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LGIM America

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Rethinking Overlay Manager Diversification

The core principles of risk management

Diversification is the foundation of risk management and asset allocation. The core principles associated with this framework reason that more uncorrelated investment strategies and perspectives should result in lower volatility, especially as those perspectives are increasingly specialized. These principles, as well as the overarching theme of efficiency, are top-of-mind for all institutional investors.

Efficiency is especially relevant for those who have implemented a derivative overlay strategy in their portfolio. After all, any overlay strategy, whether it's cash equitization or dynamic rebalancing, is designed to capitalize on the advantages that derivatives can provide to a plan. However, we believe many sponsors who have chosen this structure are unknowingly undermining these objectives by employing multiple overlay managers.

It is prudent for plan sponsors to hire numerous managers to oversee their physical investments. Employing several equity managers can provide diversification while generating outperformance due to style differences between the firms. The same can be said for fixed income. But the considerations are different when appointing an overlay manager. Because overlay structures are designed to work in concert with the underlying portfolio allocations, the benefits of manager diversification are already present within the program; unfortunately, this is often overlooked. What's worse, plans that are using multiple overlay managers are incurring greater costs without necessarily achieving any greater benefit.

At LGIM America, we believe overlay manager diversification is likely inefficient and creates uncompensated risks. Using multiple overlay managers can result in increased costs, collateral inefficiency and higher governance burdens. In aggregate, the drawbacks of using various overlay managers ultimately undermine the plan's policy structure and act as a headwind to key long-term objectives.

Overlay manager diversification considerations

Downloading various ride share apps on your phone to find the best option is typically viewed as efficient. Ordering two rides from two separate apps to go to the same place is not efficient. This process is more expensive, it takes longer to get to your destination and excess fossil fuels are burnt to get you there. What does this have to do with selecting overlay managers? More than you might think.

Typically, plans might select one overlay manager to manage their interest rate risk, then select an additional manager to handle their equity exposure. At the surface, this process could appear to make sense, as manager diversification is typically prudent. However, due to the inherent nature of an overlay manager, we believe manager diversification in this context is actually counterproductive. Let's return to core principles.

The end goal of any plan is to ensure every beneficiary is properly paid so they can enjoy retirement. To get from point A to point B, no one wants a longer ride than necessary. This means assessing every decision from a holistic plan perspective, and making informed decisions based on these outcomes. Are there hidden aggregate costs of overlay manger diversification? If so, do they act as a barrier to the plan's journey?

Management fees

At a high level, let's consider management fees. Will the fees paid out to two managers incur higher costs as compared to one manager? Well, a significant portion of management fees go towards the administrative costs of management: creating additional fund structures, covering the costs of trading platforms, etc. As a result, most fees take on a tiered fee structure based on assets under

management, meaning additional invested capital is managed at a discount. When multiple managers are selected, as opposed to one, plans are typically charged twice for administrative requirements, and they don't reap the full benefits of a tiered fee schedule.

For simplicity, consider a $500mm plan using a 50/50 split among two overlay managers, each charging 10 basis points. The total cost is $500k per year. Assume that moving all the assets to one manager would decrease the weighted average cost to 8 basis points. The plan loses an additional $100k per year by not consolidating managers. The drag on performance and opportunity costs of these losses add up over time.

Collateral inefficiency

In a similar manner, when assessing the underlying mechanics of overlay positions, is the plan optimizing their use of cash? Derivatives can be excellent instruments for creating capital efficiency—indeed, overlay strategies are dependent on this fact—but many plan sponsors are still not taking full advantage of this capability. For instance, if a plan is using multiple overlay managers, the plan is also holding several collateral accounts. With different rules for minimum and optimal levels of collateral at each manager, it can become burdensome and costly for plans to operate under this structure. Stretching cash across these accounts can make it more difficult to top-up collateral when needed, and in a counterintuitive manner, further constrain liquidity and ease of rebalancing. This puts pressure on the plan's cashflows and erodes the original intent of the overlay. However, in the case that one of the overlay managers holds physical Treasury instruments, consolidating into that account can relieve this pressure by posting these assets as collateral, rather than cash. This action gives the plan more flexibility to act quickly should more collateral be required in the event of a drawdown.

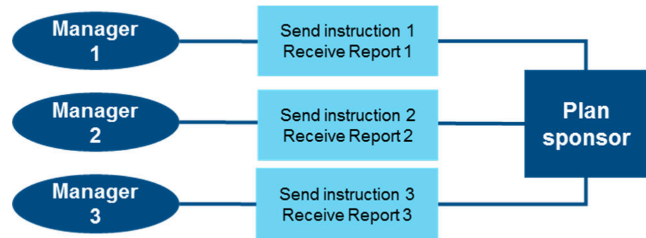
Governance costs

Physical costs result in a drag on performance, but the costs of governance result in a drag on plan efficiency. Does the plan experience any headaches related to inefficiencies in governance? When various overlay managers are used, multiple requests, multiple conversations and multiple reports are required (and then must be consolidated) in order to assess the plan's asset allocation exposure.

On the surface, it is more time consuming to gather portfolio information. Further, human error might come into play. This could result in unnecessary reallocations, or worse, not properly reallocating at all. If a plan has a glidepath, coordination between multiple managers could cause delays in rebalancing as well. Trades could be offset, the plan could be out of the market, the list goes on and on.

Thankfully, there is a simple solution to these various concerns. No need to waste excess money, resources or time.

Figure 1: Governance inefficiencies



Benefits of a single overlay manager

The thought of consolidating managers can be counterintuitive. After all, it seemingly violates the diversification principles that this very industry was built on. But if one thinks of portfolio diversification as a convenient and efficient way to mitigate uncompensated risk, choosing one overlay manager is one and the same: an opportunity to avoid incurring unnecessary risks on a plan's success. With respect to governance, the diminished risk of overlay manager consolidation is simple: fewer actors and conversations lead to fewer opportunities for errors and misallocation of capital. When considering management fees, the pickup is also evident: lower costs are advantageous. But further investigation is warranted when considering the benefits of consolidated collateral management. The devil is in the derivative details.

Figure 2: Governance consolidation

Future commission merchants ("FCMs") can accept Treasuries as collateral for initial margin on futures positions, meaning that a plan can leverage its physical holdings rather than posting cash. The caveat here is that the Treasuries and futures must be held in the same account, and by extension, with the same manager. Consolidating overlay managers can free up cash by netting trades but implementing an overlay with an existing LDI manager can enhance this benefit even more by using Treasuries as collateral.

This excess cash can be redeployed by the plan into a variety of opportunities. Whether it is invested in a high yielding asset or used to purchase downside equity protection, the repurposing of this cash is ultimately a major

driver in helping plans achieve their desired funded status outcomes.

With experience in custom overlay and LDI, LGIM America can provide the necessary guidance, execution and collateral management to be your one-stop shop for overlay management.

Consolidation in action

To showcase consolidation in action, let's assume a corporate defined benefit plan, XYZ, with $2.5 billion in assets is seeking to reduce the risk profile of their portfolio using an LDI approach while maintaining its policy allocation through a separate overlay mandate. Subscribing to the manager diversification model, the client choses one external manager to manage the LDI portfolio and another manager to implement the policy overlay. While the two portfolios had different objectives, they traded in common markets. However, with separate managers, the lack of coordination initially resulted in missed opportunities and an inefficient use of plan assets.

As markets move and returns disperse, a policy overlay might require a significant amount of trading, some of which might counteract other strategies used by the plan. XYZ found themselves in that exact situation: their LDI portfolio and policy overlay positions offset each other. The plan's policy overlay manager was looking to synthetically increase their fixed income exposure to rebalance to their Strategic Asset Allocation. However, the LDI manager needed to hedge excess rate exposure at the long end of the curve in order to manage to XYZ's target interest rate hedge.

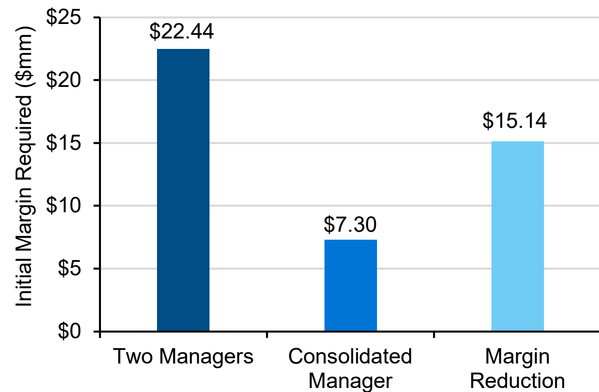
Assume that XYZ traded 3,139 gross Ultra contracts, but if viewed from a wholistic level, only needed to trade 1,021. If we use a bid/offer spread of 1 tick per contract, then XYZ surrendered $63,540 to transaction costs for failing to net 2,118 Ultra futures. Without consolidation, the plan unnecessarily lost on transaction costs. This could happen several times during the year.

Figure 3: The Math of Consolidation

Portfolio	US Ultra Bond Contracts (WN)	Est. Transaction Cost (1 tick)
Policy Overlay	2,080	$62,400.00
LDI Manager	-1,059	$31,770.00
Gross Position	3,139	$94,170.00
Net Position	1,021	$30,630.00
Difference	**-2,118**	**-$63,540.00**

Source: LGIM America. For illustrative purposes only. Estimated transaction cost based on LGIM America's experience with Ultra contracts.

Figure 4: Initial margin savings



Source: LGIM America. For illustrative purposes only. Estimated margin requirements based on LGIM America's experience with margin requirements for overlay and LDI mandates.

In addition to reduced transaction costs, holding a net position has a significant impact on the initial margin outlay. Rather than posting margin on both long and short positions, consolidating contracts creates efficiency. In this case, the initial margin required would have dropped by approximately $15.1mm, had the positions been netted. When combined, the transaction and initial margin costs represent about 60 basis points of total plan assets, a material sum that could be redeployed to further enhance the portfolio. The incremental return could be used to pay for manager fees, staffing costs, or even be put towards future benefit payments.

After considering the potential savings from trading and collateral efficiencies, XYZ chose to consolidate its overlay mandates with one provider. Simultaneously, the plan mitigated the coordination and governance risks associated with employing multiple managers. Just like any well-planned ride-share user, the client streamlined its journey and fast-tracked itself to the intended destination.

About LGIM America

LGIM America (LGIMA) was founded in 2006 with the purpose of helping people achieve their long-term financial goals. We offer a range of strategies to help our institutional clients (corporations, healthcare agencies, non-profit, educational institutions, public plans and Taft-Hartley multi-employer plans) manage their investment objectives, which can range from market-based alpha-oriented strategies, derivative overlays, equity solutions and those that are designed to be more liability-centric. Encouraging a diverse and inclusive environment coupled with a solutions-focused culture allows us to increase our breadth of knowledge and the likelihood of improved client outcomes and stronger financial performance. We have teams of experienced, innovative professionals committed to helping plan sponsors meet their pension promises, managing investment exposures efficiently to seek enhanced returns while mitigating risks, and working to generate returns while making a positive societal difference.

For further information about LGIM America, find us at www.lgima.com

1. Ultra US Treasury Bond Futures

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