The Effect of Introducing Voluntary Audit on Accounting Quality and Firm Behaviour – An Empirical Study of Small Norwegian Firms

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In 2011, the Norwegian government decided to introduce voluntary audit for small limited companies. The reform allowed limited companies with less than NOK 5 million in revenues, NOK 20 million in total assets and no more than 10 full time equivalent employees the right to voluntary audit. In this study, we use a detailed data set on all businesses in Norway gathered by the Norwegian Tax Authorities to explore the effects the option of voluntary audit has had on small firms' accounting quality and behaviour. Our findings indicate that dropping the auditor leads to lower accounting quality, and that the existence of thresholds for voluntary audit leads to changes in firm behaviour.

Small Norwegian limited companies (AS) were, effective May 1st 2011, eligible for voluntary audit as long as they fulfilled certain requirements. Until this point the principal rule was that all companies with an accounting obligation were obliged to have an auditor. An exception to the rule were Norwegian-registered Foreign companies (NUFs). NUFs were eligible for voluntary audit before 2011 if they had revenues less than NOK 5 million. In the early 2000s, NUF became an increasingly popular corporate form in Norway. Questions were raised about the reputability of some of these firms, and several policies were aimed at reducing the relative attractiveness of NUF over AS as a corporate form in the years from 2011. With this background, we analyse the 2011 reform in three steps. We first assess differences in accounting quality between NUFs and limited companies in the period leading up to the law change. We then see if opting out of audit leads to a decrease in accounting quality. Lastly, we observe if the revenue threshold for voluntary audit leads some firms to actively position themselves below the threshold in order to avoid being audited.

In our analyses of accounting quality, both regarding NUFs and limited companies, we use seven proxies for accounting quality; Four accruals quality measures, one earning smoothing measure, and two measures of timely loss recognition. Using several proxies for accounting quality should allow us to generalize our results, mitigate concerns about fundamentals influencing our findings, and allow us to determine the source of differences in accounting quality.

We first use correlations to assess potential differences in accounting quality between NUFs and limited companies. The results from this model, however, cannot be interpreted causally, because the entrepreneurs self-selected into the two company forms. It is therefore possible that NUFs and limited companies differ in unobserved characteristics that are correlated with accounting quality. To assess the 2011 reform and analyse the causal relationship of dropping the auditor on accounting quality, we use a Difference-in-Difference (DiD) design with one treatment group and two control groups. The treatment group contain firms who opt out of audit after the reform. The first control group consist of firms keeping their auditor and the second control group are firms not eligible for voluntary audit.

In our last analysis, we make histograms of the yearly distributions of firms with revenues between NOK 4 million and NOK 6 million in order to look for signs of firms "bunching" below the threshold. We aggregate the data pre and post reform, overlaying it with a quadratic best fit line with a 95 percent confidence interval to assess if there is a significant difference in the amount of firms above and below the revenue threshold for voluntary audit. We then attempt to quantify the amount of "bunching" firms.

When analysing the differences in accounting quality between NUFs and limited companies, we do not find conclusive evidence of differences in accounting quality. NUFs have lower accruals quality, but less accruals relative to operating cash flow than limited companies. NUFs also have more timely loss recognition than limited companies, making the results of this analysis inconclusive. We find no statistically significant relationship between auditor use and our accounting quality measures.

In our DiD analysis of accounting quality and auditor use in limited companies, we find that dropping the auditor leads to lower accrual quality, more earnings smoothing and less timely loss recognition. The DiD analysis assumes that the three groups of firms have "parallel trends" for the accounting quality measures before the reform. Through tests, we cannot reject the parallel trend assumptions for any of the measures when comparing the treatment and control group containing firms not eligible for voluntary audit, but the assumption is rejected for two of the accruals quality measures for the control group containing firms keeping their auditor. Our results indicates that dropping the auditor leads to lower accounting quality, and that the unaudited financial statements will be of lower value to external stakeholders.

When assessing the yearly distribution of firms with revenues between NOK 4 and 6 million there are no signs of bunching behaviour in the years leading up to 2011. After the reform, there are clear signs of firms bunching below the threshold and the effect is intensifying year-by-year. This is verified by aggregate data post reform. There is a distinct discontinuity in the 95 percent confidence interval of the quadratic best fit line, meaning that there are a significant difference in the amount of firms just above, and just below the revenue threshold for voluntary audit. We find there to be 52 percent more firms with revenues between NOK 4.84 Million and NOK 5 Million than the amount we would assume there to be in absence of a revenue threshold.

Our findings will be of use when evaluating the tax reform of 2011, and to countries contemplating voluntary audit for small firms. It highlights some of the costs related to the introduction of voluntary audit, but the trade-off between the costs and benefits remains a political question. Moreover, the measurements used to assess accounting quality are developed for large, or at least larger, firms than we examine in our paper. This could impair their effectiveness when used on small firms.