

SUMMARIES OF PAPERS IN THIS ISSUE

## VAT Adoption and Corporate Income Tax Avoidance

C. S. Agnes Cheng, Chih-Chieh Hsieh, and Kenny Z. Lin

Previous research suggest that value-added taxes' (VAT's) third-party reporting and paper trails self-enforce VAT collection (Pomeranz 2015). However, it is unclear whether this third-party information of VAT deters income tax avoidance. Our main hypothesis is that VAT generated third-party information can be useful for the tax authority to cross-check firms' self-reported amount for income tax purposes. This increased probability of detection reduces tax avoidance (Allingham and Sandmo 1972).

We exploit the 2012 VAT reform in China during which the retail sales tax (business tax in China) was replaced with a VAT in a staggered manner across regions and time. The full sample consists of 6,948 firm-year observations for 2008 to 2019. We find that VAT adoption leads to less income tax avoidance (as measured by book and cash effective tax rates) for a given firm. We also find that the effect is more pronounced among firms that make the most of their sales to businesses than individuals, confirming that firms that leave more transaction trails respond more to the VAT adoption. We find that the VAT's deterrence effect is stronger for firms located in low-trusting regions, suggesting that third-party reporting and social trust could be substitutes in deterring tax avoidance. Consistent with our hypothesis that VAT paper trail could be substitute to tax audit, we find this deterrence effect is stronger for firms located in regions with low tax enforcement levels.

An alternative explanation to the positive association between VAT adoption and ETRs could be the mechanical response of ETR to consumption taxes conditional on the demand elasticity faced by firms. For example, if VAT is not fully absorbed by customers, the net income reduces after VAT adoption, thereby increasing firm's ETR. We follow the method of Jacob, Michaely, and Müller (2019) to test whether potential consumption tax burden explains our main findings. We use size and profit margin to proxy for demand elasticity. Small and low profit margin firms face relatively more elastic demand. We do not find statistically significant increases in ETRs for firms facing lower demand elasticity. This suggests that the positive association between VAT adoption and ETRs is unlikely to be driven by the changes in the consumption tax burden borne by firms.

Our findings provide the first batch of evidence of a spillover effect across taxes from VAT to income tax within the same firm. This implies that tax authorities should consider potential indirect effect when introducing a tax instrument. This result also has policy implication for tax audit efficiency. Given our findings, tax authorities should allocate resources to auditing the income tax returns of firms with more individual customers.

While aiming to eliminate double taxation, the VAT reform in China generates a positive externality for income tax collection. Our study has some policy implication. Since the deterrence effect is stronger for firms with intermediary sales to other firms when designing an audit strategy, tax authorities should focus on those firms with final sales to consumers. Second, given that most firms are liable for several taxes and that these taxes may overlap in their enforcement, tax authorities should allocate their resources more efficiently.

# Investigating the Effect of Service Messages on Noncompliant Taxpayers' Reactions to Imperfect Audits

Nina S. Collum, Susan Journey, and Mary E. Marshall

Income tax audits are a useful deterrent of noncompliance; however, tax audits may fail to fully detect all noncompliance. Prior research has focused on the influence of fully effective simulated audits. This paper explores how taxpayers respond to imperfect audits. Specifically, we examine whether the IRS can offset the influence of imperfect audits on taxpayers' subsequent compliance behavior. In a  $2 \times 4$  between-participants experiment administered to 802 U.S. taxpayers, we manipulate the effectiveness of an audit (100, 75, and 50 percent) and the presence of a service message (present or absent). We predict and find that taxpayer compliance decreases with declining audit effectiveness. We further identify that the inclusion of a message focused on the IRS mission and service objectives moderates the negative relationship between audit effectiveness and taxpayer compliance in subsequent periods.

Our results contribute to tax compliance behavior literature, particularly related to taxpayers' awareness of the tax authority's balance between service and enforcement efforts. Further, our results highlight a low-cost solution to offsetting declining audit effectiveness, specifically a service message or reminder process that emphasizes the service-focused elements of the tax authority when taxpayers may be overly focused on enforcement-related objectives.

# Did FASB Interpretation Number 48 (FIN 48) Affect Noninnovative Corporate Investment?

Nathan C. Goldman

**T**his manuscript examines whether firms respond to decreased innovation expenses due to tax disclosures by altering their non-innovative investment. I proxy for decreased innovation expenses due to tax disclosures by examining the onset of Financial Accounting Standards Board (FASB) Interpretation Number 48 (FIN 48). I proxy for non-innovative investment using capital expenses using capital expenditures and M&A expenditures. I provide evidence of a negative relation. These findings suggest that firms do not reallocate those foregone innovative investments toward other types of investments. These findings contribute to our understanding of the real effects of FIN 48 and can help us better understand the effects of financial statement tax disclosures as we continue to determine whether and to what extent firms should be required to provide additional public tax information.

# The Impact of Tax Avoidance and Environmental Performance on Tax Disclosure in CSR Reports

Inga Hardeck, Kerry K. Inger, Rebekah D. Moore, and Johannes Schneider

There is an increasing interest in tax transparency among researchers, regulators, and the public. Our study contributes to this debate by shedding light on firms' voluntary corporate social responsibility (CSR) reports. The purpose of our study is two-fold. First, we explore how firms disclose tax information in CSR reports. Second, we examine two possible influences on the decision to voluntarily include socially responsible tax disclosures: tax avoidance and environmental performance, another salient CSR area. Using textual analysis and keywords developed for the tax setting, we analyze nearly 3,000 CSR reports from 22 countries. We find that on average firms provide limited tax information and tend to use disclosures portraying tax payments as beneficial for society rather than presenting strategies to ensure socially responsible tax behavior. When examining possible influences on firms' disclosure decisions, we find robust evidence that firms with a poor environmental performance are more likely to employ socially responsible tax disclosures, consistent with firms using the disclosures to build or repair reputational capital. We also find evidence that firms that experience an increase in their tax avoidance are more likely to use socially responsible tax disclosures. Our results are useful for readers of CSR reports and regulators. Moreover, our findings emphasize the relevance of the new disclosure standard for tax-related CSR reporting developed by the Global Reporting Initiative (GRI 207 Tax) for CSR reports published after December 31, 2020.

# Tax Indemnification and Unrecognized Tax Benefits in Mergers and Acquisitions

Patrick L. Hopkins

Accounting standards may require a firm to report indemnified positions as unrecognized tax benefits (UTBs), although the underlying positions are not the firm's responsibility. Practitioners have expressed concerns that the accounting behind indemnification and UTB recognition may be problematic for investors when assessing UTBs without proper disclosure of indemnification. Despite these concerns, I document that firms rarely disclose in their associated 10-Ks that they obtain indemnification from merger and acquisition (M&A) contracts, although indemnification is present in approximately three-fourths of my sample.

Since indemnification is rarely disclosed and common, I investigate whether indemnification impacts UTBs' association with future tax cash outflows and firms' effective tax rates (ETRs). I document a positive association between current UTBs and future tax cash outflows for firms *without* tax indemnification but an insignificant association for firms *with* tax indemnification, suggesting that indemnified positions may impact UTBs' association with cash flows. These results are robust to several specifications, including entropy balancing, endogenous switching regressions, additional controls, and various sample cuts. Furthermore, I document lower GAAP and higher cash ETRs for firms with indemnification than those without indemnification. Due to the accounting behind indemnification, these results suggest that reversals of indemnified positions happen more often than settlements, suggesting sellers may offer indemnification when they perceive the risk of payout to be low.

Since indemnification appears consequential, firms may consider voluntarily disclosing indemnified positions to facilitate investors' assessments of UTBs. Furthermore, the Financial Accounting Standards Board may find this study of interest for their ongoing income tax disclosure project, especially considering that tax indemnification is growing and expanding beyond the M&A setting.

# Tax Avoidance and Corporate Social Responsibility: A Meta-Analysis

Mário Marques, Tânia Menezes Montenegro, and Filomena Antunes Brás

The purpose of this paper is to use meta-analysis to synthesize and evaluate the findings from the existing literature on the relationship between corporate social responsibility (CSR) and tax avoidance. Our meta-dataset comprises 117 estimates of the relationship between CSR and tax aggressiveness, sampled from 23 studies conducted between 2012 and 2022).

The main results reveal several moderators that significantly explain the heterogeneity in the relationship between CSR and tax avoidance found in earlier studies. Regarding proxies for tax avoidance, we found significant differences between the estimates of primary studies using (cash) effective tax rates, book-tax differences, tax rate differences, and extreme tax planning activities. Concerning the CSR construct, studies using a binary CSR measure, a comprehensive measure of CSR (i.e., comprising social, environmental, governance, and economic dimensions) and those employing a CSR proxy that reflects corporate social irresponsibility find a more positive association between CSR and tax avoidance. Data samples and econometric specifications also significantly explain the heterogeneity observed in previous studies.

By using estimates from our meta-regression, we predicted the association between CSR and tax avoidance for several alternative and plausible hypothetical study designs and found either no or a small to moderate association between the constructs, indicating that, overall, firms decouple CSR from tax avoidance. Remarkably, we find evidence suggesting that such a relationship exists in particular settings of extreme CSR and tax avoidance behaviors.

The determinants of the heterogeneity of the empirical evidence on the relationship between CSR and tax avoidance remained unexplored in the literature. This meta-analysis fills this gap and provides useful insights for future research, practice, and regulation. It contributes to the ongoing debate around programs and actions to combat corporate tax avoidance, by revealing that although overall firms decouple CSR and tax avoidance, extreme behaviors regarding both CSR and tax aggressiveness are associated with each other.

# The Consequences of Income Tax Subsidies: Evidence from the Restaurant Industry

Scott G. Rane

Governments use tax subsidies to encourage specific behavior or provide financial relief to specific individuals or businesses. Opponents of tax subsidies argue that they are difficult to reverse, lead to inequitable treatment of taxpayers, and create economic distortion. Understanding the attributes and consequences of tax subsidies is important for evaluating their costs and benefits. In this study, I explore the potential outcomes of tax subsidies by examining a unique tax credit in the restaurant industry. Specifically, I investigate the intended and unintended consequences of the 45B Credit, an employer payroll tax subsidy (administered as an income tax credit) designed to promote honest wage reporting for tipped employees.

The IRS classifies tips as wage income and subject to reporting, income tax, and payroll taxes. However, since tips are not paid by restaurant owners and thus not automatically part of payroll processing, employees have both the incentive and opportunity to underreport tip-related income. Not surprisingly, a significant amount of tip wages are unreported. To improve tip wage reporting, the 45B Credit was enacted in 1993. The 45B Credit grants restaurant firms an income tax credit for the employer portion of payroll taxes paid on reported tip wages. I examine whether the implementation of the 45B Credit influenced wage reporting, investment, and economic performance for restaurant firms.

I use census wage data to calculate average reported employee wages by industry subcategory. I find evidence suggesting that the average reported wage of “full-service restaurant” (tipping environment) employees increased relative to the average reported wage of “limited-service restaurant” (nontipping environment) employees after the implementation of the 45B Credit. This finding suggests that the 45B Credit is associated with an increase in the reporting of tip wages.

Next I examine whether the 45B Credit influenced investment and economic performance for restaurant firms. As firms receive tax subsidies, their internal cost of capital is decreased and they are more likely to engage in increased competitive actions, such as investment. These competitive actions increase competition within the industry and may result in reduced economic performance for firms not receiving the tax subsidy. The 45B Credit provides a substantial tax subsidy to only some firms within the restaurant industry. Therefore, this subsidy likely influenced 45B Credit firms to increase competitive actions.

Using a sample of restaurant firms with publicly available financial information, I find that 45B Credit firms increase investment spending. I also find that 45B Credit firms experienced greater profitability and growth. In an additional analysis, I find that the results of my hypothesis tests vary predictably with firm financial constraints. That is, high financial constraint firms experience a greater increase in investment and economic performance following the implementation of the credit relative to low financial constraint firms.

This study has at least two important implications. First, I provide evidence of the consequences of the 45B Credit in the restaurant industry. The 45B Credit has been in place for more than 25 years, impacting an industry that employs roughly 10 percent of the U.S. workforce. I find evidence consistent with the 45B Credit increasing wage reporting. The 45B Credit is unique in that it attempts to encourage honest payroll tax reporting of employee wages by providing an income tax credit to employers. My findings indicate that although this form of tax credit resulted in an increase in wage reporting, there were also significant industry- and firm-level consequences. In recent years, officials have discussed the repeal of the 45B Credit as part of budget negotiations. My results should be useful to lawmakers when reviewing the net benefits of this tax subsidy and other tax subsidies in the future.

Second, I contribute to the literature that investigates firm behavior and tax policy. I add to this literature by investigating the intended consequences of the 45B Credit. However, I also provide a view of firm behavior in response to a tax subsidy that is not tied to specific investment incentives.