

# The More Illiquid, The More Expensive: A Search-Based Explanation of the Illiquidity Premium

Jaewon Choi, Jungsuk Han, Sean S. Shin, and Ji Hee Yoon

Discussion by Chaojun Wang  
The Wharton School, University of Pennsylvania

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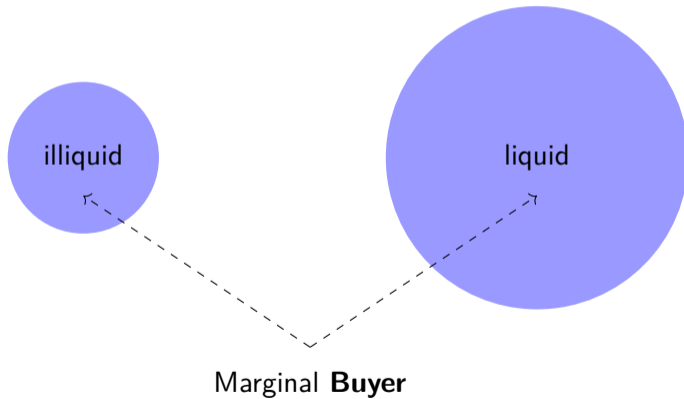
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**Empirically** Illiquidity premium during market distress  
liquidity premium in normal periods

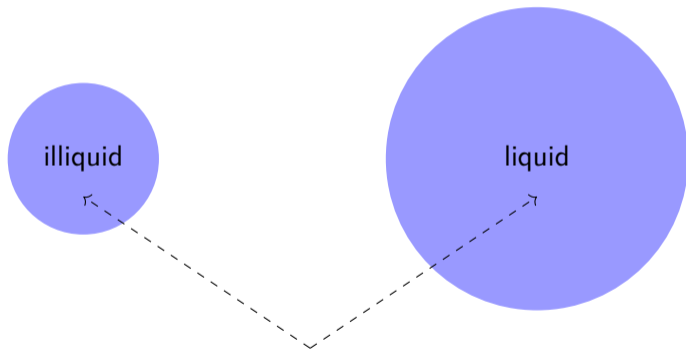
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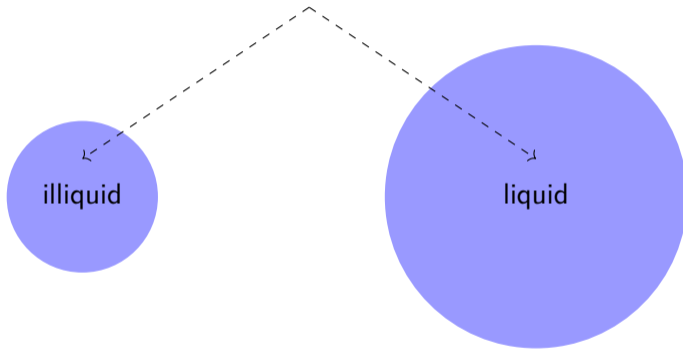


Marginal **Buyer**  
 $P_{\text{illiquid}} < P_{\text{liquid}}$ : **Liquidity** Premium



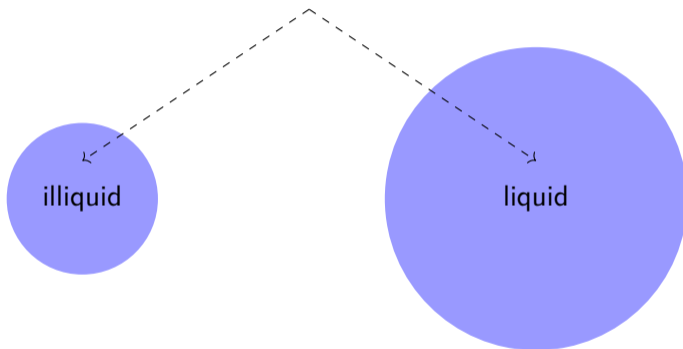
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- Firms post wages
- Each worker chooses which firm to apply
- A higher wage attracts more applications, and thus each application has a lower probability of success
- In equilibrium, a worker is indifferent between applying to a high-wage and a low-wage job

## Commitment to mutually exclusive choice

- Requires investors to commit to a mutually exclusive choice of which asset to trade
- Like choosing which country to live
- If investors can choose which asset to trade upon meeting  $\implies$  always liquidity premium
  - ▶ Marginal investor is indifferent between trading either of the two asset
  - ▶  $P_{\text{liquid}} > P_{\text{illiquid}}$  (standard explanation for liquidity premium)

## Solution: directed search?

- Each investor has a fixed “search capacity”
- Each investor chooses how to allocate her search capacity across other investors—toward “whom” to prioritize search
- “Global” investors can trade either asset, “local” investors can trade only one asset
- Conjecture: a global investor  $i$  direct her searches only to toward a “local” investor
  - ▶ A local investor has a worse outside option
  - ▶ Investor  $i$  obtains a better price when trading with a local investor
- In equilibrium, a global seller is indifferent between search for a local buyer of asset A and a local buyer of asset B

## Illiquidity premium → liquidity discount

- “What is the illiquidity premium? A primer on the rewards and hazards of investing in hard-to-trade assets” (The Economist)
- “The terms *illiquidity premium* and *liquidity premium* are used interchangeably. Both mean that an investor is getting an incentive for a longer-term investment.” (Investopedia)

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# Summary

- Illiquidity premium a striking pattern
- Elegant model that generates
  - ▶ liquidity premium during normal period
  - ▶ illiquidity premium during market distress
- Main suggestions:
  - ▶ Relax commitment to mutually exclusive choice?
  - ▶ Use directed search?