DWIGHT ASSET MANAGEMENT
A GOLDMAN SACHS COMPANY

Negotiating Risk for Stable Value Options

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Five Aspects of **Stable Value** Risk

1. **Interest Rate & Extension Risk**
2. **Credit & Liquidity Risk**
3. **Asset/Liability Matching Risk**
4. **Wrap Provider & Contract Risk**
5. **Third Party Sub-advisor Risk**

The shifting landscape in the wrap marketplace can be viewed largely as a result of changes in how plan sponsors, consultants, and wrap providers each perceive risk.

Introduction

The stable value market has changed considerably in the wake of the financial crisis. Several wrap providers have exited the market while others, under pressure to reduce their notional exposure to the asset class, have decreased, or indicated a desire to decrease, their market presence. New providers have recently emerged, and capacity has been gravitating from the banks to the insurance companies. Meanwhile, wrap providers have instituted more complex contract requirements and tighter investment guidelines.

The shifting landscape in the wrap marketplace can be viewed largely as a result of changes in how plan sponsors, consultants and wrap providers each perceive risk. While the stable value asset class held up well during the crisis, the experience during that period highlighted the effect that tail risk can have on market value to book value (MV/BV) ratios. At the same time, plan sponsors and other market participants began scrutinizing the asset class more closely, and in particular, the wrap contract provisions.

This heightened scrutiny and much of the de-risking that has taken place in stable value portfolios, particularly the increased focus on certain investment risks, is in the long-term interest of plan participants. It has also occurred at a time when plan sponsors, consultants and participants are focused on gaining greater transparency into the mechanics of the portfolio and a more thorough understanding of the risks involved.

We believe there is an opportunity to continue to improve risk management within stable value portfolios in order to be prepared for and manage through future market events. Stable value managers should be able to proactively identify, quantify and clearly explain the risk exposures within portfolios, and more importantly, ensure they manage each of those risks in the best interests of plan participants. The discussion that follows will explore five key areas of risk associated with stable value options and seek to provide perspective on certain management considerations for each one.

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1. Interest Rate & Extension Risk

Potential Risk

Effective management of interest rate and extension risk within stable value portfolios is particularly critical in the current environment. With U.S. interest rates plumbing all-time lows due largely to sustained pressure by the Federal Reserve, a rapid increase in rates likely presents the greatest intermediate-term risk to stable value investors. This is particularly true in light of a domestic fiscal situation that may drive rates higher in coming years. Predicting the timing of any reversal of rates is difficult, but at the present time the long-term risk/reward trade-off in U.S. rates does not seem very compelling.

Stable value wrap contracts are designed to help smooth the impact of any rate-driven volatility on participant returns over time. Recent trends in guideline construction, which have generally reduced the amount of duration risk that can be taken at the wrap level, could also help provide some mitigation in this regard. Nevertheless, the impact of a significant increase in rates on the MV/BV ratios of stable value portfolios could be substantial. During the credit crisis, the industry witnessed MV/BV ratios dip to the low to mid 90% range in some cases. In many of these situations, wrap providers responded by limiting portfolio flexibility in certain areas, particularly for plans with negative cash flow. While this prior episode was largely the result of credit-related stress, one could envision a scenario where interest rate stress could lead to a similar outcome in the future.

In the near term, the Federal Reserve has signaled its intent to keep rates low for an extended period, and existing MV/BV gains should help cushion the impact of any modest increase in rates. However, unless rates fall even further from here, standard crediting rate formulas will cause MV/BV ratios to gradually pull closer to 100% over time. To the extent a large rate increase occurs after existing gains have been largely amortized, stable value portfolios would be more vulnerable to such an increase than they are today.

For any fixed income manager, a robust risk management systems infrastructure is a prerequisite for quantifying and managing interest rate risk.

Potential Risk

Another risk from rising rates could result from exposure to the agency mortgage-backed securities (MBS) sector. After several years of large-scale mortgage refinancing driven by low rates and government incentive programs, the agency MBS universe is now characterized by historically low coupons. MBS durations are based on modeling assumptions regarding future prepayment behavior in the underlying mortgages. If rates spike in the future, few homeowners are likely to have an incentive to refinance and as a result, prepayments on MBS will be very low. With this source of cash flow largely eliminated, durations on MBS may increase substantially. This increase in MBS duration becomes a potential issue for stable value portfolios for two reasons.

1. MBS are often a material component of the stable value asset mix due to the high quality bias in stable value and the significant presence of MBS in the Barclays Aggregate family of indices.

2. Extension in MBS duration could cause portfolios to hit the explicit caps on duration that many wrap contracts now impose, resulting in forced asset sales that effectively lock in rate-driven losses.

Potential Risk Management Considerations

For any fixed income manager, a robust risk management systems infrastructure is a prerequisite for quantifying and managing interest rate risk. The ability to project the market value performance impact of various rate shock scenarios, including the impact of duration extension within the MBS portion of the portfolio, is critical. However, a stable value manager should extend this analysis to account for potential implications under the wrap contracts. The manager should be able to forecast how low a client's MV/BV ratio could get under various rate paths and understand the potential triggering of duration-driven investment guideline limits. This analysis may result in somewhat more conservative duration positioning and the utilization of asset strategies that de-emphasize less predictable cash flows such as MBS.

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2. Credit & Liquidity Risk

Potential Risk

Following the financial crisis, some wrap providers have narrowed the definition of acceptable credit risk in investment guidelines. Changes have typically included the elimination of high yield exposure, tighter caps on the allocation to BBB-rated securities, more explicit sub-sector limitations and lower limits on exposure to any single issuer. Still, credit risk is present at both the sector and issuer levels and, in some cases, through exposure to derivatives counterparties.

Potential Risk Management Considerations

The systematic, or non-diversifiable, component of credit risk may be viewed similarly to the interest rate risk discussed earlier. Managers should have the ability to project the impact of generally widening credit spreads on market value performance and MV/BV ratios.

The risk associated with a specific issuer may be assessed using the depth and experience of credit research resources at the manager's disposal and by considering appropriate limits, including on position sizes. For securitized credit such as commercial mortgage-backed and asset-backed securities, analysis may be guided by collateral detail at the loan level and stress testing of bond performance under various collateral loss scenarios.

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Potential Risk

Periods of market stress can impair liquidity, causing transaction costs to increase due to wider bid/ask spreads. During the financial crisis, transaction costs in some sectors increased substantially as market makers retreated and balance sheets shrunk.

Potential Risk Management Considerations

Though the stable value option often sees inflows from other investment options during these periods, managers should not take for granted that this will always happen. When crafting the investment portfolio for each client, managers should take into consideration the portfolio's liquidity profile and the impact that transaction costs may have on the investor experience in various market environments.

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3. Asset/Liability Matching Risk

Participant demographic considerations might include age distribution, percentage of retirees in the plan or employee turnover.

The increasing focus on MV/BV ratios underscores the need to gain a greater understanding of a client's business, including its retirement plan design and participant demographics. While the industry has understood that this set of factors will impact how wrap providers develop the underwriting profile for a plan, the difficulties of the last few years show how crucial it is to look at each client as a unique case and to develop a solution based upon an assessment of that client's liability profile.

Potential Risk

Some plan-specific factors that garner the most focus include participant demographics, recent cash flow experience and the degree to which plan participants move assets among plan options in response to external influences such as equity market performance. Due to the mechanics of wrap withdrawals, persistent negative participant cash flow can exacerbate any MV/BV deficit.

Potential Risk Management Considerations

A portfolio requiring regular cash outflows to meet investor needs might warrant a somewhat more conservative investment profile, including a shorter duration, to ensure that these needs can be met without undue stress on the MV/BV ratio.

Managers should weigh all factors in arriving at a holistic view of each client's liability profile.

Potential Risk

The client's business and industry profile may also be important in determining how best to manage a portfolio. Wrap contracts are structured to pay book value for plan participant activities, but wrap providers do not bear unlimited risk for participant withdrawals. In fact, certain sponsor activities could result in the payment of market value rather than book value. While there is currently an average MV/BV premium in the industry, this may not be the case in the future.

Potential Risk Management Considerations

Stable value managers should be aware of industry and company-specific dynamics and work with plan sponsors and wrap providers to formulate an asset allocation consistent with the primary goal of capital preservation.

Perhaps as important is the frequency at which these influences are re-evaluated. Certainly, factors such as participant demographics and investor cash flow trends may tend to change over time. For these factors the ability to access robust data about the plan regularly and accumulate and interpret that data is important. Changing trends can be identified and portfolio strategy can gradually be altered in response to those changes. However, we have seen evidence in the last several years that corporate and industry-specific factors can also change rapidly. These kinds of rapid changes reinforce the need for regular communication with plan sponsors.

Managers should weigh these factors in arriving at a holistic view of each client's liability profile and develop a consistent methodology for communicating and implementing the resulting portfolio positioning. Besides potentially mitigating risk to participants, this approach increases the transparency to plan sponsors by explicitly connecting the asset strategy to plan factors. It also promotes greater dialogue, so that sponsors better understand:

- Wrap dynamics
- The implication of corporate developments on stable value investors
- The importance of manager diligence

Sponsor-related activities that could trigger wrap contract provisions may include a bankruptcy of the plan sponsor, large scale layoffs, mergers and acquisitions, and other corporate events.

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4. Wrap Provider & Contract Risk

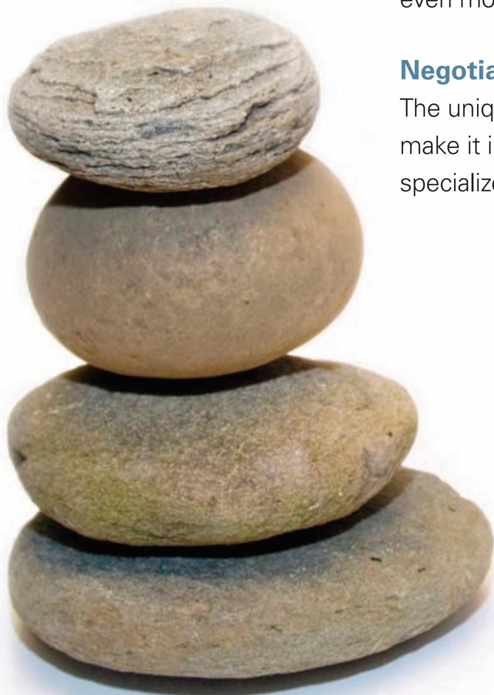
Since wrap contracts expose clients to an element of counterparty risk, effective ongoing assessment and management of that risk is critical. Exposure is generally limited to any amount by which the market value of a wrapped portfolio is less than the book value. With MV/BV ratios generally above 100% today, the current risk to clients may be relatively minimal and more related to the availability of replacement coverage, if it were needed.

Potential Risk Management Considerations

A number of factors related to wrap providers and wrap contracts are worthy of exploration.

The ability to objectively assess the credit risk posed by a wrap provider:
While rating agency credit evaluations are a useful starting point, the stresses experienced by large financial institutions during the crisis underscore the value of an independent analysis of asset quality and operational risk. With the list of available wrap counterparties having narrowed, maintaining a disciplined, objective credit review process has become even more important.

Negotiating increasingly detailed wrap contracts:
The unique nature of the asset class and the heightened complexity of wrap contracts make it increasingly important for stable value managers to have access to experienced, specialized expertise in these contracts.



The level of commitment to the wrap business that a provider exhibits is a qualitative risk that should not be taken for granted.

Need for a robust pre- and post-trade compliance infrastructure:
Managers' compliance systems should be equipped to simultaneously handle multiple sets of wrap guidelines for a given client portfolio and at the same time be capable of evaluating security characteristics down to the most granular level. The compliance process should include ways to assess unique bond-level characteristics such as registration status, issue size and the bond's position within the capital structure. Additionally, a clear process should exist for identifying, escalating and correcting any issues, including the involvement of dedicated compliance personnel.

Wrap provider commitment:
The level of commitment to the wrap business that a provider exhibits is a qualitative risk that should not be taken for granted and should be assessed over time, particularly given the exit from the market of certain wrap providers. It is important for stable value managers to regularly review the business risk associated with counterparties on an ongoing basis and seek to work with ones whose interests are best aligned with those of clients' participant bases.

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5. Third Party Sub-Advisor Risk

The utilization of third party sub-advisors as part of an overall stable value solution drives another important facet of risk management. When properly selected and utilized, these sub-advisors can add style diversification and potential risk mitigation to the portfolio. However, in many cases, they also bring another layer of consideration for the oversight manager.

Potential Risk Management Considerations

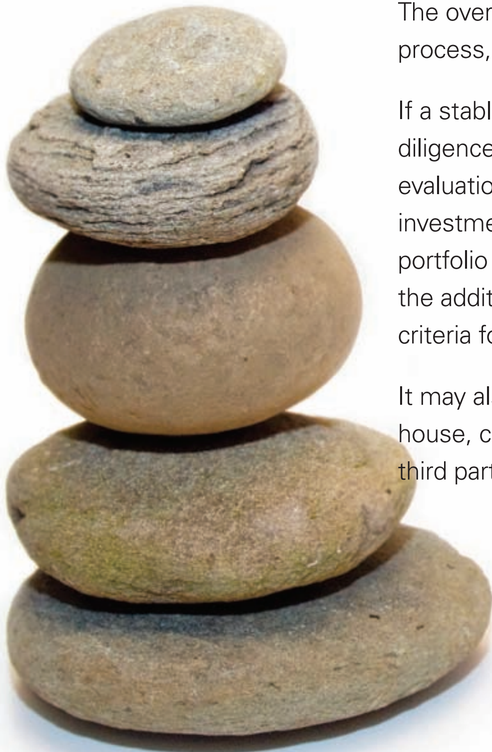
The oversight manager should assess the degree to which a sub-advisor offers complementary investment benefits and evaluate any incremental operational and performance risk posed by the third party manager. Among the items managers may want to consider are:

- Organizational stability, particularly with regard to key investment personnel
- Technology platforms and other physical infrastructure
- A manager's internal control environment

The oversight manager should also confirm that the sub-advisor has a sound investment process, appropriate guideline compliance screens and a strong risk management culture.

If a stable value manager utilizes many different third party sub-advisors, their due diligence process may require a significant commitment of resources. The proper evaluation of a sub-advisor could include, for example, on-site visits to the sub-advisor, investment and operational due diligence questionnaires and regular assessments of portfolio positioning and investment performance. A clear process should also exist for the addition of new sub-advisors and the removal of sub-advisors that no longer meet the criteria for inclusion in the portfolios.

It may also be beneficial to confirm the extent to which the stable value manager has in-house, committed resources and teams focused on evaluating wrap provider credit and third party sub-advisors.



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In Summary

The last several years have brought paradigm shifts to the stable value asset class. Risk management in stable value has always been a multi-dimensional exercise but the current state of the market may warrant an even more thoughtful, resource-intensive level of engagement to ensure that the core goal of capital preservation can be achieved while still providing a reasonable level of income to participants. It is critical for managers to be forward-looking in the evaluation of risk, as the issues that characterized the last crisis may not necessarily drive the next one.

If managers can continue to address this challenge, we believe the stable value asset class can continue to deliver value and occupy an important place as a capital preservation option for plan sponsors and their participants.

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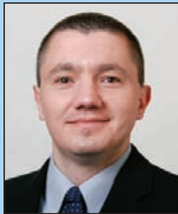

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Josh is head of Stable Value Portfolio Management at Dwight Asset Management (Dwight), a Goldman Sachs Company. In the three years prior, he was head of Portfolio Construction and Risk Management at Dwight. Previously, Josh was a structured product portfolio manager specializing in the residential mortgage sector from 2003 to 2008, and before that, he was a quantitative analyst for two years. Josh joined Dwight in 1999 as an assistant client portfolio manager.

Prior to joining Dwight, Josh was a member of the Finance department at Bain Capital, Inc. from 1997 to 1999. While at Bain, he provided accounting and analytical support for the company's small cap hedge fund, CBO/CLO portfolios and private equity funds. Josh began his career in 1994 as a financial statement auditor for Price Waterhouse LLP, specializing in audits of mutual funds and other investment vehicles. Josh serves on the boards of the Vermont CFA Society and the Humane Society of Chittenden County. Josh earned a BS in Business Administration from the University of Vermont in 1994.

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