

# Discussion of “Hedge Fund Liquidity Management”

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Authors solve “Rich Man’s Problem”:

- Massive amount of new confidential data
- What can we do with it?

We know virtually nothing about how liquidity is intermediated:

- Cash Lenders  $\implies$  Dealers  $\iff$  Asset Managers

This is first study on the joint liquidity management of assets and liabilities among Hedge Funds (HFs).

Authors study HFs’ liquidity – many interesting results:

- connecting asset liquidity to funding liquidity
- dynamic response of asset liquidity to outflows

# Connecting Asset Liquidity to Funding Liquidity

## 1. Negative Liquidity Mismatch

- assets (cash+“portfolio”) more liquid than liabilities (equity+debt)

## 2. HFs investing in less liquid “portfolio” secure longer-term equity commitments

- but NOT longer-term debt financing

## 3. More on Liquidity Management:

- if equity is committed for longer-term
  - HF keeps less cash at hand
- if debt financing is committed for longer-term
  - HF keeps less unused borrowing capacity (undrawn credit & free credit)

# Dynamic Liquidity Management

Who do HFs respond to (investors) outflows?

- cash buffers (cash/NAV) increase in response to equity investors' outflows
- consistent with persistent outflows and precautionary liquidity hoarding

**Caveat:** mutual funds take little or no leverage, HFs take much more

What about dealers outflows? masked in  $NAV = \text{asset value} - \text{debt}$

Alternative explanation:  $\text{Net Flows}_t < 0$  leads to:

- $\text{Cash}_t \downarrow$
- but...  $\text{Cash}_t / \text{NAV}_t \uparrow$
- implying that  $\text{NAV}_t \downarrow \downarrow$
- dealers run together with investors

- What is Asset Liquidity?
- What is Asset Liquidity capturing?
- Is Mismatch meaningful? Alternatives
- Funding Liquidity across Collateral – the Dealers' view
- Different HF strategies in isolation?

# What is Liquidity?

Asset Liquidity is the (weighted) average number of days needed to **liquidate** the HF's **positions**.

	% of portfolio capable of being liquidated within
1 day or less .....	
2 days – 7 days.....	
8 days – 30 days.....	
31 days – 90 days.....	
91 days – 180 days.....	
181 days – 365 days.....	
Longer than 365 days.....	

**Liquidate:** “each investment is assigned shortest period\* during which HF believes that **positions** could be liquidated at or near its carrying value.”

\*(based on market conditions, assuming no fire-sale discount)

**Positions:** not sure what that means: Long? Long/Short trade?

# What is Asset Liquidity Capturing?

Hedge Fund – Long/Short Equity Strategy:

HF wants to bet Twitter TWTR goes up and Facebook FB down. How?

- HF gives \$100 to Dealer (D):
- D buys \$100 of TWTR, and repos it out to raise \$95 cash (Repo).
- D gives \$ 95 cash as collateral to borrow \$98 of FB (RevRepo/SecBorr).
- D sells FB for \$ 98.
- Later, both REPO and REVERSE REPO unwind

If TWTR drops and FB goes up, HF **LOSES money**

- even if both FB and TWTR are **very LIQUID assets**

**Q1. What is the Asset? Long TWTR, or the whole Long/Short exposure trade?**

**Q2. Is Asset Liquidity more about riskiness of strategy (VaR) than liquidity of each stock?**

# Is Mismatch a Meaningful Measure?

Mismatch = Asset Liquidity - Funding Liquidity

Asset Liquidity = average number of days to liquidate positions at no loss

Funding Liquidity = average number of days for which funds are committed

**PROBLEM:** Mismatch does not full capture possibility of **DISTRESS**

- similar issue with Liquidity Coverage Ratio

Enough average liquidity doesn't mean that liquidity is enough each day.

Example:

- Assets: \$100 can be liquidated in 1 month
- Liabilities: \$50 overnight claim; \$50 committed for 1 year.

HF can **DEFAULT** tomorrow if overnight claim doesn't roll

- even if Asset Liq >> Funding Liq



# Alternative to Mismatch

Mismatch day-by-day:



(a) Assets



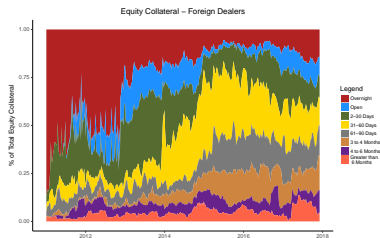
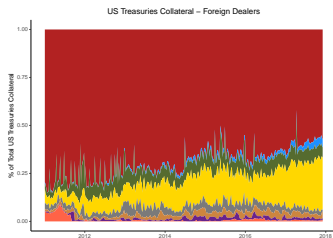
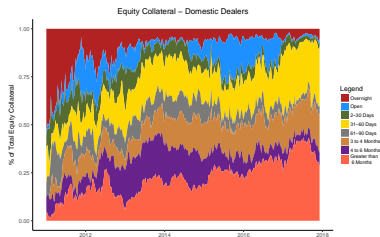
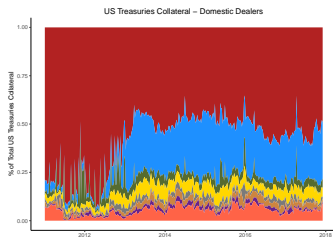
(b) Financing

Mismatch (x days) = Assets liquid within (x days) - Funds committed for ( $\leq$  x days)

Similar to LCR's Net Outflows:

- in stress scenario when funds don't roll,
- how many assets can be sold to meet redemptions?
- how much equity is at stake?

# The Dealers' View: Funding Liquidity across Collateral



(c) Treasuries

(d) Equities

Figure: Maturity profile of triparty repos. Source: Macchiavelli, Pettit (2018).

# HF Strategies in Isolation?

Overall... great analysis, and I want to know more!

Are correlations between Asset Liq and Financing Liquidity capturing

- differences across equity/fixed income/ distress strategies?
- different risk appetite within each strategy?
- not enough to control for strategy FE
  - need to fully interact, or
  - separate regs for each strategy

Also..

Asset Risk (VaR) / Funding Liquidity connection for each strategy?

Cash Buffers respond to both Dealers and Investors Outflows?