

By Tom Hazenberg and Koen de Reus, Ortec Finance September 2022



Illiquid courage: A new approach to balancing an illiquid portfolio

Illiquid assets are an important component of many pension fund portfolios, but they come with serious risks, particularly in volatile markets. Managing those risks requires realistic scenario analysis and a total balance sheet perspective.

Illiquid assets have become increasingly important to institutional investors and pension fund managers over the past two decades. These investors are looking for long-term, steady returns and illiquid assets – instruments like private equity, private debt, infrastructure equity and debt, real estate and natural resources, for example – can offer opportunities to provide just that. Pension fund managers may also see illiquid assets as a means of enhancing their yields and diversifying their portfolios.

Illiquid assets are attractive because they tend to offer a return premium. In part, this reflects their illiquid nature: by definition, these type of assets can't be sold without significant financial implications (usually in the form of a 'haircut'). Illiquid assets also require much more expertise and investment sophistication and therefore not every investor has the capabilities or the resources to invest in illiquid assets.

The fluid world of illiquids

While these assets may seem ideal for the patient long term investor, the reality is that illiquid assets carry significant risks. Cash flows to and from illiquid assets can be estimated but are uncertain – managers may call capital at any time and the timing of disbursements are often unpredictable. If you are managing a mature pension plan, the liquidity issue could be a significant risk, because the cash needed to fund these requirements may not be available. Even when managing a younger fund, cash calls may prove unpredictable and unwelcome.

A second challenge relates to allocations. Firstly, institutional investors need to assess what proportion of illiquid assets to target. A decision is typically informed by the risk appetite of the stakeholders, asset characteristics but also by qualitative arguments and

liquidity. Once a suitable allocation is defined it can be challenging to navigate how much cash to commit each year to achieve the target allocation. The market may move against you which can lead to significant under or over exposures relative to the Strategic Asset Allocation (SAA), and that is challenging because illiquid assets can't easily be rebalanced.

Consider two different (yet plausible) scenarios for the future: In one, the current levels of economic stress subside, allowing valuations of illiquid assets to rise relative to the liquid portfolio. In this scenario, some managers may find themselves overexposed to



illiquid assets versus their SAA. In the second scenario, economic stress flares up even further leading to falling valuations of illiquids. In this situation managers may need to increase their commitments to meet their SAA. Neither scenario is ideal for a pension fund manager.

Not seeing the full picture

Given the potential of volatile market circumstances to significantly change funding positions, allocations and available liquidity, pension fund managers should be focusing on doing whatever they can to better understand and manage these risks. Insight into the potential for significant under or overexposure and for liquidity risk in changing market conditions is a key component of sound risk management.

Most pension fund managers decide on their strategic exposure to an illiquid asset by assessing the quantitative analysis of the attractiveness of the particular asset class (risk/return characteristics and correlations) and a holistic scenario analysis such as an Asset-Liability Management (ALM) or a SAA study. These

managers then combine these insights with qualitative considerations around illiquidity, internal capabilities, and costs. This approach is adequate in many cases.

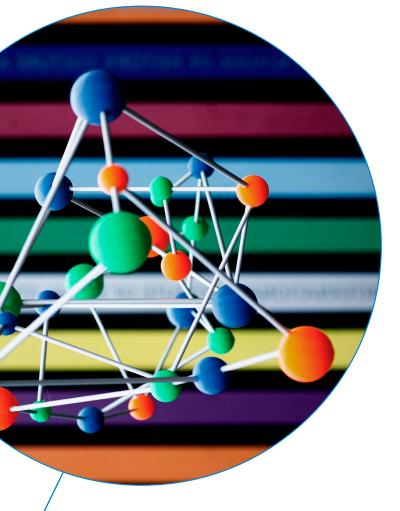
The problem is this practice leaves considerable risks stemming from illiquids unquantified. For younger pension funds and other investors with modest exposures to illiquid assets this does not pose a great threat, and the current approach is suitable. For mature pension funds and those with large exposures to illiquid assets, however, we should not ignore or stop at simple estimates of the potential impact of illiquid assets on the asset allocation weights of the total portfolio, as well as the impact on liquidity at a total balance sheet level.

What portfolio managers really need is a better understanding and quantification of how their total liquidity and allocations will change based on different market conditions. They need to know what types of risks they face from having to fund large capital calls in their illiquid portfolio. They need to assess the cash flows and allocations against a range of potential scenarios. Moreover, these risks should not be analyzed in isolation, but with a holistic model considering all investments, both liquid and illiquid, as well the cash flows to and from the liabilities. Pension fund managers also need to be able to zoom in on various specific risk scenarios, as well as zoom out to quantify the probability and severity of adverse scenarios.

A new approach

At Ortec Finance, we believe there is a better way for pension fund managers to assess and manage the risks associated with their illiquid asset positions. Our methodology takes advantage of our deep industry experience advising on SAA and ALM and our thirty-five year history of technological innovation to create a platform that brings together sophisticated ALM capabilities with illiquid asset cash flow models to provide a more holistic, reliable and quantifiable view of the total balance sheet.

The platform enables fund managers to analyze the impact that illiquid asset investments will potentially have on future asset allocations and allows the quantification of future liquidity risk from a total



balance sheet perspective in the context of many different scenarios. Ortec Finance's industry-leading Economic Scenario Generator allows pension managers to understand the illiquid asset returns and capital calls across thousands of different market conditions. Our tools provide managers with important insights like the probability of breaching allocation bandwidths or the probability that they may face liquidity problems in future years.

The output of our model helps pension fund managers understand how their illiquid asset portfolio will develop over time and how that will impact their overall cashflow. It helps them identify potential liquidity constraints and circumstances that could lead to overor under-exposure. It also allows them to calculate how much capital they should commit over the coming years in order to reach their fund's targeted exposure.

Making it work

Many of our clients have provided insights on what is important to them, and we have provided them with insights on how their illiquid asset portfolio could impact their long-term liquidity and cash flow. These insights must be aligned against your fund's objectives, maturity, risk appetite and investment guidelines.

If yours is a younger fund with significant positive cash flow, you may find that you are able to take on more illiquid exposure. If you manage a more mature fund, you may identify future cash flow problems that could impact your ability to meet your fund's obligations. In both cases, the platform allows pension fund managers to better assess the implications of allocating to illiquid assets to ensure policies are developed and in place when major deviations from the SAA occur.

Most pension fund managers will want to conduct this type of holistic approach to assessing liquidity risk as part of the SAA or ALM process. The tool would also be helpful to managers who want to monitor on a monthly or quarterly basis the impact of changes in (current and expected) market circumstances, allocations, and funding positions on expected liquidity and SAA deviations.



A better way

Illiquid assets form an important part of the pension fund portfolio for many pension fund managers. This asset class, however, comes with unique challenges. In particular, liquidity risk in periods of market volatility should be well understood. We believe pension fund managers should be taking a more holistic approach to assessing their illiquid asset portfolio. We encourage you to contact us to find out how Ortec Finance can help.





Tom Hazenberg Senior Consultant Pension Strategytom.hazenberg@ortec-finance.com

Koen de Reus Senior ALM Consultant koen.dereus@ortec-finance.com

