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The effect of enforcement on timely loss recognition: Evidence from insider trading laws ☆

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ABSTRACT

I use the first-time enforcement of insider trading laws in sixteen countries as a shock to enforcement and examine its influence on timely loss recognition (*TLR*). Consistent with greater enforcement increasing the usefulness of accounting information in contracts and thereby the demand for higher quality reporting, insider trading enforcement is associated with a significant increase in *TLR*. No such increase is detected in neighboring non-enforcing countries. In addition to documenting how shocks to enforcement influence financial reporting outcomes, this is also the first study to extend the Khan and Watts (2009) measure of accounting conservatism to a cross-country setting.

1. Introduction

I examine how first-time enforcement of insider trading laws affects the extent of timely loss recognition (*TLR*) in financial statements. A growing literature examines how cross-country variation in institutional characteristics shape financial reporting outcomes (e.g., Ball et al., 2000, 2003; Ball and Shivakumar, 2005; Bushman and Piotroski, 2006; Hail and Leuz, 2006). These studies find that variation in the demand for accounting information in contracts drives differences in the quality of financial reporting across countries. As the usefulness of accounting information in contracts depends on how well these contracts are enforced, the effectiveness of enforcement of securities laws is an important determinant of reporting quality.

I use the first-time enforcement of insider trading laws across sixteen countries as a shock to enforcement and examine its influence on *TLR*. Prior studies (e.g., Bekaert and Harvey, 1997, 2000; Bhattacharya and Daouk, 2002; Daouk et al., 2006) provide evidence that first-time enforcement of insider trading laws results in an overall increase in the level of enforcement of securities laws and property rights. Countries that enforce these laws for the first time follow it up with several initiatives designed to sustain the increased level of enforcement. These result in improvements in sovereign credit

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ratings and greater lending by foreign investors—the ones more likely to rely on financial statements for monitoring (Ball et al., 2000; Leuz et al., 2009).

Following studies that predict that improvements in enforcement increase the demand for higher quality financial information, I expect first-time insider trading enforcement to be associated with an increase in *TLR*. While Hail and Leuz (2006), Burgstahler et al. (2006) and Bushman and Piotroski (2006) provide evidence that enforcement is relevant for financial reporting outcomes and cost of capital, the cross-sectional design of these studies is likely to raise concerns about endogeneity and omitted variables. My study complements these studies by using a shock to enforcement and tracing its effect on reporting outcomes. The advantage of this design is that it uses each firm as its own control thus mitigating omitted variable bias.

Using the Khan and Watts (2009) firm-year measure of timely loss recognition (the *CSCORE*), I find strong evidence of an increase in *TLR* in the two years after first-time enforcement compared to the two years before. I also use a control sample of countries (based on matching each treatment country with a control country) that did not enforce insider trading laws and find no evidence of a change in *CSCORE* for these countries. These inferences are confirmed in a difference-in-difference design that compares changes in *CSCORE* in treatment firms with those in control firms. While the sensitivity of earnings to bad news is 40% higher than that to good news in enforcing countries even prior to enforcement, this differential sensitivity increases to 47% after first-time enforcement of insider trading laws (i.e., a relative change of 17%).

Next, I explore cross-sectional variation in the effect of insider trading enforcement. First, as the contracting demand for *TLR* depends on the use of accounting information in debt contracts, I expect post-enforcement *TLR* increases to be pronounced in firms that rely more on debt financing (Ball et al., 2008). Using the level of debt, I find that post-enforcement increases in *TLR* are indeed concentrated in firms with more debt. Second, I examine whether the presence of a strong internal monitor affects post-enforcement *TLR* increases. As firms with a strong monitor rely less on explicit contracting arrangements to mitigate agency conflicts (Bushman and Piotroski, 2006), I expect these firms to have smaller increases in *TLR*. Using ownership data from the sources in Claessens et al. (2000) and Faccio and Lang (2002), I find that *TLR* increases after first-time IT enforcement are restricted to firms without a majority shareholder. These results provide additional evidence in support of the contracting-based demand for *TLR*.

Third, I examine whether demand from equity markets influences the effect of IT enforcement on *TLR*. Lafond and Roychowdhury (2008) argue that agency conflicts between shareholders and managers are associated with differences in *TLR*. However, Ball et al. (2008) argue that equity markets are not the primary source of demand for *TLR*. Using equity issuances to capture the importance of equity markets, I find no evidence that post-enforcement increases in *TLR* are related to the importance of equity markets. It might seem counterintuitive that enforcement of insider trading laws, which pertain to trading behavior in securities markets, is associated with increases in *TLR* but that these increases are not related to the importance of equity markets. However, it should be noted that increases in *TLR* are driven by the heightened contracting-based demand for high quality financial reporting. My results suggest that this demand emanates from debt holders and not from equity holders.

While the above results are consistent with the effect of enforcement, they could also be consistent with several alternative explanations. I perform additional tests to rule these out. First, I verify that the results are not being driven by effects of IFRS adoption—both voluntary and mandatory. Second, I verify that my results are not due to improvements in corporate governance as enforcing countries start globally integrating their capital markets. Third, I include time-varying macroeconomic variables to mitigate concerns that changes in macroeconomic factors could be driving observed *TLR* changes and find that my results remain unaffected.

My results are also robust to several additional sensitivity tests. First, I include all available countries as controls (instead of one-to-one matching) and find robust results. Second, I examine whether IT enforcement potentially impacts other factors in the reporting environment. To do so, I examine changes in timely gain recognition (*GSCORE*). In contrast to the results for *CSCORE*, I find no change in *GSCORE* before versus after enforcement. Thus, IT enforcement appears to be related only to the incremental timeliness of bad news recognition and not to that of good news recognition. Third, I use the Basu (1997) model to measure *TLR* and find consistent results. Fourth, I allow the effect of country-level variables to vary over time and find robust results. Fifth, I verify that my results are not driven by any single country. Finally, I include firm and year fixed effects and find robust results.

My study offers several contributions to the literature. First, it uses first-time enforcement of insider trading laws to examine how *changes in* institutional features affect *changes in* financial reporting. This *changes* design treats every firm as its own control thereby mitigating omitted variable problems that affect cross-country comparisons. My results confirm predictions by Holthausen (2009) that enforcement has an important effect on financial reporting. Second, my study contributes to the literature on the debt-based contracting demand for *TLR* by documenting that post-enforcement increases in *TLR* are concentrated in firms that rely more on debt and not equity (see Ball et al., 2008). Third, my study contributes to the recent debate on the effectiveness of IFRS adoption. Studies such as Ball (1995, 2006), Leuz and Wysocki (2008), and Kothari et al. (2010) argue that convergence of financial reporting outcomes is unlikely to be achieved merely by adopting IFRS but by changing underlying institutional structures. My results provide corroborating evidence by documenting that within the subset of IFRS adopters, only those that enforce IT laws experience an increase in *TLR*. Fourth, my study answers the call of recent studies such as Leuz and Wysocki (2008) on the need to explore the effects of recent regulatory and enforcement changes in several countries on financial reporting outcomes. Finally, I extend the *CSCORE* measure of Khan and Watts (2009) to a cross-country setting.