Contents lists available at ScienceDirect



Journal of Economic Behavior & Organization

journal homepage: www.elsevier.com/locate/jebo



Communication of soft information: Reputation and imperfect enforcement of reporting quality $\stackrel{\star}{\sim}$



Jay Pil Choi^{a,b}, Eirik Gaard Kristiansen^c, Jae Nahm^{d,*}

^a Michigan State University, United States

^b Yonsei University, Republic of Korea

^c Norwegian School of Economics, Norway

^d Department of Economics, Korea University, Republic of Korea

ARTICLE INFO

Article history: Received 2 June 2016 Received in revised form 31 January 2017 Accepted 1 February 2017 Available online 20 February 2017

JEL classification: L14 L15 D82

Keywords: Cheap talk Investments Credibility

D83

1. Introduction

ABSTRACT

Entrepreneurs report unverifiable soft information to investors. The credibility of soft information depends on the entrepreneur's reputation concern. In equilibrium, high-talent entrepreneurs, who are better at developing profitable projects in the future and therefore have stronger reputation concerns, signal their talents by producing honest reports on current projects. We show how probabilistic third-party monitoring of reporting quality changes some firms' reporting strategies, which again spill over to the financing costs of firms not directly affected by improved monitoring. In some cases, improved monitoring of reporting quality can reduce firms' reputation concerns and result in less efficient communication of information.

© 2017 Elsevier B.V. All rights reserved.

Information provided from an entrepreneur to investors, such as sales forecasts or progress reports of investment projects, contains soft information, which is difficult to verify. The credibility of such reports depends on the sender's reputation concerns.

We develop a dynamic reputation model in which an entrepreneur's reputation and financing terms are shaped by previous progress reports and outcomes of completed projects. We show that, in equilibrium, high-talent entrepreneurs, who are better at discovering and developing profitable projects, signal their talents by producing honest reports on current projects. Entrepreneurs are willing to take short-term losses associated with making an honest report on bad current projects if they are compensated by an improved reputation and less expensive financing in the future. Future financing costs are

* Corresponding author.

http://dx.doi.org/10.1016/j.jebo.2017.02.002 0167-2681/© 2017 Elsevier B.V. All rights reserved.

^{*} We thank Romana Autrey, Carsten Bienz, Chiara Canta, Hans K. Hvide, Tiago da Silva Pinheiro, Frøystein Gjesdal, Finn Kinserdal, Trond Olsen, Tommy Stamland, Jack Stecher, and various seminar audiences for their helpful comments. We are also grateful to two anonymous referees and the Co-Editor Thomas Gresik for constructive comments which greatly improved this paper. Jay Pil Choi's research was supported by the National Research Foundation of Korea Grant funded by the Korean Government ((NRF-2016S1A5A2A01022389). Eirik Gaard Kristiansen gratefully acknowledges financial support from the Finance Market Fund.

E-mail addresses: choijay@msu.edu (J.P. Choi), eirik.kristiansen@nhh.no (E.G. Kristiansen), shnahm@korea.ac.kr (J. Nahm).

most important for high-talent entrepreneurs, and we examine an equilibrium where only high-talent entrepreneurs make honest reports on current projects.

Consider, for instance, an entrepreneur managing a biotechnology project. As the project progresses, the entrepreneur produces reports and investors update their beliefs on how likely the project is to succeed. If it turns out that the project is less promising than initially thought, the project may be liquidated and some of the investments are saved. However, because the entrepreneur and investors often have different incentives, the credibility of progress reports is an important issue. Even after the outcome of a research project is known, it might be difficult to assess whether the progress reports were truthful.

To capture the fact that soft information is hard to verify and that entrepreneurs are concerned about their reputations, we introduce a two-period cheap-talk model with the following main features. The entrepreneurs are heterogeneous and characterized by their different talents, which in our setting is their probabilities of finding good investment projects. Talent is constant over time and private information of the entrepreneur. At the beginning of each period, the entrepreneur approaches potential investors for financing. The investor might be a venture capital (VC) firm offering a convertible debt or a bank offering a standard loan. After a project is financed, the entrepreneur privately observes whether the project has a high or low probability of success. Consequently, at this stage, the model contains two types of private information: entrepreneur talent and the current project's probability of success. A project with a high probability of success is worth continuing, but one with low probability of success should be liquidated. The entrepreneur reports the probability of success to investors. However, if information on success probability is unverifiable, nothing (apart from reputation concerns) prevents the entrepreneur from misreporting it. The outcome of a project, on the other hand, is verifiable and contractible. The financial market uses the report and the project outcome to update their beliefs about the entrepreneur's type.

If the entrepreneur privately observes that the project has a low probability of success, he faces the temptation to misreport in order to continue the project. On the other hand, if he reports truthfully, he builds a reputation for being honest which will be associated with high talent in equilibrium.

Low-talent entrepreneurs are less likely to succeed and repay investors in the future, and consequently they are less concerned about building their reputation in order to reduce financing costs.¹ In equilibrium, high-talent entrepreneurs signal their talent by making truthful reports on current projects. This implies that reports on *current* projects signal information about the entrepreneurs' talent.

Our model is related to Choi et al. (2010) which considers preannouncing new products, but differs from it in important ways. First, to reflect the residual uncertainty prevalent in the context of project financing, we employ a different information structure and let the final outcome be uncertain even after the firm has obtained private information about the outcome. Otherwise, the outcome would perfectly reveal whether the firm has misreported or not. More importantly, we also introduce imperfect monitoring of reporting quality. This is to incorporate and analyze the effects of regulatory environments in which misreporting is detected and penalized with a positive probability. For instance, misreporting is detected by both standard corporate governance actors like investors, the SEC, and auditors, and also nontraditional actors like employees, the media, and industry regulators (Dyck et al., 2010).

We derive the following results: (i) Reputation concerns induce high-talent entrepreneurs to report *truthfully*, while low-talent entrepreneurs misreport bad projects. (ii) Because financial markets have coarse information about individual entrepreneurs, they categorize entrepreneurs into different groups based on observable characteristics and past reporting. Individual entrepreneurs' reporting strategies spill over onto comparable entrepreneurs' financing costs. We investigate the spillover effects from one entrepreneur's reporting strategy on other entrepreneurs' financing costs.

In order to increase the detection probability, several countries have recently improved their legal regulations of firms' reporting to investors. To explore implications of such regulatory changes, we also conduct comparative statics analysis investigating the effects of strengthening regulation on truthful reporting. In particular, we investigate how reputation concerns and public monitoring of reporting quality *jointly* induce entrepreneurs to report honestly. Better enforcement of reporting quality has a heterogeneous effect on entrepreneurs' reputations and financing costs. For instance, better monitoring will induce a larger set of entrepreneur types to report honestly about bad projects, which implies that honest reporting yields a smaller boost to reputation. More generally, we investigate how improved monitoring changes some firm types' reporting strategies, and how firm types *not* directly influenced by improved monitoring face higher or lower financing costs. Furthermore, we show that better monitoring may reduce the disciplinary effect of reputation concerns. In some cases improved monitoring crowds out reputation concerns, which again implies less honest reporting and possibly less financing to talented entrepreneurs starting their second project. Thus, we cannot rule out the possibility that economic surplus may decrease by better monitoring.

The main branch of the disclosure literature considers a firm that chooses between either truthfully disclosing private information or not making a disclosure. This literature started with Grossman and Hart (1980), Grossman (1981), and Milgrom (1981), who developed a "full-disclosure theorem" in a setting where all informed agents know their types perfectly and disclosure is costless. The assumption that a firm making a disclosure always reports truthfully can be justified in settings.

¹ In addition to reducing interest rates, reputation can also determine the amount of funds available to the entrepreneur. This is a straightforward extension of our model in which highly reputed entrepreneurs benefit from lower interest rates as well as from running larger projects. In this way our results carry over to a model of staged financing, where the entrepreneur obtains the next round of financing depending on progress reports.

Download English Version:

https://daneshyari.com/en/article/5034506

Download Persian Version:

https://daneshyari.com/article/5034506

Daneshyari.com