

DISSERTATION PROPOSAL

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“Essays on Accounting Information Structure and Economic Incentives”

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This dissertation aims at enhancing our understanding of accounting information structure and economic incentives of those who prepare, audit, and use financial reports. Accounting information structure refers to the characteristics of accounting information identified in the FASB’s Conceptual Framework that guide the development of financial accounting standards. In order to thoroughly evaluate the trade-offs involved in selecting among accounting alternatives, economic incentives of preparers, auditors, and users of accounting information must be understood. The first two chapters examine the desirability of transparency and clarity of a public disclosure and comparability of accounting information from multiple firms in capital markets, respectively. The last chapter moves to the inspection process of regulatory agencies, and focuses on the optimal enforcement actions in detecting securities law violations related to financial reporting and audit failures.

Prior literature has assumed public disclosure as common knowledge to market participants, and concluded that the more precise is public disclosure, the more efficient is the capital market. On the contrary, we find it not to be the case with our theoretical model where financial markets is a Keynesian beauty contest metaphor and investors form heterogeneous but correlated interpretations of the public disclosure. In the first chapter, we examine how public disclosure about the fundamental value of a firm affects the firm’s stock price behavior and efficiency in an overlapping generations rational expectations model. The heterogeneous interpretations of the public disclosure lead to correlated private signals of individual investors. We operationalize such correlation by decomposing the noise of each private signal into two components: a common one and an idiosyncratic one. We define the precision of the common noise as transparency, and the precision of the idiosyncratic noise as clarity of public disclosure. Public information plays a dual role of conveying fundamental information (informational role) and serving as a focal point for beliefs (coordination role). Increasing information precision monotonically enhances the informational role of the public information. While improving clarity always enhances the coordination role, increasing transparency is detrimental to the coordination role, which can even dominate the increase in the informational role. If transparency and clarity of a public disclosure are of comparable magnitude, clarity is of first-order importance in improving price efficiency. Moreover, marginally improving transparency can be detrimental to price efficiency if the initial level of transparency is already sufficiently high.

One principal reason for developing accounting standards is to facilitate financial comparisons among enterprises under a common set of accounting methods. Nevertheless, there lacks a theoretical construct of accounting comparability. Moving from a setting of a single sender and multiple receivers to a setting of a representative receiver and multiple senders, in the second chapter we attempt to fill this gap by developing the statistical and informational properties of accounting reports under varying degrees of comparability. We study how accounting comparability affects investment efficiency and risk-allocation in the economy and thus the preparer’s incentive in choosing the level of comparability. In our information economics framework, a perfectly comparable accounting measurement system enables investors to perfectly infer the

difference between any two firms' future cash flows although investors remain uncertain about either firm's cash flow. Because of the increased informativeness of the relative accounting earnings, comparability alleviates the underinvestment problem by strengthening price response to accounting earnings. However, perfect comparability is not socially optimal as it induces excessive price risk as well as systematic cash flow risk. Moreover, investors demand more comparable accounting reports as users than firms issuing financial reports who are the preparers of accounting information.

Regulatory agencies are sometimes accused of doing a feeble job in identifying and prosecuting securities law violations related to financial reporting and audit failures, for example, with inadequate enforcement investigations and monetary penalties imposed on a detected fraud. In the third chapter, we investigate the optimal combination of enforcement tools including investigation effort, strength of the burden of proof, and monetary penalty on a detected fraud. We build an analytical model based on existing work in law and economics literature, as well as modern information economics framework applied to auditing contexts. The model is designed to capture the essential trade-offs of fraud detection in securities law violations setting. For example, due to the unintentional errors inherent in any accounting system, the optimal strength of the burden of proof involves trading off the deterrence of fraud and the chilling of honest reporting, which generally leads to imperfect detection of fraud. Such a model also has the potential to generate interesting results. For instance, depending on the relative size of deadweight loss to the monetary penalty, the optimal penalty can be set at zero, the maximum, or an intermediate level.