

Rules v. discretion in market surveillance: evidence from India

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Structure

1. What does this paper do?
2. Questions
3. Data and approach
4. Findings
5. Implications

What does this paper do?

A unique surveillance measure called Graded Surveillance Measure (GSM) in the Indian equity markets.

Main objectives of GSM:

- ▶ alert and advice investors to be extra cautious;
- ▶ advice market participants to carry out necessary due diligence.

Common manipulative practices

Ex-post

Sanction is targeted towards manipulators

Firm fundamentals

Ex-ante

Sanction affects all investors

The GSM surveillance framework

Criteria

	Criteria
Stage 0	<p>Firms with:</p> <ul style="list-style-type: none">▶ Networkth \leq ₹ 100,000,000; and▶ Net Fixed Assets \leq ₹ 250,000,000; and▶ P/E ratio $>$ 2xP/E ratio of Nifty 500 or S&P BSE 500 or firms with a negative P/E ratio.
Stage I	<p>Firms with:</p> <ul style="list-style-type: none">▶ market capitalization \leq ₹ 250,000,000 ; and▶ a P/E ratio \geq 2x P/E ratio of Nifty 500 or S&P BSE 500; or▶ Firms with a negative P/E ratio, for which the following should be considered:<ol style="list-style-type: none">a. P/B value of scrip is $>$ 2x P/B value of Nifty 500 or S&P BSE 500; orb. P/B value is negative

The GSM surveillance framework

Sanctions

7 stages of surveillance

Stage	Consequences
0	Warning
I	Trade for Trade window with a price band $\leq 5\%$
II	Trade for Trade window with a price band $\leq 5\%$ ASD of 100% of trade value.
III	Trading permitted once a week. ASD of 100% of trade value.
IV	Trading permitted once a week. ASD of 200% of trade value.
V	Trading permitted once a month. ASD of 200% of trade value.
VI	Trading permitted once a month with no upward movement in price. ASD of 200% of trade value.

Questions

- ▶ Whether the GSM surveillance framework is consistently applied across firms that meet the stated requirements?
 - ▶ Study characteristics of firms that entered and exited GSM.
- ▶ What is the impact of a firm being subjected to GSM on: (a) returns; and (b) liquidity.
 - ▶ Event study framework: Propensity score matching to measure its impact on a set of treated and control firms.

Data

- ▶ Hand collect data on securities under GSM: quarterly GSM lists published by the NSE.
- ▶ Duration: March 2017-March 2019
- ▶ Total: 121 securities; 111 unique firms

Stage	No. of securities	Avg. days
Stage 0	55	53
Stage I	96	97
Stage II	40	51
Stage III	27	72
Stage IV	10	49
Stage V	7	56
Stage VI	4	87

Data (contd.)

Table: Summ.stats: firms under GSM

Indicator	1st Qu.	Median	Mean	3rd Qu.	sd
Close price (₹)	2.6	5.8	15.0	13.9	29.6
Traded quantity	1,588.8	20,132.0	65,529.7	59,427.9	146,360.7
Traded value (₹mn.)	0.0	0.1	0.9	0.4	3.0
No. of trades	6.0	51.8	132.0	123.9	286.8
Market cap (₹mn.)	90.1	209.3	883.6	445.8	4601.3
P/E ratio	-2.9	-0.4	10.9	-0.1	161.5
P/B ratio	0.5	1.6	4.0	4.4	7.6
Shareholder's funds (₹mn.)	-3015.8	-712.2	-3215.2	44.1	9774.3
Net fixed assets (₹mn)	85.5	356.7	1394.4	1226.7	3018.1
Age since listing (years)	7.5	12.0	13.1	18.5	7.1
Age since incorporation (years)	22.5	32.5	38.7	48.7	23.1

Data (contd.)

Table: Equity holding of firms under GSM

Qtr	Prom.	Ind. Prom.	For.Prom	NP	NPI	NPNI
Jun 17	42.75	40.79	2.19	57.25	6.00	51.25
Sep 17	41.74	40.39	2.45	58.26	5.90	52.14
Dec 17	42.16	40.38	1.95	57.84	5.28	52.54
Mar 18	41.50	39.73	1.90	58.50	5.91	52.40
Jun 18	41.86	40.12	1.99	58.14	5.39	52.73
Sep 18	44.14	42.18	2.17	55.86	4.37	51.28
Dec 18	41.96	40.21	1.95	58.04	5.38	52.61
Mar 19	41.90	40.09	2.25	58.10	5.43	52.47

NP: non-promoter; NPI: non-promoter institutions;
NPNI: non-promoter non-institutions

Findings

Satisfaction of criteria

34% of the total sample did not meet the pre-specified criteria.

Table: Whether firms met Stage 0 criteria

Criterion	Yes	No	NA	Total	Yes (%)	No (%)
Net worth \leq ₹ 100mn.	48	3	4	55	87.3	5.5
Net fixed assets \leq ₹ 250 mn.	45	1	9	55	81.8	1.8
P/E $>$ 2*Nifty 500 or -ve PE	46	9	0	55	83.6	16.4
All	37	9	9	55	67.3	16.4

Table: Whether firms met Stage I criteria

Criterion	Yes	No	NA	Total	Yes (%)	No (%)
Market cap \leq ₹ 250 mn.	41	15	0	56	73.2	26.8
PE $>$ 2*Nifty 500 or -PE	43	12	1	56	76.8	21.4
All	30	25	1	56	53.6	44.6

Findings

Exit from GSM

N=47

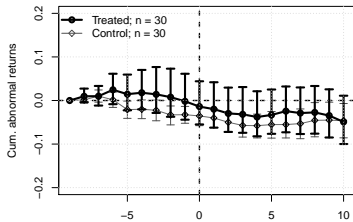
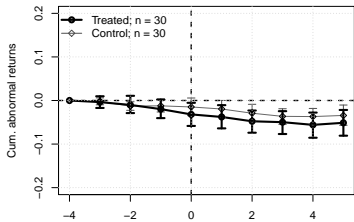
Table: Characteristics of firms that exited GSM

Criterion	Yes	No	NA	Total
Net worth \leq ₹ 100 mn.	25	14	1	40
Net fixed assets \leq ₹ 250 mn.	28	8	4	40
PE > 2*Nifty PE or -PE	30	8	2	40
Market cap \leq ₹ 250 mn.	31	9	0	40
-ve PE & (PB > 2*Nifty PB or -ve PB)	16	18	6	40

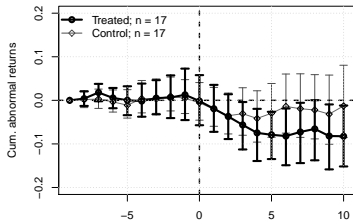
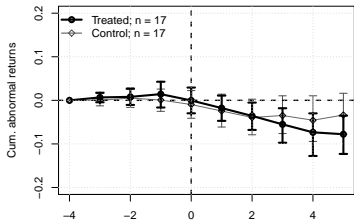
Findings

Impact on stock prices on entry

Stage 0



Stage I

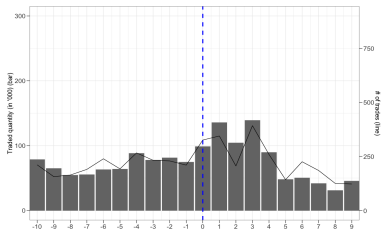


Findings

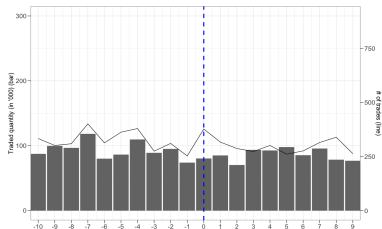
Impact on liquidity: traded volumes and number

t=0: Announcement date

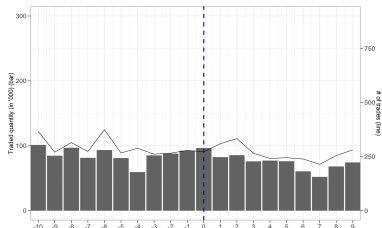
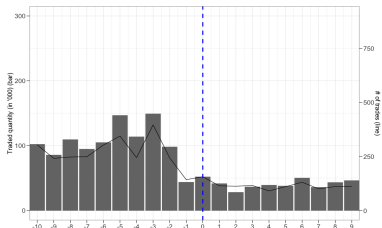
Treated



Control

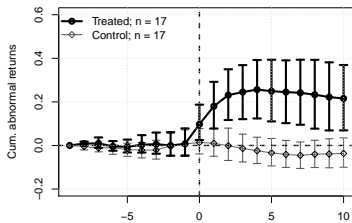
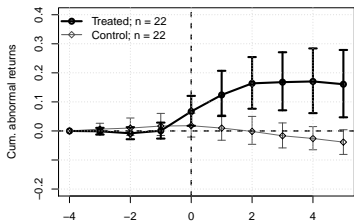


t=0: Effective date



Findings

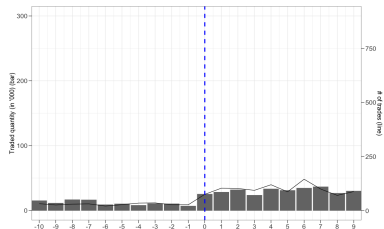
Impact on exit: stock prices



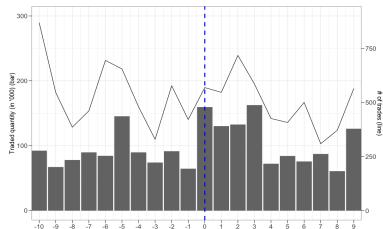
Findings

Impact on exit: liquidity

Treated



Control



Implications

1. Considerable ambiguity on the implementation of the surveillance measure: rule of law
2. Surveillance measures have costs: unclear if they are commensurate with the benefits.
3. Identifying the investors most adversely affected
4. Cost of capital for the firms under GSM

Questions/ comments
Thank you