



**Do Buyside Institutions Supply Liquidity in Bond Markets?
Evidence from Mutual Funds
by Anand, Jotikasthira, and Venkataraman**

**CFIC Discussion, 4/6/2018
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SUMMARY

- **Examine the role played by bond funds in providing liquidity**
- **Create a measure of liquidity supply/demand based on dealer inventory cycles**
- **The measure is persistent**
- **Funds with more liquid bonds and more stable flows are more likely to supply liquidity**
- **Predicts abnormal returns**



WHY SHOULD WE CARE?

- Liquidity provision by dealers has declined
 - e.g., Schultz (2017) finds that the Volcker rule had an impact
- The SEC seems to care
- Do mutual funds supply liquidity in this dealer market?







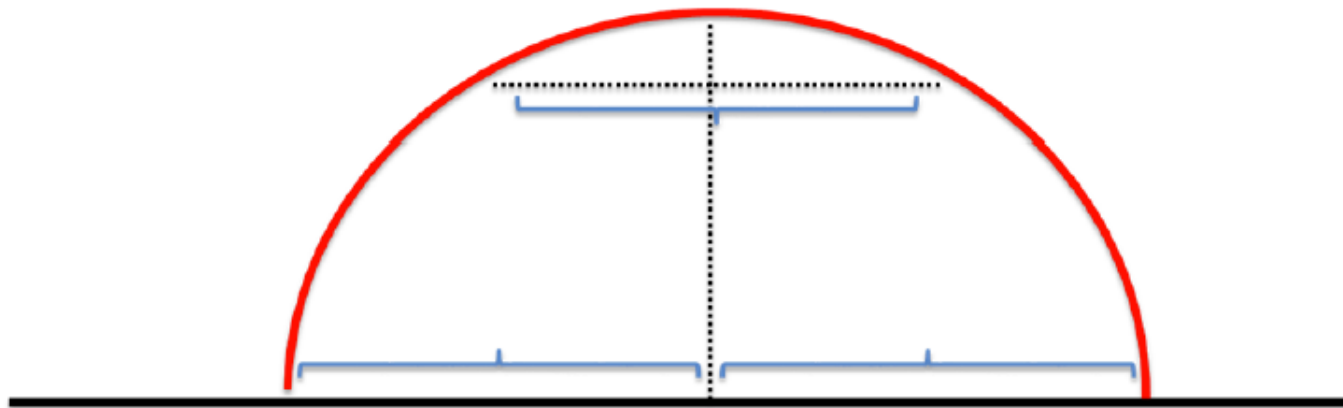
OUTLINE

Main Comments:

- Measure
- Data
- Dealers
- Alphas



COMMENT 1: LS MEASURE



DEALER:	BUY	SELL	
FUND 1	BUY	BUY	SUPPLY LIQUIDITY TO DEALERS
FUND 2	SELL	SELL	DEMAND LIQUIDITY FROM DEALERS
FUND 3	BUY	SELL	These seem like more “standard” definitions
FUND 4	SELL	BUY	

COMMENT: LS MEASURE (CONTINUED)

- Inventory & inventory cycles seem to be measured at the aggregate level.
- I guess this is okay since dealers can trade with each other (inter-dealer trades)
- Still, might want to include a justification
- Do we see a lot of inter-dealer trades near the peak (or trough) of a cycle?

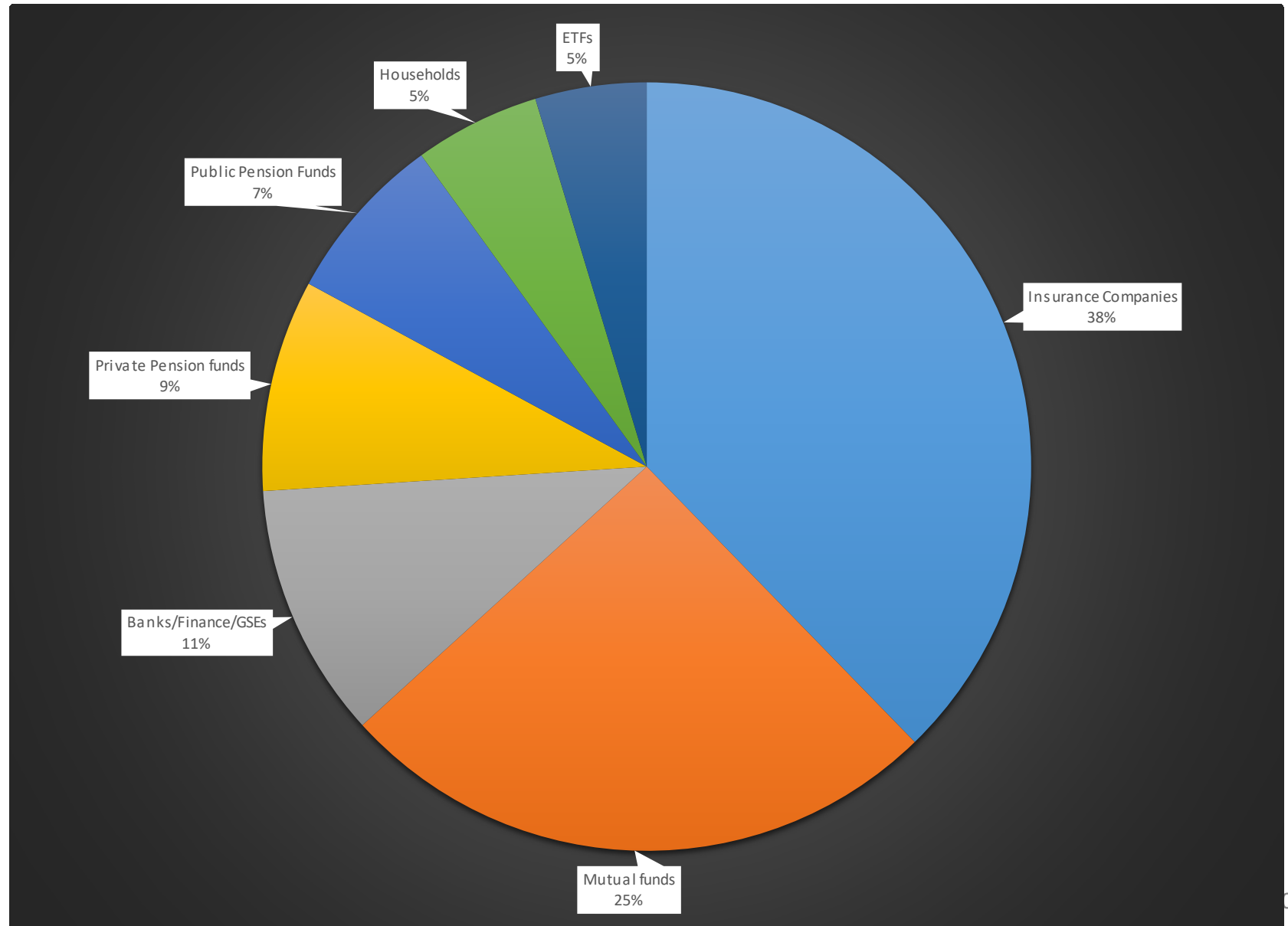


COMMENT 2: MUTUAL FUND DATA

- Mutual funds are active in the corporate bond sector
- Good candidates to fill the role of liquidity suppliers
- On the other hand, we have to rely mostly on quarterly or monthly holdings to infer trades.
- Liquidity suppliers are likely to be very active.
- Can you validate that holdings data provide similar results to trade-level data?
- Active ETFs are too few and too new
- Ancerno has very little bond data
- What about insurance companies?



WHO OWNS CORPORATE BONDS? (FED FLOW OF FUNDS DATA 2017)



COMMENT 2: MUTUAL FUND DATA

- NAIC requires disclosure of transactions by insurance companies
- Less active than bond funds, on average, but some variation

full_cusip	description	foreign	date_acquired	name_of_vendor	disposal_date	name_of_purchaser
88579EAE5	3M COMPANY		14JUN10	Royal Bank of Canada	28JUN10	Southwest Securities
002824AS9	ABBOT LABORATORIES		14JUN10	BNP PARIBAS	28JUN10	BNP PARIBAS
06052MAD7	BANK OF AMERICA AUTO TRUST		16JUN10	Bank of America	28JUN10	Greenwich Capital
084664BG5	BERKSHIRE HATHAWAY FIN		14JUN10	Goldman Sachs & Co	28JUN10	BNY/ITC Dealers
136375BS0	CANADIAN NATL RAILWAY	F	16FEB10	Wall Street Axess	01JUN10	Wall Street Axess
17275RAG7	CISCO SYSTEMS INC		14JUN10	Wells Fargo	28JUN10	Southwest Securities
22160KAB1	COSTCO WHOLESALE CORP		14JUN10	US Bancorp Piper Jaffray	28JUN10	Southwest Securities
532457BD9	ELI LILLY & CO		14JUN10	Royal Bank of Canada	28JUN10	VARIOUS
34529EAD2	FORD CREDIT AUTO OWNER TRUST SER B		15JUN10	Citigroup Global Markets	28JUN10	Barclay Capital
36967HAY3	GENERAL ELEC CAP CORP		16MAR10	Morgan Stanley	01JUN10	HSBC Securities
43812WAC1	HONDA AUTO REC OWNER CL A3		14JUN10	Wells Fargo	28JUN10	Barclay Capital
717081CZ4	PFIZER INC		14JUN10	VARIOUS	28JUN10	VARIOUS
718172AB5	PHILIP MORRIS INTL INC		17FEB10	Royal Bank of Canada	28JUN10	Southwest Securities
742718DL0	PROCTOR & GAMBLE CO PG		16FEB10	Royal Bank of Canada	28JUN10	Called
80282DAC6	SANTANDER DRIVE AUTO REC TRUST		14JUN10	Wells Fargo	28JUN10	Greenwich Capital
822582AL6	SHELL INTL FINANCE	F	14JUN10	VARIOUS	28JUN10	VARIOUS
904764AJ6	UNILEVER CAPITAL CORP		14JUN10	Royal Bank of Canada	28JUN10	Greenwich Capital
913017BF5	UNITED TECHNOLOGIES CORP 6.1%		14JUN10	VARIOUS	28JUN10	Southwest Securities
931142CL5	WALMART STORES INC		14JUN10	Deutsche Bank	28JUN10	Wall Street Axess
10112RAB0	BOSTON PROP CORP NOTE CONT CALL 6.250		13JUL10	CHASE SECURITIES	12DEC10	REDEMPTION 110.7470
62888XAA2	NCUA GUARANTEED 2010-C1 A1 CMBS 1.600		03NOV10	BARCLAYS GROUP INC.	27NOV10	PAYDOWN
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91324PAE2	UNITEDHEALTH GROUP INC CORP NOTE NON CAL		23JUL10	BANK OF AMERICA SEC	28JUL10	BANK OF AMERICA SEC
947074AH3	WEATHERFORD CORP NOTE MW 15BP 5.950%		23JUL10	BANK OF AMERICA SEC	21OCT10	REDEMPTION 107.9790
767201AE6	RIO TINTO FIN USA CORP NOTE CONT CALL	F	23JUL10	MORGAN STANLEY	02NOV10	REDEMPTION 113.1970

- Data from 2010: about 12% of dollar volume and 8% of trades were round-trip within quarter



COMMENT 3: DEALERS

	dealer	dolvol	trades	buys
1	JP MORGAN	20637966635	23261	16904
2	BANK OF AMERICA	20539018990	19542	13743
3	MORGAN STANLEY	15909161567	12979	8018
4	BARCLAYS CAPITAL INC	15556938617	12043	8129
5	CITIGROUP	12526200107	11688	7998
6	CREDIT SUISSE FIRST BOSTON	13891164489	11520	7445
7	GOLDMAN SACHS	11779562253	10189	6434
8	DEUTSCHE BANK	10347161974	8787	5882
9	WELLS FARGO	4481518546.2	5594	3575
10	UBS SECURITIES	3998919873.5	5065	3371
11	JEFFERIES & CO	4831743048.9	4854	2516
12	ROYAL BANK OF SCOTLAND	3219573509	2950	2199
13	RBC CAPITAL MARKETS	2846181383.8	2868	1657
14	WACHOVIA	2296733492	2416	1493
15	BNP PARIBAS	1862628007.8	2278	1225
16	HSBC	1975523464.6	2233	1303
17	NOMURA SECURITIES	3070446714	2096	1147
18	CANTOR FITZGERALD	1919724958.9	1659	906
19	MERRILL LYNCH	718191645.83	1611	1012
20	STIFEL NICOLAUS	957824330.34	1603	851
21	KEYBANC CAPITAL MARKETS	893523002.82	1534	980
22	BANK OF NEW YORK	928631744.68	1498	725
23	FTN FINANCIAL	1288957605.1	1472	815
24	SALOMON SMITH BARNEY	1123920830.4	1353	880
25	GREENWICH CAPITAL MARKETS	1943682744.8	1270	774
26	JOHN HANCOCK LIFE INSURANCE COMPANY OF N	3373574232	1202	790
27	BAIRD (ROBERT W)	824357052.06	1079	737
28	WELLINGTON	200764698.16	1003	719
29	FIRST UNION SECURITIES INC	602773881.39	867	395
30	US BANK	240051028.81	859	604
31	MELLON INVESTORS SERVICES	200946239.32	844	417
32	MORGAN KEEGAN	674780536.54	840	470
33	WALL STREET ACCESS	692975892.12	822	357
34	BEAR STEARNS	539561334.25	819	393
35	PERSHING	315555569.45	785	400
36	RAYMOND JAMES	760114392.49	772	543
37	STERNE AGEE	251094435.98	704	321
38	DALTON	1609495219.2	697	193
39	BLACKROCK FIN. MGMT.	388868709.11	673	355

Some of these dealers are actually primarily management companies:

BLACKROCK INVESTMENTS, LLC
55 EAST 52ND STREET, NEW YORK, NY 10055
Mailing Address: 1 UNIVERSITY SQUARE DRIVE, PRINCETON, NJ 08540

T. ROWE PRICE INVESTMENT SERVICES, INC.
100 E PRATT ST, BALTIMORE, MD 21202

INVESCO CAPITAL MARKETS, INC.
11 GREENWAY PLAZA, SUITE 1000, HOUSTON, TX 77046

JANUS HENDERSON DISTRIBUTORS
151 DETROIT STREET, DENVER, CO 80206-4923

What happens if their funds are excluded?

COMMENT 4: ALPHAS

- Trading style predicts future alpha.
- How much of this alpha is driven by active trading vs buy-and-hold.
- In other words, is the alpha attributable to the trades associated with liquidity supply?
- If not, what about the trading style can explain the abnormal returns?



OTHER COMMENTS

- **Include direct measure of liquidity for bond portfolio when examining determinants**
- **Examine determinants of LS and LD separately**

