

Regulator preferences and managers' manipulation choices

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Chapter 5

Conclusion

The traditional assumption in the accounting literature is that regulatory agencies such as the SEC investigate firms that are most likely to violate regulations and enforce firms' compliance with these regulations. However, economists have long argued that regulators can be captured by the industry they are supposed to regulate or can be influenced by the government (Stigler 1971). Next to economic theories, recent fraud scandals have further increased public concerns that regulators are not effective in their enforcement of regulations.

This dissertation investigates underlying motives for differences in regulatory scrutiny across different types of firms operating in different institutional settings. As regulatory behavior also affects managers' manipulation choices, this dissertation also sheds light on how managers make different manipulation choices depending on the regulatory scrutiny they face.

In particular, chapter 2 and 3 investigate the behavior of regulators in the healthcare industry and hospital managers' reactions to these behaviors, while chapter 4 focuses on regulatory preferences of the SEC and managers' reactions to these preferences. All of these studies contribute towards a better understanding of regulatory behavior and firms' reactions to such behavior. This chapter provides a summary of the findings of each study, their limitations as well as their contributions and implications. An outlook on potential future research concludes this dissertation.

4.6. Summary

The first study of this dissertation, presented in chapter 2, empirically investigates whether regulators in the healthcare sector are less likely to enforce regulations for nonprofit firms that have higher performance on social goals. It further examines whether these organizations, in light of this lower regulatory enforcement, use upcoding as a tool to subsidize their social goals.

Based on "regulatory capture" theory (Stigler 1971), this study develops the case that differences in regulatory scrutiny may serve the benefit of a larger group of stakeholders and might reflect regulators' preferences about how to maximize social welfare. Nonprofit firms' objective is not only to meet a zero-profit goal, but also to improve the welfare of a broad group of constituents (Hoerger 1991; Newhouse 1970; Pauly 1987). In the healthcare sector nonprofit hospitals, for instance, pursue social goals such as providing medical education and care to the uninsured (Clement et al. 1994). As the financial support nonprofits obtain to pursue these social goals is limited

(Chen et al. 2009), nonprofit hospitals are likely to explore alternative mechanisms to generate additional resources. One such mechanism to supplement the cost of pursuing social goals is upcoding, a form of overbilling where an ailment is classified as more severe than it actually is.

In line with this argumentation, it is posited that health care regulators recognize that nonprofit hospitals pursue costly social goals, which are implicitly supported by regulators' reduced enforcement of firms with higher social performance as such reduced enforcement allows these firms to obtain higher average prices. As such preferences can be revealed in the process of regulatory enforcement, it is argued that nonprofit hospital managers that pursue social goals react to this differentiated enforcement of regulation by engaging in higher levels of upcoding. The results confirm the predictions developed in this study, showing that hospitals with higher performance on social goals are less likely to be convicted for upcoding and use upcoding to subsidize the cost of social objectives such as charity care and medical education.

The second study of this dissertation investigates the role of upcoding as a type of revenue manipulation in firms' performance management activities. This study builds on the first study of this dissertation, in which revenue manipulation via upcoding has been identified as a powerful manipulation tool, which allows firms to increase revenues without (1) altering operations, (2) affecting costs directly or (3) facing the need to reverse in the future. More precisely, the second study examines how managers make trade-off decisions between revenue manipulation and accrual-based earnings management and real activities manipulation.

Whereas studies have started to examine how firms make choices between AEM and RAM depending on the costs associated with these strategies (Zang 2012; Badertscher 2011), the role of revenue manipulation via overbilling practices in such manipulation choices has not yet been investigated. As fraud scandals suggest that firms' performance manipulation tools are not limited to AEM and RAM, studying the trade-off decisions between these three manipulation tools provides a more complete picture of managers' manipulation choices.

In addition, this study identifies operational and financial circumstances as well as scrutiny from different regulators that make the application of each of these three strategies costly. Therefore, it is likely that managers will trade off between these three different strategies depending on the specific constraints they are facing.

The results of the second study confirm that managers trade off between these three activities, indicating that the use of RM as an alternative manipulation tool directly decreases the hospital's need to apply RAM and AEM. In addition, the results suggest that the trade-off decisions are driven by the operational constraints the hospital is facing. Overall, the results suggest that organizations that have the opportunity to engage in revenue manipulation are likely to make different trade-off decisions in their performance manipulation choices than organizations that have only RAM and AEM at their disposal.

The third study of this dissertation extends the analysis of regulatory behavior from the healthcare sector to a large sample of listed firms and focuses on the role of government in affecting the behavior of regulatory agencies. In particular, it investigates whether government's preferences for firms that contribute to the government's policy of fostering employment are likely to reflect in the SEC's decisions as to which firms to investigate. Thus, this study examines the role that government has on inducing pressure on the enforcement actions of the SEC, as one specific regulatory agency, and also provides insights in how firms that are subject to such preferential treatment adjust their reporting behavior.

Even though research in accounting and finance traditionally assumes that the SEC is a neutral regulatory agency that investigates those firms that are most likely to violate GAAP, economists such as Stigler (1971) and Peltzman (1976) have long argued that regulations and regulators are influenced by the government. To maximize political support the government responds to both constituent and special interest pressure by adjusting its political decisions and measures accordingly (Stigler 1971). As the employment conditions are proven to systematically affect future electoral outcomes (Hibbs 2006), the government pursues a policy of promoting these conditions by supporting not only large employers in absolute terms, but also smaller, labor-intense firms that contribute to future employment (Adams and Brock 1987b; Audretsch 2003; Caves 1976).

The reason for government's pressure on SEC's enforcement actions is that these enforcement actions can take down firms that are important for the government's policy of promoting employment. As a consequence, the SEC and its Commissioners are likely to face political pressure from the government to spare labor-intense firms from enforcement actions. The government has several measures such as decision rights over the SEC's budget and the nomination of SEC Commissioners at its disposal to impose its preferences on the SEC's decisions as to which firms to investigate. As a result, the SEC is likely to act in accordance with government's policy to foster employment and thus exercises judgment as to which firms to investigate.

In line with this argumentation, the results provide evidence that labor-intense firms are less likely to be subject to SEC's enforcement actions. To test the robustness of these results, the study further examines whether a government's higher sensitivity to constituents' interests in election years further decreases the likelihood of enforcement actions against labor-intense firms. The results confirm this hypothesis providing further evidence that government's preferences for firms that support government's policies reflect directly in SEC's enforcement actions. All of these results hold after controlling for firms' accounting quality and two alternative explanations for firms' favorable treatment by the SEC, i.e., firms' location and lobbying activities. In addition, the study also provides evidence that labor-intense firms do not have a higher accounting quality, which would explain fewer SEC investigations and convictions. Instead, the results

indicate that labor-intense firms exploit this preferential treatment by the SEC by engaging in more aggressive accounting choices.

4.7. Limitations

Even though considerable attention has been devoted to the empirical research design in each of the three studies, several limitations apply. As the studies presented in chapter 2 and 3 both investigate upcoding in the healthcare sector, they have some limitations in common. First, in both studies a hospital's upcoding level is investigated using only one respectively three DRG families. Including more DRG families in these analyses would indeed provide more complete results, but will greatly increase the complexity of the analyses because interactions between these DRG families have to be accounted for. In addition, to the extent that all DRG families used in these analyses are known for being prone to upcoding for over a decade, the analyses provide a conservative proxy for a hospital's upcoding behavior. An additional concern is related to the measurement of upcoding or inappropriate billing. To determine upcoding, two measures are used to control for the patient health status, i.e., Charlson index and mortality rate, which control for the underlying patient characteristics. However, even after controlling for these underlying patient characteristics, it cannot be conclusively stated that every case where there is a higher proportion of DRGs in the top of the DRG family is indeed upcoding. Finally, the analyses focus only on hospitals located in California. However, the results should be generalizable to other countries that use DRG-type reimbursement systems such as Australia, Germany, the Netherlands, and the United Kingdom.

In addition to the limitations already mentioned, the study presented in chapter 3 is subject to additional limitations. First, the possibility to manipulate revenues as described in this study might not be a feasible manipulation strategy for all types of firms. However, fraud scandals in various industries suggest that many firms have the possibility to manipulate revenues via overbilling, which is a similar mechanism as upcoding (Koppel 2006). Second, the study focuses only on upcoding as an alternative manipulation strategy of hospitals and ignores additional potential manipulation mechanism such as kickbacks or overtreatment of patients (GAO 2000). Finally, the analysis focuses on for-profit hospitals whose operations and related manipulation incentives might differ to firms in other industries. However, prior research indicates that for-profit hospitals face similar manipulation incentives than firms in other industries.

The third study also has several limitations. First, AAERs only represent the end product of SEC's enforcement actions as opposed to the initial investigations themselves. Thus, the analyses cannot directly test at which stages of the SEC enforcement process government's preferences affect the enforcement process. However, as the study also finds that labor-intense firms are less likely to receive a comment letter, which is an important trigger event for an enforcement action, the study

can provide some evidence that the resource-constrained SEC allocates fewer resources to general reviews of firms that contribute to government's policies. Second, the study ignores that also the terms of SEC Commissioners are limited to five years and thus SEC Commissioners themselves might have incentives to impact the enforcement preferences of the SEC around the end of their terms. Finally, the measures of accounting quality have limitations. For instance, it can be argued that higher discretionary accruals do not reflect fraudulent misstatements that might eventually lead to an AAER, but simply an exploitation of leeway in accounting standards. However, given the consistency of the results across several noisy accounting quality measures, the study provides some evidence that labor-intense firms have on average a lower accounting quality than their less labor-intense peers.

4.8. Contributions, Implications and Future Research

All three studies contribute to the accounting literature as well as have implications for firms' managers, shareholders, policy makers and other stakeholders such as regulatory agencies or financial market intermediaries. In particular, the first study contributes to the accounting literature as it enhances the understanding of the complex social considerations surrounding regulation and its enforcement by showing that regulators reduce their enforcement for firms that perform activities that increase societal welfare. Accounting literature has not yet examined whether social preferences of the regulator drive enforcement efforts. Second, it provides evidence that in nonprofit settings, revenue manipulation via upcoding could be driven by a desire to cross-subsidize social goals. Finally, upcoding has been identified as a powerful method for revenue manipulation. The study further has policy implications as it suggests that regulators are likely to take the motives for financial manipulation into consideration while making decisions about which firms to pursue. In addition, the results identify upcoding as one potential reason for the high costs of health care in the US relative to other countries.

One of the main contributions of the second study is that it provides a more complete picture of the types of performance management tools that firms use to manipulate their performance. This is important to get to more definitive conclusions about the application and effect of the various performance management strategies (Fields et al. 2001). As it also provides additional insights on the costs that determine managers' decisions to choose one of the three performance manipulation tools over the other, it helps to further understand which manipulation strategy firms choose depending on their operational environment.

The findings of this study also inform regulators, auditors and investors that they should be aware of alternative, powerful instruments to manipulate financial performance, which can hardly be detected from financial reporting numbers. Especially for auditors of hospitals' financial statements the findings of the study suggest that it might be important to incorporate the potential performance manipulation resulting

from upcoding into their auditing processes in order to conduct a more thorough analysis of the hospitals' reported figures. This study also provides a set of conditions that auditors of medical claims should incorporate in their assessment of which hospitals to investigate and can thus contribute to improve the detection of upcoding.

The third study contributes to a growing body of research (Correia 2009; Kedia and Rajgopal 2011; Yu and Yu 2011) which shows that the SEC is not neutral in its enforcement actions. In addition to prior studies which either focused on firms' active attempts to impact SEC's enforcement actions via lobbying and political connections or on the underlying resource constraints of the SEC, the findings of this study suggest that SEC's enforcement actions are systematically influenced by government's preferences independent of these alternative explanations. Finally, the study provides evidence that firms adjust their accounting choices as a result of the preferential treatment by the SEC. Thus, these findings inform regulators such as the SEC about potential adverse effects of their preferential treatment.

This dissertation provides a multitude of research possibilities to further improve the understanding of the interplay between regulatory behavior and firms' manipulation choices.

The first study of this dissertation provides evidence that social preferences of the regulator drive enforcement efforts. It would be fruitful to explore this issue in other industries. For example, research could explore whether firms that signal the importance of non-monetary goals such as environmental sustainability or employee learning obtain some leniency from regulators such as tax authorities. Future studies could also investigate whether firms can actually mislead regulatory agencies about their social behavior to reduce regulatory scrutiny. From a social welfare perspective, it would also be helpful to investigate whether upcoding to meet the cost of providing indigent people with health care or providing medical education is actually preferable.

Recently, the US healthcare systems has been subject to a significant regulatory overhaul stemming from the passage of the Affordable Care Act (ACA). As one of the main goals of the ACA is to lower the number of uninsured by expanding public and private insurance coverage, future studies could investigate how that regulatory change affects hospitals need to apply upcoding to cross-subsidize social goals.⁷⁵ In addition, future studies could shed more light on potentially competing incentives of the regulator such as social preferences versus preferences for promotion, which could potentially be achieved with a strong enforcement track record.

The second study provides evidence that upcoding is a powerful manipulation tool that decreases the need to apply RAM and AEM. However, to the extent that more and more resources are devoted to detect upcoding, future studies could investigate how

⁷⁵ The Congressional Budget Office (CBO) estimates that the legislation will reduce the number of uninsured residents by about 30 million, still leaving over 20 million residents uninsured (CBO 2012).

these efforts affect hospitals' trade-off decisions. In addition, overbilling as a mechanism to manipulate revenues is likely to be present in several other industries. It would thus be interesting to investigate whether the findings are generalizable to other industries in which such possibility to manage revenues exists.

The findings of the third study suggest that firms that contribute to government's policy of fostering employment are less likely to be subject to SEC's enforcement actions. Future research could investigate whether the SEC Commissioners whose terms are limited to five years might have their own incentives to impact the enforcement preferences of the SEC around the end of their terms. As the third study also provides evidence that firms that enjoy a preferential treatment have a lower accounting quality, several questions arise. First, it would be worthwhile to explore the reaction of intermediaries such as auditors to such preferential treatment. For instance, auditors might decrease their audit fees as they assess the risk of inspection as lower than for other clients or increase their fees as the risk of fraudulent accounting choices increases. Second, it would be interesting to explore the career consequences for managers that do not exploit the preferential treatment by the SEC. Overall, it would also be helpful to understand whether such government capture of the regulatory process actually increases or decreases social welfare. Finally, future research could explore other types of firms that the government has preferences for and how it affects the work of different regulators.

Overall, many drivers of regulatory preferences and firms' reactions to such preferences are still unknown, providing many opportunities for future research.

