





Economic Theory

Journal of Economic Theory 157 (2015) 842-878

www.elsevier.com/locate/jet

# Financial reporting and market efficiency with extrapolative investors \*

Milo Bianchi a,\*, Philippe Jehiel b,c

<sup>a</sup> Toulouse School of Economics, 21, allée de Brienne, 31000 Toulouse, France
<sup>b</sup> Paris School of Economics, Ecole des Ponts, Paritech, France
<sup>c</sup> University College London, United Kingdom

Received 20 March 2014; final version received 16 February 2015; accepted 17 February 2015

Available online 23 February 2015

#### Abstract

We model a financial market in which companies engage in strategic financial reporting knowing that investors only pay attention to a randomly drawn sample from firms' reports and extrapolate from this sample. We investigate the extent to which stock prices differ from the fundamental values, assuming that companies must report all their activities but are otherwise free to disaggregate their reports as they wish. We show that no matter how large the samples considered by investors are, a monopolist can induce a price of its stock bounded away from the fundamental. Besides, increasing the number of companies competing to attract investors may exacerbate the mispricing of stocks.

© 2015 Elsevier Inc. All rights reserved.

JEL classification: C72; D53; G14

Keywords: Extrapolation; Efficient market hypothesis; Competition; Sophistication; Financial reporting

E-mail addresses: milo.bianchi@tse-fr.eu (M. Bianchi), jehiel@enpc.fr (P. Jehiel).

<sup>\*</sup> We thank Alessandro Pavan (editor) and three referees for constructive comments. We also thank participants at the conference on Finance and Expectational Coordination at NYU (especially the discussant, Stephen Morris), the NBER Behavioral Economics working group Fall 2012 (especially the discussant, Brett Green), the workshop on Bounded Rationality, Jerusalem 2012, Warwick Creta workshop 2012, and various seminar participants. Milo Bianchi thanks the Risk Foundation (Groupama Chair "Les Particuliers Face aux Risques" and SCOR/IDEI Chair "Market Risk and Value Creation") and Philippe Jehiel thanks the European Research Council (Grant N. 229871) for financial support.

Corresponding author.

#### 1. Introduction

The recent financial crisis as well as some famous accounting scandals have revealed that some firms can deliberately obfuscate their financial statements, and that many investors may lack the sophistication needed to read through such opaqueness. As a result, financial markets may not be efficient in that stock prices may be far from the underlying fundamentals. A typical regulatory response would be to impose tighter disclosure requirements on firms while at the same time attempting to "educate" investors, if possible. Another kind of response may instead rely on market forces, hoping that the competition to attract investors would discipline firms and lead to market efficiency.

In this paper, we develop a simple framework to investigate the impact of strategic financial reporting on whether the prices of stocks correctly reflect fundamental values. We focus on a setting in which investors are not fully sophisticated in the way they interpret the information provided by firms, and at the same time firms are required to meet (strong) regulatory standards insofar as all activities in the firm have to be referred to in the financial report. We analyze how firms' reporting strategies and market prices vary as investors' degrees of sophistication vary and/or as more firms compete to attract investors.

Specifically, we consider a stylized financial market in which each firm simultaneously chooses a financial report with the objective of influencing investors' beliefs and ultimately maximizing the trading price on the stock market.<sup>2</sup> A report consists in a set of signals about the firm's profitability (how much investors can expect to receive for each dollar invested in the firm). We assume that each firm is constrained to choose a set of signals whose mean corresponds to the true profitability, while at the same time being able to freely affect the noise in the signals' distribution.

Such a report can be viewed as a statement about the profitability of the firm. The firm can choose to make a very simple statement, a single number summarizing the overall profitability of the firm, or a more complicated statement, a large set of numbers describing the profitability of each single activity.<sup>3</sup> Under this metaphor, our key assumption is that firms are able to package activities in the firm as they wish, but not to hide them. All activities must be reported, and they cannot be made more or less visible to investors. As a result, the average reported profitability must coincide with the true aggregate profitability of the firm.<sup>4</sup>

If investors were able to read and process the entire report provided by a given firm and if, to continue on the packaging metaphor, they had a common understanding of how the various

<sup>&</sup>lt;sup>1</sup> Forms of investor protection aimed at enhancing the reliability of financial reports were famously advocated by SEC Chairman Arthur Levitt (Levitt [43]), and then incorporated in the Regulation for Fair Disclosure. Increasing the transparency of corporate disclosures lies at the heart of recent interventions such as Sarbanes–Oxley Act (adopted after Enron) and Dodd–Frank Reform (adopted after the subprime crisis). The latter has also created the Consumer Financial Protection Bureau with the intent of improving investors' sophistication.

<sup>&</sup>lt;sup>2</sup> Managers' compensation is directly influenced by trading prices through stock options say. Evidence suggests a strong link between performance-related compensation and aggressive accounting practices, see Burns and Kedia [9]; Bergstresser and Philippon [7]; Efendi, Srivastava and Swanson [18]; Cornett, Marcus and Tehranian [12].

<sup>&</sup>lt;sup>3</sup> We wish to capture the idea that, in practice, firms have a lot of discretion in the way they report their performance to investors. Even relatively simple reports, like earnings announcements, are typically supplemented by a large set of information such as balance sheets, cash flows, and earnings disaggregated at various levels (say by products or geographic regions). The amount of additional information provided, as well as its format, is largely discretionary (Chen, DeFond and Park [11]; Francis, Schipper and Vincent [22]).

<sup>&</sup>lt;sup>4</sup> This does not require that the regulator knows the profitability of the firm ex-ante but rather that he may be able to observe it ex-post.

### Download English Version:

## https://daneshyari.com/en/article/7359822

Download Persian Version:

https://daneshyari.com/article/7359822

<u>Daneshyari.com</u>