

Discussion of  
“A Market-Based Funding Liquidity Measure “  
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# In a nutshell

## Funding liquidity

- ▶ How much can I borrow against my assets?
  - ▶ Depends on asset and time
- ▶ Data not easily available → create proxies

## Three papers for the price of one

1. A novel way to **measure** funding liquidity
2. Estimate the **price** of funding liquidity
3. Study the **impact on hedge fund returns**.  
Can managers time funding liquidity risk?

## Main contribution:

- ▶ Construct a *tradable* proxy for funding liquidity

# The FLS factor (Funding Liquidity Shocks)

## Interesting + relevant problem

- ▶ FL as important source of risk in addition to trading liquidity
- ▶ May explain away even more HF alpha
- ▶ May help to distinguish skill vs. luck in HF returns

## 5 proxies for “marginability”

- ▶ **Size**, Idiosyncratic volatility, Amihud liquidity, Institutional holdings, Analyst Coverage

## First analysis

- ▶ For each proxy, form 5 groups
- ▶ Inside each group, form a BAB (=betting against beta) portfolio
- ▶ 5 – 1 returns large and significant

# The FLS factor (2)

Step 1: extract shocks  $X$  from 5 – 1 portfolios

$$X_{t,i} = r(PF_5^{\text{proxy}_i})_{t,t-1} - r(PF_1^{\text{proxy}_i})_{t,t-1}$$

$\text{proxy}_i = \{\text{Size, id.vol, amihud, inst.hold, analyst}\}$

Step 2: obtain FLS

- ▶ FLS = first principal component of  $X$

Verify properties of FLS

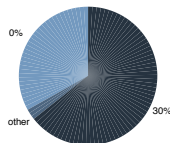
- ▶ Correlated to most other funding liquidity proxies (0.2 ~ 0.5)
- ▶ But also correlated to market liquidity proxies (~ 0.2)
- ▶ Not spanned by existing risk factors
- ▶ Explanatory power over and above existing risk factors

# Is FLS a good proxy?

## Several layers of abstraction

### Interactive Brokers Data

- ▶ Only describes “marginability”, no variation in size of margin



### Size is main contributor in probit

	(1)	(2)	(3)	(4)	(5)	(6)
Size	2.87*** (0.10)					3.12*** (0.13)
Idiovol		-1.88*** (0.11)				-1.34*** (0.13)
Amihud			-0.21*** (0.02)			-0.01 (0.01)
IO ratio				2.03*** (0.07)		0.25*** (0.07)
Analyst					0.14*** (0.01)	-0.07*** (0.01)
Constant	-1.11*** (0.04)	0.92*** (0.03)	0.49*** (0.02)	-0.63*** (0.04)	-0.22*** (0.03)	-0.72*** (0.06)
Pseudo $R^2$	<b>0.53</b>	0.10	0.05	0.17	0.20	<b>0.57</b>

- ▶ Interpretation of institutional ownership?

# Comments

## Hedge Fund Data is dirty

- ▶ Backfilling, corrections, data errors, overlaps
- ▶ Need a lot of econometrics and data science, e.g.:  
Changes you can deal with? Robust HF exposure and alpha  
Camponovo/Popescu/Trojani (wp 2015)

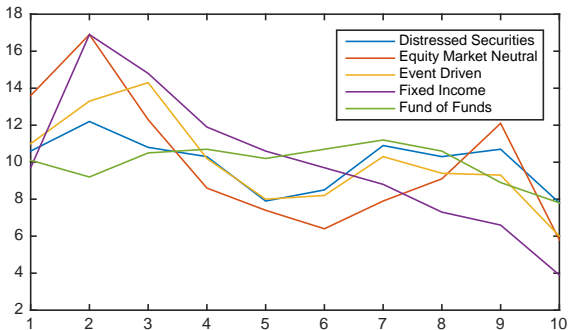
## Correlation risk is an important factor

- ▶ When there is no place to hide: Correlation risk and the cross-section of hedge fund returns  
Buraschi/Kosovski/Trojani (wp 2013)

# Comments (1)

## Three Interesting patterns

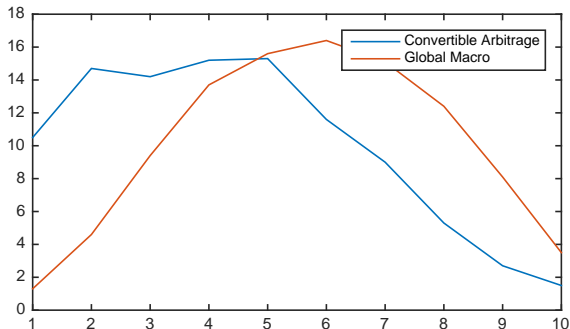
- ▶ In which portfolios do certain strategies show up?  
Assumption: linear relationship



# Comments (1)

## Three Interesting patterns

- ▶ In which portfolios do certain strategies show up?  
**Difficult** to understand: inverse U-shape

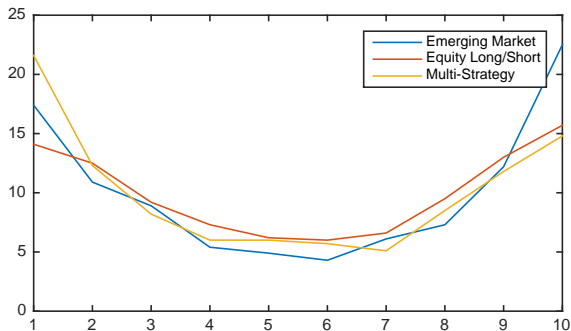




# Comments (1)

## Three Interesting patterns

- ▶ In which portfolios do certain strategies show up?  
**Even more difficult** to understand: U-shape



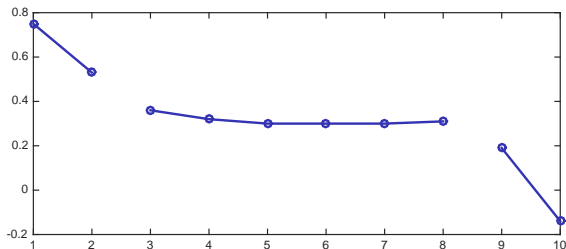
# Comments (2)

## Hedge fund performance

- ▶ By how much is hedge fund “alpha reduced?

## Only extreme portfolios concerned

- ▶ Big difference in 10 – 1
- ▶ Flat loading in 8 – 3 (i.e. 60% of funds)



# Conclusion

## Small points

- ▶ Very long. Focus?
- ▶ Notation (e.g.  $R_i$ )
- ▶ Some details on the procedure (i.e. HF data not in the data appendix)

## A mature paper