PPCmetrics

Investment Consulting

# EPFIF

## Illiquidity Risk Premium – does it exist and if so, how can Pension Funds capture it best ?

**PPCmetrics AG**
Dr. Andreas Reichlin, Partner

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## Structure of my Talk

- Introduction
- Illiquidity Risk Premium
- Harvesting Illiquidity Risk Premiums
- Conclusion

# Introduction

## What is an illiquid asset?

**Illiquid assets** are assets which **cannot be readily converted into cash**, in contrast with liquid assets, assets which are either in the form of cash, or easily convertible into cash.

# Introduction
## Definition

- Illiquid assets do **not trade often** and therefore **can't be sold quickly without a discount**.
  – Usual example is real estate, however even large blocks of stocks are illiquid.
- This infrequent trading means that observed prices may not represent recent transactions, in which case the prices are stable. As a result, volatility measures are biased downwards. (Jorion (2010)).
- Except for "plain vanilla" public equities and fixed income, **most asset markets are characterized as illiquid**.
  – Swiss covered bond market for example has an annual turnover of less than 10%. Put simply, per year only 10% of the covered bonds are traded.

# Introduction
## Some important aspects around liquidity

- **«Liquidity Dries Up»**
  - **Many normally liquid asset markets periodically become illiquid.** E.g., during the 2008 - 2009 financial crisis, the market for commercial paper – usually a very liquid instrument – experienced “buyers’ strikes” by investors unwilling to trade at any price.
  - **Those illiquidity crisis occurs often with financial crises**, i.e., when asset prices plummet. Then investors sell what they perceive to be risky investments and purchase safer investments, i.e., high grade treasuries. This phenomenon is called **«flight-to-quality»** or **«flight-to-liquidity»**.
- **Over time, liquidity has improved dramatically**
  - Through electronic trading, decimalization, transparency, more market participants, and competition (de Jong and Driessen (2013)).

# Illiquidity Risk Premium
## Definition

**Illiquidity risk premiums** compensate investors for the **inability to access capital immediately**.
They also compensate investors for the **withdrawal of liquidity during illiquidity crises** (Ang (2013)).

# Illiquidity Risk Premium
## Harvesting Illiquidity Risk Premiums

- There are **three ways for a pension fund to capture illiquidity premiums**:
  - **“Passive” allocation to illiquid asset classes**, like real estate
  - **Liquidity Security Selection**: Selecting illiquid securities within an asset class, like small caps in a large cap mandate
  - **Dynamic strategies** at the portfolio level, like countercyclical rebalancing mechanism (“increasing the percentage of illiquid asset during liquidity crisis”).
- Economic theory states that there should be a premium for bearing illiquidity (Demsetz (1968)). However, there are also models that show that illiquidity washes away with individuals (some individuals are constrained, some are not…).
- As a consequence, it is an empirical question...

# Illiquidity Risk Premium
## Conventional View Across Asset Classes

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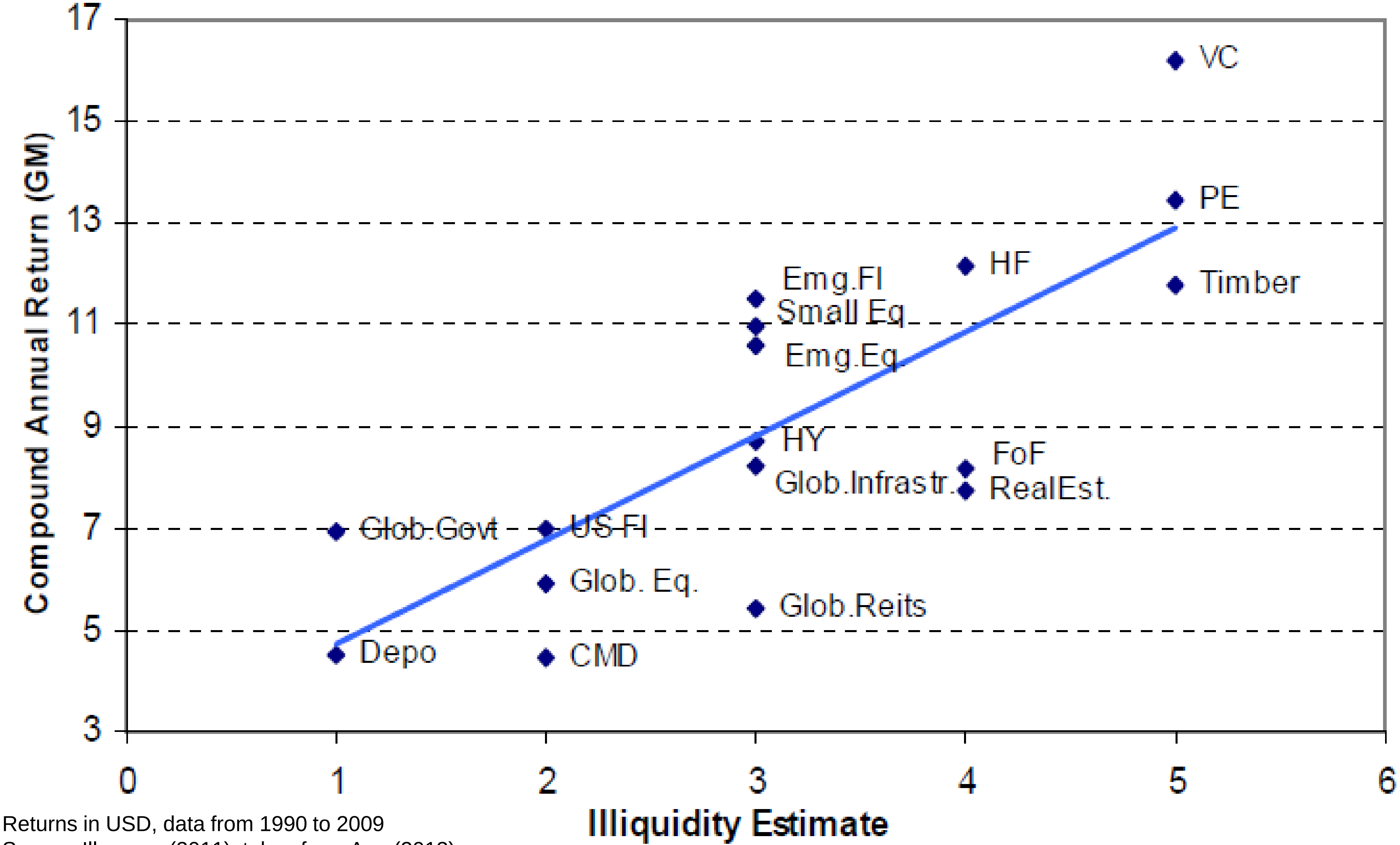
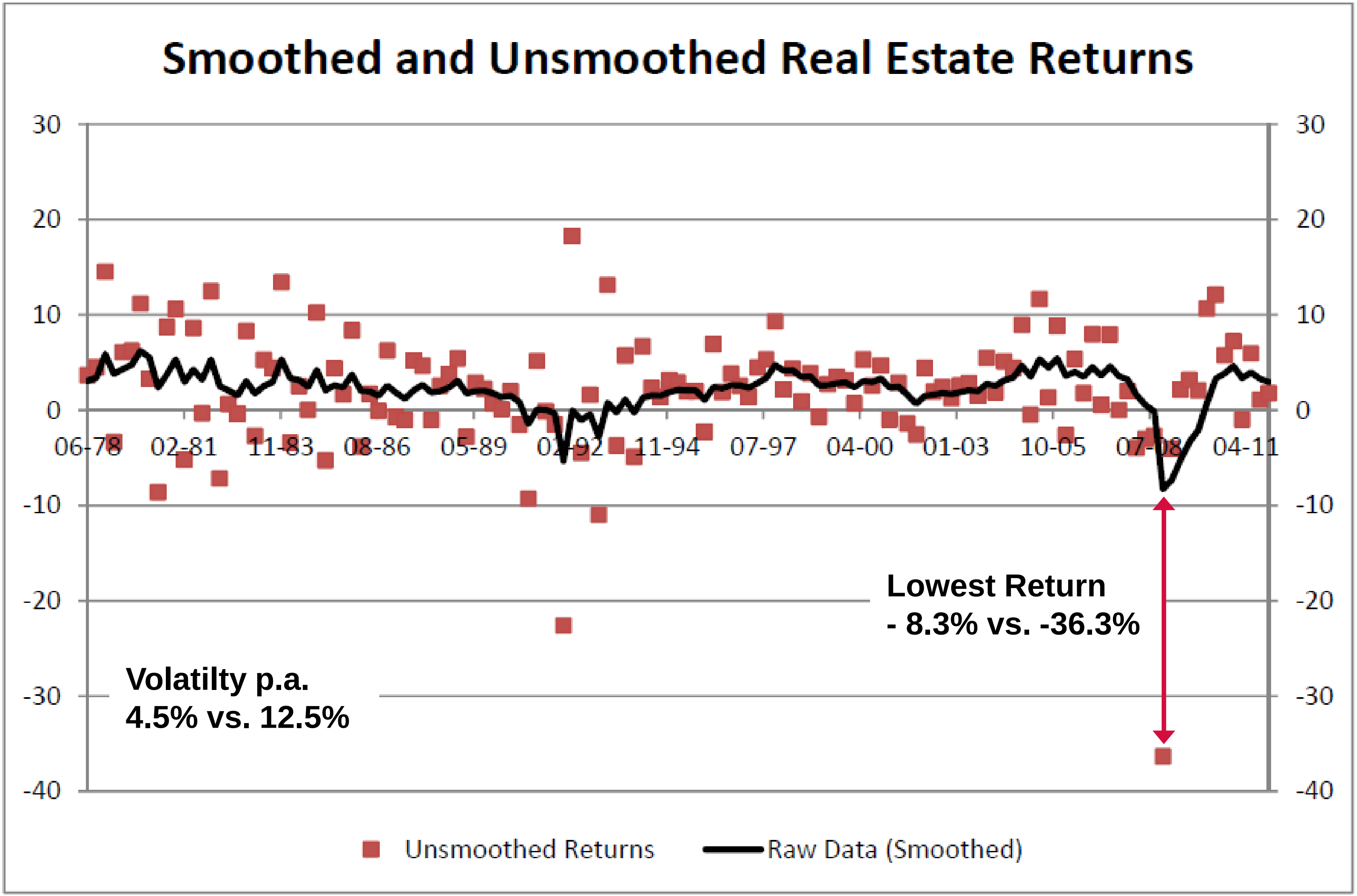



Returns in USD, data from 1990 to 2009
Source: Illmanen (2011), taken from Ang (2013)

# Illiquidity Risk Premium
## Flawed View? (1)

- Conventional view might be flawed:
  - **«Illiquidity Bias»:** historical returns are unreliable (Survivorship Bias, no mark-to-market through infrequent trading, Selection Bias).
  - **Ignoring risk**: illiquid assets contain far more risks than illiquidity risk.
  - There is **«no market portfolio»** and **«no market index»** (e.g., no investor has the same returns as the KGAST Real Estate Index).
  - **No separation between risk factors and manager skill**
- So even empirical analysis cannot answer the question that there are illiquidity risk premiums in a satisfactory way.
- Nevertheless, there is the belief that there is a premium across and within asset classes.

# Illiquidity Risk Premium
## Flawed View? (2)




Source: Ang (2013), NCREIF (unlisted real estate)

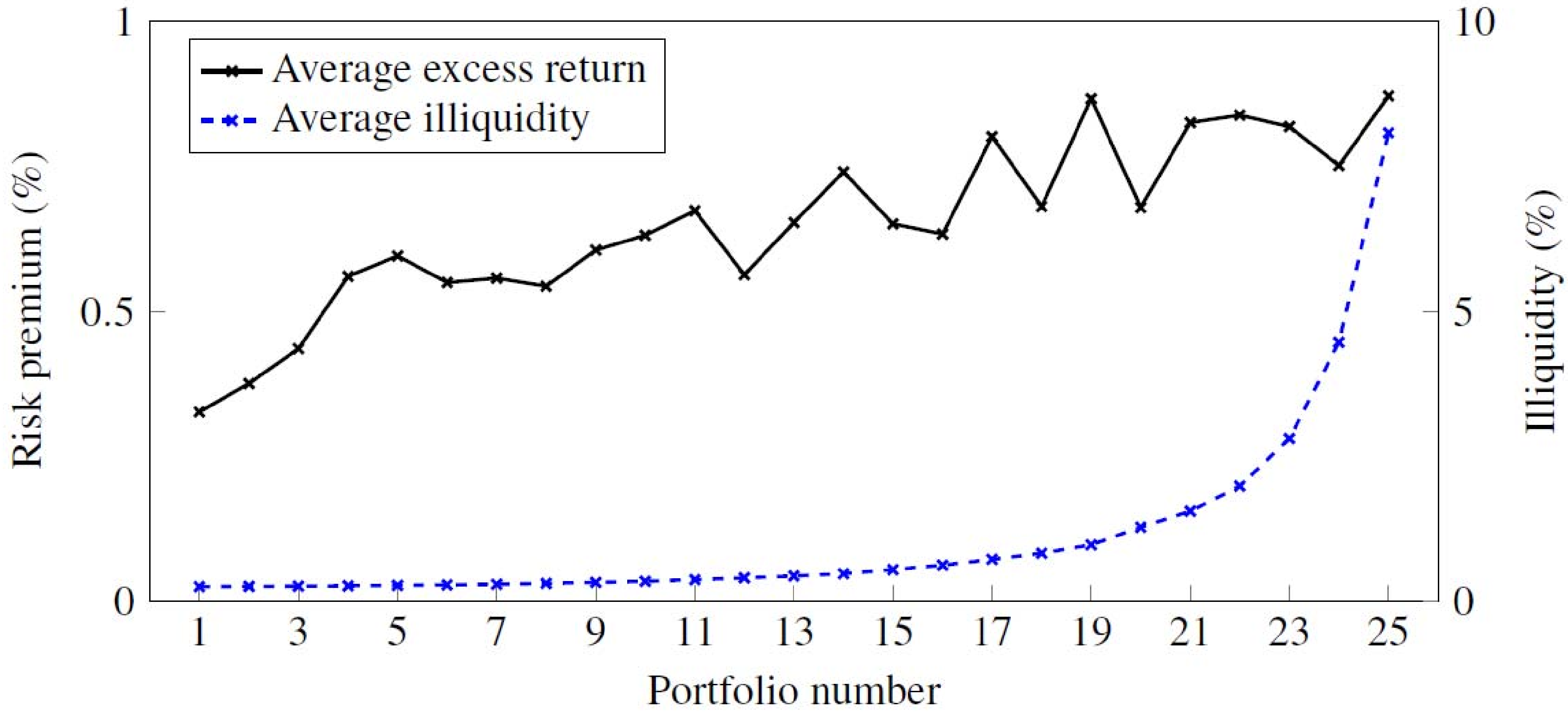
# Harvesting Illiquidity Risk Premiums
## "Passive" allocation to illiquid asset classes

- Recap: not clear if a higher return of an «illiquid» asset class is due to an illiquidity risk premium or another risk factor.
- **Typical approach of institutional investors** if they want to invest in illiquid asset such as real estate, private equity etc.
- However, there are several drawbacks:
  - The higher the percentage of illiquid assets, the **lower the flexibility** (remember Harvard Endowment Fund during the financial crisis!).
  - Illiquid assets **complicate tactical asset allocation**.
  - The more investors invest in such illiquid assets, the smaller the illiquidity premium (Ben-Rephael, Kadan und Wohl (2012)).
  - Most illiquid asset investing comes with **agency problems** and therefore needs more monitoring and controlling.

Source: Beber, Driessen, and Tuijp (2012)

# Harvesting Illiquidity Risk Premiums
## Liquidity Security Selection: Within an Asset Class

- Many empirical studies show that illiquid stocks outperform more liquid stock (also a typical strategy of active managers):




Source: Beber, Driessen, and Tuijp (2012)

# Harvesting Illiquidity Risk Premiums
## Dynamic strategies

- Since the illiquidity risk premium is time varying, a dynamic strategy is **buying additional illiquid assets in stress time** (“Warren Buffet’s strategy”).
  - The easiest way is a **rule based countercyclical rebalancing mechanism**.
- Critics argue that rebalancing is more an asset management strategy and in fact it requires some liquidity. However, such a strategy **provides liquidity**.
- However, this can be tough since increasing the allocation of a more illiquid (and therefore more risky) asset is **difficult and might need a lot of patience**.

# Conclusion

- Illiquid asset should have a **higher return than comparable liquid assets**. However, it is a **compensation for risk**.

▸ **So be careful with illiquid asset investing!**

Source: http://financewithvision.net