Stable Times

Newsletter of the Stable Value Investment Association

Volume 2; Issue 3 June 1998

The Hidden Cost of Buy-and-Hold (Part 1)

by C. Jason Psome and Greg Wilensky, Sanford C. Bernstein & Co., Inc.

A common question arises when discussing the different approaches to fixed income investment management: What is the advantage of actively managed bonds versus a buy-and-hold ladder of securities?

Over the years, the benefits of active fixed income investment management have persuaded most investors that it is the superior approach to fixed income investing. Defined benefit plans first had the choice of active management versus buy-and-hold more than 30 years ago, when an active management focus on total return began to replace the yield-oriented buy-and-hold approach for bond portfolios. One would be hard pressed to find many plans that still use a buy-and-hold approach for their fixed income allocations.

While other fixed income investors embraced active management, the stable value market continued to use a buy-and-hold approach because illiquid GICs/BICs were the only investments available. A ladder was necessary to create a liquidity stream to help fund cash needs. Now, stable value funds can capture all the benefits of active management. With a liquid bond portfolio and a book value wrapper (AKA synthetic GICs), these cash needs can be completely satisfied without a laddered portfolio.

This article, the first in a series, will focus on the advantages of maintaining ongoing control of the yield curve structure. Specifically, we will show how a portfolio's optimal maturity structure can vary, given the changing shape of the yield curve. As a result, a strictly laddered portfolio is often suboptimal. We will then discuss the benefits of selling securities before they mature.

Optimal Maturity Structure

A ladder of five-year securities maintains a fairly constant duration of approximately 2.5 years, as the periodic reinvestment of maturing assets balances the shortening of aging contracts. With an actively managed portfolio, different maturity structures can be used to create the same 2.5-year duration but with a better risk/return tradeoff. The three most basic maturity structures are:

- A ladder—in which assets are evenly distributed across a range of maturities (such as the buy-and-hold portfolio described above)
- A barbell—in which the duration is achieved by combining short bonds with long bonds so that the average duration is 2.5-years

(Continued on Page 8)

Credit Enhanced GICs

by Wesley C. Whiteman, Prudential Investments

Credit Enhanced GICs ("CE-GICs") were first introduced in August, 1995 to address the credit concerns of Stable Value Fund ("SVF") managers. CE-GICs usually provide the non-participating structure of traditional general account GICs, but utilize a separate account structure combined with a third-party guarantee to provide a triple-A rated alternative in the stable value marketplace. In addition to these features, CE-GICs also provide SVF managers with additional possibilities to diversify a plan's stable value fund.

CE-GICs can be structured to mimic traditional non-participating general account GICs. Like traditional GICs, CE-GICs have:

- flexibility regarding deposit structure (lump sums, windows, cap/floor, etc.),
- provide a guaranteed return for the life of the transaction,
- have a finite maturity structure defined at inception and,
- offer benefit responsiveness.

Unlike traditional GICs, CE-GICs are primarily issued through a diversified separate account, and enjoy insulation from the creditors of the general account. In addition, the issuance of a CE-GIC is usually accompanied by the issuance of an irrevocable surety bond directly to the contract holder by a third party guarantor (usually a monoline insurer). The combination of these features earn the CE-GIC the highest possible credit rating from the major rating agencies.

This direct guarantee structure is one of the most secure structures possible. It provides the client with three layers of protection. First, payments are guaranteed by the assets of the insulated separate account. In most instances, the assets of the separate account

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Editor's Corner: The Glass is Half Full

by Victoria M. Paradis, CFA
Pacific Investment Management Company

These are the best of times. Confidence is high. The economy has entered its eighth year of expansion. Unemployment levels are at record lows and yet inflation remains virtually absent. The stock market continues to add wealth to the nation, particularly defined contribution plan participants.

But the stable value industry is downright gloomy in the face of all this good news. Transfers continue to trend toward equities, away from our funds. Traditional GICs continue to lose market share. Book value wrap competition is intense, causing fee compression and contract term concessions. Providers are shifting focus away from the DC stable value world to develop new products and stake out new markets.

The good news is that we have probably reached equilibrium in many of these areas. Transfers to equities can only slow, as participants become "seasoned" after several years of chasing equity returns. Most plans have already diversified away from exclusive reliance on traditional GICs, and now consider GICs to be just one potentially attractive investment from a variety of choices. And now that the industry is really talking about performance measurement, we hope that stable value managers that produce good results will benefit, causing improvements in the industry's overall performance.

What new pendulum swings should we look forward to? How about diversification from company stock? How about a trend away from locked up, retail bundling to a more rational menu of institutional investment products based on risk-adjusted, economic results? How about focusing on managing stable value more efficiently and elegantly, with increasingly sophisticated investment techniques?

Stable value should never recapture its old glory as the primary defined contribution investment allocation. Instead, the sensible solution is for stable value to focus on defining itself as the fixed income option of choice; the absolutely best low-risk investment option. We should support the Stable Value Investment Association as it leads the way.

Of course, we can all still root for a good, old-fashioned stock market correction. But before that happens, make sure you sell your personal equity investments, and transfer into your employer's stable value fund.

This issue of ***Stable Times*** covers many of these themes: Performance measurement (Fen and Libby). Sophisticated investment strategies (Libby and Psome/Wilensky). Stable value publicity (Dennis and Markland). Product alternatives (Whiteman). Industry assessment and measurement (Richmond). We even offer a crossword puzzle for fun.

DEADLINE FOR ARTICLE SUBMISSION

August 1!

If you're interested in submitting an article for the next addition of this newsletter, our editorial timetable calls for draft copy to be submitted by August 1. If you are interested, please call Karl Tourville, Galliard Capital Management (612) 677-8033

STABLE *times*

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Message From The President

As most of you are well aware, one of the primary directives of the Stable Value Investment Association is to develop a comprehensive communications strategy that will successfully deliver our message points to key audiences. While there are both broadcast and target components of our plan, we believe the latter may well provide the most "hits" at the least cost. The following is a brief description of the target portion of the plan that we have developed, which centers around five key target audiences, each of which has a reason or need to hear our message about the benefits of stable value:

1) The first group we are targeting is **corporate financial decisionmakers**. These include CFO's as well human resources and benefits executives who are involved in the investment selection process for their organization's retirement plan investments. We need to make certain that these executives understand the benefits of stable value over other fixed income options and, perhaps most importantly, that they do not remove existing stable value funds. The message to this audience is that stable value is the best fixed income option, and should not be excluded in favor of money market and bond accounts.

2) The second target group is **financial planners**, a group with an increasingly important role to play in distributing investment advice to DC plan participants. Currently, stable value is not part of the curriculum required to earn a Certified Financial Planner (CFP) designation. We have contacted the College of Financial Planning in Denver and convinced them that stable value should be included in their educational materials as part of the required knowledge base. However, there are more opportunities to reach CFP's and other fee-based planners. Articles in the financial planning trade journals and continuing education programs are just two of these vehicles for delivering the message, which is simple and direct: Stable value has uniquely attractive investment characteristics, which we can demonstrate quantitatively.

3) **Women**, especially those in the workforce, are another target group. Numerous studies tell us that women approach the investing process somewhat differently than men do. A woman tends to invest with a carefully reasoned, highly research-oriented approach and is generally more satisfied with hitting "singles" and "doubles" as opposed to home-runs. Our research showing the diversification benefits of stable value should find a receptive audience with most women, the message being that stable value in a retirement portfolio can be the foundation for long-term saving success.

Finley, how come OUR mutual fund isn't on the Forbes *honor roll of nine investment funds that have consistently outperformed the averages and amply protected their investors against inflation?*

4) **Small business owners** are also included in our group of target audiences. Since most smaller employers can offer only a limited number of investment options in their plan, the benefits of having stable value as **the** fixed income option allows for as wide a range of options as possible. Our message of combining stable value with equities to achieve diversification is very compelling. In addition, most small business owners do not have a great deal of time and attention to devote to these issues, so they need clear, concise, practical advice that is easily implemented and effective in terms of the result.

5. Finally, we need to reach the **pre- and post- retiree** audience, which is a highly sought-after group. Financial services companies have focused on this segment, so it may be the most challenging group of the five. Our message stresses that the stable value option is a major benefit of participating in a defined contribution plan. Retirees currently cannot invest in stable value through any other channels, so they should maximize their investment opportunities by leaving at least some portion of their retirement assets inside their DC plan. As pre-retirees approache retirement and the distribution phase of their financial life, traditional financial planning advice would call for an increasing allocation to fixed income.

The Association is working hard to make headway in educating these five key audiences, through a variety of tactical media relations outreach efforts. We have received favorable feedback thus far, and believe that we will make significant inroads. This targeted effort will take place over a relatively long time horizon, and success will be measured incrementally.

Current Status of the Life Insurance Industry

by Allan G. Richmond, T. Rowe Price

Surplus rose 14.2% in 1997, an improvement over the 9.8% growth experienced in 1996. Moreover, commercial mortgage delinquency rates fell to their lowest level since 1984, while the substantial growth in after-tax gains from operation produced the highest return on equity since 1993.

Financial Results for 1997

Operating earnings in 1997 increased by 22.7% over the prior year. The favorable results for the year were attributable to (1) wider spreads on interest-sensitive products enjoyed by insurers, as 2 year to 30 year Treasury yields declined by 20 to 70 basis points during 1997 compared to a 70 to 80 basis point rise during 1996, and (2) a significant increase in fees on variable products as a result of the substantial growth in separate account equity assets under management, as the Dow Jones Industrial Average completed its third straight year of 20% plus returns.

However, the most notable reason for the favorable growth in surplus in 1997 was the rise in net capital gains, which were 74.5% greater than the prior year, because of the substantially more favorable movement in interest rates in 1997 versus 1996, as noted above. On the other hand, surplus paid out as dividends exceeded surplus paid-in for the fourth consecutive year, as capital continued to be allocated to other subsidiaries outside of the life insurance industry that generated higher returns on equity.

The confluence of these factors produced a return on equity of 9.6% in 1997, above the average of 9.3% for the 1990-1996 period. Moreover, the ratio of capital-to-assets climbed to 11.4% at year-end 1997, which continued its steady rise from 7.3% at year-end 1990.

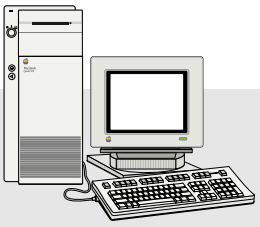
Along with the favorable trend in the industry's capital ratio was a similar rise in the risk-based capital (RBC) ratio used by state regulators to monitor insurance company solvency. The composite ratio at year-end 1997 was 276%, up from 244% in 1995 and 258% in 1996, which is almost three times the amount of capital required. The improvement has occurred as a result of the decrease in risk on both sides of the balance sheet, e.g.,

- Commercial mortgages and real estate have declined from approximately 22% of cash and invested assets at year-end 1992 to about 14% at year-end 1997. Companies have taken advantage of the improvements in the commercial real estate market and divested a significant amount of their portfolio, both currently performing as well as problem properties.
- Insurers have been exiting the capital-intensive and volatile medical and disability income lines of business and reinvesting the proceeds into their core life insurance and asset accumulation product lines. In many cases, the medical business is being sold to managed care companies outside of the life insurance industry, while disability income sales are either being curtailed or products are being redesigned to provide better loss ratio experience.
- The focus in the life and asset accumulation lines has shifted from general account guaranteed spread-based products to lower margin, lower risk separate account fee-based products. In this regard, the in-force block of guaranteed investment contracts (GICs) declined by approximately 13% during 1997, as many insurers continued to run off their existing block, while other companies replaced sales of traditional GICs with off-balance, fee-based synthetic GICs. It is not surprising that general account assets only grew by about 5% in 1997, while separate account assets, which is where variable life and annuity assets reside, rose by almost 25%.

> Acquisitions and mergers in the U.S. insurance industry more than doubled in 1997.

Asset Quality

Below investment grade bonds have increased from between 3.5% - 4.0% of general account assets at 12/31/96 to between 4.5% - 5.0% at 12/31/97. The demand for such high-yield bonds has grown because investment grade corporate bond yields have fallen and because fears of corporate bankruptcies have subsided due to the strong economy. With the need to credit competitive yields on products, insurers have been forced to move down in credit quality to maintain margins and produce desired returns. Fortunately for insurers, supply has not been a major problem, as favorable economic conditions resulted in $111 billion of high-yield security issuance in 1997, almost three times the $39 billion issued in 1996.



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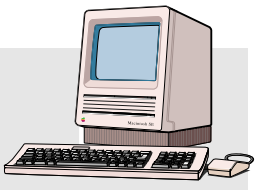


WWW. STABLEVALUE.COM

It's full of late-breaking news about what's happening in the stable value industry, as well as downloadable text of monographs and newsletters.

The commercial mortgage delinquency rate declined to 0.90% of the portfolio in the fourth quarter of 1997, from 1.33% in the third quarter of 1997 and from 1.79% and 2.35% one and two years prior. In addition, restructured loans fell for the twelfth straight quarter, to 4.61% of the loan portfolio in the fourth quarter of 1997, a significant decline from 6.81% and 8.27% one and two years ago. Moreover, foreclosures on commercial properties for 1997 were 20% below the 1996 level, 56% below the 1995 level, and 80% below the 1992 level, the height of the real estate recession.

The favorable trend in results reflects the continuation of low vacancy rates in the Office Building sector, sales of property to REITS which have included marginal properties previously reported as delinquent, and the sale, payment in full, or return to good standing of several large restructured loans. It is interesting to note that in 1997 the contraction of commercial mortgages as an asset class, which began in 1990, appears to have ended, with year-end 1997 and 1996 commercial mortgage portfolios being comparable in size. The shrinking mortgage portfolio was a reflection of the desire to improve overall portfolio quality as well as the high capital requirements assessed for mortgages compared to fixed income investments. The current plateau reflects the fact that mortgage originations have been growing, which is due to the significant premium of mortgage yields over comparable duration Treasuries versus that for corporate bonds, and the life insurance companies' need to enhance overall portfolio yields

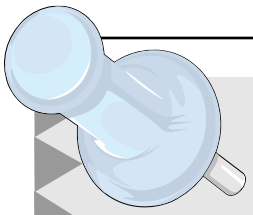
Current Industry Issues: The "Urge to Merge"

Acquisitions and mergers in the U.S. insurance industry more than doubled in 1997, as a result of lower interest rates and a booming stock market and the need to grow revenues and reduce expenses. Low interest rates have made bank financing costs relatively inexpensive, while the equity markets have made acquisitions using company stock an equally attractive alternative. Moreover, the rating agencies have focused on "sustainable competitive advantage" and "diversified sources of distribution" as the keys to maintaining and/or enhancing ratings, and often these only can be accomplished in the near- to medium-term through an acquisition or merger.

Also spurring the trend is the difficulty that companies are having in increasing earnings per share, due to growing competition both from inside and outside the industry which has compressed margins. This has caused insurers to have to work on both the revenue and expense sides of the profit equation. With life insurance sales remaining stagnant and property/casualty premiums declining due to over-capacity in the market, significant top line growth can often be accomplished only through an acquisition or merger. Moreover, although technology continues to contribute to cost savings through productivity improvements, the industry is beginning to reach diminishing returns in reducing unit costs that can only be meaningfully addressed through the purchase of blocks of business.

Lastly, many of the larger insurance companies are mutuals, owned by the policyholders, with less incentive to take the necessary steps to increase profitability and return on equity. However, with the advent of mutual holding company legislation and the realization by mutual company executives that they do not have a currency to make acquisitions unless they can issue stock, the stage is set for another round of consolidation during the next few years.

Some of the figures in this report were obtained from (1) The Townsend and Schupp December 31, 1997 LIBRA Review and (2) the ACLI Mortgage Loan Portfolio Profile report as of December 31, 1997.



Make A Note!

The 1998 Stable Value Investment Association National Forum will take place October 28-29 at the ANA Hotel in Washington, DC. Don't miss what is sure to be a must-attend event. In addition, SVIA is offering Forum Sponsorhips, which can provide additional opportunities to promote your products and organization.

Also, all members are invited to attend the open SVIA Board Meeting, the morning of October 27. This is a great opportunity to get involved in the Association and its on-going initiatives.

For further information call SVIA at (202) 463-9044.
Or fax us at (202) 463-7590

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Sex, Lies and Performance Measurement

by Allan Fen, Fidelity Managed Income Group

Marriage and other personal relationships are built upon a foundation of trust, in theory at least, but in business this isn't enough. Accountability is also needed. With investment management, this takes the form of investment guidelines, fiduciary responsibility, and, except for stable value, performance benchmarks. With stable value, it's more of a subjective "trust me" standard. For plan fiduciaries, the best we can offer are endless mind-numbing debates and outrageous claims about which investment strategy or manager is superior. Until now.

At the recent conference in Orlando, the SVIA Performance Measurement Task Force gave a presentation summarizing the exposure draft recently released which introduces a new framework for performance measurement . When comparing performance between stable value funds or with benchmarks, the task force is advocating the use of "economic value" as opposed to book value. This is just extending the practice which is already used with wrapped evergreen bond funds to laddered portfolios as well.

The two primary shortcomings of using book value for performance measurement are delayed gain/loss recognition and cash flow distortions. One can get a better understanding of the nature of these two problems by looking at some examples comparing book value and economic value performance under a various interest rate, investment strategy and cash flow assumptions.

Delayed Gain/Loss Recognition

Delayed Gain/Loss recognition occurs because capital gains and losses are not immediately recognized when using book value returns. The longer the portfolio, the slower the emergence of these gains and losses. Let's look at the performance of two portfolios, one a 3-year laddered portfolio with annual payouts, and the other a 6-year laddered portfolio with annual payouts. Rates are assumed to be at 6% when the portfolios are created. Over a seven year simulation, we assume rates rise to 12% and then drop back to 6% by the end of year seven with a flat yield curve throughout. Payouts are reinvested out three or six years, depending on the portfolio and there is no external cash flow. Table 1 shows the results:

Table 1

YR	Market Rate	Book Value Returns LAD3	Book Value Returns LAD6	Economic Value Returns LAD3	Economic Value Returns LAD6
0	6%				
1	8%	6.00%	6.00%	4.05%	1.21%
2	10%	6.67%	6.33%	6.04%	3.22%
3	12%	8.00%	7.00%	8.02%	5.18%
4	12%	9.98%	8.01%	12.00%	12.00%
5	10%	11.33%	9.03%	14.05%	17.36%
6	8%	11.33%	9.72%	12.04%	15.32%
7	6%	10.00%	10.06%	10.02%	13.11%
	AVG	9.02%	8.01%	9.41%	9.47%

On a book value basis, the shorter portfolio outperforms in all years except the first and last, when the returns are about the same. Over the seven years, the shorter portfolio outperforms by 1.01% average annualized return. The chart below shows the comparison on a book value basis.

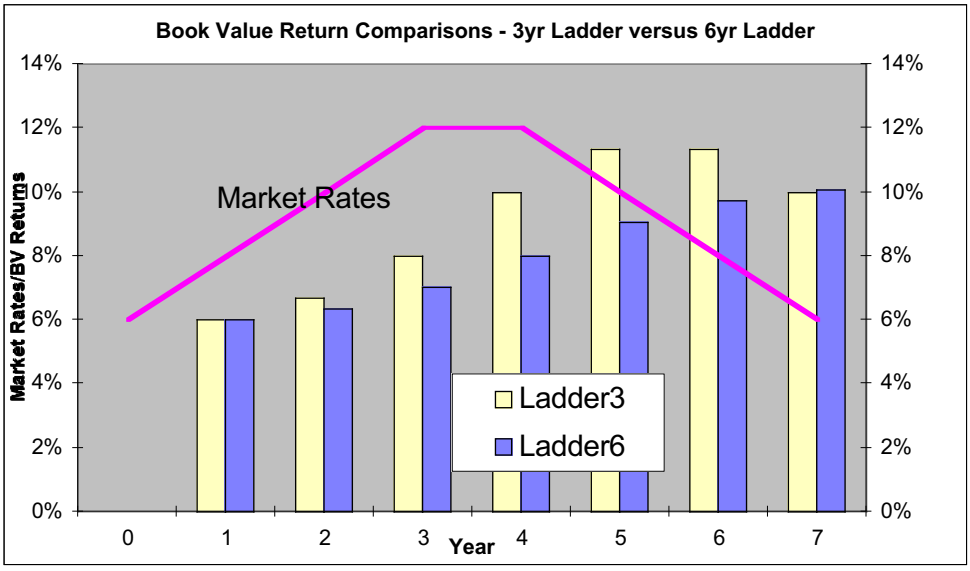
If rates were assumed to go down and then back up, the long portfolio would have the advantage on a book value basis.

On an economic value basis, the results are much more intuitive with the short portfolio outperforming as rates rise, identical performance when rates hold steady, and the long portfolio outperforming when rates fall.

Over the entire term, the two portfolios are very close, as one might expect during a period when rates end up at the same point they started. Year 5 shows the biggest contrast with the short portfolio, despite a sharp drop in rates, outperforming by over 2% on a book value basis but underperforming by over 3% on an economic value basis. The chart below shows the comparison on an economic value basis.

A plan sponsor comparing the two portfolios on a book value basis would clearly give the advantage to the short portfolio. The larger unrecognized gains in the longer portfolio (approx. [9.47%-8.01%]x7) will emerge slowly over time when using book value.

Chart 1



Economic value gives a more valid comparison because of immediate recognition of capital gains and losses.

Cash Flow Distortions

Two portfolios with identical structure and reinvestment strategy will generally have different performance if the external cash flows are different. Valid comparisons between funds or managers are problematic when a factor outside the control of the fund manager impacts performance.

Let's compare two 6-year laddered portfolios which have the same reinvestment strategy and structure. Maturing proceeds are reinvested out six years. External cash flow, positive or negative, is allocated equally (prorata) across all "rungs" of the laddered structure for reinvestment or disinvestment, maintaining identical structure for the two portfolios. We assume the same rate scenario as the previous example and that one portfolio has -10% annual external cash flow while the other portfolio has cash flow of +10% annually.

Table 2 shows the performance of the two portfolios on a book value and economic value basis.

On a book value basis, the portfolio with positive cash flow outperforms in every year but the first and last. In Year 5, it outperforms by 1.62% and over the entire period, it outperforms by .75% average annualized return. A plan sponsor looking at book value returns would likely draw the mistaken conclusion that this portfolio was significantly better managed.

On an economic value basis, the performance each year is the same for the two portfolios and is the same as the portfolio with no external cash flow shown in the first table. The level of external cash flow has no effect on performance. Economic value is the only way to neutralize the cash flow impact.

With immediate recognition of capital gains and losses and by neutralizing the impact of cash flow, stable value fund performance measurement using economic value provides plans sponsors, consultants and fund managers a better way of comparing performance between funds and with benchmarks. Plan fiduciaries, on one hand, can hold managers accountable just as they do with other asset classes. The managers, in turn, can make more credible claims about performance. Only with accountability is there credibility. Amen.

Chart 2

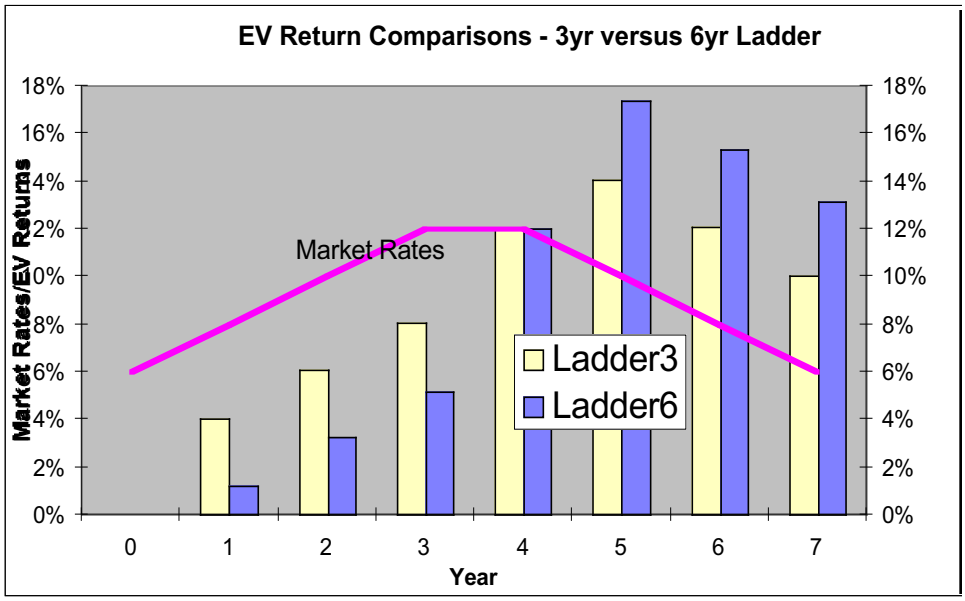


Table 2

YR	Market Rate	Book Value Returns -10% CF	Book Value Returns +10% CF	Economic Value Returns -10% CF	Economic Value Returns +10% CF
0	6%				
1	8%	6.00%	6.00%	1.21%	1.21%
2	10%	6.16%	6.48%	3.22%	3.22%
3	12%	6.54%	7.37%	5.18%	5.18%
4	12%	7.22%	8.61%	12.00%	12.00%
5	10%	8.07%	9.69%	17.36%	17.36%
6	8%	9.00%	10.13%	15.32%	15.32%
7	6%	10.03%	9.93%	13.11%	13.11%
	AVG	7.56%	8.31%	9.47%	9.47%

Cost of Buy-and-Hold

(Continued from page 1)

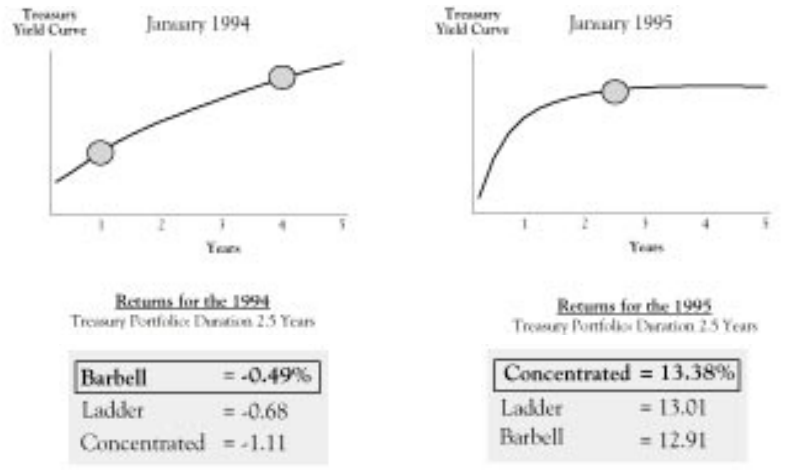
- A concentrated portfolio—in which all the assets are concentrated in the 2.5-year area.

All of these structures can have the same 2.5-year duration and hence the same sensitivity to general shifts in interest rates.

Recall how a bond's yield typically varies according to its maturity. Normally, the longer the bond's maturity, the higher the yield. However, this is not always the case—sometimes the yield curve is inverted. At other times it has more or less curvature than is "normal." Each yield curve shape is associated with a specific maturity structure that is likely to perform best when both yield and price changes are taken into account. Only through active management is it possible to adjust a portfolio's maturity structure to take advantage of yield curve changes.

To demonstrate the impact of maturity structure on returns, we have computed the returns for the three maturity structures discussed above during two different interest-rate environments. The results can be found in Display 1.

DISPLAY 1



Assumptions: The laddered portfolio contains bonds with maturities from 3 month to 5-years; the concentrated portfolio contains 2.5-year bonds; and the barbelled portfolio contains 1 and 4-year bonds. Bonds in all portfolios are allocated so that duration remains at a constant 2.5-years, and portfolios are rebalanced monthly.

At the beginning of 1994, yields increased linearly between one year and five years at a very steep incline. In such an environment, a barbell portfolio is generally optimal because it should outperform as normal curvature returns to the yield curve (rates on the intermediate section of this curve should rise relative to the short and long maturities) and the curve becomes less steep. In the left panel of Display 1, we see that the barbell strategy outperformed both the ladder and concentrated strategies over the subsequent twelve months.

At the beginning of 1995, there was more curvature out to the five-year point than is typical. In this environment, a concentrated portfolio is generally optimal because it should outperform as intermediate rates fall relative to the end points. In the right panel of Display 1, we see that the concentrated strategy outperformed the ladder and barbell strategies over the subsequent twelve months.

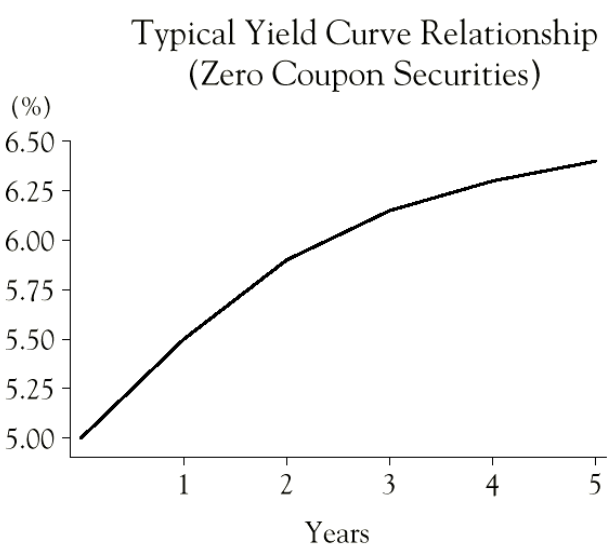
As these examples show, the ability to adjust the portfolio's maturity structure in response to the changing yield curve environment can increase returns. However, if one *were forced* to choose just one maturity construction for a portfolio, the choice would be a concentrated portfolio, not a ladder. A concentrated portfolio has the highest expected return when the yield curve has a "normal" amount of steepness and curvature.

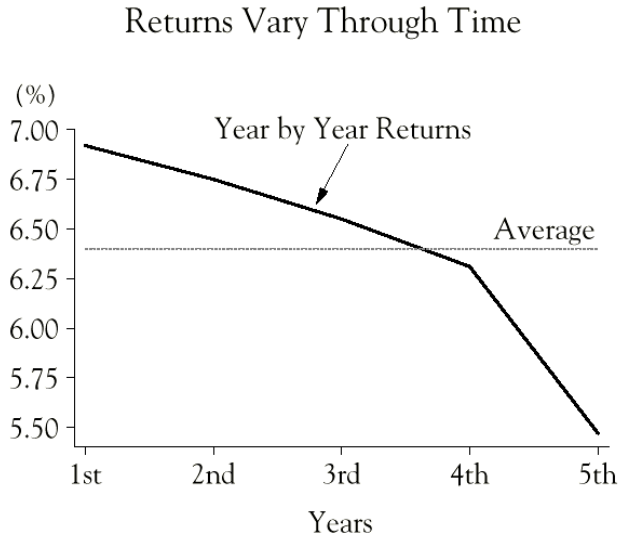
Selling Securities Before They Become Cash Equivalents

Another benefit of active management is the ability to take advantage of the price changes that result naturally as a bond's maturity shortens. Let's start with the left panel of Display 2, which shows a normal spot yield curve from three months to five years, with longer bonds having higher yields. The effect of these yield differences on returns is shown in the right panel of Display 2. If interest rates are stable, a bond's total return in the first few years will be higher than its original yield-to-maturity, as price appreciation from "rolling down the yield curve" supplements its yield. Consider a five-year zero coupon bond with a yield-to-maturity of 6.40%. After one year, the yield-to-maturity falls to 6.27% (that of a four-year security) and its price will increase, to produce a total return of 6.92%[1] or 0.52% more than its original yield. Now, we know that if this bond is held until maturity, the average return must equal its original yield of 6.40%. As Display 3 shows, the extra return earned in the first three years is subsequently given up in the last two, with the majority of the loss occurring in the final year, when the total return is only 5.47%. This analysis also applies to traditional GICs: they earn a fixed rate over their life, but that essentially represents the average of their annual economic returns – higher returns than average during the initial years and lower returns than average during the cash equivalent period.

This pattern of price changes creates a return opportunity that can be captured by selling bonds prior to their maturity—something that is achievable only with active management. Display 3 shows how a simple "active" strategy can take advantage of this relationship. A buy-and-hold ladder composed of securities that initially had five years until maturity is shown on the left. While the annual return for each security in the portfolio is different because of "roll," the average return is 6.40%—the yield on the five-year zero coupon bond. The "active" portfolio is shown in the right panel. Instead of holding each bond until maturity, we assume the bonds are sold one year prior to maturity. In order to ensure that the two strategies maintain the same average duration, we assume that four-year bonds are purchased instead of five-year securities. As you can see, this simple strategy offers a higher expected return (6.54% instead of 6.40%) even though lower- yielding four-year bonds were purchased. This strategy generates a higher return without altering the duration or risk of the portfolio. This is an example of how active management strategies can *optimize* the use of fixed income instruments—squeezing out the most return possible *without* increasing the absolute level of risk in a portfolio.

DISPLAY 2





It is interesting that almost all the standard fixed income benchmarks (e.g., the Lehman Aggregate Index and the Salomon Broad Index) are computed assuming that bonds are sold when they have one year left before maturity; the indices are structured to capture the benefits of roll. Therefore, even a manager generating benchmark-like returns should outperform a buy-and-hold strategy.

Additionally, stable value portfolio returns are often dragged down by the typical STIF that buffers a buy-and-hold ladder to avoid accessing GIC contracts. Since withdrawals from an actively managed wrapped bond fund can be funded by selling liquid bonds, stable value funds can be structured without (or with very small) cash buffers—generating an additional return advantage for participants.

Conclusion

The optimal maturity structure varies as the shape of the yield curve changes. With active management, a plan can take advantage of these changes by adjusting the portfolio structure. The benefits of roll can be captured by selling securities prior to their maturity. Of course, other factors matter, but these yield curve factors can be isolated to increase a portfolio's returns versus a buy-and-hold approach. Furthermore, cash buffers, which are typically a detriment to stable value fund returns, can be significantly minimized through the active management of liquid securities.

[1] For those familiar with bond mathematics, this was the implied one year forward rate beginning four years from the analysis' start date.

DISPLAY 3

Buy 5-Year Securities and Hold to Maturity

Weight	Years to Maturity (Start of Year)	Years to Maturity (End of Year)	Annual Return
20%	5	5	6.92%
20	4	4	6.75
20	3	3	6.55
20	2	2	6.31
20	1	1	5.47
Average	3.00	2.00	6.40%

Buy 4-Year Securities and Sell 1-Year Before Maturity

Weight	Years to Maturity (Start of Year)	Years to Maturity (End of Year)	Annual Return
33%	4	3	6.75%
33	3	2	6.55
33	2	1	6.31
Average	3.00	2.00	6.54

Credit Enhanced GICs

(Continued from page 1)

are overcollateralized in relation to the liabilities. Second, should this diversified portfolio prove insufficient to satisfy the liabilities, the general account of the insurer is available to satisfy any remaining obligations. Third, in the highly unlikely event that these two levels of protection prove insufficient, there is an independent guarantee from a monoline [1]insurer to satisfy any remaining obligations.

The CE-GIC will provide timely payment in the unlikely event of an insolvency of the issuers. With a traditional GIC, if the issuer enters rehabilitation the GIC is subject to the structure of the rehabilitation plan. A CE-GIC in the same circumstance will provide the contract holder with payments in accordance with the original contract structure. If the insulated separate account and the issuer are unable to make timely payment, the independent monoline insurer will make the payment and assume the contract holder's position in the rehabilitation.

It is this bulletproof structure that earns the CE-GIC its triple-A rating. If we examine the links of the chain supporting the CE-GIC, we note that it is supported by an investment grade overcollateralized separate account, an insurance company, and a triple-A monoline insurer. Intuitively, it seems reasonable that the joint probability of default for this product is less than that for a traditional GIC, even a GIC issued by a triple-A issuer. Exhibit 1 uses Moody's Bond Default data to illustrate this point. The estimated probability of default for the CE-GIC, 0.00003%, is virtually zero. Of course these calculations do not recognize the correlation, if any, between the variables. But absent perfect correlation the default probability for the CE-GIC must be less than that of the GIC issued by a AAA company, due to the two primary guarantors in addition to the AAA guarantor.

The security of this structure is not free. If we assume that the GIC market is a double-A market, Exhibits 2 and 3 detail that the CE-GIC should be an attractive alternative to traditional GICs at a yield 8-10bp lower than the yield on a traditional GIC.

Exhibit 1

		5 year Cumulative Bond Default Rates *
Investment Grade Separate Account:		**1.31%**
A1 GIC Issuer:		**0.85%**
Aaa Credit Wrap:	*	**0.24%**
CE-GIC:		**0.00003% (unadjusted)**
v.		
AAA GIC Issuer:		**0.24%**

* Source: Historical Default Rates of Corporate Bond Issuers, 1920-1997. Moody's Investors Service

"Why Stable Value" Presentation Available On-Line

Do you need to convince your Investment Committee that the stable value option really makes sense for your participants? Have you been asked to give a talk to a DC audience? Do you need materials for a client workshop? Rescue is as close as your Internet connection.

Why Stable Value is a readily downloadable presentation which Judy Markland has made available to the stable value industry at www.lmstrategies.com. You'll find text and hard copy versions of the presentation slides at the web site. If you contact Judy at jmarkland@lmstrategies.com or 781©860©7320, she'll email you a Powerpoint file so that you can generate your own copies of the slides.

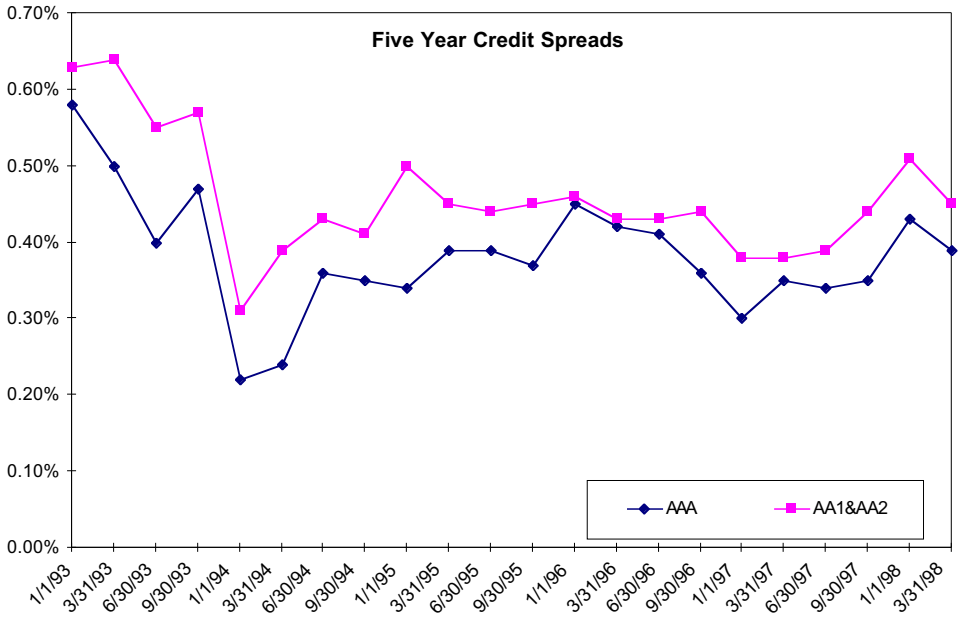
Unfortunately, the GIC market is far from efficient, and on any given day the rate offered on a CE-GIC may be significantly lower (or even higher) than the yield offered on a traditional GIC.

In addition to offering the highest possible credit rating, CE-GICs also provide a portfolio manager with additional diversification. The simplest analysis of a CE-GIC would imply that the ultimate guarantor, the monoline insurer, is the 'name' for diversification. A more detailed analysis reveals that the CE-GIC is a name onto itself.

The product carries its own independent rating. It does not carry a triple-A rating solely because of the involvement of the monoline insurer. The structure and protections inherent in the program earn the triple-A rating for the CE-GIC product. The program's three independent guarantees - an overcollateralized insulated separate account, a financially secure insurer and a monoline insurer - need to be considered simultaneously when evaluating diversification, just as they need to be considered simultaneously when evaluating credit rating. An exposure to a CE-GIC involves a partial exposure to all three of the guarantors of the program. Simplistically, this might equate to a one-third exposure to each name, and enable a portfolio manager to allocate a greater portion of assets to this one aggregate name. In reality, the layers of protection inherent in this product allow for an allocation level much greater than three times the "unenhanced" name limit. A more detailed analysis is beyond the scope of this article, but several articles have been written on the topic of issuer exposure as it applies to credit-enhanced bonds (notably, ***Measuring Surety-Provider Exposure: The Rap on Wrappers***. CS First Boston, 7 August 1996.) and the theories used in these articles can be expanded to include the additional layer of diversification inherent in the CE-GIC.

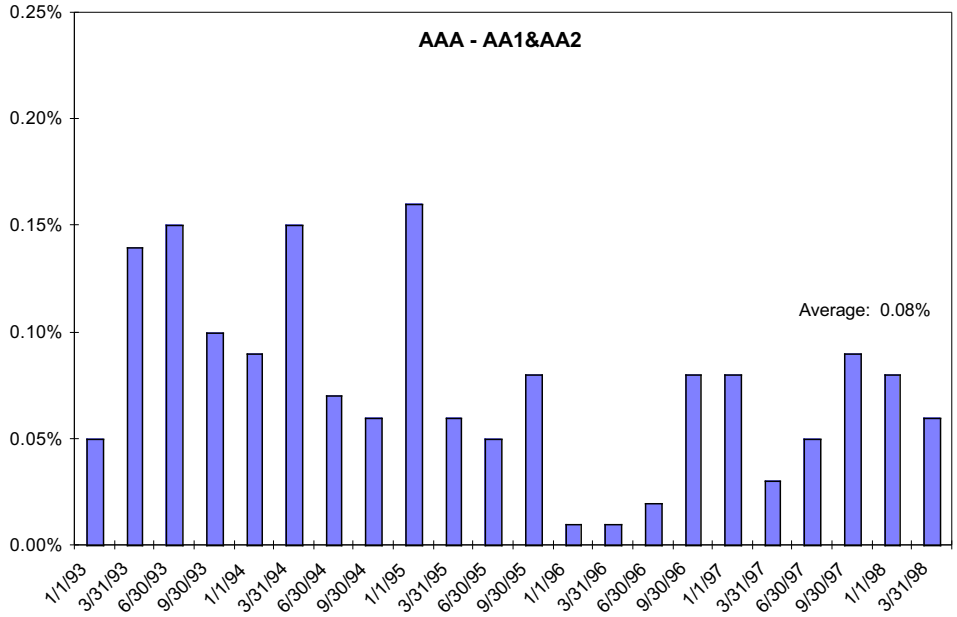
The CE-GIC recreates the traditional GIC as it was first introduced. It is a product that customizes to the cash flow needs of the plan, provides benefit responsiveness, carries a guaranteed crediting rate and offers a payment guarantee that is only surpassed by that of the U.S. Government. A CE-GIC does not always provide the yield potential of a traditional GIC, but for conservative buyers, the benefits of security and diversification far outweigh the costs.

Exhibit 2



Source: Bloomberg L.P.
5yr Bank & Finance Spreads

Exhibit 3



Source: Bloomberg L.P.
5yr Bank & Finance Spreads

Performance Measurement and Strategic Allocation for Stable Value Funds (EPILOGUE)

by K. Daniel Libby, IBM Retirement Fund

It is (not) with mixed emotions that I embark on my third and final article in this series for the ***Stable Times*** quarterly. I have enjoyed giving my thoughts on topics that I feel are of central importance to this market. In fact, these issues, benchmarking and strategic asset allocation for stable value funds, are perhaps more important now than ever. The environment in which stable value now resides is potentially much less friendly than at any time in its history.

The **plan environment** now includes daily transfers, greater education /communication, increasing investment options, and increasing participant dollars without a tax on withdrawals, (e.g. retired, inactive and those over age 59 1/2). The **interest rate environment** now is comprised of lower levels of absolute rates together with compressed credit and volatility spreads. The **asset class environment** for stable value is such that current blended rates are no longer padded with as much economic gain as was once the case. In addition, stable value has matured as an asset class and will never again see the rapid growth that was experienced in the 1980s; such growth could assist crediting rate performance in a rising rate environment. To the contrary, many funds have reached a size whereby transfer activity may now be the dominant component of fund cashflows.

Against this potentially turbulent backdrop, stable value still holds an important and unique place for defined contribution investors. If managed well, there is still no better vehicle for investors to receive their income allocation than a stable value fund. But, these funds cannot be considered well managed unless they are strategically directed and properly measured.

Economic Value Based Benchmarks

The initial article in this series focused on the peculiarities of stable value funds and the implications for performance measurement. While many support economic value-based benchmarks, I suspect that questions remain: "Shouldn't the benefit responsive risk associated with these portfolios be measured, managed and benchmarked?" Stated differently, "Should the cashflow's effect on performance be included in the measure of an asset class manager's performance? If not, shouldn't the manager of the asset class be responsible for purchasing the optimal level of insurance at the optimal price?"

As that article states, the effects of cashflow should be removed from the measure of the manager's performance. In fact, even crediting rate-based measures that have been proposed include an adjustment for plan-specific cashflow experience. The effect of the participant's cashflows do not reflect the investment manager's talents and therefore should not enter into the performance numbers for the purposes of judging his performance.

These funds cannot be considered well managed unless they are strategically directed and properly measured.

As for the second question, certainly it is the fiduciary obligation of the asset class manager to structure and purchase the benefit responsive insurance for his portfolio in the best manner possible. However, should he be measured on his ability to do so ex-post? Well yes, if it is thought that his decisions violated his fiduciary obligation to his participants. But otherwise, his decision as to the purchase of benefit responsive insurance, either in the form of GICs, participating wrappers or hybrid wrappers, has much more in common with decisions about the purchase of other forms of insurance than with, for example, active management of an options portfolio. Decisions that relate to the purchase of insurance are long-dated decisions that are seldom rebalanced. Similarly, the benefit responsive insurance embedded in a fund is not normally detachable and tradable from a plan. And while managing an options portfolio allows for continuous decision making with the aim of maintaining an optimal portfolio as measured against some passive benchmark, there can be no standardized benchmark by which to measure the benefit responsive risk of a plan. Almost by definition, the benefit responsive risk of a plan will always be unique to the demographics, culture, communication and plan structure of a savings plan.

This leads to the conclusion that the insurance purchased in these funds should be reflected in performance as a cost of doing business in this market. Managing the benefit responsive insurance is not part of an investment management process from which an active alpha can be earned. Investment decisions and performance should be considered on an after-expense basis. In this way, the performance of the portfolio will include the performance (and/or expense) of the benefit responsive insurance.

It is true that comparisons with the performance of portfolios that do not have these costs are needed from time to time. However, when this is needed it is straightforward in today's market to price the cost of benefit responsive insurance for the overall plan and "gross up" the performance of a stable value fund to allow for direct comparisons.

Strategic Asset Allocation

The follow-up article in this trilogy focused on the companion topic of strategic asset allocation for stable value funds. Although the discussion laid out a specific approach, other approaches are possible. The most important step may be in resolving to make any decision at all. After all, as the saying goes, "If you don't know where you're

going, any road will take you there." Clearly, it is better to lay out some rationale that is consistent with a strategic or policy goal and then set about to manage assets as efficiently as possible against such a goal. The strategic asset allocation decision is widely regarded as the most important decision affecting portfolio returns that a manager can make.

The article concluded by mentioning a couple of open topics that could be addressed in future articles. One was a sensitivity analysis of the effect on interest rate tracking from adopting the strategic allocation proposed in the article: 50% in evergreen mandate(s) and 50% in a ladder of maturities. Interest rate tracking is usually an objective in its own right for stable value funds. It is an objective that is consistent with the stability of principal objective, but at odds with an objective of earning the highest returns possible. No discussion about strategic allocation for stable value funds can be complete without considering its potential effect on interest rate tracking. In the interest of brevity, this portion of the discussion was deferred until this issue.

The following table shows the effect on the credited rate from extending a stable value fund's duration from a 2.5 to 3.5 years. The 2.5 year-duration fund corresponds to a typical stable value fund's duration while the 3.5 year-duration is what would be approximated by the adoption of the strategic benchmark as outlined above.

The assumptions behind the analysis are that the 3.5 year-duration fund enjoys a 25 basis point initial crediting rate advantage over the 2.5 year fund. This corresponds to the approximate historical steepness of the curve in the two- to three- year area. The net withdrawal experience is assumed initially to be zero. Then, over the course of four quarters interest rates increase and withdrawal experience ramps up to levels as shown across the rows and columns in the table. Each cell shows the resulting difference in the crediting rates at the end of the 20th quarter. At that point, the effect on the crediting rate has fully incorporated the stress of the scenario to its maximum effect. A negative entry shows that the initial crediting rate advantage enjoyed by the longer duration fund has fallen below the shorter duration fund.

Several points are worth noting about the severity of the scenarios that are shown. Interest rates are assumed to increase up to as much as 400 basis points from their initial levels and remain at those levels for five years. Likewise, net withdrawal activity is assumed to increase to a level of net fund shrinkage of as much as 20% per year and remain at those levels for five years. That kind of negative growth would imply negative transfer activity that is many multiples greater and longer than recent equity markets have been able to generate. Furthermore, the analysis assumes no "corrective actions" are made to the strategic allocation in any of the scenarios. Beginning with a scenario analysis such as this, an investment manager can begin to evaluate the efficacy of a policy change.

Conclusion

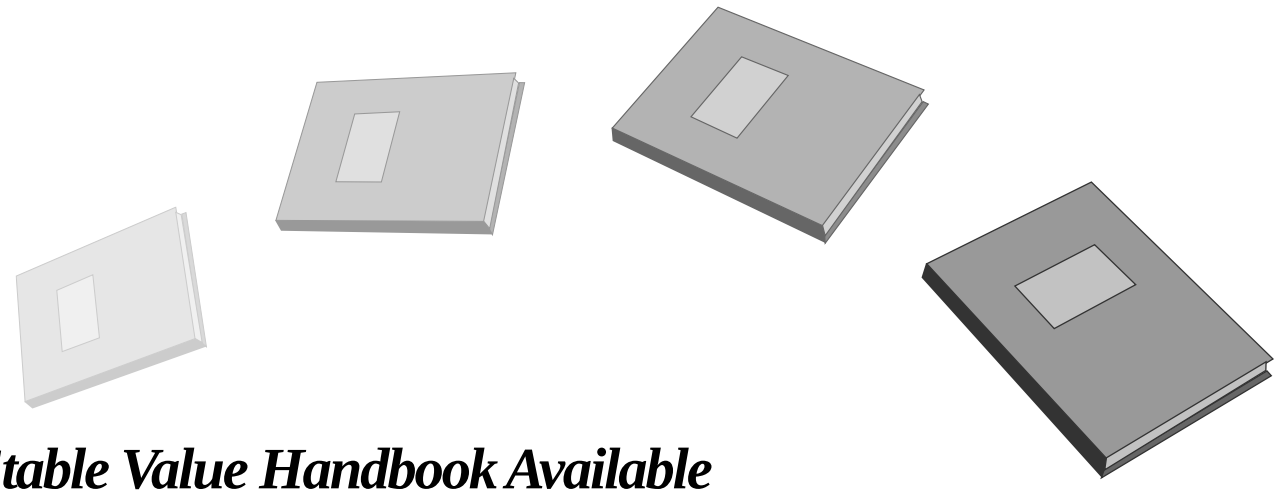
The approach in these articles has been to optimally target liquidity before considering an allocation's impact on interest rate tracking. The benefit of this approach is that it begins with the historical cash flow data particular to a plan and seeks to minimize the inequities that transfer activity has over time on participants. Of course any decision to affect a strategic change in a fund must be evaluated in light of the context of a specific plan.

In this article, we illustrated one method of evaluating the tradeoffs that arise from a strategic decision which entails lengthening the target duration of a stable value portfolio. More sophisticated variations could be adopted using probabilities or stochastic processes. But at the heart of any good analysis is a close understanding of the make-up and history of any plan/fund and its cashflows. Only then is it possible to make an informed evaluation of any analysis.

Above all, stable value funds have long occupied an important place in the investment line-up. There is no better time than the present to begin to adopt the common investment community "best practices" of economic value benchmarking and strategic asset allocation.

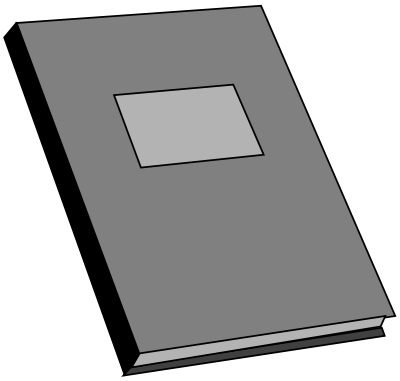
Crediting Rate Differential ***3.5 Year Stable Value Funds vs. 2.5 Year Stable Value Funds, 5 Year Horizon***

Fund Shrinkage	Yield Curve Changes +0 bps	+100 bps	+200 bps	+300 bps	+400 bps
- 0% Yrly	0.25%	0.13%	0.03%	-0.09%	-0.20%
- 4% Yrly	0.25%	0.12%	-0.02%	-0.15%	-0.29%
- 8% Yrly	0.25%	0.09%	-0.07%	-0.24%	-0.40%
-12% Yrly	0.25%	0.06%	-0.14%	-0.34%	-0.54%
-16% Yrly	0.25%	0.02%	-0.22%	-0.46%	-0.71%
-20% Yrly	0.25%	-0.03	-0.32%	-0.62%	-0.93%



Stable Value Handbook Available

The Handbook of Stable Value Investing, published by Frank J. Fabozzi Associates, is now available. In production for over a year, the book is believed to be the most comprehensive, single body of information ever compiled on stable value investing. It contains research on all aspects of stable value, including guaranteed investment contracts, synthetics, portfolio management, and credit analysis, as well as pricing and legal issues. The contributing authors are some of the industry's leading professionals in their areas of expertise. The book has 18 chapters and is approximately 400 pages. It can be ordered by phoning (215)598-8930 or via fax at (215)598-8932. Its retail price is $95.



SVIA MEMBERSHIP DUES ARE FULLY DEDUCTIBLE!

Some time ago, Federal tax law affecting the deductibility of Association dues was changed. Specifically, the percentage of member dues used by an Association for lobbying and lobbying-related activities is not deductible. For the fiscal year ended December 31, 1997, the portion of Stable Value Investment Association membership dues spent for lobbying was zero. THEREFORE, IT IS THE ASSOCIATION'S VIEW THAT 1997 FISCAL YEAR MEMBERSHIP DUES ARE FULLY DEDUCTIBLE.

For fiscal year 1998, the Association has budgeted and is estimating that 10% of its membership dues will be used for lobbying activities. Therefore, APPROXIMATELY 90% OF THE CURRENT YEAR MEMBERSHIP DUES ARE EXPPECTED TO BE DEDUCTIBLE for federal tax purposes.

STABLE *times*

SVIA

Stable Value ... Sightings in the Press!

by Julie H. Dennis, New York Life Insurance Company

With the equity market breaking historical records, any mention of "stable value" was good news. March results indicate that participants January love for stable value was short lived.

According to several news wire articles 401k assets as of March 1998 pass the Trillion mark. Participants started the year reallocating assets to stable value, in what may have been an annual rebalancing. By March however, nearly every asset class had net positive flows with the exception of stable value assets, bonds, and company stock. Even international funds, an option 401k participants typically shun, picked up its share of inflows during the quarter.

News Since Last Edition:

World Reporter, February 15, 1998 "Basic Problems Undermine Performance of Some 401k plans- Theft of 401k Contributions, Poor Performance, High Cost"

401k Wire, February 19, 1998 "How One Insurer Handled Confusion on Fees"- Participants shifted out of equities in January, stable value options benefit.

San Francisco Chronicle, March 16, 1998 "Kinds of Funds" 22% of plans that allow daily transfers, place some restriction on the total number of transfers permitted during the year.

Dow Jones News Service, March 18, 1998 "ICMA Retirement Corp. Named Newsletter Executive John Tobey New Chief Investment Officer."

Wall Street Journal April 3, 1998, "Retirement Riddle Has a New Answer in Germany:AVSV" Until now, Germans generally treated life insurance policies as the proper vehicle for old-age savings - which is why life policies have tax advantages. Now comes a new German retirement scheme that will invest in stocks, bonds and real estate and is being hailed as the beginning of a U S-style mutual fund boom, even though it doesn't have tax advantages.

KRTBN Wire Source, April 10, 1998 "Assets in 401k Plans Top $1 Trillion"

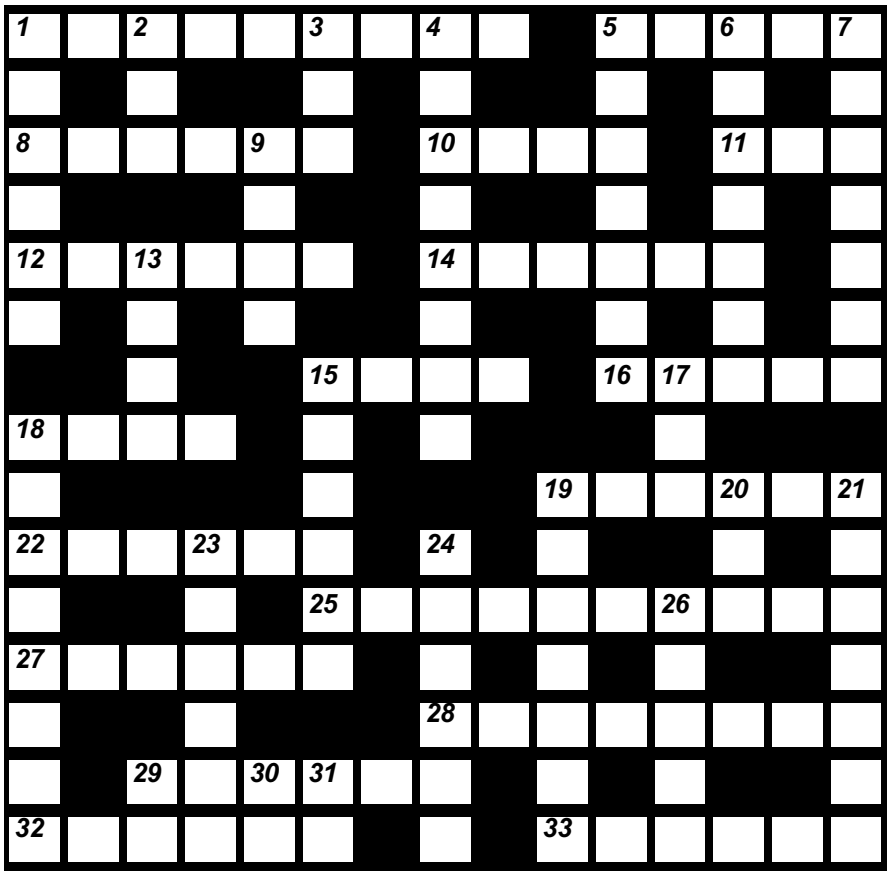
Chicago Tribune, April 13, 1998 "Employees Are Confused Because Employers Give t Investment Choices, Little Advice" Average 401k balance is now $75,000 compared to $31,000 in 1990.

Dow Jones News Service, April 22, 1998 "Sun America Sales of Guaranteed Investment Contracts Rose to 42% In Second Quarter" fiscal period started October 1, 1997.

To submit mentions of stable value (positive or negative) in the media or for assistance locating an article, contact Julie H Dennis, New York Life, Stable Value Group at (973)331-2595 or email julie_dennis@am.newyorklife.com

Stable Times Crossword Puzzle

June, 1998



Market Triathlon Entrants:

1. David McNiff - Gen Corp.
2. Jeff Mohrenweiser - CNA
3. Rhoni Seguin - PRIMCO Capital Management
4. Jim Males - Pacific Life
5. Kathy Roach - Fiduciary Capital Management

Successful crossword puzzlers will be listed in the September issue, along with the correct answers.

Across

1. not natural
5. bank rate
8. superannuate
10. inhale, puff
11. agent designation
12. management style
14. bigotry
15. compass point
16. French gallery
18. STRIP
19. disappear
22. type of network
25. Gov't bills, notes, bonds
27. expansion
28. invigorate
29. spell, hypnotic state
32. alpine calls
33. data stream

Down

1. margin above treasuries
2. after fees
3. before
4. cost of money
5. above par
6. revenues
7. teach
9. gush
13. rip
15. net worth
17. jug
18. "Purple Sage" author
19. twilights
20. Amin's given name
21. College Football champs
23. update electrical system
24. turn in
26. strictness
29. football score (abbr.)
30. Baseball league (abbr.)
31. Canadian province (abbr.)