Journal of Financial Economics 120 (2016) 102–123

Contents lists available at ScienceDirect

Journal of Financial Economics

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

Redacting proprietary information at the initial public offering[☆]

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ARTICLE INFO

Article history:
Received 5 February 2015
Revised 23 June 2015
Accepted 25 June 2015
Available online 22 January 2016

JEL classifications:
G24
G32
G34

Keywords:
IPO
Product markets
Underpricing
Proprietary information
Information asymmetry
Disclosure

ABSTRACT

Nearly 40% of IPO firms redact information from their SEC registration filings. These firms exhibit characteristics consistent with the need to shield proprietary information from potential rivals. They experience greater underpricing, but pre-IPO insiders reduce underpricing-related wealth transfers by selling proportionately less of the firm's shares at the IPO, raising more equity financing in later seasoned equity offerings, and selling their own holdings at a relatively slow pace. The information environment of redacting firms reflects proportionately more private information than that of non-redacting firms post-IPO, but this difference abates by the fourth year. Consistent with the view that redacted proprietary information provides competitive advantages, redacting firms exhibit superior financial performance post-IPO. The results illustrate tradeoffs in balancing a firm's needs to protect proprietary information with its capital needs, investor needs for information to price securities, and pre-IPO owner liquidity needs.

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1. Introduction

Dating back to the seminal work of Leland and Pyle (1977), financial economists have understood the costs associated with asymmetric information when entrepreneurs raise outside equity. Leland and Pyle (1977) and Myers and Majluf (1984) show that greater levels of informational asymmetries cause firms to issue proportionately less outside equity. Rock (1986) and Benveniste and Spindt (1989) develop models in which asymmetric information increases the underpricing of initial public offerings (IPOs). This view implies that firms going public should be as transparent as possible. Indeed, conducting an IPO pre-commits a firm to mandatory disclosure requirements as prescribed in the U.S. Securities and Exchange Commission (SEC) rules, and firms must publicly file certain financial and nonfinancial information, such as existing material

☆ The Securities and Exchange Commission, as a matter of policy, disclaims responsibility for any private publication or statement by any of its employees. The views expressed herein are those of the author and do not necessarily reflect the views of the Commission or of the author's colleagues upon the staff of the Commission. We especially thank an anonymous referee whose comments helped us significantly improve the paper. We also thank Christa Bouwman, James Brown, Jason Coffey, Jack Cooney, Laura Field, Kathleen Hanley, Jerry Hoberg, Sturla Fjesme (discussant), Adam Kolasinski, Michele Lowry, Harold Mulherin, Travis Sapp, Ann Sherman, Josh White, and seminar participants at Arizona State University, Miami University, Iowa State University, Southern Methodist University, University of Cincinnati, University of Georgia, U.S. Securities and Exchange Commission, 2014 Finance Down Under Conference, and 2014 ECCCS Workshop on Governance and Corporate Control for helpful comments. We thank Jerry Hoberg for providing data on the product market fluidity measure for our full sample period. We thank Emmanuel Alanis, Sophia Hu, and Jun Zhang for excellent research assistance.

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http://dx.doi.org/10.1016/j.jfineco.2015.06.016
S0304-405X(16)00035-0/Published by Elsevier B.V.

agreements, that could otherwise be kept confidential if the firm remained private. Although disclosure can improve capital market terms by increasing transparency and reducing information asymmetries, it can also reduce a firm's competitive advantage by revealing proprietary information to product market competitors (Bhattacharya and Ritter, 1983; Maksimovic and Pichler, 2001; Verrecchia and Weber, 2006; Tang, 2012). Graham, Harvey, and Rajgopal (2005) find that revealing sensitive information to competitors is a major concern when managers set disclosure policies.

Though work such as Chemmanur, He, and Nandy (2010) examines the effect of product market considerations on the going public decision, there is limited empirical evidence on how firms manage the tradeoff between the need for capital from public markets and the desire to protect the value of proprietary information. Analysis of this issue has been hampered by the difficulty in ascertaining which firms possess proprietary information and take actions to avoid its disclosure. We overcome this problem by investigating firms that employ an unexplored, yet widely used, technique at the IPO whereby the SEC permits the company to request a confidential treatment order for proprietary information contained in its material agreements. If granted, the firm can redact selected content from the public filing, such as pricing terms, details about the product or service, trade secrets, or purchase requirements, to shield sensitive information from competitors.[1] Agreements given confidential treatment are not subject to Freedom of Information Act (FOIA) requests for their duration of the order, which typically span from one to ten years. A byproduct of the redaction process is that it reduces transparency for investors. Although investors can observe a contract's existence and the counterparty's identity, they cannot see certain details that may provide more precise value-relevant information (see Internet Appendix B for specific redaction examples).[2] Thus, firms that contemplate redacting information at the IPO must also consider the effects of the reduced information release on pricing and the ability to successfully sell its equity (Myers and Majluf, 1984).

We document that nearly 40% of firms conducting an IPO between 1996 and 2011 redact information from one or more material agreements filed with their registration statements.[3] Redacting firms exhibit characteristics that are consistent with the proposition that they face high costs of disclosing proprietary information to rivals (Verrecchia, 1983). Specifically, these firms are younger, spend more on research and development (R&D), receive venture capital (VC) financing, and face greater potential competitive threats.

The partial redaction of material information that is released to the public ahead of the IPO should lead to increased information asymmetries between firms and investors, so we hypothesize that redacting firms should exhibit greater underpricing. Consistent with our hypothesis, we find that redacting firms exhibit greater underpricing, and thus a higher cost of capital. After controlling for other factors that influence underpricing and affect the choice to redact information, redacting firms exhibit an additional seven percentage points of underpricing. This value is economically large and suggests that shielding proprietary information is a first-order determinant of underpricing (the overall underpricing sample mean is 21%). If firms choose to optimally redact, the seven percentage points of underpricing on the fraction of the firm sold at the IPO can be viewed as a lower bound on the value of the proprietary information.

We hypothesize that pre-IPO owners of redacting firms rationally anticipate the greater underpricing, and attempt to at least partially offset the potential associated wealth transfers by selling a smaller fraction of the firm at the IPO stage. They would then raise proportionately more capital via follow-on seasoned equity offerings (SEOs) after investors have had time to observe financial outcomes. Evidence supports these hypotheses. Redacting firms sell significantly smaller fractions of the firm at the IPO. Furthermore, they are more likely to conduct subsequent SEOs, and these offerings represent a greater fraction of the total equity capital that they raise. We also hypothesize and find that redacting firm pre-IPO insiders sell their own holdings at a slower rate than non-redacting insiders to mitigate investors' potential concern that the redacted details contain negative, rather than positive, information about firm prospects. Slower selling by redacting firm insiders complements the strategy of raising proportionately more equity capital via subsequent SEOs.

Following the IPO, redacting firms exhibit significantly greater idiosyncratic return volatility than non-redacting firms; the difference is greatest in the first post-IPO year and declines monotonically until it becomes statistically insignificant in the fourth post-IPO year. This pattern is consistent with the hypothesis that the information environment of redacting firms reflects proportionately more private information compared to non-redacting firms. This asymmetry declines over time as investors observe firms' financial outcomes and are better able to make inferences about the value of redacted proprietary information. We further find that redacting firms are significantly more profitable and have greater sales growth than their industry peers in each of the first three years post-IPO (and the difference is greater than the comparable difference for non-redacting firms). This superior performance supports the hypothesis that redacting firms have valuable proprietary information, and that keeping it confidential helps generate a financial performance advantage over their peers.

[1] See Internet Appendix A for a more complete description of the confidential treatment request process. Our paper focuses on IPOs, but publicly listed firms can redact information from material agreements at any future point using the same process.

[2] This procedure contrasts with the confidential filing process studied by Dambra, Field, and Gustafson (2015) where emerging growth firms can temporarily file entire draft registration statements confidentially, but must eventually make all of these documents public before conducting a road show.

[3] We cannot observe firms that remain private because they view the risk of disclosing any information too high, nor can we observe firms that seek the SEC approval to redact information and are not approved. Thus, the 40% fraction is likely a lower bound on the fraction of IPO firms with information they seek to keep confidential. We note that firms indicating that they intend to redact from their contracts information withdraw their IPO at a rate of 10.3% versus 2.5% for firms not making this request.