

Promotion and Individual Investors' Fund Flows

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Agenda

- Motivation and research question.
- What drives individual investors fund flows?
 - Past performance, fee structure and other fund characteristics?
 - What is the role of attention?
- The **fund of the month (FOM)** experiment of an Austrian on-line broker allows us to empirically evaluate drivers of fund flows at individual investor level.
- Individual investors' reaction to FOM experiment
 - Buy and sell **imbalances**
 - Price promotion and **fund flows**
 - What determines **trading** the fund of the month?
- Summary and conclusion

Motivation

- There exist numerous studies that empirically evaluate the drivers of fund flows.
 - Past performance
 - Fee structure
 - Fund characteristics such as size, rating, investment style, etc.
 - More recently media coverage, marketing, promotion and information
- Existing studies concentrate on **aggregate fund flow levels** only very few papers look at individual investors' fund flows.
- We explore the role of attention together with other fund characteristics for **individual investors' fund flows**.
- We analyze a **natural experiment** in which an online broker monthly promotes a **fund of the month (FOM)** that is sold at a substantially reduced front load fee.
- Experiment allows us to empirically evaluate the **interaction** of **fee structure** and **attention grabbing** on **fund flows**.
- What is the relative importance of **cost structure** vis a vis **promotion** and **attention**.

What This Paper Does

- What is the impact of the FOM experiment on individual investors' fund flows?
- We explore the following distinct though related questions:
 - How does **attention grabbing** of the FOM influence the **buy** and **sell decisions** of individual investors?
 - Do **different types** of **investors react differently** to the FOM experiment?
 - Is the **cost effect** or the **attention effect** stronger for the FOM?
 - What are the **general drivers** of **fund flows** and does the FOM enforce those?
 - What are the **characteristics of fund investors** who buy the fund of the month?
 - Do investors **benefit** from trading the FOM?

Related Literature

- Aggregate Fund flows are driven by fund characteristics:
 - Fund flows are **sensitive** to **past fund performance** (convex relationship) Gruber (1996), Chevalier and Ellison (1997), Goetzmann and Peles (1997), etc.
 - Fund flows are driven by both **operating costs** and **front load fees** (salient fees) Gruber (1996), Sirri and Tufano (1998), Barber, Odean and Zheng (2005), etc.
 - Fund flows are determined by **promotion**, **advertising** and **media coverage** (information sources) Sirri and Tufano (1998), Jain and Wu (2000), Kaniel, Starks and Vasudevan (2007), Solomon, Soltes and Sosyura (2012), etc.

Related Literature (cont'd)

- Individual fund flows are driven by fund characteristics Ivkovic and Weisbenner (2009) :
 - Fund flows are **sensitive** to **performance**: inflows are related to relative performance and outflows are related to absolute performance
 - Individuals pay attention to **costs**, both to operating costs and front load fees
 - Individuals are reluctant to **sell** funds that have **appreciated** in **value** but are willing to sell losing funds.
 - Funds that are in the news are more likely to be bought (**attention grabbing** funds) Barber, Odean and Zheng (2005)

Related Literature (cont'd)

- Barber and Odean (2008) document that individual investors are more likely to buy **attention grabbing stocks**
- Attention is proxied by
 - A stock's **abnormal trading volume**
 - A stock's **previous one day return**
 - **News coverage** of the stock
- Investors are **net buyers** on high attention days
- Kaniel, Starks and Vasudevan (2007) document that **media coverage** can have an **attention effect** on investors' flow decisions
- Attention driven buying results from the **complexity** of the **search process**
- There is **no search problem** when **selling** funds as the investors know the funds they hold

Summary of Results

- FOM experiment is an **attention grabbing event** that summarizes both a **cost** and an **attention effect**
- **Individual investors** strongly react as **net buyers** to the FOM
- Effects are **independent** of **investor characteristics** (gender, education)
- The total net buying effect is **only** driven by the **cost component**; there is **no attention effect**
- This holds true for **different types** of **investors**
- Individual investors' fund flows are mainly driven by **past performance**
- The **FOM amplifies** this **effect**
- Investors who engage in net buying decisions of the FOM do so because of **fee reduction**, **lagged performance**, their **education level** their **investment experience**
- Investors do **benefit** from **trading the FOM** although the difference is very small (1 BP per month)

FOM Experiment

- Austrian online broker chooses a **FOM every month** and **promotes** this product at **reduced front load fee**:
 - Program initiated in **November 2005** and ended in December 2009.
 - „Price promotion“ strategy with a **reduction** in the **front load fee** of 90%.
- The FOM is prominently **featured** on the **website** of the online broker and account holders are informed.
- Fund promotion runs for a full month only. After that period **advertising** and **fee reduction** are **stopped**
- FOM is chosen by the online broker to inform investors and promote flows
- What is the impact of a **fee promotion strategy** on individual investors' fund flows?
- Are there any **behavioral aspects** associated with the promotion strategy?

Data Description

- Individual investment accounts over the period of **September 2001 to July 2007**
- There are 22.776 investors in the sample out of which 7.628 (33.4%) traded in mutual funds
- During the sample period **111.860 trades** in mutual funds are recorded
- Fund characteristics are taken from Morningstar database
- NAV's and fund return data are taken from Thomson Financials (Datastream)
- FOM experiment was initiated in November 2005, hence there are **22 FOM**
- Descriptive statistics are as follows

Descriptive Statistics

- Investor base

Investor Type	All Traders	Equity Traders	Mutual Fund Traders
All Investors	22776 (100%)	16708 (100%)	7628 (100%)
Male	19248 (84.51%)	14197 (84.97%)	6367 (83.47%)
Female	3528 (15.49%)	2511 (15.03%)	1261 (16.53%)
Degree	6875 (30.19%)	5099 (30.52%)	2708 (35.50%)
No Degree	15901 (69.81%)	11609 (69.48%)	4920 (64.50%)
Male & Degree	6055 (26.59%)	4536 (27.15%)	2393 (31.37%)
Male & No Degree	13193 (57.93%)	9661 (57.82%)	3974 (52.10%)
Female & Degree	820 (3.60%)	563 (3.37%)	315 (4.13%)
Female & No Degree	2708 (11.89%)	1948 (11.66%)	946 (12.40%)

Descriptive Statistics FOM

- Portfolio and investor characteristics

Characteristic	All Traders	Degree	No Degree
Proportion Option Trader	52.69%	52.51%	52.78%
Proportion Equity Trader	83.63%	83.49%	82.15%
Proportion Male	83.47%	88.37%	80.77%
Average Trade Size	EUR 3588	EUR 4189	EUR 3257
Average Number Trades	14.66	16.53	13.64
Median Number Trades	5	5	4
Age	39.20	39.32	39.13

Descriptive Statistics FOM (cont'd)

- Descriptive statistics of the FOM

Characteristics	Total Number of Funds: 21			
# Fund Types	Equity: 15	Fixed Income: 1	Commodities: 1	Other: 4
# AM Companies	14			
Domicile	Austria: 3	Luxembourg: 15	Ireland: 2	Germany: 1

Measuring Attention Effects

- Buy and sell imbalances calculated on the basis of

- Value of funds traded:
$$VI_{pt} = \frac{\sum_{i=1}^{n_{pt}} VB_{it} - \sum_{i=1}^{n_{pt}} VS_{it}}{\sum_{i=1}^{n_{pt}} VB_{it} + \sum_{i=1}^{n_{pt}} VS_{it}}$$

- Number of fund shares traded:
$$NI_{pt} = \frac{\sum_{i=1}^{n_{pt}} NB_{it} - \sum_{i=1}^{n_{pt}} NS_{it}}{\sum_{i=1}^{n_{pt}} NB_{it} + \sum_{i=1}^{n_{pt}} NS_{it}}$$

- Number of fund related transactions:
$$TI_{pt} = \frac{\sum_{i=1}^{n_{pt}} TB_{it} - \sum_{i=1}^{n_{pt}} TS_{it}}{\sum_{i=1}^{n_{pt}} TB_{it} + \sum_{i=1}^{n_{pt}} TS_{it}}$$

Buy and Sell Imbalances

- Summary of buy and sell imbalances

	<u>All Investors</u>		<u>Male Investors</u>		<u>Female Investors</u>	
	FOM	All other funds	FOM	All other funds	FOM	All other funds
Value Imbalance	88.94	20.99	88.49	20.79	91.06	21.67
Transaction Imbalance	93.21	58.25	93.19	58.24	92.56	58.67
Number Imbalance	88.91	18.8	88.46	18.58	91	19.17

- Buy and sell imbalances for different investors

	<u>Investors with Degree</u>		<u>Investors without Degree</u>	
	FOM	All other funds	FOM	All other funds
Value Imbalance	87.79	23	91.66	20.24
Transaction Imbalance	93.89	59.14	92.85	57.74
Number Imbalance	87.76	20.32	91.62	18.08

Value Imbalances Over Sample Period

Month	All Investors		Male Investors		Female Investors		Investors with Degree		Investors without Degree	
	FOM	All other funds	FOM	All other funds	FOM	All other funds	FOM	All other funds	FOM	All other funds
November 2005	96.56	53.97	96.27	57.14	100	34.80	94.13	54.74	99.15	53.19
December 2005	100	47.83	100	46.85	100	53.27	100	56.47	100	40.01
January 2006	99.18	56.27	99.12	55.69	100	59.94	100	58.80	98.55	54.09
February 2006	-24.12	53.93	-23.38	52.65	-33.34	62.43	-59.12	59.75	33.98	50.63
March 2006	99.16	21.21	99.13	14.79	99.35	48.40	99.31	21.12	99.02	21.26
April 2006	99.17	38.91	99.06	38.65	100	40.14	98.45	49.39	100	31.57
May 2006	93.82	-18.61	93.24	-14.12	97.99	-39.30	88.86	-11.62	96.79	-22.87
June 2006	89.03	-5.92	85.40	-8.78	100	11.88	82.29	-11.09	100	-0.58
July 2006	95.92	34.96	95.11	37.87	100	8.03	94.58	36.34	98.18	31.67
August 2006	94.24	37.12	92.99	38.71	100	26.05	100	46.45	87.81	31.20
September 2006	69.31	7.93	67.18	5.70	85.13	20.83	77.28	42.00	64.81	-9.36
October 2006	99.05	37.97	98.99	35.49	100	52.90	98.89	40.64	99.34	35.77
November 2006	100	29.28	100	33.53	100	1.61	100	33.47	100	26.47
December 2006	97.44	5.45	97.07	3.04	100	25.19	100	-10.20	94.90	17.88
January 2007	86.76	11.70	86.23	11.94	89.61	10.04	88.06	15.26	85.87	8.67
February 2007	92.11	2.49	90.94	1.43	99.75	10.68	95.53	-0.84	89.90	4.97
March 2007	100	9.39	100	10.11	100	0.57	100	-5.20	100	24.51
April 2007	92.87	-2.47	93.65	-3.35	85.93	7.17	100	0.70	88.16	-5.90
May 2007	98.82	0.07	98.66	-0.82	100	8.79	96.84	-3.57	99.99	2.22
June 2007	100	11.37	100	11.01	100	15.17	100	5.72	100	16.63
July 2007	88.46	7.91	88.59	9.14	87.85	-3.53	88.45	4.67	88.47	12.90
Mean	88.94	20.99	88.49	20.79	91.06	21.67	87.79	23.00	91.66	20.24

Total FOM Effect

- Total FOM effect is the sum of the
 - **Attention effect** and
 - **Cost effect** (reduced front load fee)
- Can we **split** the **total effect** into its two components?
- The **cost effect** only applies **during the period** a fund is **FOM**
- **Attention effect carries over** to the neighboring periods
- What is the net buying effect in periods immediately following the FOM period?
- Recalculate buy and sell imbalances for periods after FOM

Subsequent Value Imbalances

Month	No FOM	Lag 0	Lag 1	Lag 2	Lag 3	Lag 4	Lag 5	Lag 6
2005m11	0.546	0.966	.	.	.	.	.	.
2005m12	0.471	1.000	0.842	.	.	.	.	.
2006m1	0.561	1.000	0.666	0.189	.	.	.	.
2006m2	0.557	-0.243	-0.915	-0.665	0.572	.	.	.
2006m3	0.212	0.992	-0.509	0.944	-0.533	-0.064	.	.
2006m4	0.398	0.992	0.486	-0.585	-1.000	0.103	0.395	.
2006m5	-0.197	0.938	-0.746	-0.655	-0.552	-0.786	-0.615	-0.704
2006m6	-0.072	0.890	-0.952	-0.997	-0.455	-1.000	-1.000	-0.130
2006m7	0.331	0.959	1.000	0.822	-0.965	0.353	-0.894	.
2006m8	0.352	0.942	0.458	-0.983	-0.449	-1.000	-0.839	-0.599
2006m9	0.053	0.692	0.745	-0.116	0.188	-0.433	-1.000	-0.472
2006m10	0.366	0.990	0.380	-0.844	0.224	-1.000	-0.931	-0.655
2006m11	0.285	1.000	0.757	-0.158	-0.687	0.170	-0.706	-1.000
2006m12	0.003	0.974	-0.634	-1.000	-0.084	0.512	0.289	-1.000
2007m1	0.112	0.867	0.870	-0.508	-1.000	-0.516	1.000	-0.282
2007m2	0.002	0.921	-0.108	-0.896	-0.285	-1.000	-0.115	-1.000
2007m3	0.093	1.000	0.603	-0.073	-0.991	-0.979	-0.667	0.049
2007m4	-0.044	0.929	0.280	-0.868	-0.842	-0.934	-0.743	-1.000
2007m5	-0.017	0.988	-0.050	-0.751	-0.917	-0.810	-1.000	-0.904
2007m6	0.101	1.000	0.440	-0.947	-0.924	-0.836	0.220	-1.000
2007m7	0.077	0.884	.	-0.724	-1.000	-0.983	-0.990	-0.253
Avg.	0.200	0.890	0.190	-0.464	-0.539	-0.542	-0.475	-0.639

Subsequent Transaction Imbalances

Month	No FOM	Lag 0	Lag 1	Lag 2	Lag 3	Lag 4	Lag 5	Lag 6
2005m11	0.648	0.967	.	.	.	.	.	.
2005m12	0.663	1.000	0.864	.	.	.	.	.
2006m1	0.744	1.000	0.440	0.865	.	.	.	.
2006m2	0.638	0.600	-0.800	-0.200	0.452	.	.	.
2006m3	0.566	0.971	-0.333	0.600	0.158	0.289	.	.
2006m4	0.462	0.989	0.686	-0.200	-1.000	0.111	0.551	.
2006m5	0.019	0.896	-0.700	-0.409	-0.556	-0.333	-0.313	-0.313
2006m6	0.086	0.952	-0.250	-0.778	-0.063	-1.000	0.892	0.892
2006m7	0.448	0.942	1.000	0.667	-0.500	0.455	-0.500	.
2006m8	0.383	0.971	0.158	-0.667	-0.400	-1.000	-0.333	0.000
2006m9	0.371	0.840	0.455	0.111	0.200	-0.238	-1.000	0.486
2006m10	0.724	0.818	0.452	0.000	0.333	-1.000	-0.571	-0.333
2006m11	0.346	1.000	0.867	0.115	-0.200	0.158	-0.167	-1.000
2006m12	0.244	0.949	0.556	-1.000	-0.321	-0.333	0.474	-1.000
2007m1	0.157	0.878	0.667	-0.467	-1.000	-0.188	1.000	0.238
2007m2	0.092	0.937	0.127	-0.600	0.000	-1.000	-0.400	-1.000
2007m3	0.218	1.000	0.957	0.063	-0.714	-0.667	0.000	0.322
2007m4	-0.051	0.957	0.333	-0.116	-0.381	-0.750	-0.200	-1.000
2007m5	-0.022	0.975	-0.200	-0.333	-0.435	-0.362	-1.000	-0.667
2007m6	0.119	1.000	0.267	-0.600	-0.250	-0.667	-0.040	-1.000
2007m7	0.143	0.906	.	0.038	-1.000	-0.857	-0.818	-0.222
Avg.	0.333	0.931	0.292	-0.153	-0.315	-0.434	-0.152	-0.328

Subsequent Number Imbalances

Month	No FOM	Lag 0	Lag 1	Lag 2	Lag 3	Lag 4	Lag 5	Lag 6
2005m11	0.644	0.965	.	.	.	.	.	.
2005m12	0.611	1.000	0.843	.	.	.	.	.
2006m1	0.645	1.000	0.667	0.181	.	.	.	.
2006m2	0.532	-0.235	-0.917	-0.671	0.572	.	.	.
2006m3	0.182	0.992	-0.510	0.953	-0.536	-0.075	.	.
2006m4	0.473	0.992	0.493	-0.585	.	0.107	0.395	.
2006m5	-0.096	0.934	-0.743	-0.661	-0.553	-0.778	-0.603	-0.727
2006m6	-0.121	0.890	-0.953	-0.996	-0.465	.	0.995	0.990
2006m7	0.302	0.959	1.000	0.819	-0.970	0.369	-0.895	.
2006m8	0.212	0.941	0.450	-0.983	-0.450	.	-0.847	-0.600
2006m9	0.040	0.685	0.740	-0.124	0.205	-0.450	.	-0.474
2006m10	0.274	0.991	0.397	-0.846	0.230	.	-0.930	-0.655
2006m11	-0.052	1.000	0.760	-0.135	-0.684	0.169	-0.710	.
2006m12	0.074	0.975	-0.623	.	-0.102	0.500	0.292	.
2007m1	0.100	0.864	0.870	-0.506	.	-0.513	1.000	-0.283
2007m2	-0.108	0.921	-0.120	-0.896	-0.279	.	-0.115	.
2007m3	0.090	1.000	0.600	-0.156	-0.991	-0.979	-0.667	-0.004
2007m4	-0.072	0.929	0.281	-0.866	-0.837	-0.936	-0.743	.
2007m5	-0.104	0.989	-0.051	-0.756	-0.917	-0.813	.	-0.903
2007m6	0.114	1.000	0.451	-0.947	-0.922	-0.838	0.211	.
2007m7	-0.060	0.884	.	-0.730	.	-0.984	-0.990	-0.268
Avg.	0.175	0.889	0.191	-0.439	-0.447	-0.402	-0.258	-0.325

Subsequent Value Imbalances Male

Month	No FOM	Lag 0	Lag 1	Lag 2	Lag 3	Lag 4	Lag 5	Lag 6
2005m11	0.581	0.963	.	.	.	.	.	.
2005m12	0.465	1.000	0.827	.	.	.	.	.
2006m1	0.555	1.000	0.747	0.068	.	.	.	.
2006m2	0.547	-0.236	-0.900	-0.665	0.584	.	.	.
2006m3	0.140	0.991	-0.509	0.944	-0.521	-0.118	.	.
2006m4	0.401	0.991	0.510	-0.821	-1.000	-0.062	0.377	.
2006m5	-0.150	0.932	-0.704	-0.735	-0.543	-0.786	-0.569	-0.677
2006m6	-0.098	0.853	-0.960	-0.996	-0.486	-1.000	-1.000	-0.263
2006m7	0.361	0.951	1.000	0.821	-0.941	0.364	-0.777	.
2006m8	0.370	0.930	0.475	-0.983	-0.620	-1.000	-0.977	-0.599
2006m9	0.028	0.671	0.745	-0.116	0.178	-0.268	-1.000	-0.479
2006m10	0.340	0.990	0.407	-0.844	0.433	-1.000	-0.931	-0.655
2006m11	0.318	1.000	0.748	-0.292	-0.687	-0.177	-0.686	-1.000
2006m12	-0.027	0.971	-0.747	-1.000	-0.017	0.512	-0.106	-1.000
2007m1	0.115	0.862	0.820	-0.508	-1.000	-0.594	.	0.084
2007m2	-0.010	0.909	-0.136	-0.887	-0.379	-1.000	-0.067	-1.000
2007m3	0.098	1.000	0.687	-0.160	-0.990	-0.979	-0.667	0.100
2007m4	-0.047	0.936	0.304	-0.859	-0.837	-0.931	-0.795	-1.000
2007m5	-0.021	0.987	-0.203	-0.972	-0.918	-0.800	-1.000	-0.957
2007m6	0.100	1.000	0.527	-0.945	-1.000	-0.831	0.110	-1.000
2007m7	0.089	0.886	.	-0.731	-1.000	-0.983	-1.000	-0.050
Avg.	0.198	0.885	0.191	-0.509	-0.541	-0.568	-0.606	-0.607

Subsequent Value Imbalances Female

Month	No FOM	Lag 0	Lag 1	Lag 2	Lag 3	Lag 4	Lag 5	Lag 6
2005m11	0.346	1.000	.	.	.	.	.	.
2005m12	0.507	1.000	1.000	.	.	.	.	.
2006m1	0.599	1.000	0.492	1.000	.	.	.	.
2006m2	0.622	-0.333	-1.000	.	0.238	.	.	.
2006m3	0.506	0.993	.	.	-1.000	0.658	.	.
2006m4	0.381	1.000	0.145	1.000	.	0.739	0.517	.
2006m5	-0.410	0.980	-0.968	0.201	-1.000	.	-1.000	-0.820
2006m6	0.092	1.000	-0.893	-1.000	-0.190	.	.	1.000
2006m7	0.062	1.000	.	1.000	-1.000	-0.111	-1.000	.
2006m8	0.234	1.000	-1.000	-1.000	-0.143	.	-0.529	.
2006m9	0.195	0.851	.	.	1.000	-0.970	-1.000	1.000
2006m10	0.516	1.000	-0.147	.	-1.000	.	.	.
2006m11	0.065	1.000	1.000	0.280	.	1.000	-0.966	.
2006m12	0.241	1.000	0.957	.	-0.881	.	1.000	.
2007m1	0.095	0.896	1.000	.	.	-0.225	1.000	-0.890
2007m2	0.097	0.997	0.024	-1.000	1.000	.	-0.343	-1.000
2007m3	0.022	1.000	0.263	0.489	-1.000	.	.	-1.000
2007m4	-0.006	0.859	0.151	-0.924	-1.000	-1.000	0.821	.
2007m5	0.023	1.000	0.965	1.000	-0.908	-1.000	-1.000	1.000
2007m6	0.105	1.000	0.297	-1.000	-0.691	-0.979	0.818	.
2007m7	-0.049	0.878	.	-0.386	-1.000	-1.000	-0.525	-0.859
Avg.	0.202	0.911	0.143	-0.026	-0.505	-0.289	-0.170	-0.196

Subsequent Value Imbalances Education

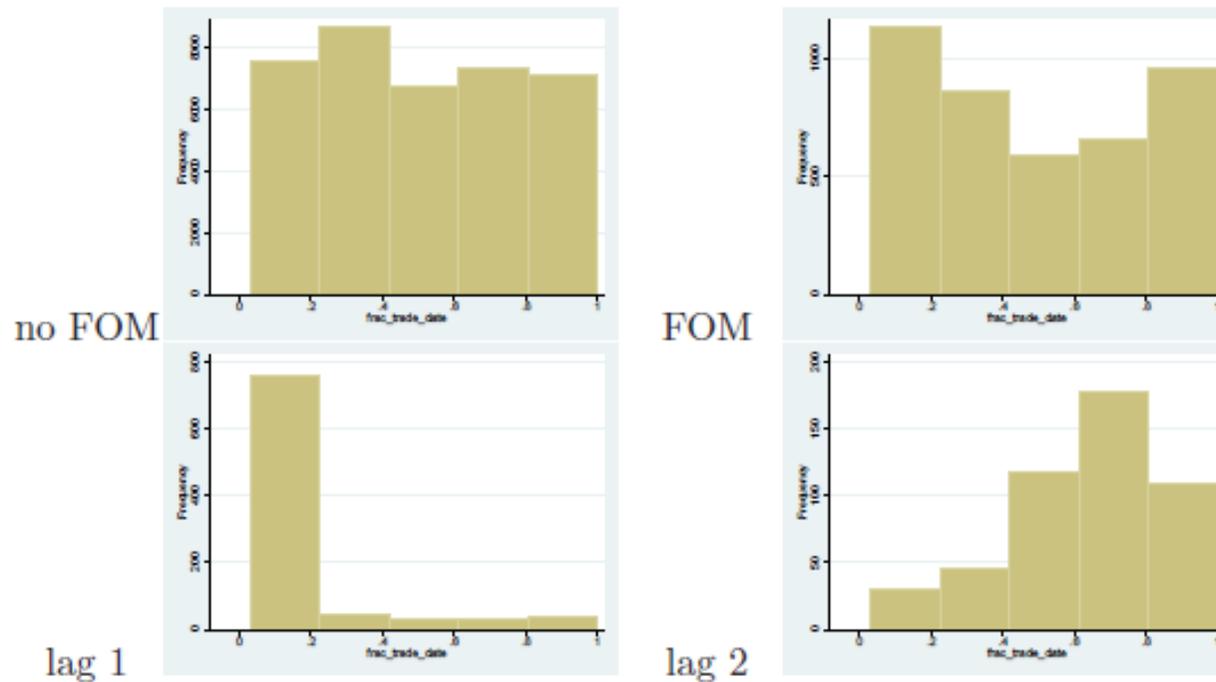
Month	No FOM	Lag 0	Lag 1	Lag 2	Lag 3	Lag 4	Lag 5	Lag 6
2005m11	0.559	0.941		.	.	.	.	.
2005m12	0.559	1.000	0.605	.	.	.	.	.
2006m1	0.593	1.000	0.750	0.091	.	.	.	.
2006m2	0.611	-0.591	-0.754	-0.734	0.372	.	.	.
2006m3	0.210	0.993	0.563	1.000	0.249	0.284	.	.
2006m4	0.528	0.984	0.401	-0.140	.	-0.134	0.479	.
2006m5	-0.130	0.888	-0.595	-0.713	0.129	-0.606	-0.702	-0.736
2006m6	-0.117	0.822	-0.850	-0.993	-0.389	-1.000	-1.000	-0.037
2006m7	0.353	0.946	1.000	.	-0.941	0.308	.	.
2006m8	0.455	1.000	0.299	-1.000	1.000	-1.000	-0.985	-0.599
2006m9	0.421	0.772	0.730	1.000	0.374	-0.972	-1.000	-0.439
2006m10	0.399	0.989	0.715	-1.000	1.000	.	-0.922	-1.000
2006m11	0.357	1.000	0.692	-0.133	1.000	-0.712	-0.664	-1.000
2006m12	-0.117	1.000	-0.820	-1.000	0.276	-1.000	-0.480	-1.000
2007m1	0.149	0.881	0.907	-0.522	-1.000	-0.387	.	0.067
2007m2	-0.004	0.955	-0.027	1.000	.	.	-0.457	.
2007m3	-0.056	1.000	0.686	-0.397	-1.000	-0.989	1.000	0.493
2007m4	-0.001	1.000	0.161	-0.597	-0.541	-1.000	-0.735	-1.000
2007m5	-0.049	0.968	-1.000	-1.000	-0.913	-0.721	-1.000	-0.908
2007m6	0.048	1.000	0.308	-0.389	-0.915	-0.934	0.209	-1.000
2007m7	0.043	0.884	.	-0.602	-1.000	-1.000	-1.000	-0.890
Avg.	0.229	0.878	0.199	-0.341	-0.144	-0.658	-0.518	-0.619

Subsequent Value Imbalances No Education

Month	No FOM	Lag 0	Lag 1	Lag 2	Lag 3	Lag 4	Lag 5	Lag 6
2005m11	0.534	0.992	.	.	.	.	.	.
2005m12	0.393	1.000	1.000	.	.	.	.	.
2006m1	0.532	1.000	0.594	0.241	.	.	.	.
2006m2	0.527	0.337	-1.000	-0.490	0.767	.	.	.
2006m3	0.213	0.990	-1.000	0.818	-0.729	-0.504	.	.
2006m4	0.312	1.000	0.555	-1.000	-1.000	0.230	0.333	.
2006m5	-0.238	0.968	-0.987	-0.591	-0.894	-1.000	-0.534	-0.680
2006m6	-0.025	1.000	-0.973	-1.000	-0.510	-1.000	.	-0.277
2006m7	0.277	0.982	1.000	0.822	-1.000	0.364	-0.894	.
2006m8	0.290	0.878	0.482	-0.930	-0.635	.	-0.621	.
2006m9	-0.132	0.647	0.767	-0.163	0.023	-0.409	-1.000	-0.491
2006m10	0.341	0.993	0.232	1.000	0.147	-1.000	-0.938	0.112
2006m11	0.236	1.000	1.000	-0.171	-0.885	0.425	-0.937	-1.000
2006m12	0.106	0.949	0.907	.	-0.254	1.000	0.438	-1.000
2007m1	0.081	0.858	0.784	-0.456	-1.000	-0.580	1.000	-0.437
2007m2	0.007	0.899	-0.195	-1.000	-0.285	-1.000	0.048	-1.000
2007m3	0.248	1.000	0.559	0.365	-0.989	-0.943	-1.000	-0.369
2007m4	-0.092	0.882	0.340	-0.966	-0.910	-0.927	-0.750	.
2007m5	0.001	1.000	0.441	-0.679	-0.919	-0.874	-1.000	-0.898
2007m6	0.152	1.000	0.475	-1.000	-0.946	-0.796	0.232	-1.000
2007m7	0.130	0.885	.	-0.799	-1.000	-0.981	-0.980	0.008
Avg.	0.185	0.917	0.262	-0.333	-0.612	-0.500	-0.440	-0.586

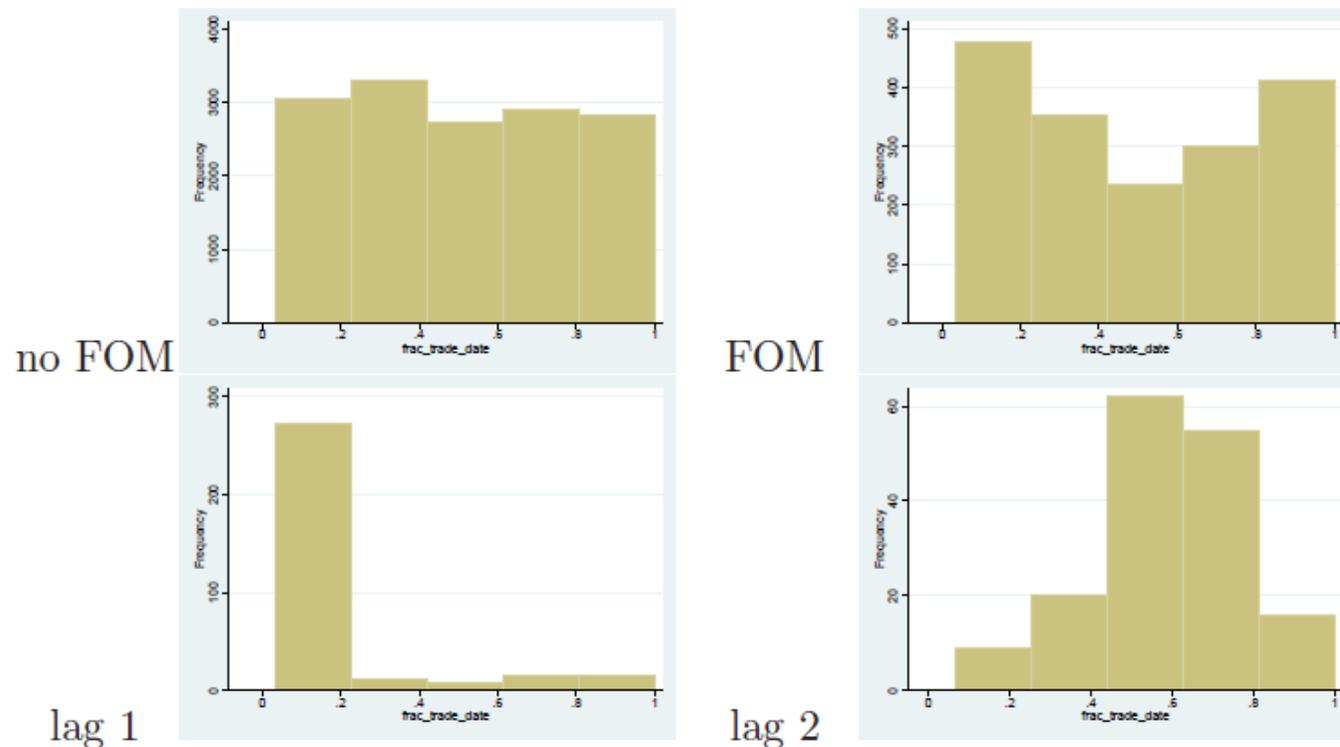
Timing of Purchases

- Month divided into 5 equal sub-periods. How do purchases spread across the month?
- Weighted by number of transactions



Timing of Purchases

- Investors with degree and weighted by number of transactions



Cost and Attention Effects

- Value, transaction and number imbalances indicate that the FOM effect is only driven by a **strong front load fee effect**
 - Immediately after the FOM period is over **imbalances return to prior levels**
 - The effect applies for **all imbalance measures** and is independent of investor characteristics
- Investors **spread purchases** of FOM **unevenly** across the month (strong initially and at the end)
- Investors seem to be very **short term return chasers**
- What drives fund (in)flows?

Individual Investors' Fund Inflows

	num_holders	0.0009 (1.00)		-0.0016** (-1.96)	
Past performance	s_12m	0.6658* (1.90)	0.6462* (1.86)	0.8117*** (2.74)	0.8282*** (2.82)
	age	0.0004 (0.46)		0.0001 (0.17)	
	ranking	0.0024 (0.87)	0.0026 (0.95)	0.0034 (1.45)	0.0030 (1.29)
	rating	-0.0830 (-1.16)	-0.0887 (-1.23)	-0.0821 (-1.36)	-0.0842 (-1.38)
	net_exp_ratio	-0.0423 (-0.29)		-0.0205 (-0.17)	
	mgt_fee	-0.1159 (-0.55)		-0.0706 (-0.39)	
	max_front_fee	0.0551 (0.58)		-0.0127 (-0.16)	
	Anzahl Investoren	ln_num_holders		0.0892 (1.29)		-0.1056* (-1.79)
ln_age			0.0851 (0.77)		0.0539 (0.57)
ln_net_exp_ratio			-0.0828 (-0.28)		-0.0806 (-0.32)
ln_mgt_fee			-0.0818 (-0.33)		0.0070 (0.03)
ln_max_front_fee			0.2026 (0.54)		-0.0286 (-0.09)
FOM		fom			54.5993*** (35.90)	54.5912*** (35.88)
	_cons	0.1857 (0.39)	-0.5888 (-0.82)	0.3458 (0.86)	0.2597 (0.42)
	R-squared	-0.0001	0.0002	0.2820	0.2819
	N	3287	3287	3287	3287

Individual Investors' Fund Flows

Regression results:
 Dep. Variable: Flows
 Indep. Variables:

- FoM
- Performance
- Size
- Age
- Rating
- Fees
- Front Load

	dep. variable: inflow	
	model 1	model 2
fom	41.6156 (1,90)	54.3106 (2,06)
ln_num_holders	-0.1178 (-2,60)	-0.1134 (-2,80)
ret_lag1m	-0.2071 (-0,13)	
ret_last_12m		0.5078 (2,91)
ret_last_12m x december		-1.3148 (-1,36)
ln_size	0.0119 (0,35)	0.0329 (0,76)
ln_age	0.0636 (0,52)	0.0259 (0,28)
ln_num_holdings	-0.0173 (-0,23)	-0.0943 (-1,36)
ranking		0.0013 (0,40)
rating		-0.1243 (-2,13)
net_expense_ratio	-0.091 (-0,98)	-0.1449 (-1,14)
managment_fee	-0.1375 (-1,06)	-0.1081 (-0,70)
ln_minimum_initial	0.0212 (0,87)	0.0238 (0,91)
max_front_load	0.1228 (2,86)	0.0321 (0,79)
R^2	0.2036	0.2595

Fund of the Month Trading

- What determines trading the fund of the month?

	Dependent Variable: FOM Trader			
	(1)	(2)	(3)	(4)
Lagged FOM Performance	5.4083*** (8.67)	5.4110*** (8.67)	4.7530*** (7.74)	4.7567*** (7.75)
Absolute Fee Reduction	35.2226*** (10.19)	35.2064*** (10.18)	35.4016*** (10.18)	35.3982*** (10.18)
Equity Trader	0.8577*** (7.59)	0.8624*** (7.64)	0.8870*** (7.78)	0.8917*** (7.83)
Options Trader	0.3659*** (5.12)	0.3607*** (5.06)	0.2833*** (3.94)	0.2781*** (3.87)
Age	0.0275*** (9.87)	0.0262*** (9.17)	0.0281*** (10.04)	0.0266*** (9.28)
Male	0.0461 (0.49)	0.0486 (0.51)	0.0454 (0.48)	0.0451 (0.47)
Degree	0.2989*** (4.41)		0.2359*** (3.47)	

Fund of the Month Trading

- What determines trading the fund of the month?

Econ		0.7407** (2.30)		0.7347** (2.27)
Tech		0.2237** (2.41)		0.1683* (1.80)
Long_Educ		0.4793*** (3.95)		0.4254*** (3.50)
Mag		0.2503*** (2.60)		0.1715* (1.77)
Average Turnover	1.9791*** (17.39)	1.9760*** (17.37)		
Monthly Turnover			-0.5169 (-1.46)	-0.5235 (-1.48)
Constant	-7.1874*** (-29.46)	-7.1301*** (-29.02)	-6.5013*** (-26.58)	-6.4356*** (-26.13)
No. Observations	30734	30734	30734	30734
No. Groups	6414	6414	6414	6414

Do Investors Benefit from Trading the FOM?

Trader Type	Gross (1)	Net with FOM Promotion (2)	Gross minus Net (1)-(2)	Net without FOM Promotion (3)	FOM Differential (2)-(3)	No. Investors
All Traders	0.0147***	0.0123***	0.0025***			7217
(a)	(72.22)	(57.52)	(34.47)			
FOM Traders	0.0176***	0.0147***	0.0029***	0.0147***	0.0001***	1874
(b)	(58.04)	(45.51)	(23.81)	(45.29)	(9.75)	
Never FOM Traders	0.0137***	0.0114***	0.0023***			5343
(c)	(54.29)	(43.23)	(26.75)			
Difference	0.0039***	0.0033***				
(b) - (c)	(9.86)	(7.98)				
First Time FOM Buyers	0.0176***	0.0152***	0.0024***	0.0152***	0.0000***	1630
(d)	(55.3)	(45.43)	(21.64)	(45.35)	(6.96)	
Rebuy FOM Traders	0.0172***	0.0104***	0.0068***	0.0100***	0.0003***	244
(e)	(38.00)	(17.94)	(15.57)	(17.42)	(9.66)	

Do Investors Benefit from Trading the FOM?

- Performance of investor types grouped by the number of FOM purchased

No. FOM Purchases	Gross (1)	Net with FOM promotion (2)	Gross minus Net (1) - (2)	Net without FOM promotion (3)	FOM Differential (2) - (3)	No. Investors
1	0.0172*** (37.24)	0.0143*** (29.17)	0.0029*** (16.74)	0.0143*** (29.05)	0.0000*** (-5.47)	1052
2	0.0175*** (26.84)	0.0149*** (21.73)	0.0026*** (9.98)	0.0148*** (21.64)	0.0001 (0.02)	356
3	0.0196*** (26.65)	0.0161*** (19.85)	0.0034*** (8.56)	0.0161*** (19.73)	0.0001*** (3.57)	165
4	0.0180*** (22.73)	0.0155*** (17.83)	0.0025*** (6.02)	0.0154*** (17.63)	0.0001*** (3.56)	102
More than 4	0.0181*** (33.86)	0.0150*** (24.20)	0.0032*** (9.97)	0.0149*** (23.99)	0.0001*** (6.24)	199

- Performance is inverse U-shaped

Conclusions

- We have evaluated **individual investors' fund flows** within a **natural experiment**.
- Fund flows are driven by:
 - Fund of the month.
 - Past **performance** (return chasing behavior).
- Investors **only react** to the front load fee effect.
- It seems that there is not attention effect even for different investor types.
- Investors seem to be rational agents that are ultra short term focused.