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# INVESTING IN ILLIQUID ASSETS

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**X**avier Timmermans, head of Alternatives Investment Specialists at Fortis Investments, recently presented a research paper on the potential benefits and possible pitfalls of investing in illiquid assets. This newsletter provides a brief summary of that paper. The full paper is available upon request.

Long-term investors do not necessarily need 100 percent liquidity for all their assets. The illiquidity premium is currently exceptionally high due to the ongoing credit crisis. Institutional investors have an opportunity to lock-in this high premium, which should boost the returns of their portfolios during the lengthy period in which they are invested in illiquid holdings.

## WHAT IS ILLIQUIDITY?

A liquid asset is one that can be sold rapidly, with minimal loss of value from bid-ask spreads, at any time within market hours. The essential characteristic of a liquid market is that there are ready and willing buyers and sellers at all times.

Illiquidity, liquidity's opposite, comes in different forms:

- Markets that are normally liquid may suddenly become illiquid if there are too many sellers for the number of buyers, and market makers withdraw from the market.
- Restricted liquidity, as for hedge funds where subscriptions and redemptions can typically only be made once a quarter with a notice period of at least a month.
- Illiquidity due to the absence of a secondary market. Private equity funds, for example, typically have 10-year duration with no exit possibilities other than via coupons and regular reimbursement in the final years of the lock-up period.

## ILLIQUIDITY IN TRADITIONAL ASSET CLASSES

### *The illiquidity premium*

The difference in the yield of two assets that are similar in all aspects apart from their liquidity is called the illiquidity premi-



um. This is the compensation an investor receives for accepting lower liquidity.

In the government bond market, for example, for the same issuer, maturity and coupon, a large, recent issue has a lower yield to maturity than an older or smaller issue. However, it is important to note that the transaction costs are smaller for liquid instruments, so a bond manager must find a balance between the need for mobility and the quest for higher yield to maturity. (Indeed, transaction costs in illiquid instruments may completely negate the benefit of their higher yields.)

Such liquidity premia exist in every market and their magnitudes change over time. In the example above, the cost of liquidity tends to decrease when yields are low and investors' risk appetite is high. Conversely, the illiquidity risk premium increases during sell-offs when investors are looking for safety.

Different studies show that expected returns are positively correlated with illiquidity. A recent study<sup>1</sup> showed a strong positive relationship between equity returns and the aggregate commission rate for NYSE trading, which itself exhibits a strong correlation with illiquidity indicators such as bid-ask spreads, order imbalance, and small-trade ratio.

### ***Restricted liquidity can protect fund investors against losses***

Excessive liquidity can be detrimental to a fund's performance. In principle, a fund's redemption period should not be shorter than the average time required for the liquidation of its assets. Also in principle, fund redemptions should not be allowed if the liquidation prices are lower than the net prices used to compute the fund's net asset value.

This may sound obvious, but many corporate bond funds and credit spread products lost value during the recent credit crisis

<sup>1</sup> "Is Illiquidity A Risk Factor? A Critical Look at Commission Costs," Jinliang Li, Robert M. Mooradian and Wei David Zhang, *Financial Analysts Journal*: Jul/Aug 2007.

# A WELL-KNOWN FRENCH MID CAP MANAGER HAD TO BE RESCUED BY ANOTHER COMPANY EARLIER THIS YEAR. ...

when bid-ask spreads and market volatility were much higher than usual. A well-known French mid cap manager had to be rescued by another company earlier this year because it was unable to guarantee the liquidity of its funds when liquidity disappeared in the small and mid cap market.

Therefore, restricted liquidity, a minimum holding period and high early-exit fees to the benefit of the fund, should be seen as protection for investors that are not looking to exit the fund.

## *Investing in illiquid traditional strategies in a crisis*

Illiquidity premia tend to increase in crisis situations. Today, the illiquidity premium is extremely high as we are in the middle of a credit crunch. Investors with deep pockets who can tolerate high temporary mark-to-market volatility are well placed to harvest this premium and generate what could be attractive returns for years to come.

An institutional investor willing to accept some illiquidity can obtain today's much-increased illiquidity premium on top of credit risk premia, for example. The true opportunities lie in the less liquid segments of the credit market, in bank loans, in small-size issues, and even in convertible bonds, which have suffered abnormally.

In most of these cases, the opportunities need to be structured in a fund or special mandate in order to optimize the risk-return trade-off, for example by hedging duration and currency risk or to get the right average maturity. Such funds tend to have a fixed maturity to reinforce the lock-in feature. The lock-in feature and other restrictions to liquidity also aim to protect investors from difficulties in determining accurate valuations (Mark-to-market

prices may be out of line with realistic acquisition prices, for example.).

## ILLIQUIDITY AND HEDGE FUNDS

Hedge fund redemptions can typically only take place quarterly, and with a notice period of several weeks. However, some hedge funds have restricted their liquidity further in order to exploit longer-term strategies and protect themselves against the arrival of a client base that is quick to punish poor short-term performance.

Dr. Fabrice Dusonchet, a Quantitative Analyst with E.I.M. S.A., demonstrated in a recent article<sup>2</sup> that between January 1997 and September 2006, hedge funds with annual liquidity outperformed hedge funds with monthly liquidity by about two percentage points per year.

This may be partly due to factors other than liquidity, but these results are hardly surprising when we consider the nature of hedge fund strategies, many of which aim to exploit market anomalies that take time to disappear. Distressed debt, for example, can take a couple of years before delivering the returns it targets. We do not expect to see hedge funds' liquidity improving—massive recent redemptions due to short-term underperformance will probably lead the best of them to add further restrictions to liquidity.

## *Vulnerability of some hedge funds in a liquidity crisis*

In theory, genuine hedge fund strategies should perform well whatever the market conditions: they do not have systematic exposure to bond or equity markets, and may even have a net negative exposure via short positions. Yet, in the past few quar-

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<sup>2</sup> See "Hedge Funds, Is their illiquidity worth it?" Dr. Fabrice Dusonchet, November 2006. EIM Web site <http://www.eimgroup.com/jahia/page86.html>

ters, many hedge funds have failed to meet their performance targets. In order to understand why this has happened and why we believe it does not discredit hedge funds, it is important to look at the ways in which hedge fund managers aim to generate performance.

Specifically, they can exploit two types of opportunity—directional and relative value—by taking long or short positions in different instruments. These techniques can be successful in both rising and falling markets. They are vulnerable, however, when there is a sudden withdrawal of liquidity, such as we saw recently when many market participants tried to reduce their risk (their leverage) at the same time. This is dangerous for hedge fund strategies because it means a lot of investors are trying to close their long and short positions at the same time by buying back the instruments they have sold and selling those they have bought. In other words, investors buy back the instruments they thought were overvalued, pushing their price up further, and sell the instruments they thought were cheap, making them even cheaper, in order to reduce their overall exposure to the markets.

A hedge fund manager who has made a correct initial assessment of the relative value of two instruments will lose money when this happens. The situation is even worse when the markets are highly leveraged, as this heightens the selling pressure. On top of this, long-short hedge fund managers tend to be short in liquid assets—since they must be able to buy back the instrument in the future to close the position—while they may take more long positions in less liquid assets. In a liquidity crisis, investors try to move their funds into liquid assets and offload less liquid instruments, creating the risk of further losses on both the long and the short sides of a relative value trade and increasing correlations across asset classes.

Crises such as these are hard to predict, can be violent, and may do considerable damage, especially to highly-leveraged funds. However, they are generally relatively short lived. Prices do

eventually adjust sufficiently to attract new buyers and sellers. This can create opportunities for hedge funds that are able to increase their positions and so generate better future performance.

## PRIVATE EQUITY

Private equity funds are the most illiquid of all alternative investments. Once invested in limited partnership interests (which are the dominant legal form of private equity investments), it is very difficult to achieve liquidity before the manager starts to sell the investments in the portfolio. Capital is locked up for as long as 12 years and distributions are only made as and when investments are converted to cash; limited partners typically have no right to demand that sales be made.

There is a wide range of types and styles of private equity, such as leveraged buy-outs, venture capital, capital growth, infrastructure, real estate and distressed situations. Institutional investors are increasingly interested by private equity as they seek:

- Higher returns than can be achieved on public stock markets;
- Diversification from traditional listed securities; and
- Lower volatility, as private equity can be a means of avoiding the volatility brought on by new regulatory mark-to-market requirements.

The private equity business model has a straightforward goal: to increase the value of a business as much as possible within a defined timeframe, typically eight-12 years. In contrast to public companies, private equity firms seek to sell all of the businesses they own. This influences every stage of a private equity investment's lifespan. Throughout the ownership period, private equity stewardship is relentlessly focused on improving aspects of the business in order to increase its attractiveness to new owners.

### *Is private equity illiquidity worth it?*

It could be expected that on average, private equity would generate higher returns than public capital markets because it involves



# “THE PERFORMANCE OF PRIVATE EQUITY FUNDS OVER THE PAST FEW YEARS HAS DIFFERED DEPENDING ON THE TYPE OF FUNDS AND THEIR VINTAGES.”

higher risk. However, the reality is much more complex. The performance of private equity funds over the past few years has differed depending on the type of funds and their vintages. Even within a specific type of private equity fund of the same vintage, the performance of the top- and bottom-quartile managers has varied dramatically.

A number of recent studies<sup>3</sup> have demonstrated that on a risk-adjusted basis, private equity does not outperform the public capital markets on average. The adjustments for risk in question take into account that private equity portfolios are typically far more highly leveraged than public companies and also their lack of liquidity, which adds a further element of risk and should justify an illiquidity discount.

A particular problem in such analyses is that these asset classes—including leveraged buy-outs, venture capital and real estate—are not valued on the same basis as traditional, more liquid asset classes such as cash, bonds and public equities. Illiquid asset classes have artificially-smoothed return series, making them look both less volatile than, and less correlated with, other asset classes. However, when methods are used to make the returns of publicly-traded assets more comparable with those of illiquid assets by removing serial autocorrelation in the data and treating errors in measurement, the results<sup>4</sup> lead to a dramatic revaluation of both the risk-adjusted returns and the diversification benefits of the asset classes.

This note is not intended to add to the debate, but we believe the conclusion of The Boston Consulting Group in the study referred to above<sup>3</sup> is very important:

“On a risk-adjusted basis, private equity does not outperform the public capital markets; nevertheless, it remains an attractive asset class for investors. The reason: there are indications that the best private-equity firms consistently “beat the fade”—that is, they avoid the reversion to average returns, which, over time, afflicts the vast majority of investment opportunities. In other words, some private-equity firms do have a strong likelihood of outperforming the market over time—something rarely witnessed in other asset classes, such as mutual funds or individual public companies.”

Leverage, meanwhile, is not necessarily a bad thing, as it contributes to the excess return of the asset class. Using leverage is not compatible with liquidity, however. This is one of the reasons why private equity illiquidity is worth it.

## CONCLUSION

Investing in illiquid assets can provide clear benefits—namely higher returns and diversification. However, this kind of investment is not for the fainthearted and any potential investor must make a detailed assessment of their liquidity needs beforehand—if they get this wrong then they run the risk of not locking-in the illiquidity premium (which is currently extremely attractive) or of not being able to meet their liabilities.

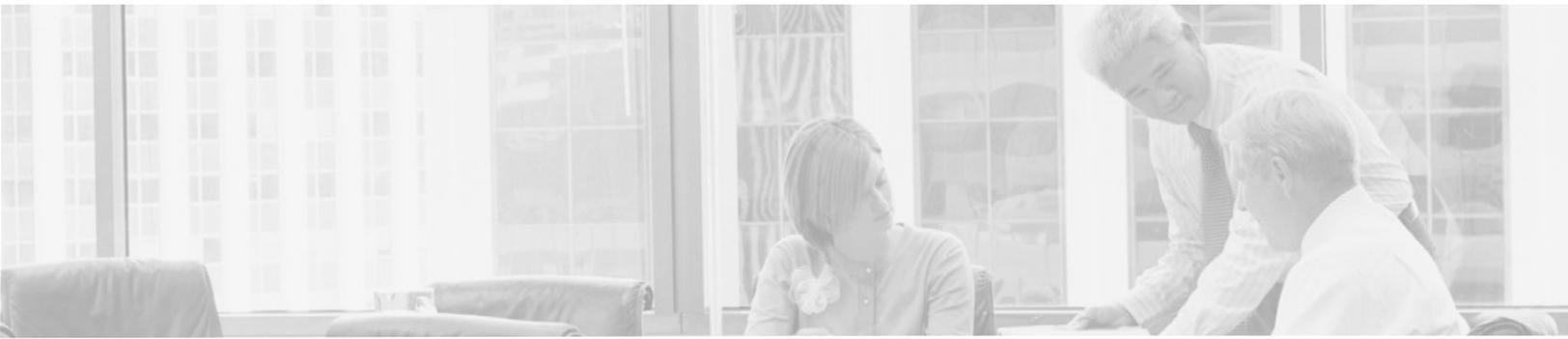
In particular, institutions investing in illiquid assets must be certain that they will not need to access the money they have invested in the near future. Illiquid assets are just that—they can often only be cashed-in several years after the initial investment, and so are only suitable for investors with an appropriate time horizon.

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<sup>3</sup> See “The Advantage of Persistence, How the Best Private-Equity Firms ‘Beat the Fade,’” The Boston Consulting Group & University of Navarra, February 2008.

See also “Private Equity Performance: Returns, Persistence and Capital Flows,” Steve Kaplan and Antoinette Schoar (Kaplan is at the University of Chicago Graduate School of Business and at the NBER; Schoar is at the Sloan School of Management at MIT, and at the NBER, and the CEPR).

<sup>4</sup> See “How Risky are Illiquid Investments? A practical approach to estimating volatilities and correlations for non-traded assets,” Vineet Budhreja and Rui J. P. de Figueiredo, Jr. The Journal of Portfolio Management, Winter 2005.



In addition, investors must have the knowledge and time to be able to manage what are somewhat complex asset classes. In general, this involves selecting an investment manager to carry out this role for them, but even then they should conduct extensive due diligence as managers vary widely in their ability.

In short, the longer institutional investors are prepared to lock up their money, the higher the return on their investment is likely to be. Given that the illiquidity premium is currently high

as a result of the ongoing financial turmoil, institutions may be well-advised to carefully consider investing in illiquid assets.

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