One of the cornerstone investment principles for long term investors is that they should be able to accept more risk than an investor with a shorter investment horizon, all else being equal. The construction of a robust long term investment portfolio requires diversification across different asset classes and risk premia such as the illiquidity premium.

Institutional investors often position their investment portfolios relatively conservatively from a liquidity management perspective, even those with very long investment horizons. This is driven by a range of factors such as governance constraints, regulatory requirements, concerns about historical market events and the behaviour of peers. However, this tends to result in inefficiencies from a long term investment perspective and we therefore recommend that institutional investors review their liquidity requirements periodically. Indeed, we suggest that the liquidity budget is considered explicitly as part of any long term Strategic Asset Allocation (SAA) review.

We have developed a Liquidity Budgeting Framework to assist institutional investors with a fundamental assessment of their own liquidity requirements. Once such a first-principles review has been carried out, an appropriate liquidity budget can be quantified and documented. This framework allows investors to integrate their liquidity requirements into the SAA setting process and facilitates the management and monitoring of their investment portfolio’s liquidity characteristics over time.

In this paper we summarise Mercer’s views on the illiquidity premium, revisit the case for investing in illiquid asset classes and provide a high level overview of Mercer’s Liquidity Budgeting Framework.

“A ship is safe in harbor, but that’s not what ships are for.”

William G.T. Shedd
DOES THE ILLIQUIDITY PREMIUM EXIST?

A case can be made that, in the long run, the returns from listed assets and unlisted assets should be similar if they have the same underlying drivers. However, where investors invest in illiquid assets, they should arguably be compensated for this lack of liquidity. The question is whether this additional return can be realised consistently over time, after the deduction of investment fees.

In addition to our own research, Mercer has reviewed the available academic and practitioner evidence and concluded that an illiquidity premium does exist, but that high active management fees for illiquid assets often absorb the illiquidity premium.

However, we also found that additional alpha / illiquidity premium can be captured by above median investment managers. For example, top quartile private equity, real estate and infrastructure managers have delivered meaningfully different and persistently superior returns over long measurement periods.

In practice, the most sensible way for institutional investors to capture the illiquidity premium is to invest in less liquid asset classes. The key here is that liquidity is a double-edged sword. Significant transaction costs are incurred when illiquid assets are bought, but also if they are sold prematurely. For example, private equity assets can normally only be sold in the secondary market at a significant discount relative to their fair value. Therefore, the most effective way of capturing the illiquidity premium is to minimise trading activity and hold investments to maturity.
DOES THE ILLIQUIDITY PREMIUM PERSIST AND CAN IT BE QUANTIFIED?

Liquidity can unexpectedly drop and remain low for some time. This gives rise to the concept of liquidity risk – the risk that an asset cannot be traded quickly enough to prevent or minimize a loss. Liquidity risk is typically reflected in an unexpected, sharp rise in transaction costs.

This means that that even assets such as listed equities, that are liquid in normal times, can carry an illiquidity risk premium. This is because there exists a possibility that they can suddenly become less liquid under certain market conditions. Such unexpected shocks to liquidity tend to be systematic, that is, they affect a range of asset classes at the same time.

As the liquidity of different asset classes varies over time according to prevailing economic market conditions, so does the illiquidity premium. This was clearly demonstrated during the Global Financial Crisis (GFC) when illiquidity premia widened to record levels as a result of the demand for liquidity.

Quantifying the illiquidity premium for various asset classes is extremely difficult. The reasons for this include:

- There are rarely directly comparable liquid and illiquid versions of a particular asset class.
- Lack of availability of accurate real time pricing and return information for less liquid assets.
- There may be factors other than just liquidity driving return differentials, for example the temporary effects of market sentiment.

There have been many academic and institutional studies which have attempted to quantify the illiquidity premia. Recent estimates range from around 0.50% p.a. to 0.75% p.a. for assets such as senior infrastructure debt to around 3% or more for assets further up the risk spectrum such as private equity.

Whilst the illiquidity premium fluctuates over time, is difficult to quantify and differs across asset classes, Mercer believes that it does exist and is worth pursuing by long term investors.

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For long term investors, there are multiple benefits of introducing illiquid asset classes into an investment portfolio: The key benefits include:

- **Expanded investment opportunity set.** This allows the construction of an investment portfolio with improved risk and return characteristics. In particular, illiquid asset classes provide exposure to risk and return drivers that are not accessible through listed asset classes.

- **Improved diversification / lower equity market beta.** Equity risk tends to dominate risk within the growth portfolios of institutional investment portfolios. The introduction of illiquid asset classes can help to diversify away from equity risk.

- **Greater potential value add compared to listed markets.** Private markets are less competed and less efficient than their listed equivalents. For example, information is less dispersed and more difficult to research. Greater control of private market assets and better governance provide the ability to add value post investment.

- **Inflation sensitivity in the case of real assets.** Given the way real assets are structured, their cash flows are often linked, directly or indirectly, to inflation.

By investing in illiquid assets, investors can expect to be compensated for this lack of liquidity through an illiquidity risk premium. The illiquidity premium can be accessed via a number of different asset classes. Specific asset examples where the exposure to the illiquidity premium is relatively high are shown in figure 2. We note that these asset classes are often also linked with relatively high alpha expectations.
When evaluating investment performance over long measurement periods, it is clear that illiquid asset classes have delivered strong results when compared with listed asset classes. There is therefore a strong argument in favour of including such assets in the portfolio of a long term investor that is able to accept the illiquidity risk. See figure 3.

As noted earlier, the additional returns achieved by investing in illiquid asset classes are often eroded through relatively high investment fees. Mercer is well placed to identify those managers that are able to deliver positive investment outcomes for investors, even after the deduction of investment fees.
When reviewing and setting the liquidity budget, Mercer strongly recommends that such a review should in the first instance focus on the cash flow and liquidity requirements of the investor’s underlying business or fund, rather than the current investment portfolio itself. This helps to identify the investor’s true liquidity profile and avoids the situation where the current investment strategy acts as an anchor to the liquidity budgeting process (which often results in relatively conservative liquidity budgets).

In addition, it is essential to gain a clear understanding of the investor’s liquidity profile through different market conditions. Therefore, a key consideration in setting the liquidity budget is that it needs to remain suitable and realistic through both “normal” and stressed market conditions.

Finally, it is essential that the liquidity budget is not considered in isolation or on a set-and-forget basis. Instead, it is recommended that the management and monitoring of liquidity within the investment portfolio is integrated within the SAA setting process.

**FIGURE 4. PRINCIPLES FOR ASSESSING AN INVESTOR’S OVERALL LIQUIDITY REQUIREMENTS**

- **Understand liquidity**
  - Through time
  - Different market conditions

- **Risk profile**
  - Investor specific
  - Governance structure
  - Regulations

- **Monitor liquidity**
  - Sources of cash flow
  - Uses of cash flow

- **Quantify**
  - Minimum liquidity
  - Tolerance ranges

Source: Mercer
INTEGRATION WITH THE SAA SETTING PROCESS

An investor’s liquidity profile and requirements impact multiple aspects of the investment process:

- The liquidity budget forms an integral part of any long term investment strategy and therefore liquidity should be considered explicitly as part of any SAA review.

- Portfolio liquidity should also be evaluated as part of the portfolio construction process within each asset class, as the liquidity characteristics of individual asset classes will have an impact on the overall opportunity set available to the investor.

- Illiquidity risk is one of the major investment risk categories for investors to consider as part of the management and monitoring of their investment portfolios.

**FIGURE 5. MAJOR INVESTMENT RISKS**

Without a fundamental assessment of an investor’s cash flow and liquidity requirements, it is difficult to set an appropriate liquidity budget for the investment portfolio. This liquidity profile is specific to each institutional investor and depends on the nature of its cash flow characteristics. Only once a clear liquidity assessment has been undertaken, can the investor-specific liquidity profile be effectively incorporated into the investment portfolio.

“*It is essential that the liquidity budget is not considered in isolation or on a set-and-forget basis*”

Source: Mercer
LIQUIDITY BUDGETING FRAMEWORK

Mercer has developed a Liquidity Budgeting Framework to assist institutional investors with a fundamental assessment of their own liquidity requirements.

Mercer’s Liquidity Budgeting Framework is a three-step process that is summarised below.

1. **Assess** overall liquidity requirement
2. **Quantify** the capacity and tolerance for illiquidity
3. **Define** the liquidity budget

STEP 1: ASSESS THE OVERALL LIQUIDITY REQUIREMENT

To facilitate the identification of an appropriate liquidity budget, investors first need to assess their specific capacity and tolerance for illiquidity. The analysis carried out as part of this step includes a multi-year evaluation of all cash flows experienced by the investor in terms of the day-to-day management of its business or fund. This analysis should also take into account any significant cash flows that are expected in the near future.

We differentiate between the capacity and tolerance for illiquidity as follows:

- Capacity for illiquidity provides a fundamental indication of the amount of illiquidity that an investment organisation or fund can realistically accept, based on their own expected cash flow requirements over time.

- Tolerance for illiquidity takes into account any specific investor preferences or prevailing legislative/regulatory guidance that further constrain an investor’s exposure to illiquid assets. These factors will typically result in more conservative liquidity budgets.

NOTE: While similar investor groups might exhibit broadly similar liquidity profiles, the overall liquidity requirement is ultimately investor specific and will depend on the investor’s own preferences and needs.
STEP 2: QUANTIFY THE CAPACITY/TOLERANCE FOR ILLIQUIDITY

In order to effectively manage and monitor the portfolio’s liquidity profile, it is important to quantify the liquidity budget. This would:

- Assist in setting and defining the initial liquidity budget.
- Facilitate the decision-making process when changes to the SAA are considered.

The recommended structure is to define the liquidity characteristics of the investment portfolio and individual asset classes as follows.

This construct can be amended to comply with local investment practices, regulatory guidance or other legal requirements. For example, an investor may wish to define primary liquidity as less than one month, or set secondary liquidity as one week to three months.

The application of this classification structure to the overall portfolio will be informed by:

- The investor’s overall capacity for illiquidity during normal market conditions.
- The investor’s overall tolerance for illiquidity during times of market stress.
- An appropriate set of asset class liquidity assumptions, which can be informed by historical market information. These assumptions should differentiate between normal and stressed market environments.
- Any minimum liquidity requirements (such as restrictions prescribed by legislation or a regulator) and other investor specific constraints.

STEP 3: DEFINE THE LIQUIDITY BUDGET

Based on the analysis carried out as part of the first two steps of the framework, it is now possible to define the investor’s liquidity budget by allocating the appropriate percentages to each of the liquidity categories.

For example, at the overall portfolio this can be expressed as follows for an investor that can only tolerate a moderate amount of illiquidity.

<table>
<thead>
<tr>
<th>TIME TO CASH</th>
<th>PRIMARY LIQUIDITY</th>
<th>SECONDARY LIQUIDITY</th>
<th>TERTIARY LIQUIDITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIMARY LIQUIDITY</td>
<td>Less than 1 week</td>
<td>1 week to 1 year</td>
<td>More than 1 year</td>
</tr>
<tr>
<td>SECONDARY LIQUIDITY</td>
<td>85% to 100%</td>
<td>Up to 15%</td>
<td>Up to 15%</td>
</tr>
<tr>
<td>TERTIARY LIQUIDITY</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The liquidity budget shown above is illustrative only and will not be applicable to all investors. The overall liquidity requirement is ultimately investor-specific and will depend on each investor’s own preferences and needs.

Once the investor’s high level liquidity budget has been determined, this framework can be used to evaluate the portfolio’s overall liquidity profile.

- A formal liquidity policy should be captured as part of the investor’s governance documentation.
- Portfolio SAAs should be considered and evaluated relative to the stated liquidity targets.
Whilst the illiquidity premium fluctuates over time, is difficult to quantify and differs across asset classes, we believe that it does exist.

We, therefore, continue to encourage long term investors to take advantage of their long term investment horizons, which allows them to benefit from investing in those illiquid investment opportunities that are avoided and overlooked by investors with shorter term investment horizons or liquidity constraints.

Private markets and asset classes exhibit varying degrees of efficiency, and it is important to recognise which markets offer sufficient potential for alpha generation. Skilled managers are more likely to add value (after fees) in less efficient markets and we believe that Mercer’s manager research process can improve the likelihood of identifying skilful managers.

In conclusion, investors should have a good understanding of their liquidity requirements and the extent to which their investment portfolios can be exposed to liquidity risk during times of market stress. Applying our proposed Liquidity Budgeting Framework, investors can determine and manage their liquidity budgets appropriately.

Every investor has unique objectives. We invite you to review Mercer’s beliefs around key investment themes that both underpin our approach and drive investment success.

Visit us at: www.mercer.com/services/investments/investment-beliefs.html
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