

The Business School for the World®

Faculty & Research Working Paper

Governance through Threat: Does Short Selling Improve Internal Governance?

Massimo MASSA Bohui ZHANG Hong ZHANG 2013/83/FIN

RM

DOCKE.

Δ

Find authenticated court documents without watermarks at docketalarm.com.

Governance through Threat: Does Short Selling Improve Internal Governance?

Massimo Massa*

Bohui Zhang**

Hong Zhang***

This paper can be downloaded without charge from the Social Science Research Network electronic library at: <u>http://ssrn.com/abstract=2291474</u>

- * The Rothschild Chaired Professor of Banking, Co-Director of the Hoffmann Research Fund, Professor of Finance at INSEAD Boulevard de Constance, 77305 Fontainebleau Cedex, France. Email: <u>Massimo.massa@insead.edu</u>
- ** Senior Lecturer at University of New South Wales, Sydney, NSW Australia. Email: <u>bohui.zhang@unsw.edu.au</u>

DOCKET

*** Assistant Professor of Finance at INSEAD 1, Ayer Rajah Avenue, 138676 Singapore. Email: <u>hong.zhang@insead.edu</u>

A Working Paper is the author's intellectual property. It is intended as a means to promote research to interested readers. Its content should not be copied or hosted on any server without written permission from <u>publications.fb@insead.edu</u> Find more INSEAD papers at <u>http://www.insead.edu/facultyresearch/research/search_papers.cfm</u>

LARM Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

Abstract

We explore the relationship between internal governance and the disciplining mechanisms created by the threat of short selling (i.e., "short-selling potential"). We argue that the presence of short selling increases the cost of agency problems for shareholders and incentivizes them to improve internal governance. Our stock-level tests across 23 developed countries during 2003-2009 confirm that the threat of short selling significantly enhances the quality of internal governance. This effect is stronger for financially constrained firms and more pronounced in countries with weak institutional environments. The governance impact of short selling leads to an improvement in firms' operating performance.

Keywords: Short Selling; International Finance; Corporate Governance; Equity Incentives. JEL Codes: G30, M41

Introduction

The last decade has witnessed a renewed interest in the role of financial markets in disciplining managers. Shareholders – particularly blockholders – may induce good managerial behavior by exiting and pushing down stock prices when bad managerial actions are taken (e.g., Admati and Pfleiderer, 2009; Edmans, 2009; Edmans and Manso, 2011).¹ In this regard, informed trading ("exit") provides an alternative governance mechanism that shareholders can adopt in addition to the traditional "intervention" type of internal governance (e.g., Parrino et al., 2003; Chen et al., 2007; McCahery et al., 2010). Indeed, to some extent, exit and intervention offer substituting governance mechanisms that shareholders can select based on their trade-off between benefits and costs (e.g., Edmans and Manso, 2011; Edmans et al., 2013).

A more general question is whether any type of informed trading that may reveal managerial misbehavior to the market can substitute for internal governance. A notable example is short selling. Short sellers are known to be informed (Senchack and Starks, 1993; Asquith et al. 2005; Cohen et al. 2007; Boehmer et al., 2008) and highly motivated to attack bad firms (e.g., Karpoff and Lou, 2010; Hirshleifer et al., 2011).² Short selling appears to discipline managers and reduce their incentives to manipulate (Massa et al., 2013). It may therefore appear reasonable to conjecture that shareholders can rely on the external disciplining mechanism of short selling instead of engaging in direct monitoring of managers. If so, shareholders would optimally *reduce* their direct manager monitoring in the presence of an effective short-selling market.

In this paper, we address this issue by exploring the impact of short selling on internal governance. Our main contribution is to empirically document that the presence of short selling *increases*, rather than reduces, shareholders' incentives to monitor managers. To explore the economic rationale for this, we also provide a simple model with multiple short sellers to show how short selling stimulates shareholders' investment in internal governance. For lack of a better expression, we label this effect "governance through threat".

Our main intuition is as follows. Suppose that a shareholder in a firm can choose between investing in internal governance - e.g., monitoring and intervention - and optimally exiting if she privately observes that the manager misbehaves. In the former case, the shareholder reduces the probability that the manager takes a "bad" action, while in the latter case, she just tries to minimize the

¹ For instance, Edmans and Manso (2011) conclude that "informed trading causes prices to more accurately reflect fundamental value, in turn inducing the manager to undertake actions that enhance value."

 $^{^{2}}$ Of course, other market participants may also influence the shareholders of firms in this way; however, the short-selling channel is particularly powerful because short sellers are known to be good at processing negative information (e.g., Karpoff and Lou, 2010; Hirshleifer et al., 2011).

loss by selling before the market realizes it. The existence of informed short selling, however, introduces competition in trading over the same set of information. More competition, by revealing more private information to the market, adversely affects the price at which the shareholder can exit. Hence, short selling threatens the payoff of exit. This fact incentivizes the shareholder to spend more on internal governance to reduce the likelihood of the bad action in the first place.

The impact of short selling should vary across firms as a function of the real cost of bad managerial actions. For example, consider financially constrained firms that are more "dependent" on the market for external financing (e.g., Baker et al., 2003). A bad managerial action may not only directly destroy firm value but also impose additional damage to shareholders because the consequent price drop would also significantly increase the cost of capital. Therefore, for these firms, the incentive of shareholders to improve internal governance in the presence of short selling should be stronger. Similarly, because the average agency cost is higher in countries with poor country-level governance than in those with good governance, the marginal impact of short selling should be greater in countries with poor governance.

These considerations also imply that it is the *ex ante* ("potential") threat of short selling, which we refer to as "*short-selling potential*" (SSP), rather than the *ex post* actions of the short sellers that affects the shareholders' governance decisions.³ We therefore focus our empirical analysis on the impact of SSP on internal governance. Given that short-selling potential is constrained by the capacity of the market, i.e., the fraction of shares available to be lent to short sellers ("*Lendable*"), we use "*Lendable*" as our main empirical proxy for SSP.⁴

Moreover, this proxy for SSP provides several advantages. First, the number of shares available to be lent is mostly determined by the supply-side conditions of short selling and is not directly related to the stock price (e.g., Cohen et al., 2007). Second, more abundant lendable shares reduce short-selling fees (Kaplan et al., 2013) and increase price efficiency in the global market (Saffi and Sigurdsson, 2011), directly conditioning the behavior of stock-price-driven managers. Third, and more importantly, shareholders eager to exercise their monitoring/intervention roles are less likely to supply lendable shares to short sellers on a large scale because doing so would transfer their voting rights and therefore limit their ability to affect governance.⁵ In fact, this unique feature of the short-selling market would

³ For instance, a greater threat may lead to a more substantial improvement in governance, which *reduces* the likelihood of bad managerial behavior and the necessity for short sellers to punish it.

⁴ An analysis of naked short selling goes beyond the scope of this paper because naked short selling may complicate the ownership and governance structure of firms by creating more voting shares than the total number of shares outstanding. One benefit of lendable shares is to exclude naked short selling because normal short selling requires short sellers to "locate securities to borrow before selling." In this case, the lender of the shares receives dividends but relinquishes voting rights. The definition of ownership involving short selling is provided by the SEC: <u>http://www.sec.gov/rules/final/34-50103.htm</u>.

⁵ A lack of voting rights is known to discourage institutional investors (e.g., Li et al., 2008).

DOCKET A L A R M



Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.