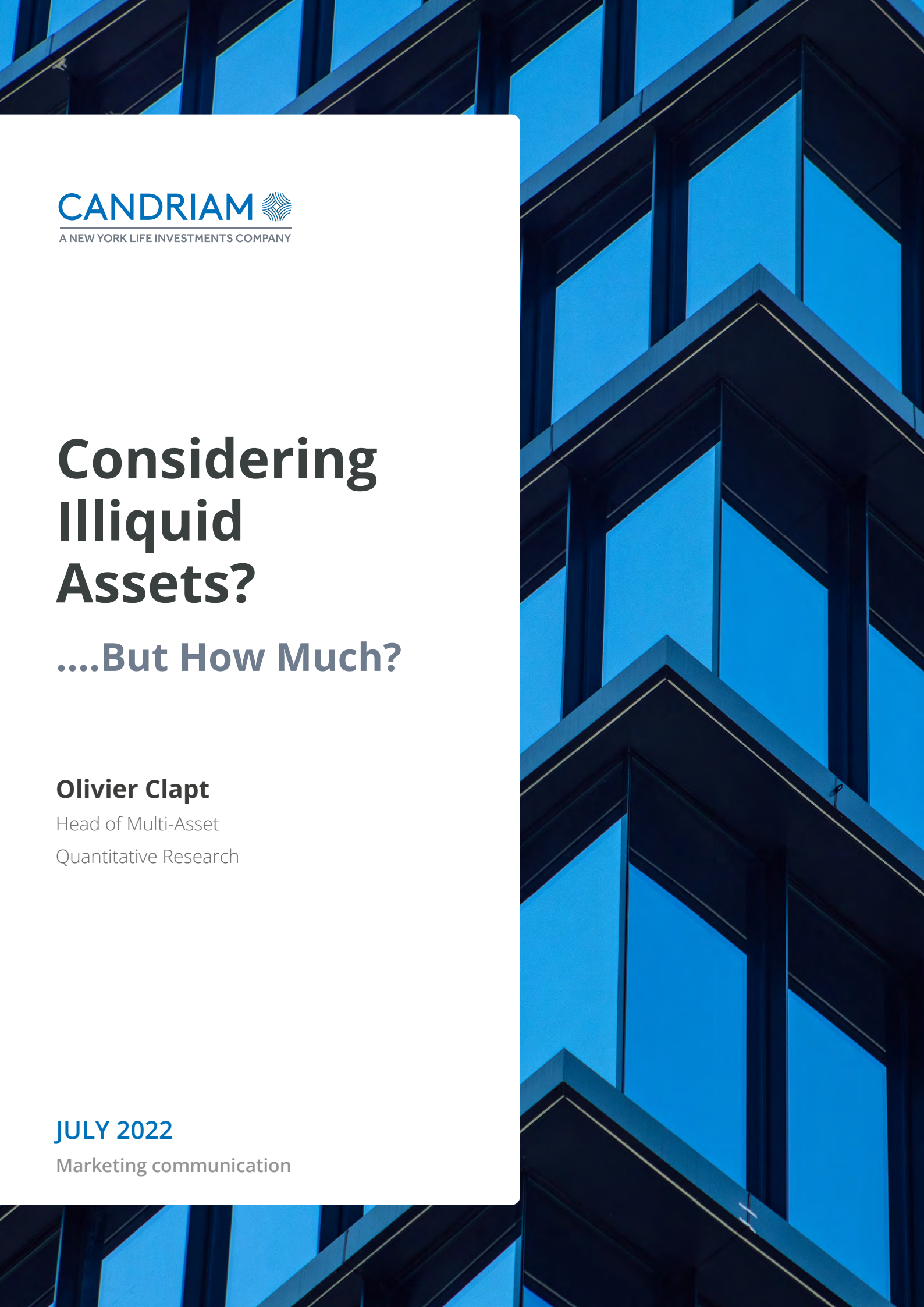

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# Considering Illiquid Assets?

## ....But How Much?

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Marketing communication

# Increasing Your Comfort in a New Investing Environment

**Markets volatile enough for you?**

**As 2022 opened, we all thought of Covid, war, oil prices, transient inflation… What do you see on the horizon now? Wheat supply crisis? Quantitative tightening? *Sustained* inflation?**

And yet, some assets are performing. The obvious answer is to diversify. With four decades of declining Treasury rates, liquid financial assets such as equities and government bonds had been the easy long-term answer. But they might not be the answer tomorrow.

The Great Financial Crisis is the most obvious example of increased asset class correlation during periods of illiquidity. While perhaps the most memorable, the GFC is only one in a series of increasing instances of asset class correlation during stress. The tech and IPO crash of 2001, the 1997 Asian crisis, and the collapse of Long-Term Capital Management also foreshadowed the increasing complexities within market volatility. It seems the long-term trend is that during market dislocations, investors suffer from increasing correlations among normally "uncorrelated" financial asset classes.

# Beyond Basic Bonds and Equities

**An old market saying has it that *Bulls make money, Bears make money, but Pigs get slaughtered*.**

Whether you are a Bull or a Bear, perhaps you feel that now is *not* the time to be greedy and put everything into the next new financial market 'thing'.

Refresh your memory with four *decades* of declining US Treasury yields, if you have been investing that long. We all know this has been the driver of financial assets throughout our adult lives. How are *you* changing your investing approach?

**Figure 1:** Ten-Year UST Yields


Source: St Louis Fed

# Illiquid, Less-Liquid, or Physical Asset Classes

**These are not new investment categories -- throughout history we have examples of investments in illiquid but portable gems and gold.**

Closer to home, even before Covid made leaving the city seem so delightful, the cost of that new house you were hoping to buy was already rising. Do you regret not having more real estate in your investment mix?

But which assets? And how *much*?

# The Data Problem

**Analyzing illiquid investments raises another concern for investors, that is, data availability, collection, consistency, and artificially smooth returns.**

The growing interest in illiquid assets means that investors and asset allocators must carefully evaluate their risk and return. Identifying data for illiquid asset classes remains a well-documented difficulty, requiring treatment for inherent biases, such as back-filling and survivorship bias.

Several elements increase the challenge in modelling illiquid assets.

- The **lack of data** representing the main **risk drivers**
- The absence of well-recognized **benchmarks**
- The **heterogeneity of return indicators** (Internal Rate of Return vs Total Return)
- The **index valuation** (appraisal-based vs transactions-based)
- **Infrequent pricing** and the scarcity of available datasets

It can be a challenge to find relevant indices for each asset class, especially in certain regions. We chose to analyze Direct Lending, Private Equity, Infrastructure, Infrastructure Equity, Infrastructure Debt, Real Estate Equity, Real Estate Debt, and Natural Resources such as timberland and farmland.

Two things become apparent – illiquid assets are demonstrably more volatile than one might estimate from quarterly or other infrequent pricing, and secondly, that the low cross-correlations with more liquid assets makes them attractive diversifiers to a balanced portfolio.

# Volatility Is So Much More Palatable When Asset Classes are Uncorrelated…

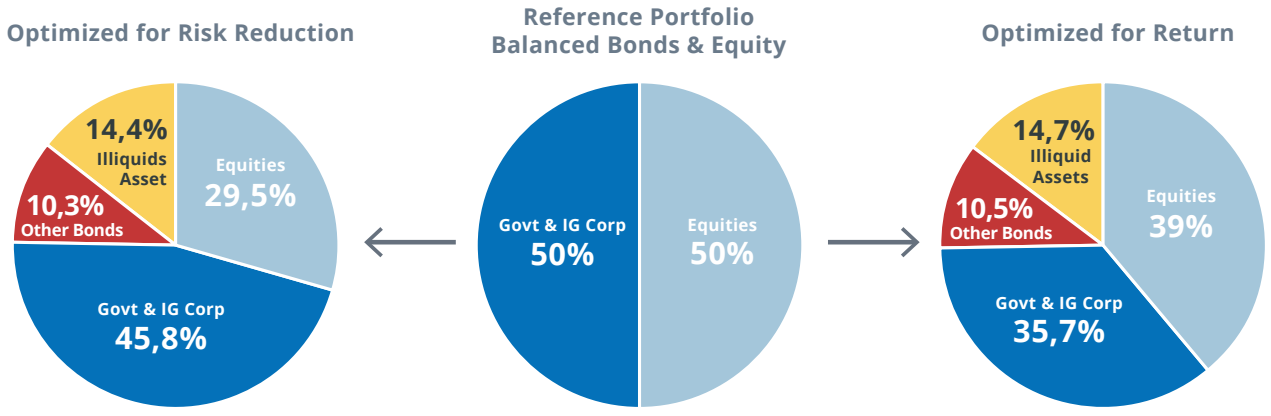
**Much better if your equities are going up while your real estate is dropping, or your real estate is appreciating while your bond investments are weak.**

But imagine trying to calculate historical asset class correlations when some of those assets are illiquid – and therefore rarely priced. And you thought math class was boring -- try it without numbers! Fortunately, we can rely on statistical methods to "unsmooth" the less-frequent reporting of illiquid asset returns,[1,2] and thus obtain a better estimate of their volatilities.

In our 'academic paper for the rest of us', we simplify by offering scenarios.

We construct basic sample portfolios for conservative, moderate, and aggressive investors. To these we add less-liquid bonds (for example, high yield) plus an allocation to illiquids such as real estate. Based on historical returns, correlations and volatility, we show the optimal mix for maximizing return, or for reducing risk. Spoiler alert – your optimal allocation to other asset classes depends on your personal risk and return trade-offs.

**Figure 2:** Optimizing a Basic Portfolio for the addition of Other Bonds, and Illiquid Assets




Source: Candriam (as of 21 Dec 2021)

# What to Add?

**And what might be of interest? Perhaps a pile of magical swords in a vault at Gringotts Wizarding Bank? Our perhaps you could purchase a farm, or some warehouses, and manage them yourself in your spare time?**

Physical assets, such as artwork, are indeed a choice. Professionally managed pools, such as real estate, private equity, or less-liquid bonds can potentially offer the returns of illiquid investments along with some element of periodic and semi-independent valuation. Investing in a pool shares the expense of the professional managers, who in turn can enhance the risk-adjusted return potential.

One further advantage to introducing illiquid asset classes cannot be demonstrated with our simple single return forecast model and long-term approach. During periods of market turmoil, while panicked investors may rush to sell listed assets and drive prices down, illiquid asset classes may avoid some of the downside price pressures that results from rapid liquidation.

Want more detail, but don't have a degree in statistics? See our educational paper, **Introducing Illiquid Assets into a Global Multi-Asset Portfolio**.

# References


[1] D. Geltner, *Estimating Market Values from Appraised Values without Assuming an Efficient Market*, 1993.

[2] M. Getmansky, A. Lo et I. Makarov, *An econometric model of serial correlation and illiquidity in hedge fund returns*, 2004.

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