Preventing Stock Market Crises (V): Regulating Sell-side Analysts

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Motivation

G-20 calls for a sound global financial system that can prevent systemic risk as 2007-2009.

We start with stock markets.

Since the founding of the Amsterdam stock exchange 400 years ago, no regulatory framework that aimed for *systemic security*, and was based on *comprehensive empirical study*, was implemented. We aim to fill that gap.

Goal

Goal: Fair and Transparent Perfect Competition
through Investor Protection and Crisis Prevention
in the spirit of Antitrust Regulation

Subjects of our Research Series

- Trade-based manipulation
- Information-based manipulation
  - earnings manipulation
  - insider trading
  - sell-side analysts bias
  - business news bias
- Potential problems of breaking news.

Market Manipulation

Manipulation of perception in order to take advantage of the induced investors/outsiders.

Our focus: <u>prevention</u> of market manipulation that can create <u>systemic risk</u>

Is Market Manipulation Illegal?

Yes.
Securities Exchange Act of 1934
section 10(b)

Is Market Manipulation Rampant?

It has the potential to or actually resulted in stock market crashes or exchange settlement difficulties

Example of Rampant Manipulation: Brazil

Naji Robert Nahas triggered disastrous stock market crashes in both the Rio de Janeiro and Sao Paulo Stock Exchanges on June 9, 1989. Within ten trading days, the indices of both markets dropped 67% and 61%. Nahas bought stock options and then forced the markets up by heavily buying and selling shares in trades so that half of trade were actually between himself and his partners. Nahas was later indicted.

Are Market Manipulations in the 21st Century Frequent and Chronic?

Over 500 prosecution cases of market manipulation
(actual complaints: over 6,000 in Japan per year)

US SEC: 394, 1999-2009 trade and information based.

Only trade based (incomplete list):

China CSRC:	19, 2000-2006
Hong Kong HKSFC:	38, 1998-2007
India SEBI:	30, 1999-2005
Japan JSESC:	25, 1998-2008

We Propose a New Concept: Information Monopoly is behind Market Manipulation

- Three components of information monopoly:
  - Potentially price-moving information
  - Publicity
  - Credibility
- Information monopoly used in trading: market manipulation

Our subject is those sell-side analysts who assist in market manipulation

"Just as entrepreneurs spend resources to build casinos to take advantage of gamblers, arbitrageurs build investment banks and brokerage firms to predict and feed noise trader demand."

Shleifer and Summers, 1990

Settlement Involving Analysts

Global Research Analyst Settlement (2003)
investigations of potential conflicts of interest in
equity research analysis of
12 industry leader banks by the
New York (NY) Attorney General,
U.S. Securities and Exchange Commission (SEC),
National Association of Security Dealers,
the New York Stock Exchange, Inc. (NYSE)
and state regulators.

"When they give "buy" recommendation to fund managers, before public release of the recommendation, they already finished buying the particular shares. They are about to sell as soon as they release the recommendation to the public."

Securities analyst: Actually I am an Actor. Economic Observer, 7/22/2011 (in Chinese)

Abnormal Positive Return Before Public Release of Analyst Recommendations, Return Reversal After USA

- Lloyd-Davies and Canes, 1978 HOTS
- Liu, Smith and Syed, 1990 HOTS
- Barber and Loeffler, 1993 Dartboard
- Mathur and Waheed, 1995 Inside Wall Street

Abnormal Positive Return Before Public Release of Analyst Recommendations, Return Reversal After non-USA

- Pieper, Schiereck and Weber 1993 Germany
- Schuster 2003 Germany, Holland, Turkey, UK, and US
- Lin and Kuo 2007 Taiwan
- Lee and Liu 2008 China
- Schlumpf, Schmid and Zimmermann 2008 Switzerland

Who Do Analysts Inform Pre-publication

The analysts' employer:

- Proprietary trading division (De Franco et al (2007), Lin and Kuo (2007), Shen and Chih (2009))
- Brokerage clients: institutional investors (Irwine (2001), Irwine et al (2007), Lin and Kuo (2007))

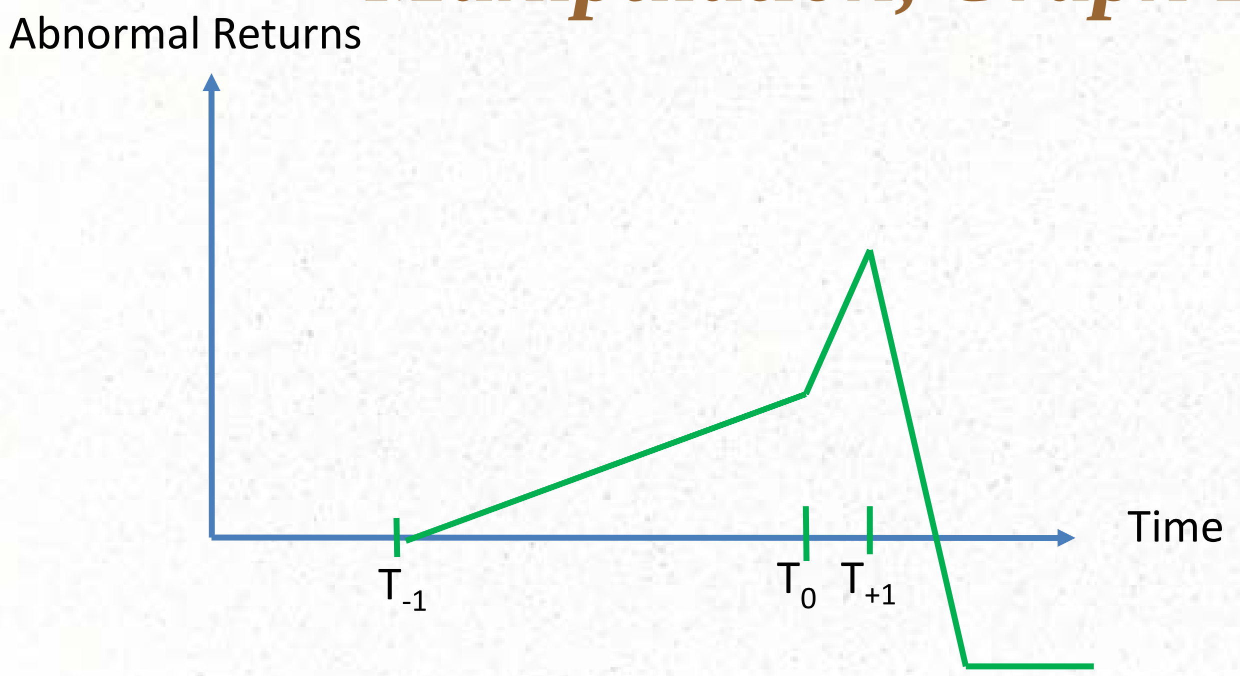
Other Interest Sell-side Analysts Serve

Investment banking division

Issuer company (access)

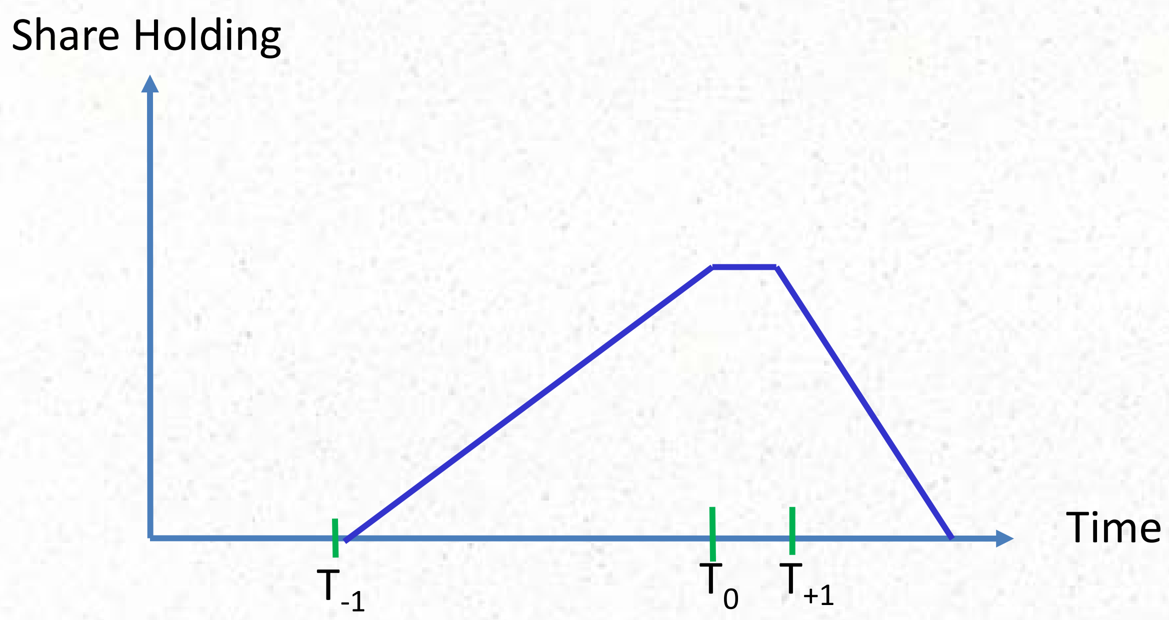
The analysts’ own portfolio

Abnormal Returns around Analysts Upgrade: Analysts Assisted Information-based Market Manipulation, Graph 1



T_{-1} - T_0 : manipulators accumulate based on private information
T_0 : public announcement of analyst upgrade
T_0 - T_{+1} : announcement day price run up due to outsiders buy pressure
At T_{+1} : manipulators distribute their shares to outsiders

Total Share Holding by Manipulators Graph 2



T_{-1} - T_0	: manipulators accumulate based on private information
T_0	: public announcement of good news
T_0 - T_{+1}	: lifting - announcement day price run up due to outsiders buy pressure
At T_{+1}	: manipulators distribute to outsiders

Interpretation of Graphs 1-2

- At T_{-1} analysts release good news to proprietary traders and large institutional investor clients. They buy before public announcement of the news
- Accumulation by manipulators results in pre-announcement abnormal positive returns during T_{-1}-T_0. Time horizon varies; weeks to days prior to public information release
- At T_0 due to public information release, outsiders generate buy pressure through high trading speed, lift the price further
- After proprietary traders and large institutional investor clients distribute at $T_{+1,}$ the stock often experiences lasting underperformance.

ALD Scheme

- Manipulators *Accumulate* while having information advantage during T_{-1} -T_0
- *Lift*: public release of good news at T_0 generates outsiders buy pressure - induced trade
- Manipulators *Distribute* after their public dissemination of good news at T_1 therefore trade against their own public information release.
- In our database, 94% were A-L-D scheme.

ALD is Monopolistic Practice

Predatory Pricing in Goods Markets:

Drive out competitors by temporary lower price

Gain control over supply

Increase price

ALD in Stock Markets:

Shake out competitors by temporary selling

Gain control over supply

Increase price by inducing herding

Sell-side Analyst have Information Monopoly

- Analyst have all the components of information monopoly:
  - Potentially price-moving information
  - Publicity
  - Credibility
- Analysts information monopoly is used in trading by
  - Tipped institutional investor clients of brokerage division
  - Proprietary trading desk
- So they become market manipulators.

Market Manipulation Can Create Systemic Risk

Two sources of systemic risk:

1. If large manipulators are not successful
2. If large manipulators are successful

1. Vulnerability of Banks

After *accumulation* and *lift*, before completing *distribution*, manipulators are vulnerable to:

- short sellers
- bad news

Manipulators can incur sudden large losses

If manipulators built large equity position from leverage, banks have problems.

(Archarya, Kulkarni, Richardson 2011)

2. Vulnerability of the Stock Market

If manipulators are successful, and *distribute* their holdings before the stock price collapse, stock price will continue to fall to the level prior to manipulation, or even much further.

Mini-bubbles of individual stocks can add up to stock market bubble.

(Didier Sornette 2004: how simple nonlinear behaviors that can act repetitively may lead to the emergence of complex cooperative behaviors)

Low Detection Rate of Manipulation

- Inherent secrecy: ex post detection is very difficult
  - No daily monitoring and rules
  - Too few resources
  - Material information and proof of *scienter* (bad intention) is extremely difficult

Prevention is needed

Direction of Our Proposals

In the spirit of anti-trust regulation:
separate trade from information monopoly

Proposals

We propose measures to prevent manipulative trading around public release of sell-side-analyst-generated information. The six measures complement existing laws and rules

The first five together are meant to fairly regulate, through effective oversight, trading by the informed trader who utilizes analysts' information monopoly. They enable related trading information to be more <u>transparent,</u> and involved analysts and their firms to be more <u>accountable</u>.

The last measure proposes <u>public service</u> in equity analysis of every stock to all investors.

Proposal 1-2

Before public release, a sell-side analyst must *disclose* his and his firms’ as well as the client investors’ shareholdings in the target stock to the regulating agency in confidence at least 24 hours in advance.

The regulating agency oversees his and his firm’s trading activities in the target stock after this filing. Trading by the firm’s clients in the target stock is *monitored* at the same time.

Proposal 3

The regulating agency can *call off or postpone* sufficiently long the public release of the analyst-generated information and start investigation if the stock in question has displayed abnormal price behavior prior to the release date.

Proposal 4-5

For each trading day on the day of and after the release, if trading *against* the released information, the analyst, (or his firm or the client investors), can transact up to x% of a benchmark.

If the analyst (or his firm or the client investors) are trading in the target stock *according* to his information release, then their daily transaction is subject to the y% limit.

Proposal 6

The regulating agency may create its own research department of *public analysts*. They issue research reports covering all stocks, requiring every issuer to pay a fee. To be objective, those reports should contain no recommendations or target prices.

The research is to be published through a credible media outlet. Analysts are also accountable if any significant price run-up or decline occurs prior to their publications.

Latest Development: China CSRC from September 1 2011

- If stocks have abnormal fluctuation, the acquiring company has to make immediate announcement of M&A plan and progress (reduced time for accumulation)

- If stocks have abnormal fluctuation due to rumor of M&A, the company must ask the stock exchange to halt trading and verify and clarify every issue, disclose relevant information (management responsibility, trading halt makes market manipulation incomplete)

Conclusion

1. Sell-side analysts generate potentially price moving information, therefore have information advantage

2. Disseminating potentially price moving information through credible sources to large audience: information monopoly is formed

3. Trading by utilizing information monopoly is market manipulation

4. Market manipulation by large traders can create systemic risk to banking and stock markets

5. We propose quantifiable and adjustable regulatory measures in the spirit of antitrust laws.

Thank you for your attention!

Best wishes,

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