, conservative target date fund, and stable value/intermediate term bond fund. Historical returns and inflation rates were based on return/inflation data compiled by Ibbotson for the period 1926 – 2005.

Three specific participant scenarios were considered. The first participant scenario was for a participant who invests 10% of her annual salary each year, beginning 40 years before scheduled retirement. The second participant scenario was for a participant who invests 10% of his annual salary

each year, beginning 20 years before scheduled retirement. The third scenario was for an individual who must decide at retirement how to invest a lump sum amount. In all three scenarios, annual salary is assumed to increase at the same rate as inflation.

For each scenario, the participant is assumed to invest in each of the five investment options identified above and, for each such investment, the maximum annual inflation-adjusted retirement benefit (expressed as a percentage of annual salary at time of retirement) payable over 30 years was determined and recorded. The results of this analysis are summarized in the Attachment to this letter. Additional details of the analysis will be shared with the Department, if interested.

Based on this analysis, I offer three substantive comments regarding the Department's proposed QDIAs.

1. **Stable value funds fail miserably in providing for adequate inflation-adjusted retirement income and clearly should not be allowed as a QDIA.**
2. **Well diversified, preferably indexed, small cap equity funds offer the best opportunity for providing adequate inflation-adjusted retirement income and should be the preferred QDIA.**
3. **Target date funds, and by implication balanced funds and managed accounts, are unlikely to provide adequate inflation-adjusted retirement income and should not be allowed as a QDIA.**

Each of the above statements is discussed in more detail below.

**Stable value funds fail miserably in providing for adequate inflation-adjusted retirement income and clearly should not be allowed as a QDIA.**

Stable value funds primarily are supported by portfolios of high quality short-to-intermediate term bonds. Consequently, the returns achieved by stable value funds will closely approximate the returns earned by short-to-intermediate bond funds.

From the results summarized in the Attachment, we can see that an individual investing 10% of her salary each year in stable value funds for 40 years prior to retirement would have been able to support an inflation-adjusted retirement income, on average, of only 4.8% of their annual salary at time of retirement. The best (worst) result historically would have been 4.6% (5.2%). If contributions began only 20 years prior to retirement, the average inflation-adjusted retirement income would have been only 3.0%, with the best (worst) results being 3.6% (2.6%). Finally, if a lump sum amount available at retirement were invested 100% in stable value funds, the average inflation-adjusted withdrawal amount that could be supported each year historically was only 2.2%, with best (worst) results of 5.3% (1.3%).

While 10% annual contributions are viewed as a fairly healthy/reasonable contribution rate, the resulting inflation-adjusted retirement income of 5% or less of salary at retirement falls well short of

any adequate income level. There can be no doubt that reliance on stable value funds to provide for a secure retirement would have resulted in absolutely dismal results historically. If stable value funds failed so miserably in the past to provide adequate retirement income, why should we expect that they would perform any differently in the future?

As stated earlier, the only appropriate basis on which to judge a QDIA is its ability to provide reasonable inflation-adjusted retirement income over an extended time period. Based on historical results, there is no basis to believe that stable value funds will ever satisfy that criteria. In my opinion, any one who continues to advocate stable value as an appropriate QDIA, at best, does not understand the challenges associated with providing inflation-adjusted retirement income, or at worst, does not have the best interests of retirement plan participants at heart.

**Well diversified, preferably indexed, small cap equity funds offer the best opportunity for providing adequate inflation-adjusted retirement income and should be the preferred QDIA.**

Over both 40 year and 20 year contribution periods, small cap equity funds have *without exception* supported a higher level of retirement income than any of the other four investment options considered. In particular, relative to aggressive target date funds, small cap equity funds supported retirement income on average 5.26 times greater for a 40 year contribution period, and 3.57 times greater for a 20 year contribution period. *In no instance* for these contribution periods was the retirement income supported by small cap equities less than that supported by an aggressive target date funds. In fact, the *minimum* out performance was quite substantial, being 4.53 greater for a 40 year contribution period and 2.87 for a 20 year contribution period. Indeed, small cap equities completely dominated all other investment alternatives for these two participant scenarios.

For the third participant scenario tested (i.e., investment of a lump sum at retirement), small cap equities also significantly outperformed all other investment options, but did not completely dominate as it had for the first two scenarios. Still, small cap equities were able to support a higher inflation-adjusted withdrawal rate than any of the other investment options (e.g., 7.2% for small cap equities vs. 3.5% for an aggressive target date fund). Small cap equities supported a higher withdrawal rate than an aggressive target date fund in 48 of the 52 observation periods measured. Also, the worst withdrawal rate result for small cap equities (1.86%) was higher than the worst withdrawal rate result for any of the other investment options (1.75% or less) considered.

The absolute level of inflation-adjusted retirement income supported by small cap equities also provides a real promise that investors may, in fact, be able to retire in dignity. Annual contributions of 10% of salary over a 40 year period to small cap equities supported average inflation-adjusted retirement income of 135% of salary at retirement. The minimum inflation-adjusted retirement income result for this contribution period was 101%. It may be asking too much to expect these results to continue in the future, but even if they are cut in half, the result would be inflation-adjusted retirement income in the range of 50% - 65% of one's salary at retirement. Not bad at all and well in excess of any result delivered by any other investment option.

Annual contribution levels of 10% of salary over a 20 year period to small cap equities supported average inflation-adjusted retirement income of 34% of salary at retirement. The best (worst) result for

inflation-adjusted retirement income for this contribution period was 14.5% (53.3%) of salary at retirement. While not as impressive as the result for small cap equities and a 40 year contribution period, this result still far exceeds results for any other investment option and also “keeps the promise alive” of a dignified retirement, when combined with Social Security, perhaps an even higher contribution rate of 15% - 20% (including matching employer contributions), and, for some lucky individuals, a pension benefit.

Based on all of the above, small cap equities have historically provided the best **and lowest risk** result, measured in terms of inflation-adjusted retirement income, which, after all, is the public policy *raison d'être* for qualified defined contribution plans. No other investment option has better credentials for being included as a QDIA and it would be nonsensical to disallow small cap equities as a QDIA.

While not discussed above, I believe a reasonable argument could also be made to include well diversified, preferably indexed, large cap equity funds, mid cap equity funds, and REITs as QDIAs. If interested, I would gladly provide the Department with more details supporting this recommendation.

**Target date funds, and by implication balanced funds and managed accounts, are unlikely to provide adequate inflation-adjusted retirement income and should not be allowed as a QDIA.**

To start, both the aggressive target date fund and conservative target date fund have historically provided less inflation-adjusted retirement income than both small cap equities and large cap equities **in every instance observed** for contribution periods of 40 years and 20 years. For the third participant scenario (i.e., investment of a lump sum at time of retirement), the target date funds produced higher inflation-adjusted retirement income than either small cap equities or large cap equities in less than 10% of the observed periods. Given this relative domination of small cap equities and large cap equities over target date funds, it is difficult to imagine why target date funds would be considered as an alternative to, and much less in lieu of, small cap equities or large cap equities as a QDIA.

The absolute level of inflation-adjusted retirement income historically supported by target date funds is also so low as to call into question whether any reasonable contribution rate to such funds will ever result in a sustainable, dignified retirement. For example, the average inflation-adjusted retirement income supported by annual contributions of 10% of salary over 40 years is only 25.4% of salary at retirement for an aggressive target date fund and 16.4% for a conservative target date fund. Comparable figures for a 20 year contribution period are 9.2% for an aggressive target date fund and 5.7% for a conservative target date fund. Finally, if investing a lump sum at point of retirement, the average inflation-adjusted withdrawal rate is only 3.5% for an aggressive target date fund and 2.7% for a conservative target date fund. None of these results bode well if a participant needs to replace somewhere between 30% and 70% (depending on other sources of retirement income) of their salary at retirement. Given the low level of likely success of these types of funds, I do not believe the Department should be providing their implied endorsement of such funds by allowing them as a QDIA.

Since balanced funds or managed funds will also contain a substantial amount of bonds and cash in addition to equities, their results will be very similar to those described above for target date funds. Hence, they also should not be allowed as a QDIA.

All of the above analysis is based on historical returns of asset class indexes. However, target date funds, balanced funds and managed accounts typically entail use of actively managed sub accounts (with higher fees) as well as an additional fee for managing overall asset allocations. If these fees were factored into the above analysis versus indexed small cap equities and indexed large cap equities, the already strong domination of the latter funds would become even stronger.

From a very practical perspective, I believe QDIAs should be based on expected performance of asset classes rather than investment managers. That could best be achieved by restricting QDIAs to indexed funds of acceptable QDIA asset classes and letting the decision of whether active investment management services, or asset allocation services, or asset classes excluded as a QDIA, provide value be made by individual plan participants through their affirmative election of such services.

WAMA greatly appreciates the opportunity to provide these comments. If the Department is interested in discussing any of these in greater detail or if WAMA can be of any further assistance, please either call me at (860) 306 – 9205 or e-mail me at [jake.auger@wamallc.com](mailto:jake.auger@wamallc.com).

Respectfully submitted,

James (Jake) Auger, FSA, MAAA  
President, WAMA Actuarial & Consulting, LLC

## ATTACHMENT

HISTORICAL RESULTS OF VARIOUS INVESTMENT OPTIONS IN PROVIDING  
INFLATION ADJUSTED RETIREMENT INCOME OVER 30 YEAR RETIREMENT  
(1928 - 2005)

## I. Participant Scenario 1: 10% Annual Contribution For 40 Years, Followed by 30 Year Retirement

Investment Option	Inflation-Adj Retirement Income			Inflation-Adj Retirement Income as % of Agg Target Date Fund Inc		
	MINIMUM	MAXIMUM	AVERAGE	MINIMUM	MAXIMUM	AVERAGE
Small Cap Equities	101.4%	166.2%	134.7%	4.53	5.84	5.26
Large Cap Equities	27.6%	40.9%	32.4%	1.22	1.34	1.27
Agg Target Date Fund	21.8%	30.5%	25.4%	1.00	1.00	1.00
Cons Target Date Fund	14.0%	19.5%	16.4%	0.61	0.70	0.65
Stable Value Fund	4.6%	5.2%	4.8%	0.18	0.23	0.19

## II. Participant Scenario 2: 10% Annual Contribution For 20 Years, Followed by 30 Year Retirement

Investment Option	Inflation-Adj Retirement Income			Inflation-Adj Retirement Income as % of Agg Target Date Fund Inc		
	MINIMUM	MAXIMUM	AVERAGE	MINIMUM	MAXIMUM	AVERAGE
Small Cap Equities	14.5%	53.3%	34.0%	2.87	4.56	3.57
Large Cap Equities	5.6%	22.9%	14.8%	1.11	2.01	1.54
Agg Target Date Fund	4.8%	12.0%	9.2%	1.00	1.00	1.00
Cons Target Date Fund	3.9%	7.3%	5.7%	0.50	0.83	0.65
Stable Value Fund	2.6%	3.6%	3.0%	0.22	0.65	0.35

## III. Participant Scenario 3: Lump Sum Investment, Followed by 30 Year Retirement

Investment Option	Inflation-Adj Withdrawal Rate			Inflation-Adj Withdrawal Rate as % of Agg Target Date Fund Inc		
	MINIMUM	MAXIMUM	AVERAGE	MINIMUM	MAXIMUM	AVERAGE
Small Cap Equities	1.86%	16.43%	7.20%	0.69	3.82	2.11
Large Cap Equities	1.75%	10.60%	4.93%	0.92	1.91	1.36
Agg Target Date Fund	1.73%	6.75%	3.50%	1.00	1.00	1.00
Cons Target Date Fund	1.70%	6.07%	2.72%	0.57	1.09	0.80
Stable Value Fund	1.27%	5.27%	2.21%	0.37	1.03	0.66

## IV. Target Date Asset Allocations

Years Before Retirement	Aggressive Target Date Fund				Conservative Target Date Fund			
	LgCap	SmCap	I/T Bond	Cash	LgCap	SmCap	I/T Bond	Cash
40	80.0%	12.0%	8.0%	0.0%	72.5%	16.0%	11.5%	0.0%
30	80.0%	12.0%	8.0%	0.0%	65.0%	13.5%	21.5%	0.0%
20	75.5%	10.5%	14.0%	0.0%	52.5%	11.0%	31.5%	5.0%
10	64.5%	8.5%	25.5%	1.5%	40.0%	3.5%	49.0%	7.5%
0	48.5%	6.5%	39.5%	5.5%	20.0%	0.0%	67.5%	12.5%
-10	34.0%	4.0%	47.0%	15.0%	20.0%	0.0%	67.5%	12.5%
-20	25.0%	2.0%	53.0%	20.0%	20.0%	0.0%	67.5%	12.5%
-30	20.0%	0.0%	60.0%	20.0%	20.0%	0.0%	67.5%	12.5%