Are Mutual Funds Sold or Bought? Evidence from the Indian Mutual Funds Market

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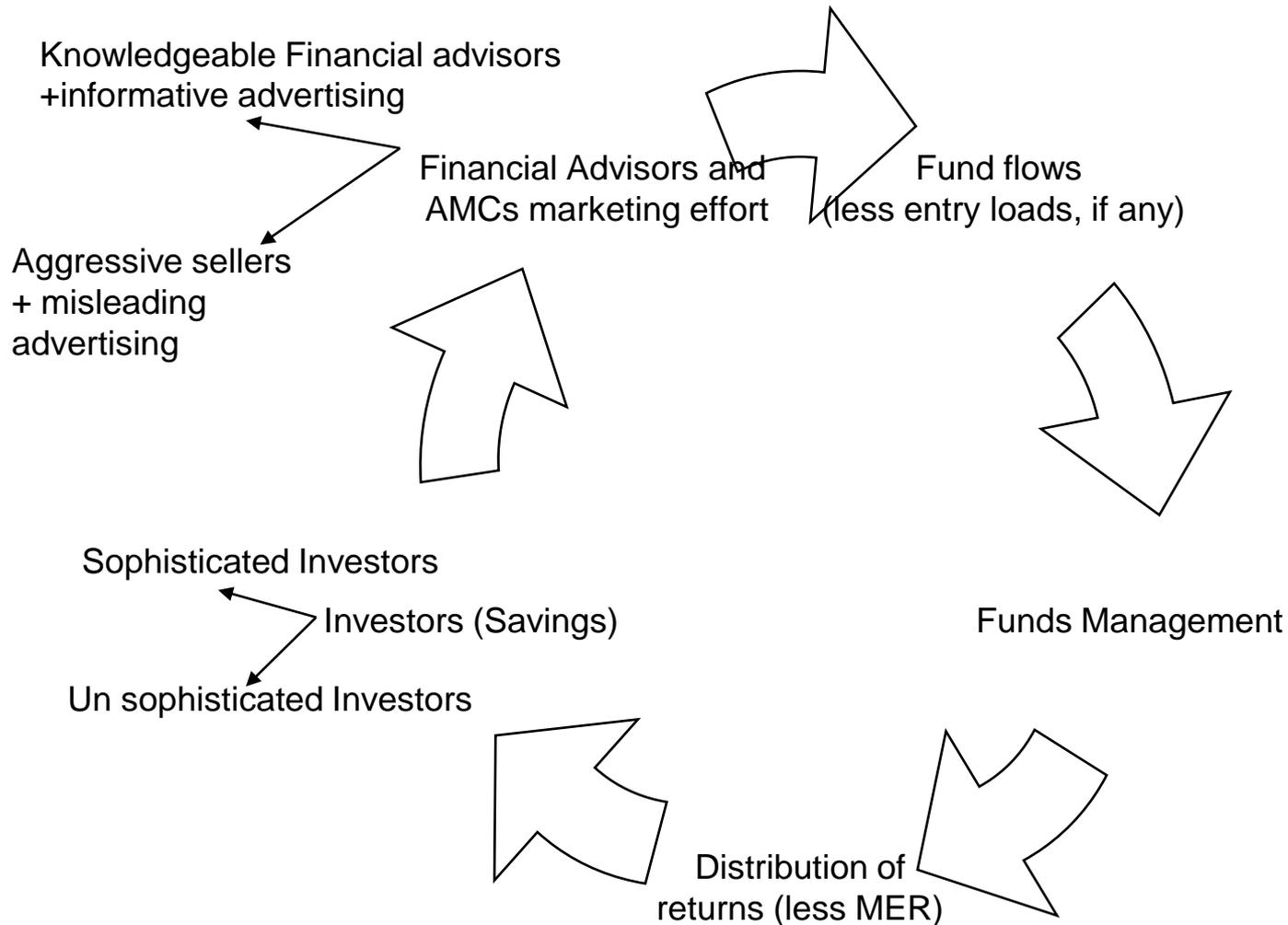
What is this paper about?

- Mutual Funds: Market for mutual funds > Is it buyers market or sellers market?

- Regulatory intervention: Can regulators influence the market for mutual funds?

- Emerging markets: Nature of investors and the institutional environment.

- In summary, this paper is under the umbrella of public policy in emerging financial markets

Why are we researching on market for mutual funds?

- Mutual funds market is a significant investment vehicle with investments made by millions of investing public that are managed by handful of investment companies. However, it is not clear whether it is sellers market or buyers market. Sellers market can have adverse effects on the investing public (high prices and low quality).

- Investors interest is paramount to financial market regulators. However, regulatory efficacy in financial markets in under researched.

- What determines market for mutual funds and whether regulatory intervention influences market forces is an under-researched topic. The answers are highly sought.

Typical mutual funds market

Knowledgeable Financial advisors
+informative advertising

Financial Advisors and
AMCs marketing effort

Fund flows
(less entry loads, if any)

Aggressive sellers
+ misleading
advertising

Sophisticated Investors

Investors (Savings)

Funds Management

Un sophisticated Investors

Distribution of
returns (less MER)

Market quality and regulatory intervention

Financial Advisor and Fund manager Quality

Investor Sophistication

Less Regulatory Intervention (High-High)	Moderate Regulatory Intervention (Low-High)
Moderate Regulatory Intervention (High- Low)	High Regulatory Intervention (Low-Low)

The issue from SEBI's perspective

"*The present system of payment of commission has led to a lack of control by the investor over the quality of service vis-a-vis the commission being borne him. This has led to a situation where advices rendered to the investors could be influenced by factors other than investor's interest. There appears to be a need to empower the investor in deciding the commission paid to the distributors and also to ensure transparency in commissions paid for mutual fund products."*

Source: SEBI circular: SEBI/IMD/CIR No. 4/168230/09 dated 30th June 2009 from www.sebi.gov.in

SEBI's action

Effective from August 1st 2009 SEBI banned entry loads charged by all AMCs that operate in India (for both existing and proposed mutual fund schemes). SEBI asked sellers of mutual fund schemes collect commissions directly from investors.

In summary, more transparency while selling mutual funds.

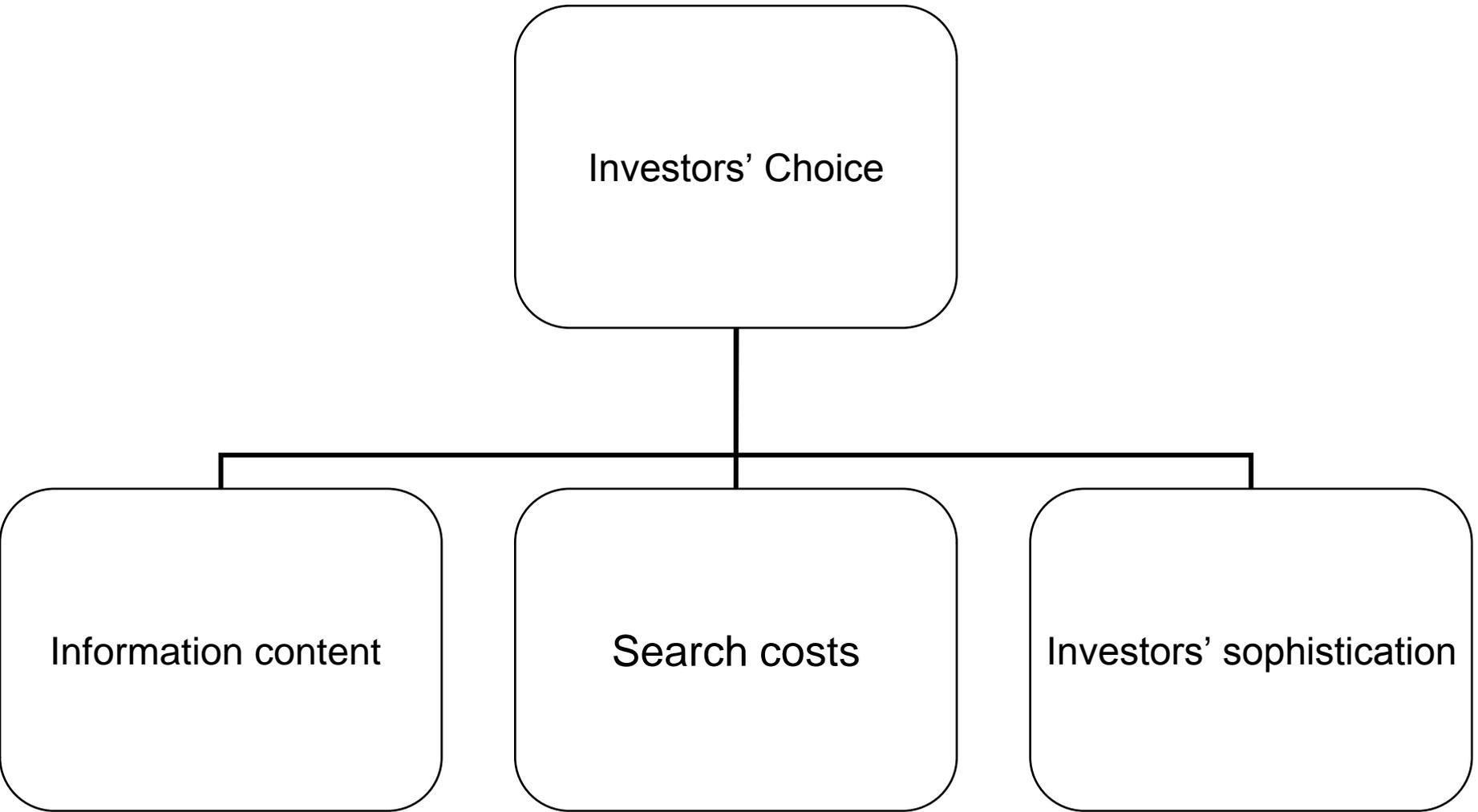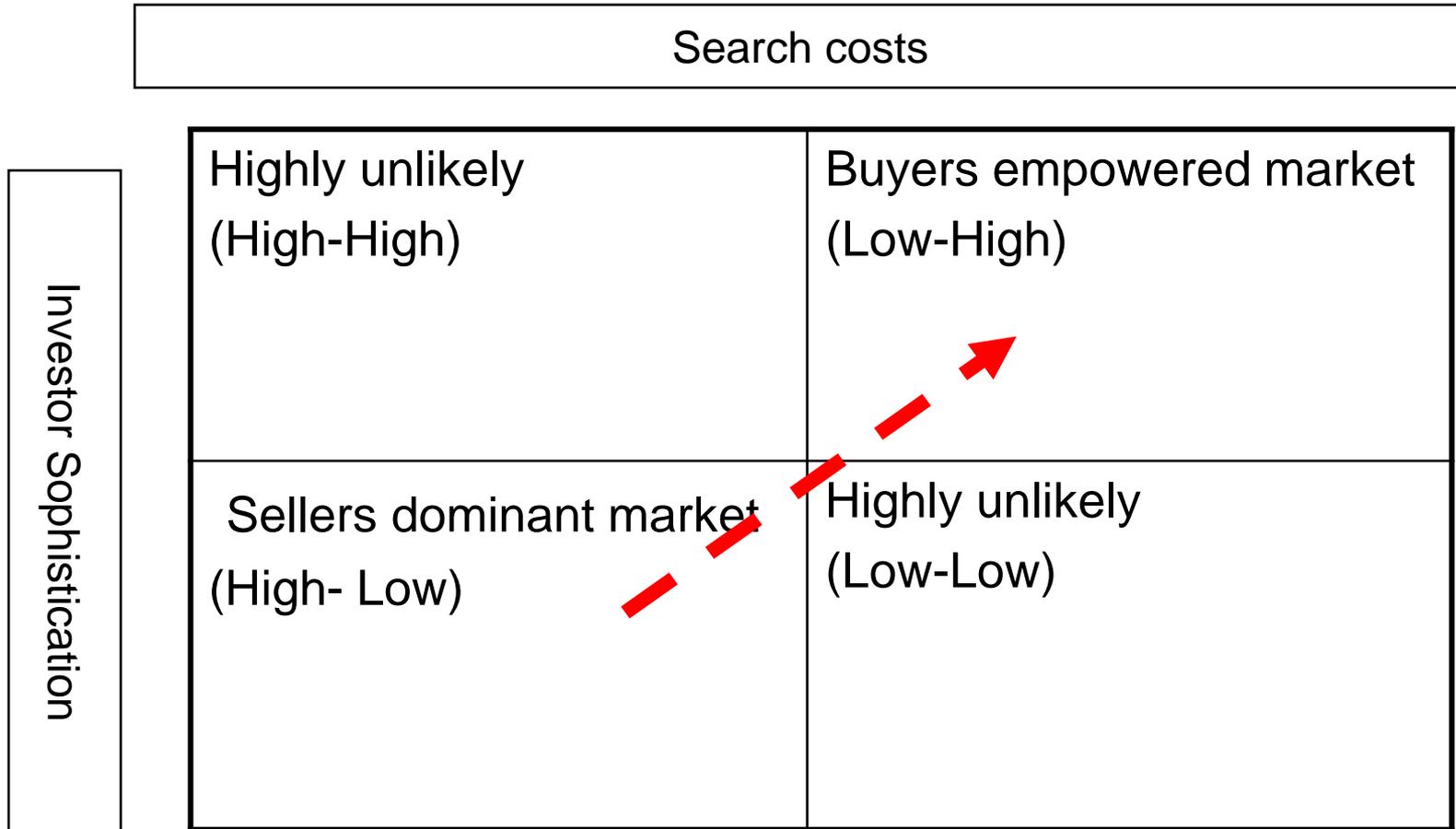# Research questions

1. What is the effect of transparency regulation on fund flows?

2. Whether buyers really get empowered after transparency regulation? Does their buying decision becomes more sensitive to fund characteristics?

3. How do sellers adapt to more transparent market environment? Do they become more competitive (in terms of their pricing and quality)?

Mutual funds investment decision

Investors, information content, and search costs

Search costs		

Investor Sophistication	Highly unlikely (High-High)	Buyers empowered market (Low-High)
	Sellers dominant market (High- Low)	Highly unlikely (Low-Low)

Hypotheses: set 1

- *H1: The general relationship between recent fund performance and fund flows should be insignificant in the Indian mutual funds market.*

- *H2: In the pre-entry load transparency regime, no-entry load funds' flows should be more sensitive to performance compared to entry load funds.*

- *H3: The performance flow relationship should improve in the post-entry load transparency regime.*

- *H4: Fund flows in the post-entry load transparency regime should be significantly lower compared to pre-entry load transparency regime.*

Sellers' reaction

	Quality	
	Highly unlikely (High-High)	Sellers dominated market (Low-High)
Price	Buyers dominated market (High- Low)	Highly unlikely (Low-Low)

Hypotheses: set 2

- H5: Fund performance, on average, should improve in the post-entry load transparency regime.

- H6: MER, on average, should remain unchanged in the post-entry load transparency regime.

India specific hypotheses

- H7: On average, MER of a group affiliated mutual fund should be higher than non-group affiliated mutual funds.

- H8: On average, fund performance of group affiliated mutual funds should be higher than non-group affiliated mutual funds.

Data

Source: Mainly from ACE Mutual funds database from Accord Fintech Ltd.

Data Period: August 2005 to June 2010

Sample: 296 equity growth mutual funds that belong to 36 Mutual fund companies (AMCs)

Other sources: RBI; CMIE (Alpha)

Current limitation: shorter post-regulation observation period. Currently working on increasing the sample period.

Data

AMC Name	AMC age (yrs.)	No. of schemes in Sample	Avg. Exp. of Fund Manager (yrs.)	AUM in Sample (Cr.)	Avg. Entry Load in Sample (%)	Avg. Exit Load in Sample(%)	Avg. Expense Ratio in Sample (%)
AIG Global	4	2.50	8.00	496.39	2.25	1.00	2.30
Baroda Pioneer	18	1	16.00	9.77	1.50	1.00	2.17
Benchmark	10	6	10.00	317.55	1.00	0.25	0.81
Bharti AXA Investment	3	2	14.00	41.90	0.00	0.50	2.44
Birla Sunlife	16	19	15.32	273.90	2.17	0.95	2.31
Canara Robeco	17	5	10.00	54.50	1.94	0.60	1.99
DBS Cholamandalam	14	8	11.00	21.76	2.28	0.94	2.42
Deutsche	8	3	12.00	83.81	2.25	1.50	2.39
DSP BlackRock Investment	14	7	18.57	884.42	2.25	0.86	2.05
Edelweiss	3	4	5.00	8.87	0.00	0.75	1.80
Escorts	15	5	6.00	3.07	2.25	0.80	2.50
FIL Fund	6	5	15.00	1415.63	2.25	0.80	2.06
Fortis Investment	7	6	5.00	127.54	2.29	0.83	2.48
Franklin Templeton	15	16	14.53	697.84	2.15	0.94	2.00
HDFC	11	11	14.09	913.38	2.25	0.55	1.92
HSBC Global	9	6	13.00	394.25	2.25	0.83	2.27
ICICI Prudential	17	16	13.67	560.79	2.15	0.84	2.11
IDFC	11	8	13.75	403.60	2.25	0.88	2.15
ING Investment	12	9	9.25	38.06	2.28	2.06	2.50
JM Financial	16	13	9.10	124.66	2.32	0.87	2.32
JPMorgan	3	3	17.00	478.15	2.25	1.00	2.29
Kotak Mahindra	16	9	14.00	314.65	2.25	0.22	1.94
LIC Mutual Fund	16	6	12.50	48.51	2.25	1.00	1.66
Mirae Global Investment	4	2	10.00	97.13	2.25	1.00	2.40
Morgan Stanley Investment	17	2	13.50	1176.44	2.25	0.50	2.20
Principal Pnb	19	9	14.33	163.93	2.09	1.14	2.24
Quantum	5	3	11.00	19.62	0.00	1.33	1.91
Reliance Capital	15	17	13.53	1638.14	2.30	0.71	1.92
Religare	5	8	12.75	71.95	2.25	0.88	2.33
Sahara	15	9	20.00	7.63	2.25	1.03	2.21
SBI Funds	18	9	8.00	366.12	2.13	0.92	2.29
Shinsei	3	1	15.00	20.33	0.00	1.00	2.50
Sundaram BNP Paribas	14	9	10.00	395.27	2.25	2.03	2.31
Tata	16	18	13.57	217.60	2.08	0.61	2.29
Taurus	17	6	14.00	42.28	2.25	1.67	2.13
UTI	7	6	17.67	378.10	2.25	0.67	1.94
Total / Average*	11.56	269	12.50	12307.52	1.92	0.93	2.15

Preliminary analysis

Variable Name	PANEL A													
	Entry Schemes			No Entry Schemes				Before Regime			After Regime			
	Mean	STDEV	N	Mean	STDEV	N	t-val	Mean	STDEV	N	Mean	STDEV	N	t-val
Flows	0.212	1.578	8790	0.205	2.732	774	2.01**	0.273	1.858	8014	0.002	0.137	1550	12.89***
AUM	452.626	834.628	9223	300.689	732.972	827	5.45***	425.180	794.090	8480	519.956	971.444	1570	-3.60***
Expense Ratio	2.208	0.333	9223	1.253	0.613	827	42.54***	2.132	0.441	8480	2.158	0.442	1570	-4.11***
Month-end Returns (%)	1.393	9.958	9223	1.658	9.599	827	-0.73	1.309	10.544	8480	2.060	5.299	1570	-4.24***
α	-0.038	0.587	9223	0.060	0.495	827	-1.869*	-0.034	0.567	8480	-0.013	0.638	1570	-0.643

Note: PANEL B spans the "Before Regime" and "After Regime" columns.

Variable Name	PANEL C							PANEL D						
	Business House AMCs - Before Regime			Business House AMCs - After Regime				Non Business House AMCs - Before Regime			Non Business House AMCs - After Regime			
	Mean	STDEV	N	Mean	STDEV	N	t-val	Mean	STDEV	N	Mean	STDEV	N	t-val
Flows	0.221	1.681	4131	0.001	0.078	763	8.36***	0.333	2.055	3883	0.002	0.175	787	9.89***
AUM	501.201	910.628	4380	681.256	1211.437	775	-3.95***	344.470	639.515	4100	355.995	603.052	795	-0.49
Expense Ratio	2.191	0.361	4380	2.213	0.365	775	-4.01***	2.068	0.506	4100	2.093	0.499	795	-1.29
Month-end Returns (%)	1.419	10.280	4380	2.229	5.254	775	-3.31***	1.197	10.815	4100	1.813	5.316	795	-2.43**
α	0.061	0.496	4380	0.052	0.569	775	0.219	-0.139	0.619	4100	-0.092	0.830	795	-0.809

Funds flow analysis

	(A)	(B)	(C)	(D)	(E) Base Coeff	BR Coeff	(F) Base Coeff	BR Coeff	(G) Base Coeff	EL Coeff	(H) Base Coeff	EL Coeff
Intercept	0.491	0.478	0.656	0.643	-0.180		-0.176		0.179		0.180	
	(0.002)***	(0.002)***	(0.000)***	(0.000)***	(0.538)		(0.544)		(0.278)		(0.274)	
$ln(TNA_{t-1})$	-0.104	-0.104	-0.107	-0.107								
	(0.000)***	(0.000)***	(0.000)***	(0.000)***								
$Fees_{t-1}$	-0.003	-0.004	-0.060	-0.061	0.014	-0.085	0.014	-0.087	-0.161	0.110	-0.150	0.084
	(0.936)	(0.905)	(0.120)	(0.110)	(0.881)	(0.394)	(0.876)	(0.382)	(0.001)***	(0.047)**	(0.001)***	(0.121)
$SecFlow_{t-1}$	0.002	0.002	0.002	0.002	0.003		0.003		0.003		0.003	
	(0.324)	(0.319)	(0.332)	(0.327)	(0.150)		(0.147)		(0.140)		(0.139)	
$Risk_{t-1}$	-0.008	-0.008	-0.009	-0.009	0.004		0.004		0.002		0.003	
	(0.404)	(0.404)	(0.377)	(0.377)	(0.718)		(0.709)		(0.847)		(0.793)	
Size					0.021		0.021		0.019		0.018	
					(0.005)***		(0.005)***		(0.011)**		(0.013)**	
Age					0.010		0.010		0.010		0.010	
					(0.014)**		(0.015)**		(0.009)***		(0.011)**	
March	-0.103	-0.103	-0.098	-0.098	-0.071		-0.071		-0.059		-0.059	
	(0.084)*	(0.084)*	(0.101)	(0.101)	(0.241)		(0.240)		(0.331)		(0.327)	
D_{BG}	-0.035	-0.035	-0.034	-0.034	-0.080		-0.079		-0.080		-0.078	
	(0.273)	(0.277)	(0.286)	(0.290)	(0.014)**		(0.015)**		(0.014)**		(0.016)**	
RANKS												
LowPref	0.318	0.532	0.320	0.528	0.001	-0.054	-0.081	0.286	0.957	-1.310	0.294	-0.184
	(0.535)	(0.223)	(0.533)	(0.227)	(0.999)	(0.969)	(0.940)	(0.808)	(0.273)	(0.146)	(0.689)	(0.805)
4thPerf	0.394		0.388		-0.138	0.567			-1.120	1.901		
	(0.296)		(0.304)		(0.885)	(0.585)			(0.150)	(0.032)**		
3rdPerf	0.136		0.132		0.070	0.014			0.575	-0.641		
	(0.711)		(0.717)		(0.940)	(0.989)			(0.450)	(0.461)		
2ndPerf	-0.051		-0.044		-0.0380	-0.043			0.261	-0.417		
	(0.890)		(0.906)		(0.968)	(0.966)			(0.735)	(0.636)		
MidPref		0.154		0.153			-0.020	0.152			0.002	0.146
		(0.105)		(0.107)			(0.935)	(0.560)			(0.991)	(0.516)
HighPref	-0.396	-0.563	-0.383	-0.543	0.345	-0.424	0.351	-0.611	-0.059	0.055	0.269	-0.566
	(0.356)	(0.124)	(0.374)	(0.138)	(0.756)	(0.725)	(0.709)	(0.550)	(0.946)	(0.957)	(0.720)	(0.510)
(D_{BR})	0.212	0.212				0.366		0.345				
	(0.000)***	(0.000)***				(0.221)		(0.244)				
(D_{EL})			0.191	0.191								
			(0.000)***	(0.000)***								
Adj-R Sqrd	2.50%	2.51%	2.49%	2.51%	0.67%		0.50%		0.40%		0.38%	
N	9564	9564	9564	9564	9564		9564		9564		9564	

Funds flow analysis -2

Flow horizon Coefficients	All Schemes	Entry Schemes	No Entry Schemes	Before Regime	After Regime*
1 Month	0.662(0.291)	0.740(0.295)	1.607(0.041)**	1.832(0.165)	0.3619(0.000)***
2 Month	1.408(0.005)***	1.532(0.006)***	1.351(0.092)*	3.443(0.004)***	0.3697(0.000)***
3 Month	1.675(0.000)***	1.843(0.000)***	1.416(0.034)**	4.876(0.000)***	0.3916(0.000)***
6 Month	1.290(0.181)	1.543(0.145)	1.532(0.002)***	2.853(0.190)	0.7207(0.000)***
9 Month	-4.791(0.205)	-3.840(0.378)	1.240(0.006)***	4.204(0.452)	1.3573(0.106)
12 Month	-14.192(0.174)	-8.956(0.464)	1.114(0.004)***	17.753(0.248)	-0.2295(0.777)

Fund expenses analysis

Variable Name	All Schemes		Before Regime	After Regime
	(1)	(2)		
Intercept	1.83(0.000)***	1.645(0.000)***	1.113(0.000)***	2.044(0.000)***
$Return_{t-1}$	-0.001(0.069)*	0.000(0.276)	-0.001(0.020)**	0.004(0.065)**
$Risk_{t-1}$	0.023(0.000)***	0.019(0.000)***	0.015(0.000)***	0.004(0.513)
Growth	-0.005(0.532)	-0.004(0.536)	0.002(0.676)	0.202(0.043)**
Size	0.017(0.000)***	0.016(0.000)***	0.001(0.458)	0.011(0.065)*
Age	-0.007(0.000)***	-0.010(0.000)***	-0.007(0.000)***	-0.009(0.001)***
Business Group AMC (D_{BG})	0.130(0.000)***	0.115(0.000)***	0.090(0.000)***	0.121(0.000)***
Before Regime (D_{BR})	-0.012(0.337)			
Entry Load (D_{EL})		0.314(0.000)***	0.950(0.000)***	
Adj-R Sqrd	3.79%	12.39%	35.76%	2.83%
N	10050	10050	8480	1570

Conclusions and future work

- The market for mutual funds is determined by investor sophistication and incentives to market mutual funds.

- SEBI regulation has some desirable effect (reducing unspohicated investors' investment and improving market quality)

- The biggest problem is still out there (where are the unsophistcated investor flows headed)

- Need more analysis (survey on the investor type before and after the regulation) to confirm the evidence.