Many defined benefit (DB) pension plan sponsors are debating using an outsourced chief investment officer (OCIO) to manage their pension plans. Using an OCIO has become a clear alternative to building and maintaining an in-house team, or hiring a consultant to assist an internal committee.

The interest in OCIOs stems from the need for specialized knowledge to properly conduct pension investing. Pension investing differs from total-return investing and can have a major impact on the corporate financial statements. Strategies such as glide paths and liability hedging require careful preparation and execution. Plus, there are a host of fiduciary and regulatory duties to address.

It should not be surprising that from 2013 to 2018, the OCIO market has doubled, from $800 billion under management to over $1.7 trillion, with DB pension plans representing the largest share of the OCIO market (Pension & Investments [2018] and Cerulli [2017a]).

This paper reviews the primary challenges a plan sponsor faces when managing a pension, and outlines the factors to consider in meeting objectives. It examines three models for running a pension: the internal team, the consultant assist, and the OCIO. With the help of a questionnaire, readers can better understand which model would be best for their unique pension need.
The plan sponsor’s decision about how to manage a DB pension plan can have important implications for key areas, including earnings, balance sheet results, and personnel. Further, a host of fiduciary requirements and regulations, in addition to corporate actions, can influence portfolio design and plan decisions. These legal responsibilities can be daunting and require ongoing oversight.

The asset management approach for traditional pension plans differs dramatically from what is called total-return investing or a “normal” approach to portfolio construction. A plan sponsor must fully understand how the plan liability affects the investment process as this “normal” approach can negatively impact the company and pension plan. In addition, given the changing risk/return trade-offs relative to plan status and funding, this is not a “one and done” portfolio management decision. Important aspects of the strategy such as glide-path construction, liability hedging, and other risk-mitigation techniques require regular attention.

Expertise, either from an internal or an external provider, is needed to effectively run the asset portfolio, control risk, and make various pension plan decisions. This paper explains those risks and offers an approach to help you decide if your company might benefit from the OCIO model. Picking the right approach matters.

Managing a pension plan: The requirements

Fiduciary duty
Managing a pension plan requires specialized knowledge of its structure and of the unique regulatory and financial reporting frameworks for pensions. Mastering this knowledge is necessary in order to design an appropriate investment strategy.

Every plan sponsor should have access to this specialized knowledge, both to optimize future plan outcomes and to comply with the prudence duty outlined in the fiduciary standards for qualified retirement plans mandated by the Employee Retirement Income Security Act, or ERISA.

According to the U.S. Department of Labor, “The duty to act prudently is one of a fiduciary’s central responsibilities under ERISA. It requires expertise in a variety of areas, such as investments” (U.S. Department of Labor, 2017). Accordingly, a plan sponsor should reflect on whether its internal team grasps these concepts well enough to handle them effectively.

Regulatory framework
Since ERISA was introduced in 1974, it has inspired a parade of rules and regulations that require understanding, interpretation, and implementation. This regulatory framework affects all aspects of plan operations, including plan design, administration, actuarial valuation, investment policy, and, ultimately, risk transfer and plan termination. Not every aspect of the corporate pension regulatory framework will affect investment strategy. Some, however—including financial accounting and minimum funding standards, Pension Benefit Guaranty Corporation (PBGC) premium requirements, and lump-sum minimum value regulations—are critical for those managing a pension plan’s investments to understand.

Company impact
A DB plan is essentially a company’s IOU to employees for when they retire. Defined contribution (DC) plans, such as 401(k) plans, have a similar mission—to provide a stream of retirement income—but with several differences.

The DB plan sponsor must guarantee the employee IOU while accepting the market risk of the pension asset portfolio relative to the pension liability, which is valued using fluctuating market interest rates. As the pension liability can be highly sensitive to interest rates, these fluctuations can lead to a rising (or falling) liability value. At the same time, the pension assets may be changing, too. Consider a recession scenario: Falling rates increase the pension liability value while a sagging stock market may hurt the pension asset portfolio, which may require employer contributions, in an economic backdrop when the company can least afford it.
DC plans, on the other hand, have steady contributions that are less affected by the economy. Down markets and allowable contribution holidays (e.g., use of a credit balance) can lead to an underfunded DB plan, whereas a DC plan is always fully funded. That is a major difference.

The DB pension’s impact on the plan sponsor depends on a lengthy list of variables—including the size of the plan, company cyclicality, the liability profile, plan growth rate, and portfolio design. The plan sponsor needs to determine its sensitivity to fluctuations in its plan’s funding status.

If its sensitivity is low, i.e., if the plan has a small potential impact on the company’s financial health, then the sponsor has a fair amount of flexibility in managing the plan. The plan sponsor can choose between having the plan assets do most of the work in improving/maintaining funding status, or, instead, implementing a meaningful contribution policy along with a conservative asset mix. That choice becomes a matter of preference as opposed to necessity.

If the plan’s sensitivity is moderate or large, however, then determining how to manage the pension plan becomes more important. If you are responsible for a plan, you had better have people who know how to manage it, given that they must have specialized pension knowledge, and given other potential hurdles, such as investment committee dynamics, personnel incentives, and the challenge of identifying the appropriate pension investment strategy.

Committee dynamics
Bringing together a team to take investment actions can be a challenge given the ways that many groups approach decision-making. One section of a Vanguard paper on best practices for investment committees (Bosse, Grim, and Chism, 2017) discusses group dynamics. Here are just three problem dynamics:

**Herding:** The tendency to do what others are doing. Peer-group studies (e.g., Baddeley, 2010)—for instance, on asset allocation—often lead committees to stay near the peer averages even if their plan’s characteristics, objectives, and optimal investment strategy may not resemble the group average.

**Overconfidence:** A belief in one’s ability to prognosticate. Countless studies have demonstrated that even financial professionals have a terrible record of making market calls. And yet, committees often believe they can divine the future and will alter their strategic decisions based on their views.1 As an example, interest rates are notoriously difficult to forecast and have an outsized impact on a pension plan—but that doesn’t stop many committees from trying to predict rates.

**Group polarization:** When members of a group strongly agree on a certain topic, they often are willing to take a stronger or bigger position than any individual member would, leading the group to take larger portfolio risks than anyone intends.

An OCIO, with a deep team and experience in these matters, may be better equipped to avoid these issues, especially in times of stress.

**Personnel challenges: Career aspirations**
This section may bring a grim smile to readers: Most company professionals with a pension oversight role are not volunteers. It is part of their job description, and often not a high-profile part. Managing the pension plan well is unlikely to land them a big promotion because it isn’t perceived as being as important as their primary task. So for these professionals, embarking on an education mission to internalize all pension investing knowledge can be a low priority. And it’s not just those with the oversight role—other committee members may feel the same way (although there are a few of us who like this stuff). Especially as plans are closed or frozen and attention turns to the management and design of the DC plan, DB plans tend to get pushed to the side.

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1 See Goyal and Wahal (2008) for more information on the hiring and termination of investment managers.
Investment strategy

Pension investing is quite different from investing as it is taught in school. Normally, we view low-risk assets as those with low volatility—cash being a good example. In exchange for low volatility, we expect little compensation. On the other hand, to take higher risk (volatility), investors demand more return.

Equities are a good example. Figure 1 shows this trade-off in the form of an “efficient frontier,” with cash anchoring the frontier on the low end and equities at the high end. Each investment merits a return based on the market’s view of its risk, although some assets may lie below the line.

A pension plan defines risk differently—it’s the volatility of funding status, rather than the volatility of the asset portfolio, that matters most. Because liability values are calculated using market rates on high-quality corporate bonds, they are inherently sensitive to changes in interest rates. In many cases, a long-term bond portfolio can closely match the rate sensitivity of the pension liability (particularly for traditional pension formulas like final average pay, which calculates benefits based on an average of selected years of an employee’s salary); in these cases, the low-risk asset is a long bond portfolio of comparable rate sensitivity (or duration) rather than cash.

This completely changes how we view risk. With long bonds as the low-risk choice (Figure 2), shorter-term bonds and cash become inefficient (below the efficient frontier) because they have lower returns during periods of a normally shaped yield curve yet raise asset-liability risk.

This change in the frontier is the key to what is commonly referred to as “liability-driven” investing (or LDI), which focuses on managing interest rate risk by increasing asset and liability correlations. Return-seeking assets are still part of the mix, as they can add to the portfolio value by improving funding or covering service cost. But they represent “compensated” risk (more return) rather than the risk that shorter bonds bring, which is “uncompensated.”

Figure 1. Total-return efficient frontier

Source: Vanguard.

Figure 2. LDI efficient frontier

Source: Vanguard.

LDI approaches are appropriate for pension investing, even if the “L” is not as interest rate-sensitive as a traditional final-pay plan. In particular, cash balance plans can have much less interest rate sensitivity, depending on their design. In many cases, an ongoing cash balance plan combined with a traditional pension benefit adds another layer of complication.2

2 See Gannon and Dutton (2018) for more information on investment strategies for cash balance pension plans.
Public-sector pensions typically use long-term asset-return expectations to value the liability rather than interest rates so the pension portfolio asset mix becomes a driver not only of risk but also of liability funding level. Pension investing with the liability as the risk determinant—that is, LDI—is a good approach that can lead to portfolio designs that are very different from those suggested by an endowment or an individual investor approach, both of which focus on total return and keeping total risk as low as possible.

Next, plan sponsors should know that the pension portfolio can require significant adjustment as the funding ratio changes. Figure 3 shows a popular investment strategy referred to as the “glide path,” which reduces portfolio risk as the funding ratio rises. The portfolio shifts can be dramatic. Properly executing these risk-mitigation strategies requires regular monitoring of the funding ratio in order to trigger action when certain funding levels are reached.

Once again, this differs dramatically from endowment or total-return investing; while both have long time horizons, the altered risk definition and objectives lead to different approaches to portfolio design and management. It is important to realize that a skilled practitioner in total-return investing may not be expert in pension investing, too.

Current low-return environment
After years of strong market returns plus historically low interest rates, return expectations have drifted considerably lower. As an example, consider that Vanguard’s median ten-year return expectation for a traditional balanced 60% stock/40% bond portfolio hovers in the 4%–6% range. The expectations for a bond-heavy low-risk portfolio would be even lower. There may be trying times ahead for plan sponsors, as achieving the expected asset returns will be a challenge. This will test committees’ investment acumen and, from a broader perspective, the framework required to make the best decisions for effective plan management.

Figure 3. Glide-path strategies can call for dramatic shifts in asset allocation

Pension management structures
Consider three structures for running a pension plan:

- In-house committee with internal support staff
- In-house committee supported by a consultant
- OCIO that reports to the committee

A self-supported in-house effort must address all the above responsibilities on its own. For large organizations with substantial pensions, perhaps global pensions, this could be a good choice because the organizations may be able to attract and retain the quality pension personnel necessary to do this task effectively and at a reasonable cost.
A good consultant, with a solid background in pensions and sufficiently broad support, may be able to complement the in-house support staff, but the committee should still be pension-savvy. The consultant can fill the gaps in their knowledge and tackle specific requests.

For situations in which gaps are substantial, an OCIO should be called in to offer additional coverage as OCIOs can generally be held liable from a fiduciary perspective, similar to the committee.

Consider the structures from the perspective of three key areas:

**Portfolio management**

**Consultant:** Recommends a strategy, then the committee debates the course of action and then executes it. This can be challenging, considering group dynamics issues. Given the quarterly nature of meetings and time needed to complete requests, the calendar can be an enemy, too.

**OCIO:** Executes the approved long-term strategy (e.g., glide-path reallocations) based on the investment policy statement (IPS). Given the OCIO’s greater authority, there is no need for further debate for the investment committee (unless it is designed in), minimizing group dynamics issues.

**Fiduciary standing**

**Consultant:** In many instances, the consultant is not a fiduciary and so is not held to that standard of service/care.

**OCIO:** Often a co-fiduciary with the plan sponsor, the OCIO carries the responsibility of execution at the highest level.

**Availability**

**Consultant:** Can be hired for specific projects, which keeps recurring costs down. Plan sponsors must decide when it is appropriate to ask for help. Knowing that the cost clock starts with each ask, sponsors may be reluctant to seek help.

**OCIO:** Always there to address issues as they arise. Depth of organization and available resources are fundamental to the success of the “call anytime” model. Cost of the service must be weighed against value added. As with the all-inclusive approach versus a la carte, you will likely use it more if it is already paid for.

**Is an OCIO right for you?**

Below is a set of questions with a sliding scale. Answer each question.

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**Figure 4. Pension preparedness questionnaire**

<table>
<thead>
<tr>
<th>The team:</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can update and maintain a fiduciary level of pension knowledge over time</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Has adequate time to conduct research, meetings, strategy execution</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Has the discipline to execute designated strategy while addressing multiple challenges (market and internal)</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Can meet fiduciary and documentation requirements</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Can respond to future corporate pension requests (e.g., plan closure, lump-sum payouts, borrow to fund)</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Can respond to pension rule changes and actuarial requirements, and assess all new investment ideas</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>We have a knowledgeable internal team that can build/maintain a pension portfolio</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Source: Vanguard.
Given the impact the pension can have on the corporate entity, it could be argued that every category should score at least a 4 to ensure the internal team can handle all responsibilities effectively. If 3’s appear, the plan sponsor should consider a consultant to assist with covering the gaps. If multiple 3’s appear or there are scores below 3, a plan sponsor should look for more complete help by hiring an OCIO.

The role of the OCIO

Establishing the OCIO relationship: The required due diligence during OCIO selection will involve sponsor commitment based on the specific level of experience and expertise your plan needs. This is an important decision because your goal is to select a trusted advisor who will serve in multiple roles, including asset allocator, pension planner, behavioral coach, meeting coordinator, and risk manager.

The OCIO will generally function as a co-fiduciary and will be responsible for executing each phase of the long-term plan, serving as a reliable guide through any market environment. The OCIO’s direction and execution will depend on the expertise and investment strategy, given the markets’ inevitable cycles. While thoughtful portfolio construction is important, the ideal partner can provide planning and management of the overall operation.

Plotting the pension’s course: The IPS is the fundamental document for guiding the plan’s strategy and its execution. While the typical U.S. corporate pension plan still has much to achieve in terms of funded status, the OCIO nevertheless should give special attention to the expected final phase or objective of the asset allocation during IPS construction. Determining this final phase can clarify the glide-path construction process and the steps between the current and future states of the plan.

Once at the final phase, many closed or frozen plans now consider a period of “hibernation,” in which the asset portfolio primarily consists of liability-hedging assets or another low-risk strategy. A full plan termination is another option—one that many sponsors are interested in but not necessarily ready to fully execute. If those strategies are important to you, you should choose an OCIO who has experience with them. The goal of the OCIO will be to structure both the IPS document and committee meetings to foster effective progress and lower the barriers to action.

Committee meetings—focus on what matters: During committee meetings, recent investment performance is always a hot topic, but the majority of time should be spent on action items or those that affect the long-term plan. An OCIO’s presence should enhance the focus on enduring goals such as portfolio allocation and balance, maintaining strategic discipline, and the effective management of plan costs. Topics such as specific manager style, distinct economic events, and tactical shifts are interesting but represent areas in which a committee can add little value. Through OCIO guidance, committees should devote substantial time to long-term objectives, funding-status stability, and risk.
Managing financial risk: One of the key benefits an OCIO brings is consistent modeling and scenario analysis capabilities. While the OCIO must rely heavily on future assumptions, these quantitative tools help the OCIO detail potential worst- and best-case scenarios for funding status, contributions, and tracking error. This type of exercise can help set expectations and assist the committee with long-term planning. Two key examples of the consistent analysis provided through an OCIO are included below in Figures 5 and 6, including the plan’s funding status on a daily basis and projections of how it could fluctuate over a ten-year period.

Figure 5. Daily funding-status monitor

![Daily funding-status monitor](image)

Sources: Vanguard and Pfaroe.

Operational risks—more than you thought: While managing financial risk remains the top priority, there are operational risks in the plan activities that many sponsors take for granted. These many facets of plan management need to be executed on a consistent basis and can matter just as much as investment risk because of their potential impact. The OCIO has a unique window into all aspects of plan management, including transition management, rebalancing, liquidity, and reporting in various forms. Consider the following activities that require oversight:

- Transition management: The goal is to maintain exposure, to the greatest extent possible, to the capital markets through the portfolio assets. While many strategies can be employed, transferring securities directly (i.e., in-kind) or using exchange-traded funds or futures are popular. A successful transition will reduce any frictions due to trading costs while maintaining hedging levels.

- Rebalancing and reallocation: Throughout each glide-path phase, the allocation will drift and require rebalancing. Various cash flows such as plan expenses, benefit payments, and, possibly, contributions need to be managed and accounted for in the portfolio. More significant shifts occur when the plan enters a new glide-path phase. When these “triggers” are hit, will the assets seamlessly move to the new target asset allocation? The time required to make these

Figure 6. Projected funding ratio—ten-year time horizon

![Projected funding ratio](image)

As compared with Glide Path A, Glide Path B is a lower-risk approach that results in a narrower distribution of funding status outcomes. This is an example of a lower-risk strategy that may be preferred by a plan sponsor.

Sources: Vanguard and Pfaroe.
adjustments and the trading specifics are key responsibilities for the OCIO during his or her management of your plan.

- **Special events:** Managing the allocation and maintaining the desired hedging properties come into focus during events such as a lump-sum window, management of an annuity buyout, or transference of assets to an insurance company during a plan termination. Coordination among the plan sponsor, the plan actuary, and the OCIO is necessary given the amount of information required to manage the plan effectively during these events.

- **Effective management of plan costs:** The list of direct costs is extensive—investment expenses, advice, payment services, actuarial fees, custodial fees, etc.—but implicit costs should be considered, too. Quiet detractors such as periodic downgrade risk, in even high-quality bond portfolios, can reduce funding levels over time. The plan sponsor needs to understand all these costs.

- **Holistic risk management:** How does each segment of the portfolio contribute to the overall risk level? Each investment should have a clear goal and, in total, should contribute to a portfolio that matches a specific phase or objective in your IPS. Multiple layers of risk management and oversight are required, highlighting the need for an experienced team with deep resources. An OCIO may provide the expertise your organization needs in order to meet your unique objectives.

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**Conclusion**

The decision of whether to hire an OCIO is driven by the requirements of managing the corporate pension promise. Fiduciary due diligence, regulatory requirements, and the pension plan’s corporate impact all point to the importance of this responsibility. You must determine whether you have the internal resources to meet these demands, whether you need to call on a consultant to cover for gaps in the skill set, or whether you need to hire an OCIO for a broader service.

Know that this job is ongoing, and poses ancillary challenges: staying abreast of pension topics, maintaining the focus on the long-term plan, and orchestrating successful decision-making. Corporate leaders must decide whether these requirements are better met by an outside expert.

An OCIO should have expertise in the areas where your company/committee needs assistance the most, whether it’s establishment of goals, ongoing investment management, or fiduciary support. Effective meeting management or skill in navigating volatile markets may also rank high on your list.

In the end, partnering with an OCIO can enhance your capabilities in pension management, from the basics of the investment policy statement to risk metrics to effective cost management, and everything in between.
Appendix

Figure A-1. Top reasons for pursuing an OCIO relationship

Participants were asked to select the top three reasons why institutions choose to outsource.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of internal resources</td>
<td>58%</td>
</tr>
<tr>
<td>Improve governance processes</td>
<td>58%</td>
</tr>
<tr>
<td>Seeking improved risk-adjusted performance (i.e., get more out of existing relationship)</td>
<td>31%</td>
</tr>
<tr>
<td>Seeking stronger advisory relationship</td>
<td>28%</td>
</tr>
<tr>
<td>Seeking operational and administrative support</td>
<td>28%</td>
</tr>
<tr>
<td>Seeking transfer of responsibility</td>
<td>28%</td>
</tr>
<tr>
<td>Cost efficiencies</td>
<td>25%</td>
</tr>
<tr>
<td>Lack of expertise in specific asset classes</td>
<td>25%</td>
</tr>
<tr>
<td>Opportunities for an open-architecture platform</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: Cerulli Associates 2017b.

References

Fiduciary issues

The hiring and termination of investment managers

Cash balance pension plan investing

LDI investing


Glide-path strategy

Inglis, R. Evan, and Jeffrey Sparling, 2012. Pension Derisking: Start With the End in Mind. Valley Forge, Pa.: The Vanguard Group.

OCIO


Investment committee best practices

**Heuristic hiring:** When hiring managers, most companies tend to hire those that have done well in the past, even though evidence shows it is an ineffective guide to the future. Multiple studies have shown that those who have won in the past are likely to underperform going forward.

**Figure A-2. High ratings have not lead to future outperformance**

![Graph showing annualized 36-month excess returns](image)

**Sources:** Vanguard calculations using data provided by Morningstar. Data are as of December 31, 2016.

**Figure A-3. A change, not necessarily for the better**

Institutional investment management hire/fire decisions, 1996–2003

![Graph showing institutional investors' performance](image)

**Notes:** Data cover 8,775 hiring decisions by 3,417 plan sponsors delegating $627 billion in assets, and 869 firing decisions by 482 plan sponsors withdrawing $105 billion in assets. Analysis covers the period from 1996 through 2003.

**Source:** Goyal and Wahal (2008).