
Proposed Qualified Default Investment Alternatives
and
Stable Value Funds

Office of Information and Regulatory Affairs
Office of Management and Budget
July 26, 2007 Meeting

SVIA

Stable Value Investment Association

- Dedicated to educating state, local and corporate plan sponsors, the public, standard setters and regulators on the importance of saving and the contribution that stable value funds can make towards these savings goals
- Voice for the stable value community on legislative and regulatory issues affecting stable value funds and retirement security
- Represents all segments of the stable value investment community: plan sponsors, investment managers, stable value contract issuers
- As of December 31, 2006, SVIA members collectively managed \$413 billion in stable value assets in 109,000 plans for more than 25 million plan participants

Purpose of Today's Discussion

- The purpose of auto-enrollment is to encourage savings

"... starting to save while young and doing so consistently every year is perhaps the single most effective way to assure that one reaches retirement with adequate savings."

"Two of three variables—contribution rate and age at which they begin to save—are more or less under control of the worker." (The third variable is rate of return.)

- Stable value must be included as a fourth QDIA to meet the goal of encouraging savings

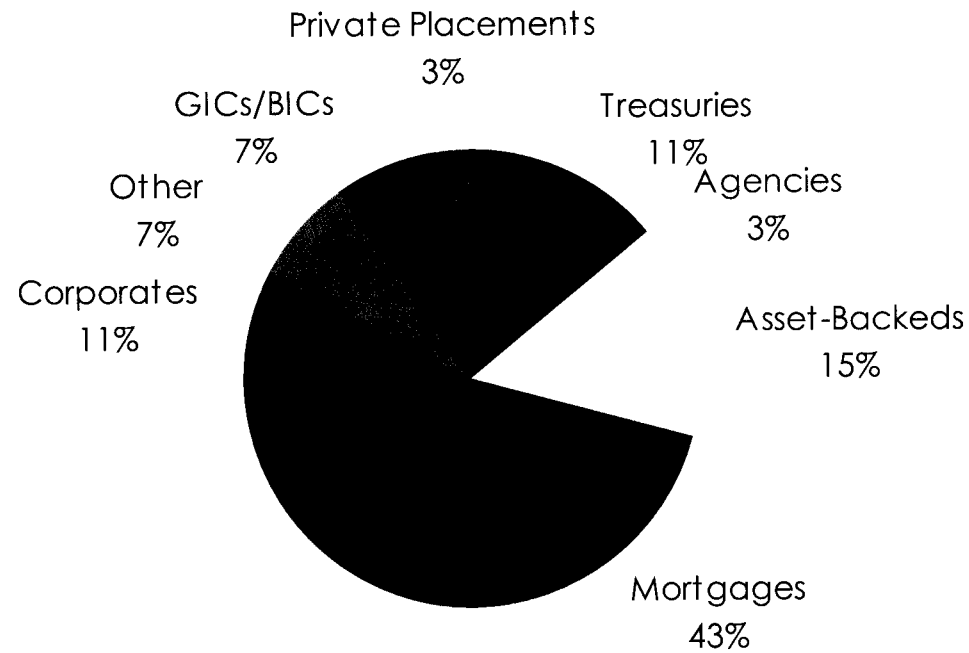
Why Stable Value* is Ideal as a QDIA Safe Harbor

- Stable value is ideal as a QDIA safe harbor since it provides
 - Principal protection with capital appreciation
 - Steady, predictable stream of earnings that tracks the performance of intermediate bonds
 - Best suited for persons who may not be saving and who are most likely to be risk averse
- Stable value is a cost effective form of investment comprised of a wrapped portfolio of diversified, fixed income securities
- Stable value funds constitute one of three leading categories of investment options relied upon in defined contribution retirement plans (the other two are U.S. equities and company stock)

4 *Stable value funds are defined by the Financial Accounting Standards Board in "Reporting of Fully Benefit-Responsive Investment Contracts Held by Certain Investment Companies Subject to the AICPA Investment Company Guide and Defined Contribution Health and Welfare and Pension Plans, FSP AAG INV-1 and SOP 94-4-1"

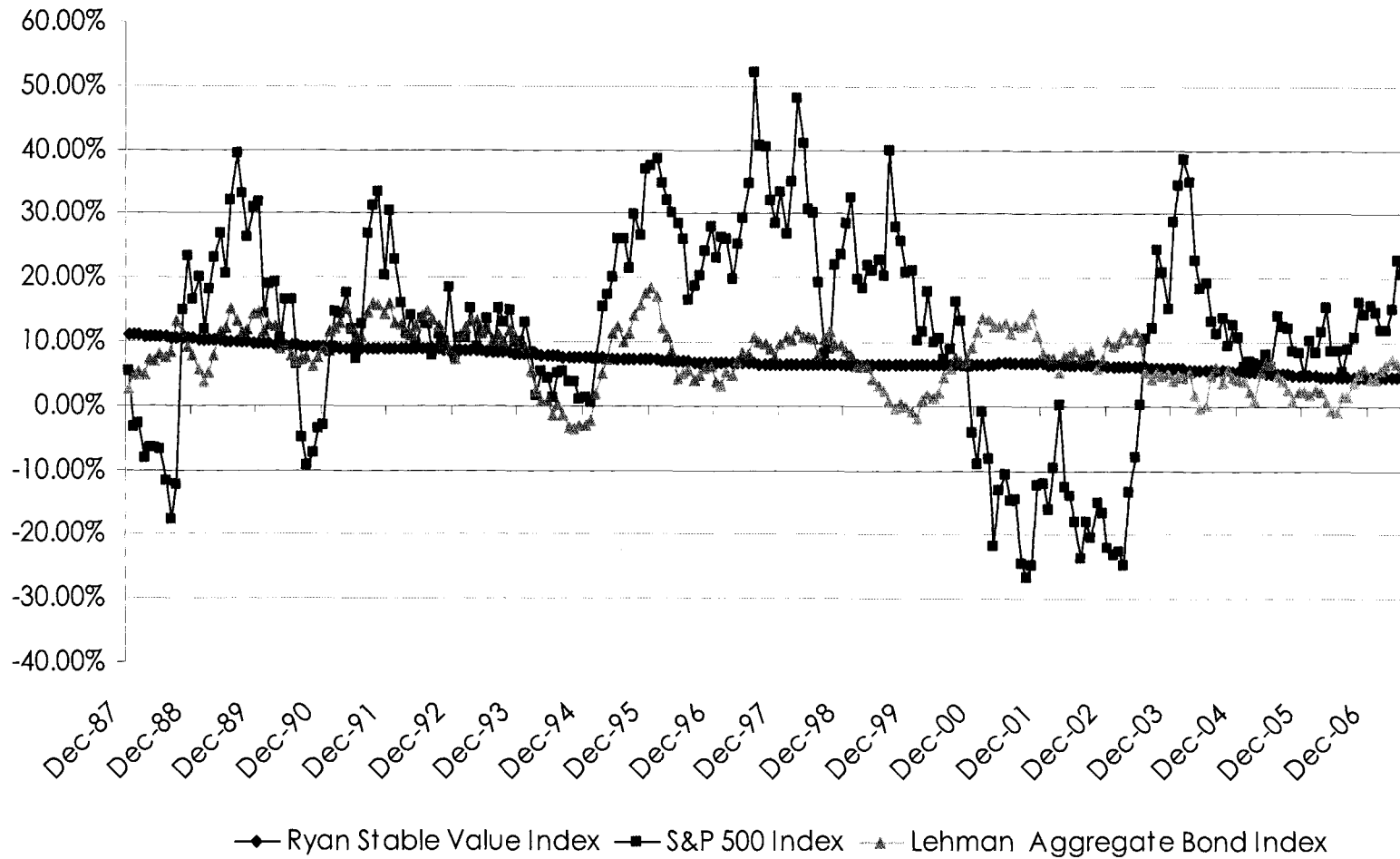
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Stable Value is a Diversified Bond Portfolio Combined with Wrapper Agreements that Provide Stability of Principal



Stable Value Fund Portfolios as of December 31, 2006

Stable Value Funds Are Wrapped, Diversified Bond Portfolios That Minimize the Volatility Associated with Stocks and Bonds While Providing Consistent, Positive Returns



Stable Value Protects Plan Participants if DOL Assumptions Are Wrong

- DOL return assumptions are problematic
 - Stock returns are overly optimistic
 - Stable value returns are assumed to be equal to cash
 - Stable value is not cash
 - Stable value has consistent, intermediate bond-like returns
- Proposed defaults simplistically and incorrectly use age as an approximation for risk tolerance
- Proposed defaults ignore variability of rates of return and their impact on retirement wealth creation
- Proposed defaults are based on capital asset management and behavioral finance theories, which continue to develop and evolve with time

Stable Value Offers Competitive Risk-Adjusted Returns Compared to Proposed QDIA Safe Harbors

Simulation of Lifecycle Funds Compared to Stable Value Funds

	Contributions Start at Age 30		Contributions Start at Age 40		Contributions Start at Age 50	
	Lifecycle	Stable Value	Lifecycle	Stable Value	Lifecycle	Stable Value
Averages						
Across 10,000 Paths	\$365,713	\$199,974	\$203,278	\$135,868	\$100,348	\$79,544
Top Decile	\$813,534	\$266,189	\$393,717	\$173,745	\$165,485	\$96,136
Middle Decile	\$318,414	\$196,802	\$186,463	\$134,353	\$ 95,988	\$79,050
Bottom Decile	\$136,798	\$147,529	\$ 93,987	\$105,576	\$ 56,200	\$65,268
Worst Case	\$ 37,600	\$ 88,594	\$ 43,999	\$ 83,332	\$ 27,718	\$52,108
Total Real Contributions	\$130,980		\$99,630		\$65,280	
No. Cases with Real Losses	351	71	589	145	1,063	404
Average Shortfall	\$19,375	\$6,599	\$13,660	\$3,951	\$8,567	\$2,729
% of cases SV > Lifecycle	17.8%		22.2%		27.7%	

Source: CRA International's Replication and Extension of ICI's Lifecycle versus Stable Value Funds Simulation. However, it corrects ICI simulations by recognizing that the components of lifecycle portfolios: stock returns and bond returns are dependent on past returns and are correlated with or related to one another, and with stable value returns. This is explained further in the attachments to SVIA's July 23, 2007 letter to OMB.

SVIA

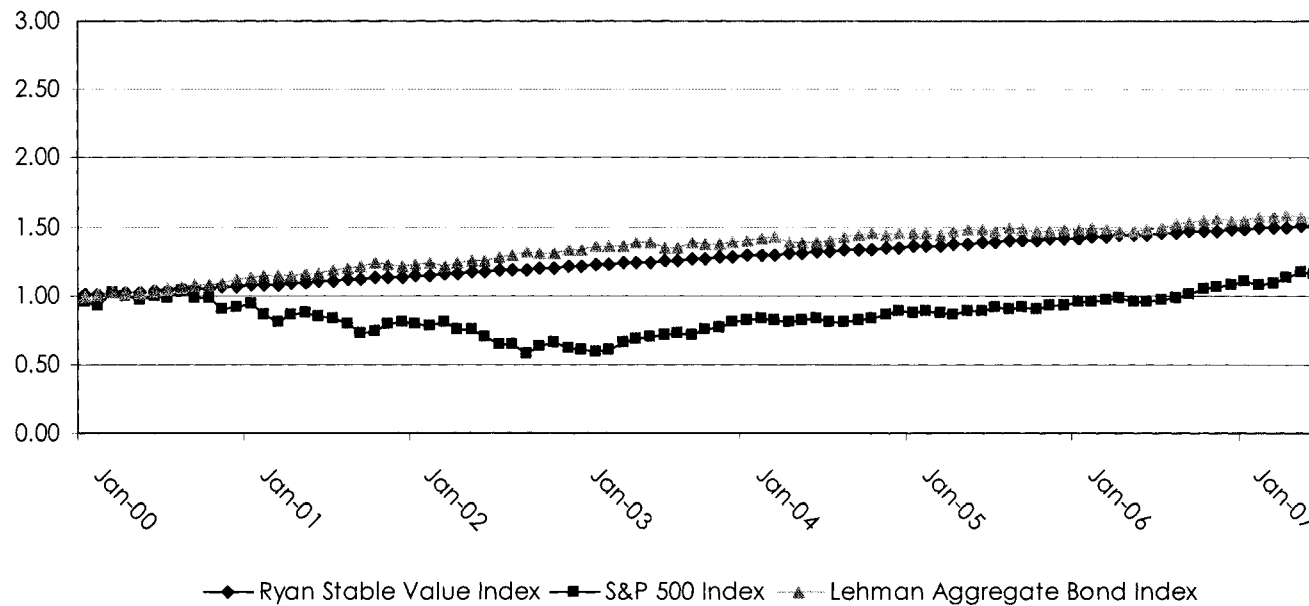
Stable Value is Most Appropriate for Some Participant Populations

Stable value is best suited for persons who may not be saving and are most likely risk averse, such as young, high turnover, low-paid workers, and older workers

Additionally, these individuals may have shorter savings periods due to interruptions in employment, unexpected expenses, and other reasons*

Without a stable value QDIA safe harbor, these workers, may 'opt-out' of the 401(k) plan if their investment experience is too volatile or too negative

Illustration of Variability of Savings and Return Accumulations



Stable Value as a QDIA Safe Harbor is Broadly Supported and Fulfills Legislative Mandate

Stable value is broadly supported as a QDIA Safe Harbor

- By the American Benefits Council, the Profit Sharing / 401(k) Council of America, the United States Chamber of Commerce, the National Association of Manufacturers, and the ERISA Industry Committee; and unions such as the AFL-CIO and AFSCME; as well as participant groups such as the Pension Rights Center
- By members of Congress such as Senators Edward Kennedy (D-MA) and Johnny Isakson (R-GA), and Congressmen Earl Pomeroy (D-ND), Patrick Tiberi (R-OH), Sam Johnson (R-TX) along with 13 other members of the House who filed comments supporting a capital preservation QDIA safe harbor

The Pension Protection Act's language describes the default investments to be covered by the regulations as including a "mix of asset classes consistent with capital preservation or long-term capital appreciation, or a blend of both"

No other option provides both capital preservation and capital appreciation

Gives Plan Sponsors a Choice of a Principal Preservation QDIA Safe Harbor

DOL and others have made incorrect assumptions about plan sponsors' response to QDIA safe harbor. They assume:

- Plan sponsors will use stable value as a default without the benefit of the safe harbor. This is not true.
 - Plan sponsors' desire for the additional protection that the safe harbor offers will motivate sponsors to use the QDIA safe harbors
- Including stable value will cause plan sponsors "to stay the course" if stable value is a QDIA. This is not true.
 - The Department's primary objective of removing fiduciary uncertainty about the use of equity-based defaults has been accomplished. Including stable value as a QDIA does not detract from this objective
 - Several news articles report that many plan sponsors are changing their default to lifecycle funds*

Plan sponsors should determine if a stable value default or equity-based default is most appropriate for their employee population, not the Government

11 *"Defining Moments for Defined Contribution Plans" by Jeanna Gottlieb, Financial Week, July 16, 2007; Pension Act Regulations Could Mean Significant Changes for 401(k) Sponsors, January 29, 2007, Watson Wyatt; and Hewitt Associates Survey Reveals New Employer Trends in Retirement, 2007-02-01

Why QDIA Safe Harbor Must Include Stable Value

Offers cost-effective, competitive risk-adjusted returns while providing both capital preservation and capital appreciation

Most appropriate for some participant populations that are risk averse, such as short-tenured plan participants and those closest to retirement age

Fulfills the legislative mandate to include capital preservation vehicles and recognizes the broad support for stable value as a QDIA safe harbor

Gives plan sponsors a principal preservation and capital appreciation investment choice if they determine there is a need for their employees

Provides a safety net should any of the Department of Labor's underlying assumptions be wrong

Appendix

Return Assumptions Are Problematic

- DOL assumptions regarding stocks are overly optimistic at 6.7%
 - DOL peer review suggested an equity premium of 2% was more reasonable*
 - Jeremy Siegel, author of *Stocks for the Long-Run*, says an equity premium of 2% to 3% is realistic**
- DOL assumed that stable value was the equivalent of cash
 - Stable value is not cash and its returns are not like cash
 - DOL assumptions for stable value appear to be a 78-year average of Treasury bill rates of 3.70%
 - Stable value fund returns for 15-year Hueler Stable Value Pooled Fund Index were 5.92%***

*Peer Review for Default Investment Safe Harbor Regulation by Nellie Liang, Board of Governors of the Federal Reserve, at 3 (June 2006)

**"Perspectives on the Equity Risk Premium," Jeremy J. Siegel, Financial Analyst Journal, Nov./Dec. 2005, 61, 6: page 61

14 ***The Hueler Pooled Fund Index was used to demonstrate stable value returns. The 15-year average for the Treasury bill rate was 3.91%

Assumptions Ignore Variability of Rates of Return

“Unfortunately, we cannot safely assume that rates of return over the next 20, 30, or 40 years will be ‘average.’ In our analysis, we simulated the variability in rates of return through a Monte Carlo process. We found that, although the average annual rate of total return over 30 years on the mixed portfolio of stocks and bonds that we chose for our analysis would be 5.5%, there was a 5% chance that the real rate of return would be 1.7% or lower and a 5% chance that it would be 9.3% or higher. **This variability in rates of return is something over which workers have no control, and which will inevitably lead to some uncertainty in retirement planning. While it may be easier for workers to focus on what they are likely to accumulate in their retirement accounts “on average,” ignoring the variability of investment rates of return could lead to poor decisions that might be avoided if workers were better informed about the way that variability in investment rates of return can affect their retirement savings over time.** A worker who is told that the most likely real rate of return on his or her investments is 5.5% might save more or less than if he or she were told that the most likely real rate of return will be between 1.7% and 9.3%. **Both statements are true, but the second more clearly conveys the uncertainty that characterizes any estimate of likely future rates of return on investment.**”

Financial Theories Are Evolving and Developing

An illustration Using Equity Asset Allocation and Time to Retirement

Conventional wisdom among financial advisors holds that the weight of equities in a retirement portfolio should decrease as the investor approaches retirement

Both empirical and theoretical studies have produced inconclusive results on the relationship between asset allocation (e.g., the proportion of equities in a portfolio) and investment horizon (years to retirement)

A recent paper by Bodie and Treussard¹ combines risk aversion with human capital risk to conclude that in order to “reflect gradual changes in human capital risk over the life-cycle ... the proportion invested in equity should be ‘hump-shaped’ rather than a linear function of age”

An empirical paper by Summers et al.² finds evidence that, among non-retirees, the share of equities increases with age, contrary to what conventional wisdom holds

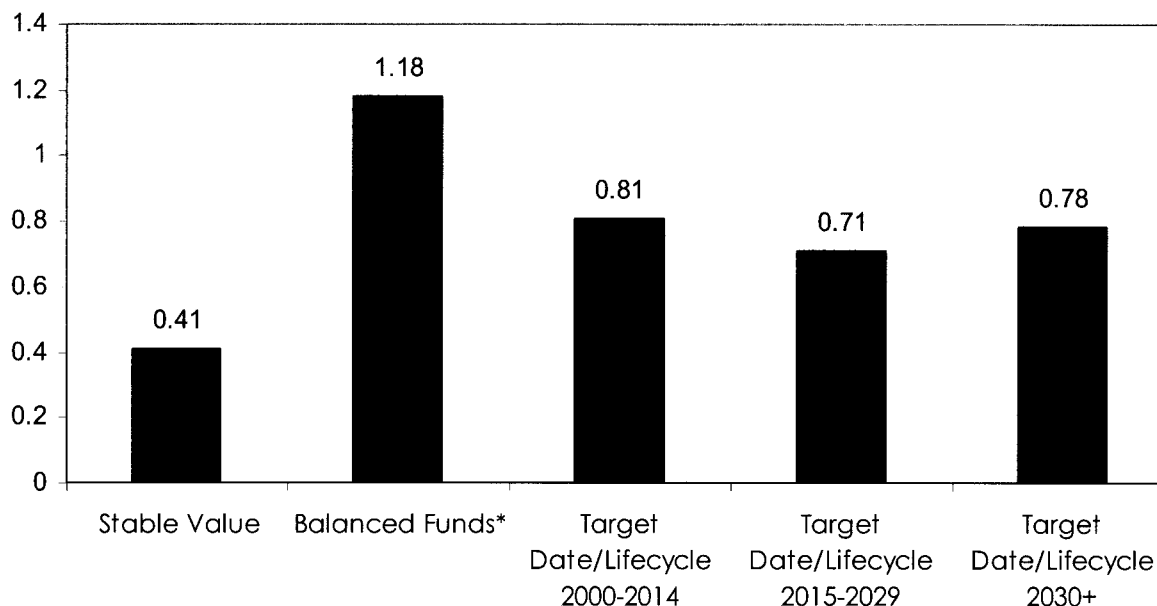
A combination of risk aversion, human capital risk and investment horizon supports the view that an optimal portfolio may exhibit a “hump-shaped” pattern, where the share of equities first increases and then declines as the investor approaches retirement

¹ Zvi Bodie and Jonathan Treussard, Making Investment Choices as Simple as Possible: An Analysis of Target Date Retirement Funds, *Financial Analyst Journal*, 63, 6, pp. 42-47, 2007

² Barbara Summers, Darren Duxbury, Robert Hudson and Kevin Keasey, As Time Goes By: An Investigation of How Asset Allocation Varies with Investor Age, *Economics Letters*, 91, pp. 210-214, 2006

Stable Value Is More Cost Effective Than Proposed QDIA Safe Harbors

Average Expense Ratios



"While contributions and earnings increase retirement savings in 401(k) and other participant-directed plans, fees and expenses charged to participants' accounts can substantially reduce that growth. For this reason, it is important that plan participants, particularly those responsible for making their own investment decisions, consider what and how fees and expenses are charged to their individual accounts."

For more information:

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July 23, 2007

Ms. Susan E. Dudley
Administrator
Office of Information and Regulatory Affairs
Office of Management and Budget
725 17th Street, NW
Washington, DC 20503

Re: Stable Value Funds as Qualified Default Investment Alternatives for
Participant-Directed Individual Account Plans – Response to Investment
Company Institute

Dear Ms. Dudley:

The Stable Value Investment Association (“SVIA”) is writing to respond to the arguments made in the Investment Company Institute’s (the “ICI’s”) letter of May 31, 2007. ICI’s letter stated their reasoning why stable value funds should not be included as a form of “qualified default investment alternative” (“QDIA”) under the Department of Labor’s (“DOL’s”) pending QDIA regulation. The SVIA disagrees with the points in the ICI’s letter.

In our May 10th letter to you, we described the reasons why the SVIA – and a broad range of other commenters on the proposed DOL regulation – believe that stable value funds should be included as a fourth type of QDIA under the regulation. As we said at that time, without the inclusion of stable value funds as a capital preservation form of QDIA, the final regulation will be inconsistent with the statutory language, not supported by the DOL economic analysis, and may put the most vulnerable of 401(k) investors’ retirement savings unnecessarily at risk. While the ICI claims that inclusion of stable value funds would be inconsistent with the goal of the Pension Protection Act of 2006 (“PPA”) to facilitate automatic enrollment and enhance the utility of 401(k) plans, the opposite is true – the inclusion of stable value would in fact promote these goals, by encouraging increased retirement savings and providing an investment vehicle that consistently generates capital appreciation through positive returns in addition to principal preservation.

Including Stable Value is Consistent with Statutory Language

The PPA language describes the default investments to be covered by the new provision as including a “mix of asset classes consistent with capital preservation or long-term capital appreciation, or a blend of both.” Stable value meets this intent.

The ICI’s characterization of stable value is incorrect.¹ Stable value funds include several asset classes, not just guaranteed investment contracts (GICs). In fact, according to a SVIA industry survey, as of December 31, 2006, stable value funds represent a high quality, diversified portfolio of fixed income securities such as mortgages (43%), corporate bonds (11%), Treasuries (11%), agencies (3%), asset-backed (15%), private placements (3%) and other (7%) combined with benefit-responsive “wrap” contracts from financially responsible third party issuers. Insurance company issued GICs comprised 7% of all stable value funds.²

The range of QDIAs must take into account the mandate to include not only funds that provide long-term capital appreciation and a blend of long-term capital appreciation and capital preservation, but also capital preservation as a stand-alone objective. Stable value funds best achieve the capital preservation objective, for the reasons described at length in the SVIA’s original comment letter to DOL, which was included as an attachment with the May 10th letter to OMB.

Focus on Returns Obscures Volatility and Risk of Loss

Underlying much of what is said in the ICI letter is the assumption that plan participants are better off invested in equities, as illustrated by the sub-heading title “The Importance of Equity Exposure,” and the emphasis in that discussion on the higher investment return that equities can achieve over time. However, the discussion downplays the trade-off for that higher return, which is higher volatility and risk of loss. In determining an appropriate QDIA, it is important to consider not just upside potential, but also the potential risks in trying to achieve that upside potential. While equities may perform better over extended time periods, many participants – even employees that go beyond the median five-year employment tenure cited by the ICI – may not continue to participate in the plan when the markets are volatile or they experience losses

¹ The term “asset class” is not defined in ERISA or the PPA. To follow the ICI’s logic, one should argue that equity mutual funds include only one asset class, namely equities. In view of its emphasis on equity investments, the ICI is presumably not saying that the language should prevent a QDIA from being entirely invested in equities. It would be more consistent with statutory intent to read “asset class” as referring to narrower categories, such as large cap stocks or intermediate term bonds, rather than such broad categories as equity and stable value.

² SVIA Eleventh Annual Stable Value Fund Investment and Policy Survey.

because they have a low risk tolerance and/or concern about significant swings in investment performance. Equities do not always perform better than other asset classes, as the markets earlier in this decade illustrated, and plan fiduciaries should be able to take that into account.

The ICI also asserts that, “safe harbors are designed to protect participants and provide the greatest good for the greatest number,” and supports this premise with its stochastic simulations comparing returns from a lifecycle fund to that of a stable value fund. The ICI simulations are fundamentally flawed. The simulations ignore and underestimate the impact of negative investment experience and the variability of returns. Based on analysis submitted to SVIA that attempts to replicate the ICI simulations, lifecycle funds produce better returns for someone who begins to save at age 30 in 82% of the simulations, which means that stable value provides better returns in 18% of the simulations. For the bottom decile, the 401(k) average default balance is \$147,529 for a stable value fund compared to \$136,798 for a lifecycle fund. In a worst case scenario, the 401(k) default balance is \$88,594 for stable value compared to \$37,600 for a lifecycle fund. A summary table of this analysis is provided below to further illustrate these points.³

Lifecycle Compared to Stable Value Funds Simulation⁴

	Contributions Start at Age 30		Contributions Start at Age 40		Contributions Start at Age 50	
	Lifecycle	Stable Value	Lifecycle	Stable Value	Lifecycle	Stable Value
Average Across 10,000 Paths	\$365,713	\$199,974	\$203,278	\$135,868	\$100,348	\$ 79,544
By Decile						
Top	\$813,534	\$266,189	\$393,717	\$173,745	\$165,485	\$96,136
Middle	\$318,414	\$196,802	\$186,463	\$134,353	\$ 95,988	\$79,050
Bottom	\$136,798	\$147,529	\$ 93,987	\$105,576	\$ 56,200	\$65,268
Worst Case	\$ 37,600	\$ 88,594	\$ 43,999	\$ 83,332	\$ 27,718	\$52,108
% of cases Lifecycle > SV	82.2%		77.8%		72.3%	
% of cases SV > Lifecycle	17.8%		22.2%		27.7%	

As the illustration demonstrates, SVIA strongly believes that plan sponsors are in the best position to determine if a QDIA safe harbor provides the greatest good for the greatest number for their specific defined contribution plan

³ A discussion of the shortcomings of the ICI stochastic simulations comparing the returns from a lifecycle fund to returns from a stable value fund are discussed in the attachments to this letter.

⁴ This information is summarized from CRA International’s Replication and Extension of ICI’s Lifecycle versus Stable Value Funds Simulation, which is detailed in the attachments to this letter.

population. That is why we believe that the Congressional mandate for a capital preservation vehicle must be available as a fourth stand-alone QDIA.

The QDIA Should Fit the Plan Participant Population

In view of the variability of the investment markets, the role of the government should not be to dictate specific QDIA selections by making judgments as to what would be a better investment vehicle. The government should provide a range of QDIA options that take into account, among other things, the different risk tolerances and preferences of different plan populations, and then permit the plan fiduciaries to determine what is appropriate for their particular plans. The plan fiduciaries are best suited to evaluate what type of default investment would meet the needs of their respective plan participants.

While there is generally a focus on age in discussions of the appropriateness of investment in equities, age is only one factor. As we indicated in our letter to DOL dated January 7, 2007, a copy of which was provided with our previous submission, many employers have found that younger, lower income employees tend to be extremely risk-averse due to job insecurity and lack of accumulated wealth, and often require investments that emphasize capital preservation, such as stable value funds. Employers should have the flexibility to select a QDIA that fits this type of population.

In our prior letters, we raised an issue that should be of great concern to DOL as well as OMB – if investment experience in a QDIA is negative, defaulted participants, particularly the financially unsophisticated, may be discouraged from continuing to save for retirement. If they opt out of automatic enrollment and stop their salary deferrals because of concerns about risk or from a negative investment experience, then the public policy goal of encouraging broader 401(k) participation will be defeated. Including stable value as the fourth QDIA addresses concerns about risk, market volatility and negative investment experience. Individual plan fiduciaries are best able to ascertain whether this is a primary concern for their employees, and should have the flexibility to offer a capital preservation QDIA if they determine it is in the best interest of their specific employee benefit plan population.

Purpose of Default Options is to Encourage Participation

The objective of automatic enrollment and default investment is to get individuals into the habit of setting aside a portion of their income for retirement savings. Once individuals have plan accounts and experience positive investment results, plan sponsors have a greater opportunity to emphasize the importance of retirement savings, investment principles and the range of investment options under the plan. Plan fiduciaries must be allowed sufficient choice to determine

the default option that best serves this purpose of starting employees on saving for retirement. Participants may be discouraged from saving by unduly volatile investments, and plan fiduciaries should be able to take that into account when choosing an appropriate default option.⁵

Plans Will Use Only Investments Covered by the Safe Harbor

The ICI makes the point that if an employer believes its workers are particularly risk averse, it is not precluded from going outside the safe harbor created by the regulation and selecting a stable value fund as the default investment fund. However, that disregards the effect that a fiduciary safe harbor will have on investment selections. Wyatt Watson reported in January that almost half, 48% of the 95 large defined contributions plans it surveyed would have to change their default options under the DOL's proposed rules.⁶ In fact, early indications show that plan sponsors are moving to take advantage of the safe harbor. Hewitt Associates reports that 43% of 146 large U.S. companies it studied at the close of 2006 were planning to change their current default investment fund to one of the three proposed QDIA, which rose significantly from the previous year.⁷ As these reports illustrate, since plan sponsors want to avoid potential exposure to fiduciary liability, they will likely insist that any default investment option under their plans complies with the regulation, in order to obtain the safe harbor fiduciary protections. The practical effect will be to force plan participants out of stable value, even if those funds are the most prudent and appropriate default investments for their particular circumstances.

There is Broad Support for Including Stable Value

The ICI noted that its view opposing the inclusion of stable value is shared by a commission of the U.S. Chamber of Commerce. By contrast, the SVIA's position in support of including stable value funds as QDIAs is shared by many commenters on the proposed regulation from a broad range of constituencies. In addition to the insurance industry, these include plan sponsor and employer groups such as the American Benefits Council, the Profit Sharing / 401k Council of America, the United States Chamber of Commerce (even if a commission that it sponsors may have taken a different view), the National Association of Manufacturers and the ERISA Industry Committee; and unions such as the AFL-CIO and AFSCME; as well as participants groups such as the Pension Rights

⁵ These issues and considerations also are described in a comment from the sponsor of a large multiemployer 401(k) plan, The Cultural Institutions Retirement System, dated November 10, 2006.

⁶ Pension Act Regulations Could Mean Significant Changes for 401(k) Sponsors, January 29, 2007, Watson Wyatt.

⁷ Hewitt Associates Survey Reveals New Employer Trends in Retirement, 2007-02-01., Hewitt Associates. In 2005, Hewitt Associates reported that 17% of plan sponsors who used capital preservation vehicles as defaults were changing their default to a lifecycle fund.

Center. Like the SVIA, they noted that failure to include stable value would not only be disadvantageous to plan participants and beneficiaries, but also would be contrary to the statutory language calling for inclusion of alternatives that are consistent with capital preservation.

Conclusion

The SVIA continues to urge OMB to assure that stable value funds are available as a fourth form of QDIA under the final DOL regulation, and that OMB request that DOL reconsider the final regulation if stable value funds are not included.

Thank you for your consideration. We are available to work with you and your staff as you review the final DOL regulation, and we will be following up shortly to arrange a meeting to discuss these significant issues. Should you have any questions, please contact me at (202) 580-7620.

Sincerely,

A handwritten signature in cursive script that reads "Gina Mitchell".

Gina Mitchell
President SVIA

Attachments: July 23, 2007 CRA International Letter
July 23, 2007 CRA International Power Point



INTERNATIONAL

July 23, 2007

Ms. Gina Mitchell
President
Stable Value Investment Association
1025 Connecticut Avenue, NW
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Washington, DC 20036

Dear Ms. Mitchell:

Thank you for giving us an opportunity to review the Investment Company Institute's (ICI) submission to the Office of Management and Budget on May 31, 2007 regarding the Department of Labor's regulations on qualified default investment alternatives (QDIA). Upon review, we have found the ICI stochastic simulations to be misleading and biased in favor of lifecycle funds when compared to stable value funds.

The ICI study makes two mistakes that undermine the ICI's contention that stable value funds do not provide sufficient returns for inclusion as a stand alone QDIA by the Department of Labor.

- The ICI seems to have simulated hypothetical portfolio returns in its study assuming that the components of the lifecycle portfolio—stock returns and bond returns—were independent of past returns and uncorrelated or unrelated with one another and with their proxy for stable value returns. This assumption is misleading because in practice, the correlations have been significant, which affect the risk and returns on lifecycle funds that mix asset classes over time. Moreover, taking into account this observed behavior has important implications for asset allocation. Our attached analysis has corrected for this assumption by recognizing past returns and correlations. In addition, we attempted to replicate the ICI's simulations over a larger number of 10,000 paths to provide more accurate estimates compared to ICI's 5,000 paths.
- In interpreting the results from their simulations, the ICI makes an unsupported assumption about 401(k) investors risk tolerances—that all investors universally want more money or wealth irrespective of any associated cost or risk. The ICI understandability concentrates its focus on the majority of the time that lifecycle funds may outperform stable value. Based on its flawed simulation, the ICI estimates that lifecycle funds will outperform stable value 87%, 82% and 77% of the time (depending on cohort starting ages of 30, 40, and 50). It then assumes that the superior performance in these states is sufficient to offset the thousands of states where lifecycle funds are projected to perform less favorably than stable value funds. This trade-off is not supported by financial theory, nor can the trade-off be properly evaluated without taking into account the range of risk tolerance in the investor population.



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Replication of ICI's Lifecycle vs. Stable Value Simulation

Based on the incomplete information provided in the ICI letter dated May 31, 2007, we replicated the ICI methodological information and came within a close distance of their results.¹ Additionally, we also reported the "worst case" balance at age 66 among the simulated trials. It is important to remember that investors will not receive average returns, but rather, will receive a particular return sequence, as modeled in the simulation.

There are two sets of charts for each time period going from the age at which contributions begin. Like the ICI, our simulations assume contributions begin at three different points: age 30, age 40 and age 50. All the simulations conclude at age 66.

The first chart for each age (30, 40 and 50 respectively), replicates the returns of the ICI, and reports the worst overall simulated balance at age 66 for the lifecycle fund and stable value fund from the simulation. The second chart for each age group takes into account the observed correlations among the stocks and bonds, and any dependencies on past returns for stocks, bonds, and stable value to correct for the ICI's exclusion of this important information.

These corrected simulations have important implications and undermine some of the ICI assertions.

Opening the PowerPoint file, you will see on page 3 the replication of the ICI results for an investor who begins at age 30 to save for retirement.² There are two red lines (the lower of which is mostly obscured by one of the blue lines) and two blue lines shown. In between the two red lines, the simulated results are shown for 90% of the simulated sequences for the lifecycle investment approach. Outcomes above the top red line would have occurred 5% of the time, and below the bottom red line 5% of the time. Turning to the pair of blue lines, a similar interpretation applies except that the lines relate to stable value returns. The ICI simulations omitted any discussion of the worst case scenarios for investing in a lifecycle fund as well as a stable value fund, leaving a rosy impression for lifecycle funds. Please note that the lifecycle fund has a worse "downside" than a stable value fund, even when using their numbers and faulty methodology. The ICI method

¹ These are very close to the ICI simulations, but we cannot exactly match them because the ICI did not provide a complete description of the model used to generate their stable value returns, the actual earnings and contribution sequences used for each of the three investment horizons, the specific lifecycle portfolio weights for each year of the investment horizon and crucial data necessary to match the random number sequences. Therefore, there will be sample error. Also, in an effort to increase the accuracy of the estimations, we used twice as many paths as the ICI, so the results are bound to be somewhat different.

² Recall that the ICI simulations were based on calibrating their return simulator to hypothetical lifecycle funds to past return data on stocks and bonds, while inexcusably ignoring the strong correlations of returns across asset classes in the same data, and then comparing these hypothetical lifecycle fund returns to a presumed return on stable value funds over the same period.

July 23, 2007

Page 3

indicates that a lifecycle investor could wind up with only \$73,215 after 37 years of steady investing, whereas under the stable value approach, the worst case scenario comes out to \$96,381. Additionally, using all the ICI assumptions, the lifecycle approach beats the stable value approach for 89.1% of the simulations.

On page 4, the same type of study is re-done, taking into account the observed correlations of returns between the various asset classes, as well as any time dependencies. The upshot is that with return sequences and interdependencies more properly modeled, the lifecycle investing approach has both a lower upside and a worse downside than reported by the ICI. You can see that the worst case scenario under the lifecycle approach is no longer \$73,215, but only \$37,600. In other words, the ICI's methodology would have given a worst case scenario for lifecycle investing that was about two times better than the actual worst case scenario. Furthermore, the lifecycle approach is estimated to beat stable value on only 82.2% of the paths, not 89.1% of the paths as reported using all the ICI replication. Finally, the average return for the bottom decile of stable value is about 8% higher than the average return of the same decile for lifecycle funds, compared to about 10% *lower* in the ICI replication. These are systematic and important differences from what is shown under the ICI method that ignores correlations of returns across asset classes.

On pages 5 and 6, an analogous comparison is done for investors who begin to save for retirement at age 40. Under these circumstances, the lifecycle beats stable value for only 77.8% of the cases, when properly modeled, rather than the 86.3% figure that would have been generated using ICI's simplistic and errant methodology. Again, the average return for stable value in the bottom decile is about 12% higher than for lifecycle funds, compared with a *lower* average for stable value funds in our ICI replication. And the worst case balance for stable value funds is about 90% higher than for the lifecycle funds, compared to about 35% higher under the ICI method that ignores correlations of returns across asset classes.

On page 7 and 8, the comparison is done for investors who begin to save at age 50. Again, the worst case for stable value is almost two times better than the worst case for lifecycle funds, and the average stable value ending balance for the bottom decile is about 16% higher than that for lifecycle funds, compared to about 4% higher under the ICI method that ignores correlations of returns across asset classes. These are the kinds of results that should have been expected but were distorted and masked for the reasons explained earlier by the flaws in the ICI simulations. What stable value funds do is limit the downside, as well as the upside results. They are particularly well suited for investors who wish both to preserve capital and receive a relatively steady return on their investment, which would characterize the preferences of investors with low tolerance for risk.

Based on our analysis, investors in lifecycle funds should be prepared to underperform stable value funds over the course of their retirement asset accumulation period as often as 18%, 22%, or 28% of the time if their contributions start at age 30, 40, or 50 respectively, and heading toward 50% as



July 23, 2007

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one nears retirement age. More importantly, when the lifecycle funds underperform stable value funds, it can be by a sizable margin. Plan sponsors choosing default options for their employees should give careful consideration to the bottom decile and worst case results of this analysis compared to their employee population's tolerance for risk. It is clear that stable value funds can provide meaningful downside protection and are particularly suitable for investors with limited risk tolerance.

If you would like some more information about this study and its interpretation, just give us a call.

Kindest regards,

A handwritten signature in cursive script that reads "David F. Babbel".

David F. Babbel
Professor of Finance and Insurance
The Wharton School of Business
University of Pennsylvania
And Senior Advisor to CRA International

A handwritten signature in cursive script that reads "Miguel A. Herce".

Miguel A. Herce, Ph.D.
Principal
CRA International

Replication and Extension of ICI's Lifecycle v. SV funds Simulation

(ICI letter to the OMB, dated May 31, 2007)



INTERNATIONAL

July 23, 2007

Description of Simulation – Data and Assumptions (Consistent with ICI's Data and Assumptions)

Returns

- Stocks: Annual Return on S&P 500 (from IBBS), 1958-2006
- Bonds: Annual Return on Long-Term Corporate Bonds (from IBBS), 1958-2006
- SV: 5-year moving average of 10-year Constant Maturity Treasury Bond yields (from the FED's H15 Constant Maturity database), 1954-2006 (first observation is a proxy SV return for 1958)
- Returns are real, net returns, adjusted for annual inflation rates (from SBBI) and expenses (120 bps. for stocks, 70 bps. for bonds and 45 bps. for SV funds, as indicated on p. 7 of the ICI letter)

LC and SV Funds

- Lifecycle (LC) fund is a combination of stocks and bonds. Weights are 90% stocks and 10% bonds through age 40, declining linearly to 40% stocks and 60% bonds at age 70
- SV fund has returns approximated by the 5-year moving average of 10-year Treasury bond yields

Balances

- Contributions to either the LC or SV fund are assumed to be 6% of annual earnings
- Real Earnings are \$50,000 (2006\$) at age 30 and increase by \$500 per year to \$70,000 by age 70

Description of Simulation – Sample Paths Generation

Return Generation (as implied in the ICI letter)

- Generate random stock and bond real net returns with their respective historical means and variances
- Generate random SV returns assuming that two previous returns influence the current return (2nd-order autoregressive model). This model reflects the significant serial correlation in bond yields
- This approach assumes that stock, bond and SV returns are uncorrelated

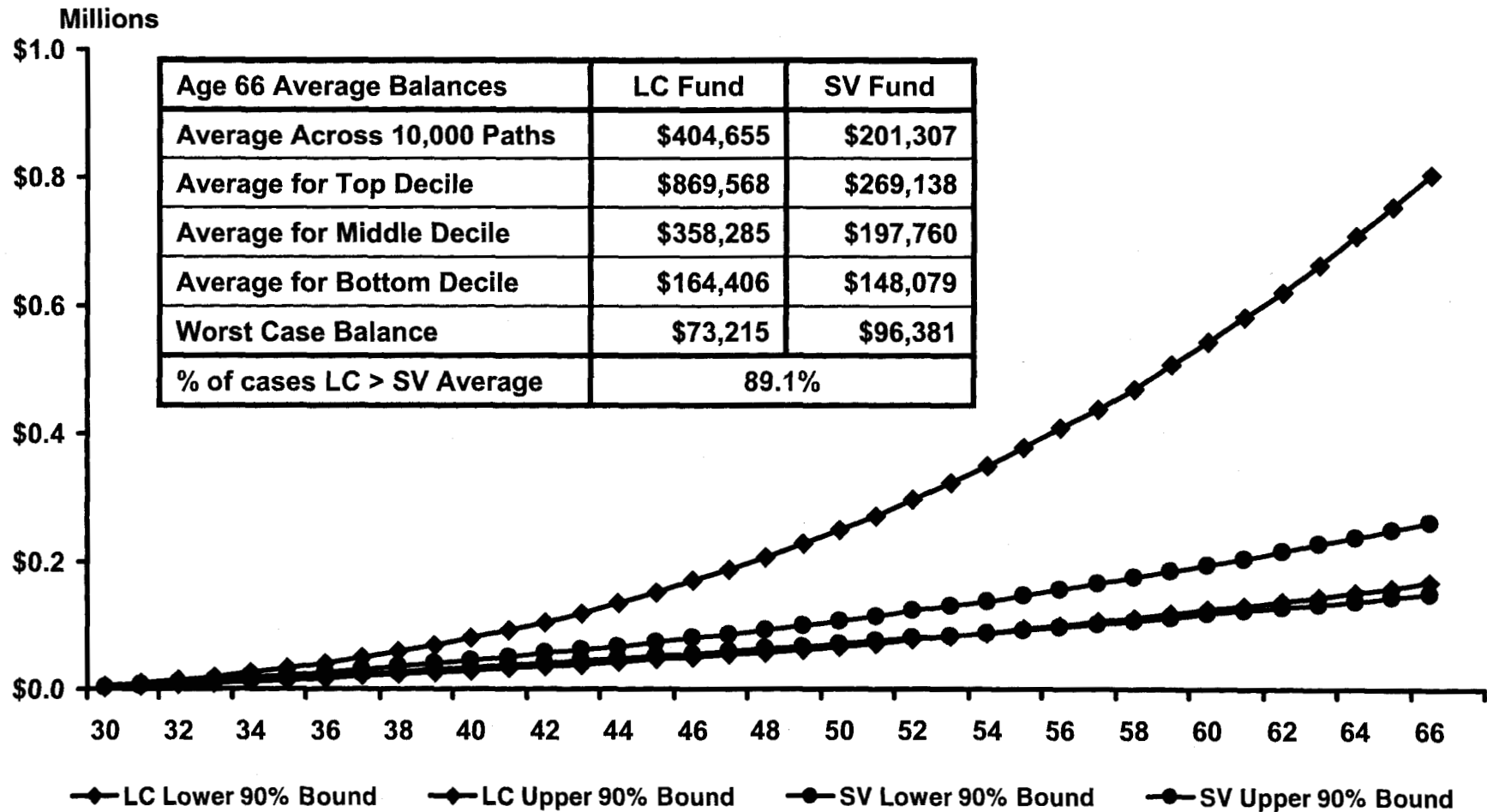
Return Generation (using covariance among returns in actual data)

- Model each return as potentially dependent on its own recent past values as well as on recent past values of the other two returns (vector autoregressive model)
- Also use covariance among returns to generate the random innovations of the model

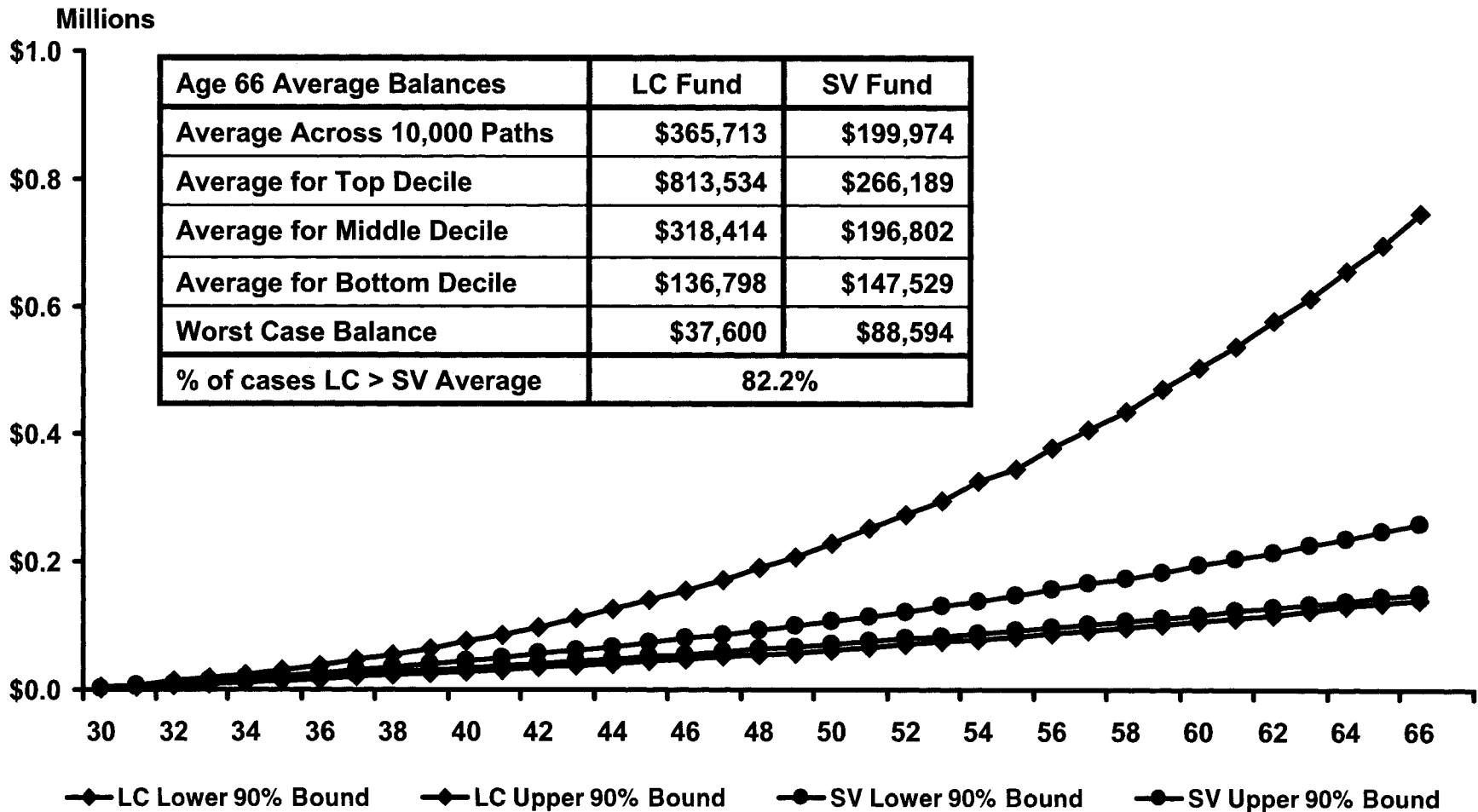
Sample Paths

- For each of three investing life-spans (30 to 66 years, 40 to 66 years, 50 to 66 years), generate 10,000 sample paths of returns using the two approaches described above
- Then use annual contributions and portfolio weights for the LC fund to construct the corresponding 10,000 paths for fund balances for each investing life-span
- The charts below show the 90% bands for the LC and SV funds, for each one of the three investing life-spans
 - The 90% band means that at a given age, 5% of the 10,000 possible balances will be higher than the upper band, and 5% will be smaller than the lower band

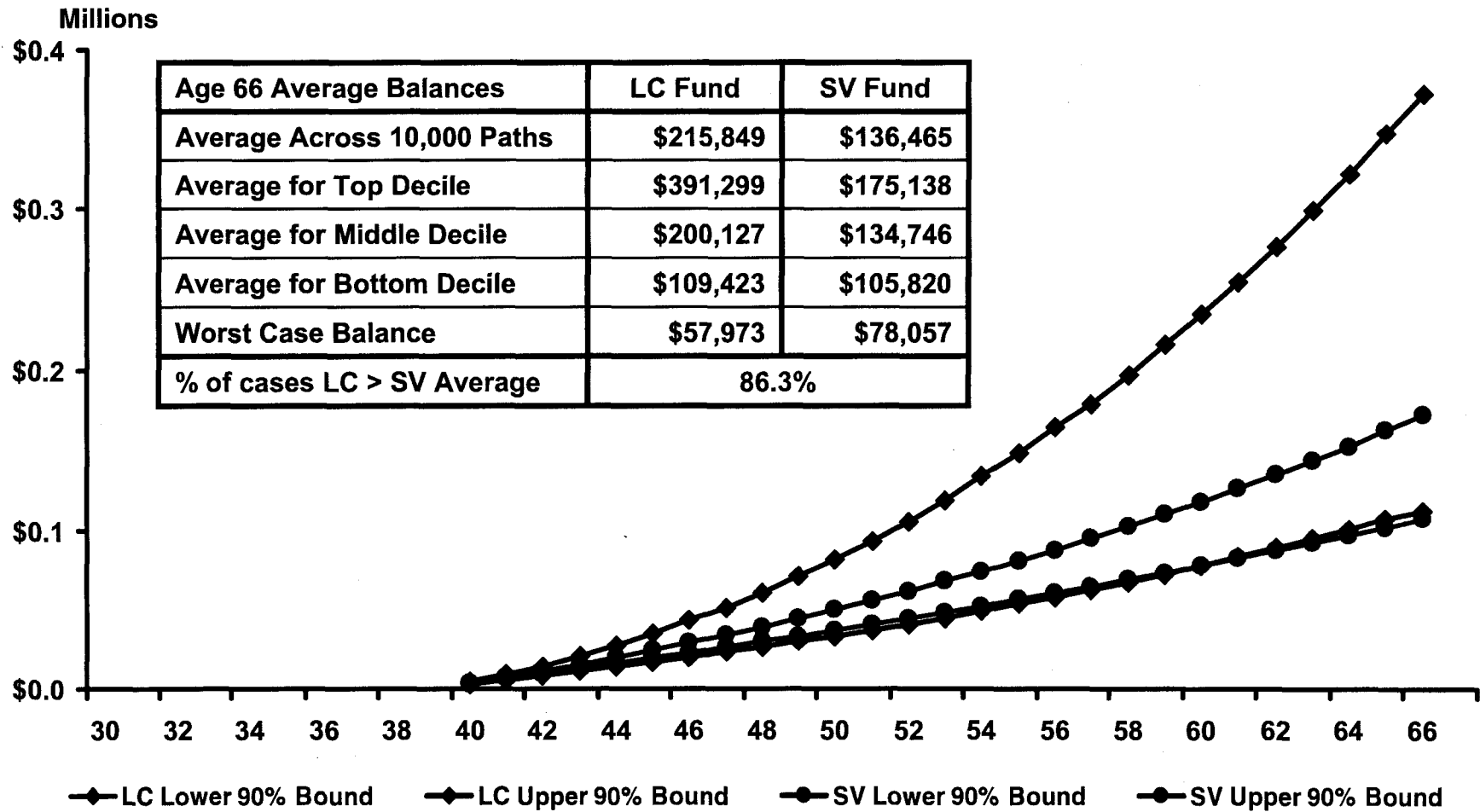
Fund Balances Beginning at Age 30 (Not Using Covariances among Stocks, Bonds & SV)



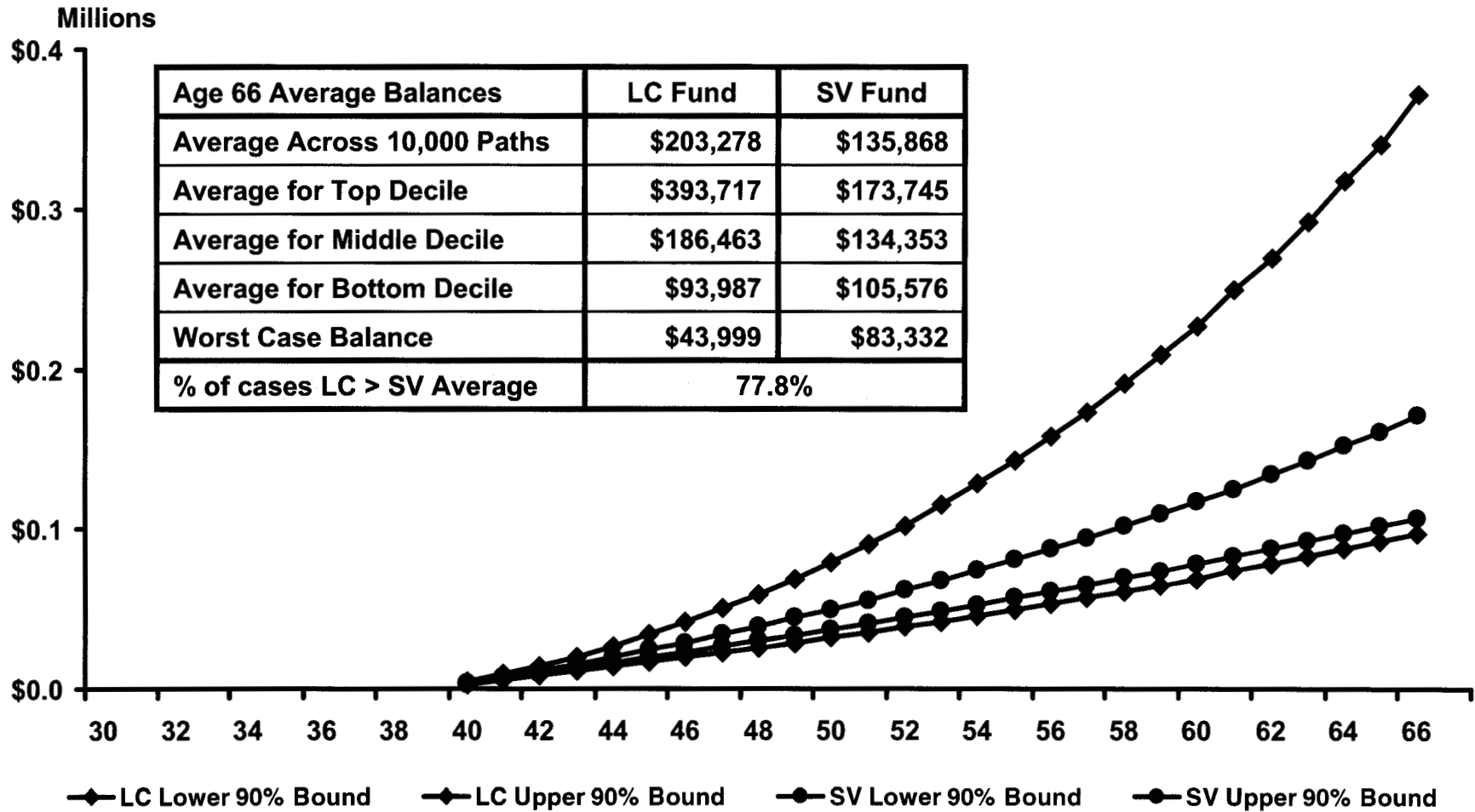
Fund Balances Beginning at Age 30 (Using Covariances among Stocks, Bonds & SV)



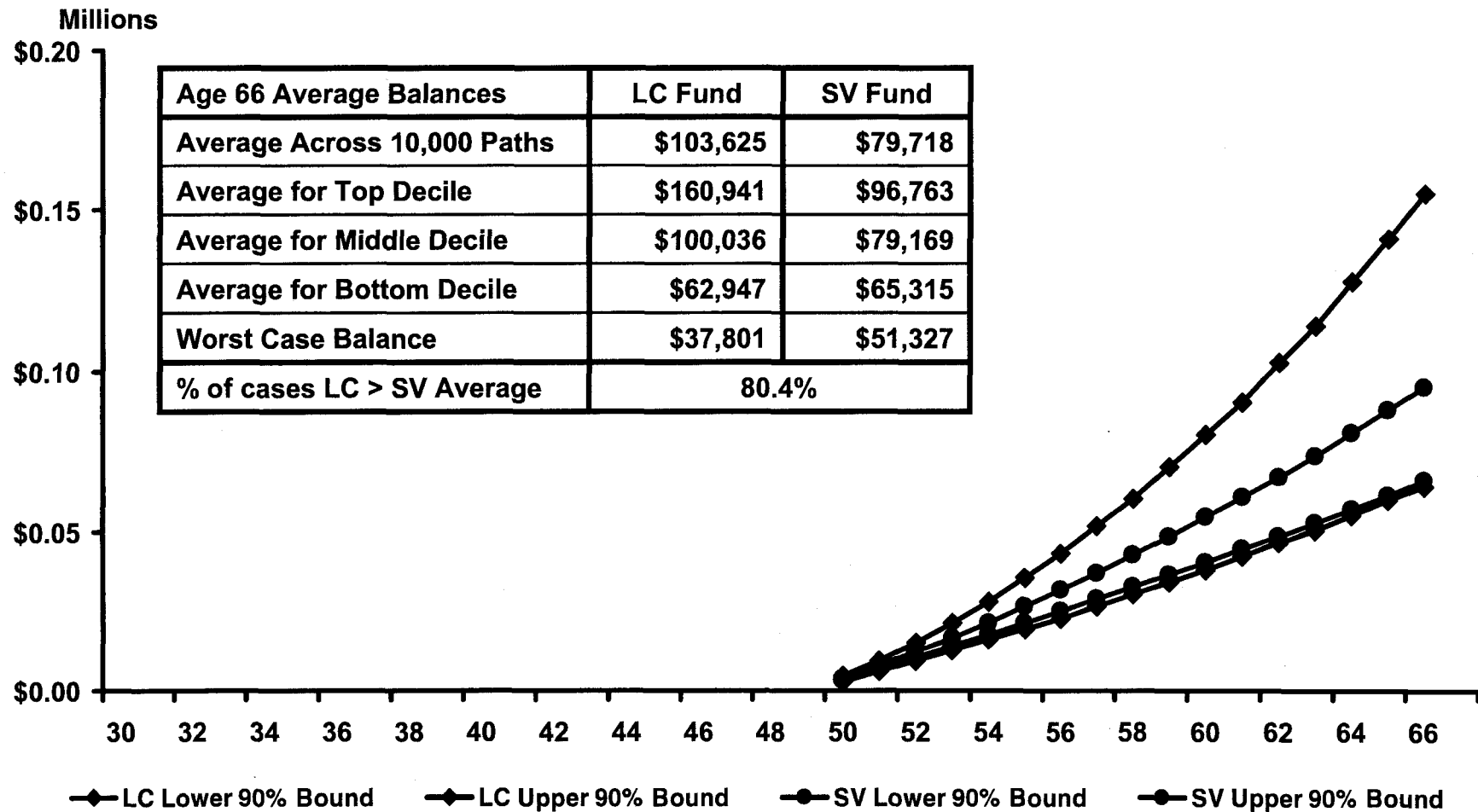
Fund Balances Beginning at Age 40 (Not Using Covariances among Stocks, Bonds & SV)



Fund Balances Beginning at Age 40 (Using Covariances among Stocks, Bonds & SV)



Fund Balances Beginning at Age 50 (Not Using Covariances among Stocks, Bonds & SV)



Fund Balances Beginning at Age 50 (Not Using Covariances among Stocks, Bonds & SV)

