IRS Attention

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October 2014

Abstract: In its monitoring role, the IRS has access to substantial *private* information, but some have argued that it also accesses complementary *public* information from firms' financial statements. We employ a novel dataset that records the IRS's access to 10-Ks hosted on EDGAR, which we term "IRS attention." We use the data to examine how the IRS monitors corporations, which we predict will be related to firm characteristics, tax avoidance characteristics and tax-related disclosures in the 10-K, all of which plausibly complement its substantial private information. We find evidence that IRS attention is primarily a firm-level construct, as firm fixed effects and firm characteristics drive most of the variation in IRS attention. IRS attention is also associated with various measures of tax avoidance, such as the CASH ETR, UTB, and the number of disclosed subsidiaries in tax havens. Moreover, IRS attention has surged since the FASB required increased disclosure of tax contingencies under FIN 48, consistent with them serving as a "roadmap to tax avoidance," as pundits have conjectured. We next examine firms' responses to anticipated IRS examination of financial accounting disclosures. We find that after the implementation of Schedule UTP and Schedule M-3, which both increased the level of private tax reporting to the IRS, the amount of public disclosure in the tax footnote also increased, consistent with the perception of proprietary costs of disclosure in the tax footnote among public firms. Overall, this study shows evidence of substantial IRS attention to financial statements and of an important interplay between IRS-required private disclosures and firms' public disclosure patterns.

1. INTRODUCTION

The enforcement role of the Internal Revenue Service (IRS) is one that is often discussed, but little is known about precisely how the IRS functions in that role, such as how it selects taxpayers to examine or what information it uses in its enforcement mission. Out of necessity, much of the IRS's enforcement mission is performed in relative secrecy, and what little we know about how the IRS functions is based on data provided by the IRS itself (e.g., Mills 1998). The IRS has access to substantial *private* financial data, such as tax return data, and the ability to request more information of firms for private use (IRC §7602(a)). Indeed, some have suggested that given the extent of the IRS's private information, new *public* information provided in the financial statements would not be useful for tax enforcement (FASB 2006).

However, this view is not uniformly held. For example, pundits have called portions of the tax footnote (i.e., the tax-related disclosure in the 10-K) a potential "roadmap" for the IRS, pointing them towards plausibly contestable tax issues (Leone 2007). Indeed, the IRS itself suggests that "financial statements … should be carefully reviewed and analyzed as part of the audit planning process."[1] For example, portions of the 10-K reveal important company details that are not reported to the IRS, such as narrative descriptions of company goals, management style, intentions behind M&A activities, and estimations about future business prospects.

In addition, a plausible concern is that the IRS's potential use of public firms' financial disclosures may incentivize firms to be less forthcoming with their disclosure choices. The firm's disclosure scenario is described by Bhojraj et al. (2004) as a "multi-audience problem" for firms, as firms provide information to the investing public as well as to competitors. Similarly, in our context, firms wish to be as transparent as possible to outside stakeholders while, at the same

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[1] See http://www.irs.gov/Businesses/Corporations/FIN-48-Implications---LB&I-Field-Examiners'-Guide.

time, reducing the probability that the revealed tax information is used against them by the tax authority (e.g., Mills et al. 2010).

In light of the foregoing discussion, the objective of this study is to examine the IRS's use of firms' financial accounting disclosures and to examine firms' response to that perceived use. To do so, we use a novel dataset of IRS downloads of firms' annual reports from EDGAR, a repository of mandatory SEC disclosures hosted by the SEC.[2] The data allow us to observe the timing and frequency with which the IRS reviews annual reports (i.e., 10-Ks) over the period 2003-2011.[3] These data offer a novel look at the intensity with which the IRS reviews annual reports, potentially to use the tax footnote as a "roadmap" or to augment the IRS's existing private information set. Further, unlike all other previous studies that examine IRS enforcement activity using micro- or macro-data provided by the IRS, we examine IRS activity using data derived independently of the IRS.[4] Similar to the terminology in prior research using the EDGAR data (e.g., Drake et al. 2014b; deHann et al. 2014), we label IRS acquisition of financial reports as "IRS attention" from this point forward.

To contextualize our data and results, we note several interesting patterns that emerge from our examination of IRS attention. First, to corroborate the validity of the attention metric, we observe large dips in attention during the lunch hour or federal holidays, a strong "9-to-5" pattern in intra-day attention, and a sharp drop-off of attention during weekends. These facts provide evidence in support of the notion that human beings at the IRS (rather than computer algorithms) are pulling the information from EDGAR during IRS hours. Second, we observe an

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[2] The data are subject to several strengths and weaknesses, which we discuss in Section 3 and the Conclusion.

[3] These data have been provided by the Securities and Exchange Commission as part of the Freedom of Information Act and some form have these data have been employed in other studies, e.g., Drake, Roulstone and Thornock (2014b) and Lee, Ma and Wang (2014).

[4] See, for example, Mills 1998; Gleason and Mills 2002; Towery 2012; Ayers et al. 2014; Hoopes et al. 2012; Hanlon et al. 2014; El Ghoul et al. 2012; Guedhami and Pittman 2008.

increasing trend in IRS attention that increases markedly in 2007-2008, but begins to curtail near 2011. The spike and decline occur roughly coincident with FIN 48 and Schedule UTP, which substantially altered the level of required public and private tax disclosure (we discuss these in detail below). Finally, we observe that the average downloaded 10-K has been public for more than a year (on average, 448 days), suggesting that the financial statements are used for tax enforcement purposes rather than information content purposes (e.g., Drake et al. 2014a).

In our initial set of analyses, we examine the determinants of IRS attention by linking IRS attention to the financial statement numbers of a given firm. We predict that the IRS will seek information from the financial statements to use in its enforcement mission to supplement, corroborate, or provide clarification for the private information it already has. Specifically, we predict IRS attention will be associated with general firm characteristics (e.g., size, foreign income) and public indicators of tax avoidance (e.g., effective tax rates, unrecognized tax benefits). As IRS attention is endogenously determined (i.e., the IRS is not searching EDGAR at random, but rather likely has some enforcement objective in seeking out a particular 10-K), an association between IRS attention and these characteristics is an indication of which publically observable measures best correlate with the IRS's private information or beliefs regarding the firm's tax avoidance activities.

We find that IRS attention is strongly driven by firm characteristics, as firm fixed effects drive much of the variation in IRS attention. However, after accounting for firm and year fixed effects, other firm-specific characteristics are also associated with IRS attention. We find that firm size, foreign profitability, and NOLs are positively associated with IRS attention and that return on assets and cash holdings are negatively associated with IRS attention. In terms of tax-related firm characteristics, we find that IRS attention is negatively related to CASH ETRs but is

unrelated to either GAAP ETRs or book-tax differences. This finding suggests that IRS attention is increasing for cash tax avoidance, but is unrelated to book measures of taxation. We also find a strong positive association between IRS attention and uncertain tax benefits (UTBs), which we view as evidence consistent with the argument by some critics of FIN 48 that the disclosures resulting from FIN 48 provide a roadmap to the IRS (Leone 2007).[5] In supplementary analysis, we also find an association between IRS attention and the geographic footprint (e.g., number of tax havens subsidiaries, number of geographic segments) disclosed on the 10-K, although at marginal significance levels. To a degree, these results are consistent with the notion that the IRS has revealed preferences for some publicly available measures of tax avoidance (CASH ETR, UTB) over other such measures (GAAP ETR, BTD), presumably because the information contained in these measures complements the private information to which the IRS has access.

Since the analyses thus far represent tests of association, in our next set of analyses, we employ several tests to more cleanly detect the relation between IRS attention and financial statement variables. First, we create a difference-in-difference test that compares differences between IRS attention and attention from other government entities (e.g., U.S. Congress, Department of Justice, etc.) before and after the effective date of the Financial Accounting Standards Board's (FASB's) release of FIN 48, which substantially increased the level of tax disclosure in the financial statements. We find that attention for both government groups has increased post-FIN 48, but the increase for the IRS was roughly four times larger than the increase for other government entities. The outcome is similar when using another FIN 48 proxy—whether a firm has ever recorded a positive UTB. Here we find that IRS attention to these firms is roughly double the attention paid by other government entities. Finally, we find

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[5] Since we only observe the IRS downloading 10-Ks, we do not know the extent to which they are actually used. An underlying assumption in the paper is that the IRS does not download 10-Ks without them playing some role in the enforcement process.

that for the significantly predictive tax variables from our determinants analyses, i.e., CASH ETR and UTB, the association with attention is significantly greater for the IRS than for other government entities.

Having examined the determinants of IRS attention, we next examine its potential disclosure effects by investigating firms' responses to perceived increases in IRS attention. As noted above, the fact that the IRS pays attention to firms' public disclosures could alter firms' disclosure patterns. Therefore, we extract the tax footnote from the 10-K and apply textual analysis to examine how firms have altered the characteristics of the tax footnote disclosure in response to a perceived increase in IRS attention. Specifically, we use the number of sentences included in the tax footnote as a proxy for the amount of qualitative disclosure; the number of numbers included in the tax footnote as a proxy for the amount of quantitative disclosure; and the Fog Index of the tax footnote as a proxy for the readability of the tax footnote.[6]

We employ two forms of empirical identification in these tests, employing plausibly exogenous shocks to the IRS's attention to firms' financial statements. First, we examine the imposition of Schedule M-3 in 2004 (Hope et al. 2013), which required companies to reconcile book income to taxable income directly on the privately disclosed tax return. Second, we examine the imposition of Schedule UTP in 2010-2012, which required companies to directly report uncertain tax positions, i.e., tax positions likely to result in additional tax liability if investigated by the IRS (e.g., Towery 2012). Both of these disclosures required by the IRS had the potential to replace information that was contained in the 10-K, making 10-K information less useful to the IRS, and therefore, likely decreasing IRS attention. Indeed, M-3 information has been touted as superior to tax related financial accounting information for tax enforcement

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[6] These measures have been used in prior research, though typically on the entirety of the 10-K (Lehavy et al. 2011; Blankespoor 2012; Lundholm et al. 2014; Li 2008; Miller 2010).

purposes (FASB 2006). These disclosures have some empirical advantages, as both M-3 and UTP rolled out at different periods of time for different size classes of firms, which allows us to separate firms into treatment and control groups before and after the change.

We find evidence suggesting that firm-level quantitative and qualitative disclosure in the tax footnote increases following the effective dates of both Schedules M-3 and UTP. Specifically, we find that both the number of numbers and the number of sentences in the tax footnote increased relative to control firms following the effective dates of M-3 and UTP. However, we find little evidence that the readability of the tax footnote, as proxied by the Fog Index, changes following these events. Overall, our findings paint a nuanced picture of the relationship between IRS-required private disclosures and FASB-required public disclosures. Once the IRS requires more private disclosure, the proprietary cost of information disclosure to shareholders is reduced, and firms publicly disclose more. Under this interpretation, a positive byproduct of increased private tax disclosure mandated by the IRS is increased public financial statement disclosure.

The paper contributes to a broad literature that examines the interplay of regulation and enforcement with accounting outcomes. Although many studies examine bank regulation, SEC regulation and enforcement, and FASB/IASB standard setting as they relate to accounting information, only a handful examine IRS enforcement. This lack of research is possibly driven by the inherent secrecy at the IRS—we simply do not know what is going on behind the curtain. Given the importance of the IRS a large stakeholder in the firm as well as the breadth of its enforcement reach, we believe that understanding the role of the IRS as a monitor is an important endeavor. Our finding that IRS attention increases following FIN 48 and for firms likely subject

to FIN 48 suggests that financial accounting information is used as a part of the IRS enforcement process.

This paper also contributes to the literature on tax avoidance, which almost universally examines corporate tax avoidance from the perspective of the firm. Our novel data allow us a modest inside view into one component of IRS monitoring; namely, the gathering of public financial data that may be used in building a case for audit or in the examination process. We find evidence that the IRS accesses publicly-available financial disclosures and that they appear to do so in pursuing historical tax-related information. Within the limitations of the data, we provide evidence on the firm characteristics and tax avoidance measures that are related to IRS attention, which we interpret as being related to the private information used by the IRS in enforcement. These results should be of importance to academics, practitioners and corporations interested in the IRS's use of firm disclosures.

Our evidence also suggests an interesting interplay between private disclosures to tax authorities and public disclosures to other stakeholders. There exists an inherent information asymmetry between the IRS and firms, which can in turn affect firms' willingness to publicly disclose tax information. In examining firms' responses to perceived changes in IRS attention to financial statements, we find that as firms are required to privately disclose more information to the tax authorities, they also appear to increase public tax disclosures. This evidence is important as policy makers further consider changes to financial accounting disclosures related to taxes, as well as private tax disclosures provided to the IRS.

2. LITERATURE, BACKGROUND AND HYPOTHESES

2.1 IRS Attention

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Over the past decade, the literature has provided fairly clear evidence that firms avoid taxes using a variety of different tax planning techniques (see Hanlon and Heitzman (2010) for a review of the tax avoidance literature).[7] In this literature, researchers measure tax avoidance in several different ways and almost exclusively using information available from the *public* financial statements of the firm. An important implication of this measurement is that outsiders—including shareholders, creditors, regulators, researchers, *and* tax authorities—can use the financial statements to infer tax information.[8]

However, why would the IRS need public financial statement information? To the extent that the IRS has complete firm information reported privately via the tax return, the financial statements will not be useful. Moreover, the IRS has the ability, subject to some limitations, to acquire more private information for usage in its audit process. Finally, the IRS can access numerous other sources of public information, including public employment records, state/local tax records, and public loan documents. All of these arguments suggest a limited role for the 10-K in IRS enforcement.

On the other hand, the very characteristics that make the financial statements useful to other stakeholders—such relevance, reliability, timeliness and representational faithfulness—could also make them useful to the IRS. Prior research has argued that taxable income can be incrementally informative to users of book income (e.g., Hanlon, LaPlante, and Shevlin 2005), but the reverse argument also holds. In the financial statements, the IRS will find a second set of

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[7] For example, prior research examines the magnitudes (e.g., Dyreng et al. 2008), determinants (Gupta and Newberry 1997; Hoopes et al. 2012; Rego 2003; Dyreng et al. 2010; Dyreng et al. 2014; Higgins et al. 2014), strategies (Klassen and Shackelford 1998; Markle 2011; Erickson et al. 2011;), agency costs (Desai and Dharmapala 2006; El Ghoul et al. 2012; Guedhami and Pittman 2008; Hanlon et al. 2014) and consequences (Gallemore et al. 2013; Graham et al. 2013; Hanlon and Slemrod 2009) related to firm-specific tax planning.

[8] It should be noted that computing tax-related values from the financial statements is subject to numerous challenges (Donohoe et al. 2012; Hanlon 2003; Hoopes 2013; Mills and Plesko 2003). At the same time, however, prior research shows that the tax accounts are value-relevant and predictive of future earnings and creditworthiness (Lev and Nissim 2004; Edwards 2011).

financials that have been vetted by auditors and scrutinized by investors. These arguments suggest a plausible role for the 10-K in IRS enforcement.

To the extent that the IRS does examine financial statements, what particular information in the financial statements could be useful to the IRS? To understand the answer to this question, we must discuss a) what information exists on the financial statements that does not exist on the tax return and b) what information exists on the financial statements that can serve to verify, vouch and corroborate the information on the tax return. Regarding the former, the tax return is basically silent on the operations and risks of the firm. For example, business operations, products, strategy, supply chain, and competition all play roles in tax avoidance, but are not directly discussed in the tax return. Further, while the IRS likely has access to many of the tax numbers in the financial statements, the narrative discussions of transactions, future prospects, or specific tax details found in the 10-K are not in the tax return—the tax return is basically void of narrative discussions. Finally, the unrecognized tax benefit disclosed under FIN 48 (which we discuss in detail below) potentially provides an indication of the firm's risky tax strategies. These features may provide new information to the IRS regarding the firm and therefore may be associated with IRS attention.

However, based on the limited evidence we derive from media anecdotes and discussions with former IRS personnel, we believe that the latter (i.e., that the 10-K information serves to corroborate the IRS's private information) is likely the more dominant reason for the IRS's attention to a particular 10-K. In other words, the financial statements more likely perform a supporting or confirmatory role to the private information the IRS already has. In this role, the IRS plausibly develops private signals of corporate tax avoidance which it can then compare to public signals of tax avoidance found in the financial statements. We focus on four financial

statement measures that are potentially used by the IRS and/or are correlated with information used by the IRS: the cash effective tax rate (CASH ETR), the GAAP effective tax rate (GAAP ETR), including its current/deferred and foreign/domestic breakdowns, the difference between book income and taxable income (BTD), and the unrecognized tax benefit (UTB).[9] We focus on research related to these four measures, as well as why we might expect that changes in these measures could draw the IRS's attention.[10]

The CASH ETR measures cash tax liability per dollar of pretax income. The distinction from other effective tax rate measures is in the numerator, which is the amount of cash outflows paid to tax authorities as typically reported on the statement of cash flows. There are several reasons why the IRS might pay attention to the CASH ETR, or that CASH ETR is correlated with factors the IRS considers as it enforces the law. First, the cash taxes paid is based on worldwide taxation (i.e., in addition to the taxes paid to the U.S., it includes the taxes paid to all other countries, and at subnational levels of government). Given that the IRS's jurisdiction covers primarily U.S. taxes, the CASH ETR may be informative of international tax strategies. Second, the CASH ETR captures tax deferral strategies, such as accelerated depreciation, which may be of interest to the IRS. We predict that lower CASH ETRs will attract higher IRS attention.

The GAAP ETR is a book-based measure of tax avoidance based on the ratio of current-year total tax expense reported under GAAP to current-year pretax income. Because the GAAP ETR includes *total* tax expense in the numerator, it captures changes in tax accruals, such as the valuation allowance and tax reserve, which may be of interest to the IRS. These numbers are

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[9] We briefly discuss other potential measures—such as measures of international operations, foreign subsidiaries, textual discussion, and tax complexity—in Section 6.

[10] Hanlon and Heitzman (2010, Section 3.2) provide a comprehensive discussion of common tax measures, which we rely on extensively in this section.

financial statement accruals, which prior research has shown to provide information about future earnings and cash flows (e.g., Frank and Rego 2006; Edwards 2011). Moreover, the denominator of the GAAP ETR, pretax income, is a book-based number, which should capture financial market pressures to manipulate accounting earnings, which may also be of interest to the IRS. We predict that lower GAAP ETRs will attract higher IRS attention.[11]

BTDs represent the aggregate difference between book income and taxable income. Prior research has used BTDs to capture both earnings quality and tax avoidance (Mills 1998; Hanlon 2005; Blaylock et al. 2011; Hanlon and Shevlin 2005), although the latter construct is more likely to capture the IRS's attention. While the IRS does have some information on BTDs from the Schedule M-3 (and previously the M-1) and the tax return, disclosures in the financial statements may provide additional information to the IRS, such as the ETR reconciliation and deferred tax assets/liabilities related to temporary BTDs. To the extent that higher BTDs imply higher tax avoidance to the IRS, we expect that BTDs will be positively associated with IRS attention.

The UTB is a financial accounting reserve for future tax contingencies related to tax audits as required by FIN 48. It represents uncertainty in the firm's tax positions—i.e., positions that may not hold up under IRS scrutiny. Because the UTB reflects managers' own assessments of risky tax positions, many in the financial community have argued that the UTB will provide a "roadmap" pointing the IRS towards companies' tax strategies (Reinstein 2007; Jones 2009; Leone 2007). Indeed, as noted in Mills et al (2012), Chester Spatt, the Chief Economist at the SEC in 2007, indicated that "Providing publicly more information about the taxpayer's position

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[11] The GAAP ETR can be broken up in two meaningful ways: current versus deferred taxes and domestic versus foreign taxes. We consider these breakdowns in the empirics below, but do not form predictions for which component will be more or less associated with IRS attention.

on salient tax issues may provide a 'roadmap' for the tax authority that may undercut the firm's bargaining power in the associated tax disputes (Spatt 2007)." And, upon introduction of the new financial accounting standard by the FASB, Jones (2009) suggests that the FASB became the IRS's "new best friend." Prior research has shown that the UTB is related to tax sheltering, which indicates its association with tax avoidance (e.g., Lisowsky et al. 2013; Lisowsky 2010).[12] Based on these arguments, we expect that greater UTBs will be associated with greater IRS attention.

In summary, because all of these measures relate to tax avoidance, and because of the IRS's inherent interest in uncovering corporate tax avoidance, we expect IRS attention to be increasing in these proxies of tax avoidance.[13] Specifically, we propose the following hypothesis:

H1: IRS attention is increasing in measures of tax avoidance.

2.2 Disclosure Response to IRS Attention

To the extent that firms perceive that the IRS is using the financial statements, they face a tradeoff when deciding how much tax information to disclose to their other stakeholders. They must balance the benefits of disclosure, such as lower financing costs (e.g., Botosan 1997; Sengupta 1998; Lambert et al. 2007), with the costs of disclosure, such as potential litigation and proprietary costs (e.g., Grossman and Hart 1980; Skinner 1997; Skinner 1994; Merkley 2013; Guo et al. 2004). These costs have been studied in many settings, often in the context of a firm's competitors using disclosed financial information to gain a competitive advantage. However,

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[12] In contrast, others have suggested FIN 48 would be of little use to the IRS. Former FASB board member Katherine Schipper indicated that "the IRS has a far more detailed and effective 'roadmap' in its schedule M-3 than it would be provided by any disclosure in the final interpretation (FASB 2006)."

[13] There are other measures we do not consider, such as long-run effective tax rates (Dyreng et al. 2008), "discretionary" BTDs (Desai and Dharmapala 2006), or tax shelter prediction models (Wilson 2009; Lisowsky 2010) because they are less likely to be used by the IRS in the same manner that they are used by researchers.

non-competitor audiences, such as a tax authority, can also impose disclosure costs on the firm. Firms' decisions regarding tax disclosure must balance the fact that the tax authority may use financial disclosures against them with the fact that tax-related activities of the firm are likely relevant information to investors, as taxes saved represent a form of profit maximization.

The IRS, via Treasury, has the indirect ability to require additional private disclosures from firms by changing tax reporting requirements.[14] The IRS can also request additional information during tax audits. If the IRS changes tax reporting requirements that require information similar to information provided in public financial disclosures, the costs of the public financial disclosure is reduced because the IRS already has the information in question. If firms consider tax-related proprietary costs in determining the extent of tax disclosure, we expect firms' level of public tax disclosure released to outside stakeholders to increase when the IRS requires more private disclosure, as the IRS will gain little additional information through the disclosure to investors. However, this may not be the case, primarily if firms discount or discredit that the IRS uses public information as a form of monitoring.

IRS attention and firms' disclosure choices are likely simultaneously determined. The IRS chooses to pay attention to firms because of private and public signals about a given firm's tax avoidance. In turn, the firm chooses, likely within the bounds of IRS and GAAP reporting requirements, the extent of disclosure related to its tax positions. Thus, to examine whether firms' respond to the perception that the IRS uses firm disclosures, we use two exogenous shocks to the usefulness of those disclosures to the IRS. Namely, we examine two recent changes in required private disclosures to the IRS, the imposition of Schedule M-3 and Schedule UTP. Under both of these changes, firms were required to provide additional tax information to the IRS. In particular, the new schedules required firms to provide information that was once

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[14] Treasury Regulation §1.6012-2

primarily available via the financial statements.[15] That is, these changes required firms to *privately* report information that was similar to what was primarily only available *publicly* via the financial statements. As a result, we posit that these regulatory changes altered the IRS's need for the information contained in financial statements. We employ these regulatory changes as a shock to the IRS's use of financial statements. We discuss each in turn.

The IRS may be interested in book-tax differences because they provide an alternate interpretation of the underlying economic fundamentals of a firm (Mills 1998). Prior to the release of Schedule M-3, the IRS could acquire information about specific differences between book income and tax income from the tax footnote of a firm's annual report or on the IRS's Schedule M-1. Under GAAP (FAS 109, paragraph 47), firms are required to report a reconciliation between the firm's effective tax rate and the statutory tax rate, commonly called the rate reconciliation. This disclosure contains a listing of items that make a firm's effective tax rate vary from its statutory tax rate, such as permanent book-tax differences and tax credits. Moreover, a firm's annual report contains a tabulation of deferred tax assets/liabilities, which arise due to temporary book-tax differences. Thus, the financial statements contained information regarding book-tax differences that may have been useful to the IRS, especially given the shortcomings of the Schedule M-1. Appendix 2 contains an example of both an ETR reconciliation and a Schedule M-1.

At an aggregate level, the M-1 explained the difference between what was reported as domestic net income to the financial markets and what was reported as taxable income to the tax authorities. The information was so aggregated, however, that the IRS decided that to obtain the information they needed, they would supplant the M-1 with the M-3 (Mills and Plesko 2003).

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[15] Both M-3 and UTP are explicitly tied to financial statements prepared according to Generally Accepted Accounting Principles (GAAP) since firms not preparing GAAP financial statements are not subject to M-3 or UTP reporting.

Schedule M-3 was required for tax years ending on or after December 31, 2004 for firms with over $10 million in assets. The M-3 requires an extensive reconciliation between the book and tax accounting numbers, potentially replacing information previously only obtainable through the ETR reconciliation in the 10-K. The book-tax reconciliation on Schedule M-3 contains reconciliations that must be filed for many specific income statement line items (e.g., deferred revenues, hedging transactions, income from pass-through entities, etc.) which highlight for the tax authority specific settings and means by which a firm may be taking aggressive positions. Overall, we posit that the imposition of Schedule M-3 reduced the IRS's need for additional book-tax difference information from the financial statements. Hence, the implementation of Schedule M-3 was a shock to the information required by the IRS, but only for firms required to file it.

Schedule UTP is the other change in IRS reporting we examine. As noted above, under FIN 48, firms are required to tabulate the balance/change in their tax contingency, uncertain tax benefits, which is a contingent liability assessing the likelihood that a particular tax position will be sustained under audit. Similar information is nowhere on the tax return. As a result, prior to Schedule UTP, if the IRS wanted access to a firm's disclosed tax risk, it needed to access them via the financial statements. The hypothesis above suggests that IRS attention is strongly increasing in both UTBs and with the effective date of FIN 48. However, the IRS changed its private reporting requirements by mandating that firms report information about uncertain tax positons directly to the IRS on Schedule UTP.

Starting with tax years ending on or after December 31, 2010, the IRS mandated that firms report their uncertain tax positions on Schedule UTP. As noted above, uncertain tax positions are tax positions for which firms have recorded a reserve (or expects to litigate) in their

audited financial statements. Schedule UTP reporting was mandatory for most firms with assets over $100 million in 2010 and 2011. However, in 2012 and 2013, the disclosure threshold was reduced to $50 million. We use these exogenous asset thresholds for mandated Schedule UTP reporting in our empirical strategy (discussed below). Hence, the implementation of Schedule UTP was a shock to the information required by the IRS, but only for firms required to file it.

In summary, using both Schedules M-3 and UTP as exogenous shocks to the IRS's need for, and presumably use of, financial statements, we examine changes in firm tax-related disclosure in the tax footnote around the requirement of these two new private disclosures. Observing that firms change their public disclosures based on mandated private disclosures to the IRS provides evidence that firms create financial disclosures with the IRS as a potential audience. Hence, we propose the following hypothesis:

> *H2: Firms increase disclosure in their tax footnote in response to decreases in perceived IRS usage of financial statements.*

3.   DATA

3.1   IRS Attention Data

To examine the determinants of IRS attention to financial reports, we employ a dataset that tracks web traffic on the SEC's EDGAR servers from 2004-2012. Through EDGAR, the public has online access to SEC-required filings. As interested parties access documents using EDGAR, a log file tracks (i) the IP address of the requesting user, (ii) the date and time of the request, (iii) the CIK (Central Index Key) of the public company whose forms were requested, and (iv) a link to the particular form or filing being accessed. To preserve the privacy of individual users, the SEC replaces the final octet of the users' IP address in the log file with three unique letters (e.g., the fictitious IP address of 123.456.789.agw). Using public records, we can

link the first three octets of the users' IP address to large entities who purchase blocks of IP addresses. We focus on EDGAR search patterns from IP addresses within block purchases by nine different IRS IP addresses[16] and use the number of downloads by IRS computers as a proxy for IRS attention.[17]

Figure 1, Panel A plots the number of IRS downloads for each type of SEC form during our full sample period. This plot shows that the four most downloaded forms are the Form 10-K (Annual Report), Form 8-K (Current Report), Form 4 (Statement of Change in Beneficial Ownerships), and 10-Q (Quarterly Report). 10-Ks are by far the most downloaded report by the IRS in our sample—the IRS downloads twice as many 10-Ks than 8-Ks and five times as many 10-Ks than 10-Qs (even though there are roughly three times as many 10-Qs available to download).[18] Figure 1, Panel B plots aggregate annual IRS interest in each form type from 2004-2011.[19] Note that the only form with substantial corporate tax information is the 10-K (the 10-Q contains very little detailed tax information on a consistent basis). Therefore, the most striking feature of this graph is the large increase in IRS interest in the Form 10-K in the latter half of the sample period following the implementation of FIN 48.

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[16] These IP addresses represent an unknown number of IRS computers because of a common form of routing, static network address translation (NAT), which may route many users through a single IP address. IRS documentation shows that the IRS advocates the use of NAT (2014, 103). As an interesting example of hiding users behind a NAT, the entire population of Qatar appears to use the same IP address (BBC 2007).

[17] We wish to caveat several features of the EDGAR IRS data. First, neither the IRS nor the SEC have provided us the identification data. Second, we use a proprietary outside source to verify that the IRS's EDGAR download activity is indeed derived from IP addresses owned by the IRS. Third, this proprietary source is made up of current IP ownership assignments—to the extent that IP ownership has varied during the sample period, these data are inaccurate (this is less likely for block purchases of IP addresses). Fourth, the IP ownership data are a partial mapping of IP ownership to IP addresses since there are likely many IP addresses owned by the IRS and other government agencies that we do not capture. As a result, we are only referring to IRS attention from locations that we are able to positively identify as being associated with the IRS. Finally, to the extent that IRS users save downloaded files to use offline, or that they has access to these data from other external sources or from internal databases, as suggested in Lisowsky et al (2013), our estimates will be biased downward. Therefore, our data represent a lower bound assessment of IRS Attention via EDGAR.

[18] Drake et al. (2014b) find that 10-Ks are the most demanded SEC filing by EDGAR users.

[19] We exclude 2012 from this plot because data was not available for the full year.

To proxy for IRS attention, we construct our primary measure, *IRS 10-K DOWNLOADS$_{i,t}$*, as the number of times in year *t* that a computer from the IRS downloaded one of company *i*'s 10-Ks related to any fiscal year. We then link this attention measure to company characteristics in Compustat using the CIK from EDGAR. Our initial sample contains all firm-years that had both (1) EDGAR download data and (2) financial information available on Compustat. Descriptive statistics for this initial sample are presented in Panel A of Table 1.

Figure 2 presents evidence to suggest that EDGAR downloads are likely performed by human beings at IRS offices (rather than search algorithms that blindly gather the data). First, Panel A shows that most downloads occur between the hours of 8 a.m. and 5 p.m. (all times Eastern). Second, downloads decrease dramatically during the lunch hour, when downloads would be expected to increase if the downloads were for personal reasons (e.g., investing).[20] Figure 2, Panel B plots IRS search volume by day of the week and shows that nearly all downloads happen during the work week (i.e., Monday through Friday). Taken together, these two figures suggest we are capturing human downloads of EDGAR filings, as opposed to automated downloads.[21]

3.2 *Tax Disclosure Data*

To examine how firms modify their disclosures in response to their perceived use by the IRS, we focus on the tax footnote found in firms' annual reports. To do so, we acquire all 10-Ks

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[20] Note that the IRS has an internet usage policy that prevents IRS employees from accessing investment websites (e.g., Nasdaq.com) on IRS computers. While this policy is somewhat subjective, many websites, including some investing websites, are actively blocked on IRS computers. Please see: http://www.irs.gov/irm/part10/irm_10-008-027.html (accessed 10/15/2014).

[21] The IRS may well use automated computer programs or robots to crawl the disclosure posted on the SEC website. In order to eliminate these downloads, we use two screens. Following Drake et al. (2014b), we apply both a "no more than 5 requests per minute rule" and a "no more than 1,000 requests per day rule" to each IP address to drop observations that come from a webcrawling program and could be subsequently manipulated. In Figure 2, the infrequent downloads occurring during the evening hours suggests we have reduced the effects of web crawling programs that could likely be left running during all hours (which the SEC requests be made between 9PM and 6AM Eastern – see http://www.sec.gov/edgar/searchedgar/ftpusers.htm).

found on EDGAR for the period 2000-2013.[22]   From the tax footnote, we capture several

characteristics that firms may modify in response to its perceived use by the IRS. We measure

TAX NOTE DISCLOSURE in three ways. First, we adapt a measure used in Blankespoor (2012)

and Lundholm et al. (2014) to a tax setting by counting the *NUMBER OF NUMBERS* in firm i's

tax footnote within the 10-K for fiscal year t. Second, we measure *TAX NOTE DISCLOSURE* by

counting the *NUMBER OF SENTENCES* in firm i's tax footnote within the 10-K for fiscal year t

(Blankespoor 2012).   Third, we measure *TAX NOTE DISCLOSURE* by calculating the *FOG*

INDEX in firm i's tax footnote within the 10-K for fiscal year t (Lehavy et al. 2011; Li 2008).

Our final sample for the disclosure analysis consists of all firm-years from 2000-2013

that had both (1) a tax footnote that could be successfully extracted and (2) financial information

available on Compustat.[23]   Descriptive statistics are presented in Panel B of Table 1.   The

definition and computation of each variable is reported in the Appendix.

Figure 3 graphs the *NUMBER OF NUMBERS* and the *NUMBER OF SENTENCES* for

the firms in our sample. While the trend is generally increasing, there are visual increases with

the introduction of FIN 48 in 2007. This increase is consistent with the increased disclosure

requirements mandated by FIN 48.

4.   IRS ATTENTION: EMPIRICAL TESTS AND RESULTS

4.1   IRS Attention - Univariate Associations with Tax Avoidance Proxies

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[22] Covering such a large sample, while comprehensive, presents certain challenges. Early in the 2000's, firms generally submitted their 10-Ks in a "flat" or simple text file. In the mid-2000's, firms generally submitted their 10-K's in HTML format. More recently, as a result of sweeping changes in how the SEC requires firms to file their reports (Blankespoor 2012; Blankespoor et al. 2014), XBRL encoding has become the standard for file submission. Therefore, we have to design and execute Perl routines specific to each type of encoding we encounter to extract the footnote. To ensure that the encoding type of the tax note does not bias our inferences, we include controls for the type of extraction later in our empirical analysis.

[23] Approximately 22% of our sample is eliminated because we are unable to successfully extract the tax footnote from the 10-Ks.

Our first objective is to understand the extent and determinants of IRS attention. In H1, we predict that IRS attention is increasing in financial statement proxies of tax avoidance. As initial descriptive evidence for H1, we plot the average IRS attention for quintiles of several proxies of tax avoidance, as presented in Figure 4. Specifically, we sort book effective tax rates (*GAAP ETR*), cash effective tax rates (*CASH ETR*), book/tax differences (*BTD*), unrealized tax benefits (*UTB*), pre-tax return on assets (*ROA*), and cash holdings (*CASH*) into quintiles for each year in our sample and then plot the average level of IRS attention for each firm in our sample by quintile. For comparison, we also plot the average level of 10-K downloads by government entities other than the IRS for which we are able to identify EDGAR access for firms in each quintile.[24]

The visual evidence from the plots in Figure 4 suggests that IRS attention is more subtle than a simple focus on firms that have low tax rates. In fact, the plots of IRS attention by quintiles *GAAP ETR*, *CASH ETR*, and *BTD* (Panels A - C) exhibit an inverted U-shape. Intuitively, this figure suggests a "sweet spot" in IRS attention—the IRS is less interested in firms at the extremes of tax rates, but is more interested in those with positive tax rates below the statutory rate. The plots of IRS attention by quintiles of *UTB* (Panel D) show that IRS attention is monotonically increasing in unrealized tax benefits. Panels E and F show IRS attention to be increasing (decreasing) in profitability (cash holdings). While these associations demonstrate a pattern in IRS attention, we rely on multivariate regression analysis (described next) which control for other determinants of IRS attention.

4.2   IRS Attention: Multivariate Regression Tests

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[24] Specifically, we are able to identify EDGAR access from Administrative Office of the Courts, California State Franchise Tax Board, Fannie Mae, Internal Revenue Service, Library of Congress (Information Technology Services), State of Delaware, U. S. Bureau of the Census, US Department of Justice and United States Senate.

One of our objectives is to understand the firm characteristics and tax avoidance information associated with IRS attention. Accordingly, we first develop an empirical model to examine how IRS attention is associated with firm characteristics and then augment that model with measures of corporate tax avoidance as follows:

$$IRS\ 10\text{-}K\ DOWNLOADS_{i,t} = \alpha_{FE} + \beta_1 FIRM\ CHARACTERISTICS_{i,t} + \varepsilon_{i,t}. \qquad (1a)$$

$$IRS\ 10\text{-}K\ DOWNLOADS_{i,t} = \alpha_{FE} + \beta_1 FIRM\ CHARACTERISTICS_{i,t} + \beta_2 TAX\ AVOIDANCE_{i,t} + \varepsilon_{i,t}. \qquad (1b)$$

In equation (1), *IRS 10-K DOWNLOADS* is as defined above.[25] *FIRM CHARACTERISTICS* is a vector of firm characteristics measured at the firm-year level. We include variables to explain factors that may contribute directly to general interest in a firm, such as firm size (*SIZE)* and market-to-book (*MARKET TO BOOK*); Hoopes et al (2008) document that firm size is important in IRS enforcement. We include an indicator if the firm is in the top 100 firms by total assets in a given year (*TOP 100*) as a proxy for firms that are under constant audit by the IRS. Firms with large amounts of *FOREIGN INCOME* that will be taxed in lower tax jurisdictions may have lower effective tax rates, which may interest the IRS. Since interest payments are tax deductible, firms with high levels of *LEVERAGE* may have lower tax rates. We include a proxy for *R&D INTENSITY* as firms that conduct R&D may have different tax attributes. We include *INVENTORY INTENSITY* to account for differences in inventory capitalization for tax purposes. Similarly, firms with high *CAPITAL INTENSITY* will have accelerated depreciation deductions for tax purposes that may reduce cash taxes. Firms with recent losses and net operating losses may be of interest because of the tax benefits associated with tax loss carryforwards/backs; therefore, we include an indicator for loss-years, *LOSS*, and include an indicator for firms that

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[25] *IRS 10-K DOWNLOADS* and all its variants are logged in estimating equations (1) – (4). Inferences from results using continuous *TAX AVOIDANCE* variables and unlogged IRS attention variables remain unchanged.

have a *CHANGE IN NOL* status. Finally, we include a proxy for cash holdings, *CASH*, which may indicate cash trapped overseas (Foley et al 2007). All variables are computed as discussed in the Appendix. We also estimate equation (1) including only firm fixed effects to examine the extent to which time-invariant firm attributes associate with IRS attention. The sample period runs 2003-2011 and covers all firms with available data on the variables above. The model also includes year fixed effects where indicated and standard errors clustered by firm. Overall, we expect that these firm characteristics will be related to the private information the IRS possesses for a particular firm, as discussed in H1.

Table 2 presents the results of estimating equation (1a). Columns 1-2 present regressions using only firm and year fixed effects, respectively. Column 1 shows that 40% of the variation in IRS attention is driven by firm fixed effects, which suggests that, to some degree, IRS attention is a firm-level construct that does not vary over time. That is, there are some firms that consistently draw the IRS's attention, while others consistently do not. Column 2 shows that 31% of the variation in IRS attention is driven by year fixed effects, which, in contrast, suggests that IRS attention is a temporal construct. Further, untabulated results show that the coefficients on the year fixed effects demonstrate that IRS attention has also varied over the sample period, 2003-2011.

Columns 3-5 present the coefficients on the *FIRM CHARACTERISTICS* variables when the fixed effects are included and excluded. The evidence suggests that *IRS* attention is increasing in firm size and for firms that are constantly under audit (i.e., both *SIZE* and *TOP100* are positive and significant in most models). *FOREIGN INCOME* is positively associated with IRS attention, except for when both firm and year fixed effects are included in the model in Column 5. *ROA* is negatively associated with IRS attention; this result is somewhat surprising,

but could indicate that IRS attention increases for firms approaching loss status, as is indicated by the marginal, positive significance on *CHANGE IN NOL* and *LOSS*. Overall, the results in Table 2 show evidence to suggest that IRS attention is strongly related to firm characteristics, possibly related to the firm characteristics that often show up in the IRS's private information set.

We next augment equation (1a) with a vector of tax avoidance measures, *TAX AVOIDANCE*, and estimate equation (1b) using OLS. The tax avoidance measures include *CASH ETR*, *GAAP ETR*, *BTD*, and *UTB*. We also separately break *GAAP ETR* into its current/deferred and domestic/foreign components. The model includes firm and year fixed effects to account for stationary firm characteristics and temporal trends in IRS attention. In estimating equation (1b) standard errors are clustered by firm. Under H1, we expect that IRS attention is increasing in measures of tax avoidance. Therefore, for *GAAP ETR* and *CASH ETR*, we expect $\beta_1 < 0$; and for *BTD,* and *UTB*, we expect that $\beta_1 > 0$; for these variables, we assess significance based on one-tailed tests.

Table 3 reports the results of estimating equation (1b). Because the tax avoidance measures are related, we enter each of them into the model individually, and report the results across Columns 1-6.[26] The data reveal that IRS attention is significantly decreasing in *CASH ETR* and significantly increasing in *UTB*. Specifically, in Column 1, the coefficient on *CASH ETR* is -0.105. The coefficient on *GAAP ETR* in Column 2 is not significantly different from zero. When we separate *GAAP ETR* into its domestic and foreign components in Column 3, we find that *DOMESTIC ETR* is negative and marginally significant. However, the breakdown of

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[26] In Table 3, the sample size varies across columns because we impose data constraints depending on the independent variable of interest in order to maximize the sample. For the effective tax rate measures, we require positive pretax income for interpretation of the rate. The *UTB* is only available after 2006, which reduces the sample size when *UTB* in included. Decompositions of *GAAP ETR* and *TAX HAVENS* have less data availability and therefore the sample size is smaller when these are included.

CURRENT ETR and *DEFERRED ETR* is not associated with IRS attention. The coefficient on

UTB in Column 5 is 0.05, suggesting that a one quintile increase in *UTB* is associated with an

increase in IRS attention of 5.0%. In Column 6, the coefficient on *BTD* is insignificant.[27] In

summary, after accounting for firm characteristics and fixed effects, the results suggest that

CASH ETR and *UTB* have a clear relation with IRS attention; *DOMESTIC ETR* exhibits a

relation with IRS attention, but with lower statistical significance; and *GAAP ETR* and *BTD*

show no association with IRS attention.

4.3   IRS Attention to 10-Ks versus Other Government Attention

The results just discussed provide evidence based on tests of association. We now

perform several tests aimed to improve the identification of the association between IRS

attention and proxies of tax avoidance. Our first approach involves comparing IRS attention to

attention paid by other government entities. We estimate a similar set of equations using OLS

and test across specifications using SUR, as follows:

$$IRS\ 10\text{-}K\ ATTENTION_{i,t} = \alpha_{FIRM} + \alpha_{YEAR} + \beta_{1,A}ETR_{i,t} + \beta_{2,A}CASHETR_{i,t}$$
$$+ \beta_{3,A}BTD_{i,t} + \beta_{4,A}UTB_{i,t} + \beta_{K,A}CONTROLS_{i,t} + \varepsilon_{i,t} \tag{2a}$$

$$OTHER\ 10\text{-}K\ ATTENTION_{i,t} = \alpha_{FIRM} + \alpha_{YEAR} + \beta_{1,B}ETR_{i,t} + \beta_{2,B}CASHETR_{i,t}$$
$$+ \beta_{3,B}BTD_{i,t} + \beta_{4,B}UTB_{i,t} + \beta_{K,B}CONTROLS_{i,t} + \varepsilon_{i,t}. \tag{2b}$$

IRS 10-K ATTENTION is defined as above and *OTHER 10-K ATTENTION* is the count of the

number of times in year *t* that an individual from a government entity other than the IRS

downloads a 10-K filing (e.g., Census Bureau, Department of Justice, etc.). The models include

firm and year fixed effects as well as standard errors clustered by firm. To the extent that the IRS

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[27] Mills (1998) finds that the magnitude of book-tax differences are positively associated with proposed IRS audit adjustments, but uses proprietary IRS data to calculate firms' actual taxable income. Consistent with prior studies that do not have access to IRS data, we infer taxable income (and therefore book-tax differences) by grossing up tax expense by the top corporate statutory rate, but acknowledge there are multiple issues with this methodology as noted in Hanlon (2003) and Guenther (2014). Hence, because BTD is a noisy measure, our lack of results should not be interpreted as definitive evidence that the book-tax differences do not increase IRS attention in financial reporting.

is accessing the 10-K for tax monitoring purposes, we would expect to see the association

between tax avoidance and the number of downloads concentrated within downloads by the IRS.

As effective tax rates are decreasing in tax avoidance, H1 predicts that $\beta_{1,A} < \beta_{1,B}$, and $\beta_{2,A} < \beta_{2,B}$.

Since both book-tax-differences and unrealized tax benefits are increasing in tax avoidance, we

expect that $\beta_{3,A} > \beta_{3,B}$, and $\beta_{4,A} > \beta_{4,B}$.

The results of estimating equations (2a) and (2b) are presented in Table 4. Column 1 of

Table 4 estimates equation (2a). Column 2 of Table 4 estimates equation (2b). The results

suggest that tax avoidance is not associated with the 10-K download volume for government

entities other than the IRS. Specifically, none of the proxies for tax avoidance are significantly

associated with non-IRS 10-K downloads. In cross equation testing, the effect of *CASH ETR* and

UTB on 10-K downloads is significantly greater for the IRS than for other government entities,

with chi-square statistics of 5.23 and 15.14, indicating that the differences are significant at the

5% and 1% levels, respectively.

4.4 IRS Attention and FIN 48

Our next identification method involves a difference-in-difference test of IRS attention

relative to other government attention before and after the effective date of FIN 48. Recall that

FIN 48 increased the level of required tax disclosure details, including an estimate of risky tax

positions to be included as a tax contingency. We therefore compare differential attention

before/after FIN 48, as follows:

$$IRS\ 10\text{-}K\ ATTENTION_{i,t} = \alpha_{FIRM} + \beta_{1,A}FIN48_{i,t} + \beta_{2,A}CONTROLS_{i,t} + \varepsilon_{i,t} \qquad (3a)$$

$$OTHER\ 10\text{-}K\ ATTENTION_{i,t} = \alpha_{FIRM} + \beta_{1,B}FIN48_{i,t} + \beta_{2,B}CONTROLS_{i,t} + \varepsilon_{i,t} \qquad (3b)$$

As before, we estimate the two models in OLS then use SUR to compare $\beta_{1,A}$ to $\beta_{1,B}$ across the

two equations. The model includes firm fixed effects and standard errors clustered by firm.

FIN48 is an indicator variable set equal to one for observations after the required implementation of FIN 48 for fiscal years beginning 2007 and zero for observations before implementation. Observing $\beta_{1,A} > \beta_{1,B}$ is consistent with our first hypothesis.

Table 5 reports the results of these tests. In both equations, the coefficient on *FIN48* is positive and significant—the *FIN48* coefficient for IRS attention is 0.819 and that for other government bodies is 0.202—indicating that government attention to 10-Ks is increasing over the sample period. However, the magnitude of the change in IRS attention following FIN 48 is roughly four times that the change in other government attention for the same period and the cross-equation difference is starkly significant ($\chi^2 = 894.97$; p-value < 0.0001). The results suggest that IRS attention has dramatically increased in the FIN 48 period.

Further, we examine whether IRS attention to financial reporting changed around FIN 48 for firms that disclosed a UTB in the post-FIN 48 period, relative to firms that did not disclosure a UTB. To do this, we estimate the following equation:

$$IRS\ 10\text{-}K\ ATTENTION_{i,t} = \alpha_{FIRM} + \alpha_{YEAR} + \beta_{1,A}FIN48_{i,t}*UTB\ FIRM_i + \beta_{2,A}CONTROLS_{i,t} + \varepsilon_{i,t}, \tag{4a}$$

where *FIN48* is defined as in equations (3a) and (3b) and *UTB FIRM* is an indicator variable if, at any point in the sample period, the firm reported a *UTB* balance greater than zero. Our variable of interest is the coefficient on the interaction of *FIN48* and *UTB FIRM*. The main effects for *FIN48* and *UTB FIRM* are excluded from the model as they are collinear with the year and firm fixed effects, respectively. The model includes firm and year fixed effects as well as standard errors clustered by firm. A significant, positive coefficient on *FIN48*UTB FIRM* would be consistent with H1 and suggest that FIN 48 increased IRS attention to the financial reporting more for firms that disclosed a UTB that for those that did not disclose a UTB.

Additionally, we estimate whether any increase in attention following FIN 48 to firms that disclose a UTB is greater for the IRS than for other government entities as follows:

$$OTHER\ 10\text{-}K\ ATTENTION_{i,t} = \alpha_{FIRM} + \alpha_{YEAR} + \beta_{1,B}FIN48_{i,t}*UTB\ FIRM_i$$
$$+ \beta_{2,B}CONTROLS_{i,t} + \varepsilon_{i,t}. \tag{4b}$$

The equation is estimated using OLS, and using SUR, we again test for coefficient equivalence on the interaction *FIN48*UTB FIRM* across equations (4a) and (4b). Observing $\beta_{1,A} > \beta_{1,B}$ is consistent with our first hypothesis.

In Table 6, we present the results of estimating equations (4a) and (4b) in Columns 1 and 2, respectively. In Column 1, the coefficient on *FIN48*UTB FIRM* is 0.234, which is statistically significant at the one percent level. This finding suggests that the change in IRS attention following FIN 48 was 23% larger for firms that reported a UTB at any time after FIN 48 than for firms that did not report a UTB. In column 2, in which downloads by government entities other than the IRS is the dependent variable, the coefficient on *FIN48*UTB FIRM* is 0.163, which is statistically significant at the one percent level. Across the columns, we observe a marginal statistical difference statistical difference between the two interaction coefficients.

In summary, the results of these tests paint a fairly clear picture of IRS attention. IRS attention appears to be increasing in firms' cash effective tax rates and unrealized tax benefits, and has increased for all firms after the adoption of FIN 48 and especially for firms that recorded a UTB balance as required by FIN 48. Having established the determinants of IRS attention, we now test the notion that firms modify their disclosures in response to IRS attention.

5. *FIRM DISCLOSURE IN RESPONSE TO PERCEIVED IRS ATTENTION*

Our second objective is to examine whether firms make different disclosure choices when they perceive that the IRS uses their public financial disclosures for tax enforcement purposes.

As noted above in Section 3.2, we employ textual analysis of the tax footnote included in a firm's 10-K filing as a proxy for the tax disclosure choices of firms. We employ two settings to examine how firms change their tax note disclosures in response to new, more stringent IRS information requirements—the release of Schedule M-3 and the release of Schedule UTP. As both schedules are not required for all firms, both settings allow for separate analyses between a treatment group (those that submit the schedule to the IRS) and a control group (non-submitters).

For both settings, the increase in the information given to the IRS allows us to examine how firms' disclosure of tax information to financial markets changes following the implementation of new private disclosure rules that increase the granularity of detail provided to the IRS. Specifically, we estimate the following regressions:

$$TAX\ NOTE\ DISCLOSURE_{i,t} = \alpha_{FIRM} + \alpha_{YEAR} + \delta_1 M\text{-}3\ DISCLOSURE\ PERIOD_{i,t} + \delta_2 M\text{-}3\ FIRM*M\text{-}3\ DISCLOSURE\ PERIOD_{i,t} + \delta_3 CONTROLS_{i,t} + \varepsilon_{i,t} \qquad (5a)$$

$$TAX\ NOTE\ DISCLOSURE_{i,t} = \alpha_{FIRM} + \alpha_{YEAR} + \delta_1 UTP\ DISCLOSURE\ PERIOD_{i,t} + \delta_2 UTP\ FIRM*UTP\ DISCLOSURE\ PERIOD_{i,t} + \delta_3 CONTROLS_{i,t} + \varepsilon_{i,t}, \qquad (5b)$$

where *TAX NOTE DISCLOSURE* is one of the following three variables: *NUMBER OF NUMBERS, NUMBER OF SENTENCES,* and the *FOG INDEX. NUMBER OF NUMBERS* is the number of numbers in the tax note of the 10-K. *NUMBER OF SENTENCES* is the number of sentences in the tax note of the 10-K. *FOG INDEX* measures the readability of the tax footnote, and is a function of the number of words, number of sentences, and number of complex words in the tax note.[28] These models include firm and year fixed effects as well as standard errors clustered by firm.

In the two respective settings, *M-3 FIRM* is an indicator variable for the years a firm was subject to Schedule M-3 filing and *UTP FIRM* is an indicator variable for the years a firm was

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[28] The specific formula for calculating the *FOG INDEX* is detailed in the Appendix.

subject to Schedule UTP reporting.[29] As previously mentioned, Schedule M-3 was required for all firms that have more than $10 million in assets beginning in 2004 and Schedule UTP was required for all firms beginning in 2010 (2012) with assets over $100 ($50) million. *M-3 DISCLOSURE PERIOD* is coded to equal one for firm-years ending on or after December 31, 2004. Because there is not a single year Schedule UTP was implemented, for firms below the asset thresholds that would necessitate Schedule UTP reporting, we assign a random year ranging from 2010 to 2013 to define the post period for *UTP DISCLOSURE PERIOD*. Our variables of interest are the interaction terms *M-3 FIRM x M-3 DISCLOSURE PERIOD* and *UTP FIRM x UTP DISCLOSURE PERIOD*. Consistent with our discussion in Section 2, to the extent that the changes in IRS-required disclosures lead firms to change public disclosure behavior, we expect $\delta_2 > 0$ in both equations (5a) and (5b), except when we examine tax note disclosure opacity (*FOG INDEX*), where we expect $\delta_2 < 0$. The main effects for *M-3 FIRM* and *UTP FIRM* are excluded from the models as they are perfectly collinear with the and firm fixed effects. We also include a vector of controls: *SIZE*, *ROA*, *MARKET TO BOOK*, *LEVERAGE*, *INVENTORY INTENSITY*, *R&D INTENSITY*, *CAPITAL INTENSITY*, *FIN48*, *HTML CODE*, *XBRL USED FOR EXTRACTION*, *MNE*, *FOREIGN INCOME*, *ZERO TAX EXPENSE*, *CHANGE IN NOL*, *UTB*, and, where appropriate, *LN(10K NUMBERS)* and *LN(10K SENTENCES)*. We define these variables in the Appendix.

While several of these are standard controls used in the tax and disclosure literatures, some merit explanation, as they are unique to our setting. *HTML Code* is an indicator variable

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[29] *M-3 FIRM* relies on total worldwide assets from COMPUSTAT to establish the $10M threshold, whereas for tax purposes, firms use total domestic assets reported on Form 1120, Schedule L to determine whether they are obliged to file Schedule M-3. Because smaller firms with assets under $10M are less likely to have significant foreign assets, we expect the two numbers to be similar. We expect that any mis-assignment of firms with more than $10M of worldwide assets and less than $10M of domestic assets as treatment firms would bias away from finding results, as the mis-assignment introduces measurement error.

equal to one if the firm used HTML code, as opposed to flat text, in its 10-K in year *t*. *XBRL*

USED FOR EXTRACTION is an indicator variable coded to equal one if the text of the tax note

was found using XBRL tags. Both of these controls are precautionary and are meant to ensure

that the automated manner of extracting tax notes is not confounding our inference.[30] *ZERO*

TAX EXPENSE is an indicator variable if the firm has zero tax expense in year *t*. After inspecting

hundreds of tax notes, tax footnotes for firms with zero tax expense are frequently different than

other tax footnote insofar as they are much shorter and simpler.   Firms with foreign operations

have many other items that will require disclosure and discussion in the tax note. These

disclosures are more related to the actual economic activity being disclosed and therefore less to

do with disclosure choice. We therefore control for both the existence (*MNE*) and amount

(*FOREIGN INCOME*) of foreign income. Finally, because researchers have noted the change in

the length of 10-Ks over time (e.g., Loughran and Mcdonald 2011). Therefore, in some

estimations, we include characteristics of the 10-K, *LN(10K NUMBERS)* and *LN(10K*

SENTENCES), to account for this trend. All other variables are defined in Appendix 1.

     In Table 7, we present the results of estimating equations (5a) as our test of the disclosure

effect of the imposition of Schedule M-3. In Column 1, the coefficient on *M-3 FIRM*M-3*

DISCLOSURE PERIOD is 9.996 and statistically significant at the one percent level.   Relative

to the sample mean number of numbers, this coefficient implies that firms subject to Schedule

M-3 include roughly 13% more numbers in their tax footnote disclosures than control firms

during the M-3 disclosure period. In Column 2, in which *NUMBER OF SENTENCES* is the

dependent variable, the coefficient on *M-3 FIRM*M-3 DISCLOSURE PERIOD* is 10.651 and

statistically significant at the one percent level. Relative to the sample mean number of

sentences, this coefficient implies that firms subject to Schedule M-3 include roughly 41% more

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[30] Excluding the controls does not alter our inferences.

sentences in their tax note disclosures than control firms during the M-3 disclosure period. In Column 3, in which *FOG INDEX* is the dependent variable, the coefficient on *M-3 FIRM*M-3 DISCLOSURE PERIOD* is -0.563 and statistically significant at the ten percent level. Overall, the evidence suggests that firm disclosure patterns in the tax footnote significantly changed in response to Schedule M-3. Namely, our results are consistent with firms providing both more quantitative and qualitative disclosure that is less opaque during the Schedule M-3 disclosure period.

In Table 8, we present the results of estimating equation (5b) as our test of the disclosure effect of the imposition of Schedule UTP. In Column 1, the coefficient on *UTP FIRM*UTP DISCLOSURE PERIOD* is 18.669 and statistically significant at the one percent level. Relative to the sample mean number of numbers, this coefficient implies that firms subject to Schedule UTP include roughly 24% more numbers in their tax footnote disclosures than control firms during the UTP disclosure period. In Column 2, in which *NUMBER OF SENTENCES* is the dependent variable, the coefficient on *UTP FIRM*UTP DISCLOSURE PERIOD* is 16.795 and statistically significant at the one percent level. Relative to the sample mean number of sentences, this coefficient implies that firms subject to Schedule UTP include roughly 65% more sentences in their tax note disclosures than control firms during the UTP disclosure period. In Column 3, in which *FOG INDEX* is the dependent variable, the coefficient on *UTP FIRM*UTP DISCLOSURE PERIOD* is -0.037, but it is not statistically difference from zero. Overall, the evidence suggests that firm disclosure patterns in the tax footnote significantly changed in response to Schedule UTP. Namely, our results are consistent with firms providing both more quantitative and qualitative disclosure during the Schedule UTP disclosure period.

6. ADDITIONAL TESTS

In Section 2 above, we focused on widely available proxies of tax avoidance in the financial statements (CASH ETR, GAAP ETR, BTD and UTB) that are likely outward indicators of the private information contained by the IRS. In this section, we consider several other categories of information in the financial statements that could be related to the IRS's private information. Specifically, we examine the association between IRS attention to firms' financial statements and the amount of detail relating to firms' foreign operations, the richness of narrative detail in the 10-K regarding firms' recent activity, and the amount of technical tax detail firms are willing to share with investors. We consider these categories of information separate from earlier analysis because either (1) the measurement of these proxies is more challenging or (2) the data requirements to construct these proxies are more stringent than those of the four discussed above.

First, because of its effect on domestic tax revenues, the IRS is inherently interested in firms' international tax planning, including tax avoidance strategies that involve transfer pricing, hybrid entities, cost sharing agreements, and intra-company debt agreements. While the ability to measure international tax planning is somewhat challenging using the financial statements (e.g., Donohoe et al 2012), the 10-K provides a listing of material subsidiaries in Exhibit 21, including those in tax havens. It also provides information on geographic segments. While firms are required to provide detailed information about foreign subsidiaries by filing a copy of Form 5471 for each controlled foreign corporation, the subsidiary listings in Exhibit 21 may be useful to the IRS to validate the completeness of firms' private filings. If the number of publicly disclosed subsidiaries is correlated with the private information that the IRS has that, in turn,

incentivizes it to seek more information in the 10-K, then we expect to see IRS attention increasing in the firm's geographic footprint.

Accordingly, we examine the association between IRS attention and three variables: the number of subsidiaries in tax havens, the number of subsidiaries in foreign countries, and the number of geographic segments disclosed in the financial statements. Table 9, Columns 1-3, reports the results of this test. We find a positive association between IRS attention and each of the three proxies for the extent of a firm's foreign operations (coefficient estimates of 0.043, 0.039, and 0.078 significant at the 10%, 5%, and 10% levels, respectively). These associations suggest that IRS attention to the financial statements is increasing in the firm's disclosure of foreign operations.

Second, it is also plausible that the IRS uses some of the narrative disclosure in the 10-K, such as the MD&A, Risk Factors, and Business sections, to provide context to the audit process. In contrast, tax returns are primarily quantitative in nature and present quantitative information at a very aggregated level. Further, tax returns specify what information firms provide to the IRS and firms do not usually volunteer any additional information. To the extent that the qualitative information in firms' financial statements provide context to the private quantitative information the IRS obtains from tax returns, financial statements could help the IRS interpret and better understand the information contained in the return. We coarsely proxy for the narrative richness of information in a firm's 10-K by using a count of the number of words in the 10-K. Table 9, Column 4, reports the association between IRS attention to a firm's financial statements and the number of words in the 10-K. We find a positive association between IRS attention and 10-K word count (coefficient of 0.012, $p < 10\%$), suggesting that IRS attention to the financial statements is increasing in the firm's narrative disclosure.

Finally, it is possible that IRS attention is higher for firms with complex tax strategies in place. As firms that make decisions to reduce taxes have incentives to communicate this to shareholders to reduce agency costs, firms will sometimes disclose specific technical tax details to their investors, which could be used to the IRS to corroborate and complement private information from the tax return. We attempt to capture the amount of technical tax information shared with investors by including three proxies—the number of unique code sections explicitly referenced in a firm's 10-K, the proportion of words in the 10-K that reference the IRS or a tax authority, and the proportion of words in the 10-K that reference the Internal Revenue Code. We examine the relation between these proxies and IRS attention and report the findings in Table 9, Columns 5-7. Across these three tests, we find no association between IRS attention and the, admittedly coarse, measures of technical tax complexity.

Overall, the results in this section suggest that IRS attention is increasing in measures of multinational operations, as well as our measure of the amount of narrative disclosure, but not for our measures of tax complexity.

7. SUMMARY AND CAVEATS

In this study, we examine the determinants of IRS attention paid to firms' financial disclosures. We employ a novel dataset that tracks IRS downloads of 10-K filings, which serve as a proxy for IRS attention. Despite the IRS having a large amount of private tax information, we find evidence that the IRS does pay attention to public financial disclosures in that their acquisition of a given firm's 10-Ks is associated with characteristics of tax avoidance, such as the CASH ETR and UTB. Relative to other government entities' attention, IRS attention is

larger following FIN 48. In summary, we find that the IRS is more likely to examine the public financial disclosures of firms that avoid taxes.

We also examine firms' disclosure responses to perceived increases in IRS attention. The intuition is that, if firms perceive that the IRS is monitoring their tax-related disclosures, firms may withhold tax-related information to prevent the IRS from using it against them. Using two plausibly exogenous shocks that likely reduced the IRS's use of publicly-available financial accounting information, we find that the quantity of firms' disclosure in the tax footnote increases, consistent with firms providing additional information to shareholders once firms' IRS disclosure costs are reduced.

Our analyses are subject to several important caveats. First, the data used in our analysis provide an incomplete view of IRS attention in that we observe a very small fraction of the enforcement activities of the IRS. Moreover, we neither directly observe the private information obtained by the IRS nor how it interacts with public financial statement information. Therefore, we view our study as an important first step in understanding the drivers of IRS attention, but look forward to future research that may wish to explore this issue.

In addition, there is a disconnect in the timing of IRS attention and the observed tax avoidance variables in the financial statements. That is, by examining the association between IRS downloads of 10-Ks from any fiscal year with the current year's tax avoidance measures, we are likely missing the exact line item that draws the attention of the IRS. That being said, we made this research design choice intentionally because IRS audits are primarily backward-looking and often span the tax returns of many years, which therefore captures the historical audit patterns of the IRS.

Finally, we do not explicitly examine the relation between our proxies of IRS attention and our proxies of firms' tax disclosure. We do so for two reasons. First, our proxy of IRS attention is likely unobservable to the firm. Hence, we would not necessarily expect a change in disclosure policy if the IRS more frequently downloads a given firm's 10-K because the firm's preparers are unlikely to know that the IRS has done so. Second, as noted above, IRS attention to firm disclosures and firm disclosure choices are endogenous. For this reason, we employ two plausibly exogenous shocks to the IRS's use of firm disclosures to capture changes in IRS attention.

Overall, we view our paper as contributing to research examining the interaction between firms and outside entities that monitor the firm. The IRS has been posited to be an important monitor for financial reporting, but tests of the IRS's audit function have been somewhat coarse (Hanlon et al 2014). By employing a novel dataset that tracks the IRS usage of financial reports, we can more directly speak to the IRS's role as a monitor.

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APPENDIX 1 – Variable Definitions

BTD	Pretax book income (PI) minus current domestic and foreign tax expense grossed up by 35% and adjusted for the change in NOLs, scaled by total assets. For ease of interpretation in regression tests, BTD is the within sample BTD quintile.
CAPITAL INTENSITY	Net property, plant, and equipment (PPENT) divided by lagged total assets
CASH	Cash holdings (CH) scaled by lagged total assets
CASH ETR	Taxes paid (TXPD) divided by pretax book income net of special items (PI-SPI) following
CHANGE IN NOL	Change in the tax loss carryforward scaled by lagged total assets
FIN48	An indicator beginning in fiscal year 2007
FOG INDEX	Fog Index of the 10-K tax footnote, computed as .4[(words/sentences)+100(three or more syllable words/words)]
FOREIGN INCOME	Pretax foreign income (PIFO) divided by lagged total assets
GAAP ETR	Total tax expense (TXT) divided by pretax book income (PI)
HTML CODE	An indicator coded to equal one if the tax footnote was located in within HTML code
INVENTORY INTENSITY	Inventory (INVT) divided by lagged total assets
IRS 10-K DOWNLOADS	Count of the number of times during year t that an individual with an IRS IP address downloaded any 10-K from EDGAR for firm i
LEVERAGE	Long term debt (DLTT) divided by lagged total assets
LN(10K NUMBERS)	Natural log of the number of numbers contained within the entire 10-K
LN(10K SENTENCES)	Natural log of the number of sentences contained within the entire 10-K
M-3 DISCLOSURE PERIOD	An indicator beginning for fiscal years ended December 31, 2004.
M-3 FIRM	Firms subject to Schedule M-3 reporting [i.e., firms that have assets over $10 million beginning in fiscal year 2004]
MARKET TO BOOK	Number of shares outstanding at the end of the year multiplied by the price per share at year end divided by the book value of equity (PRCC_F*CSHO/CEQ)
MNE	An indicator coded to equal one for mulitnational firms (i.e., firms with any foreign pre-tax income (PIFO not missing))
NSUBS IN TAX HAVEN	The log of 1 + the number of subsidiaries in tax havens listed in Exhibit 21
NSUBS IN FOREIGN COUNTRY	The log of 1 + the number of foreign subsidiaries listed in Exhibit 21
NUMBER OF GEO SEGS	The log of 1 + the number of distinct segment identifies in the Compustat segment file
NUMBER OF NUMBERS	Number of numbers contained in the 10-K tax footnote
NUMBER OF SENTENCES	Number of sentences contained in the 10-K tax footnote
OTHER 10-K DOWNLOADS	Count of the number of times during year t that an individual from a government entity other than the IRS (e.g., Dept. of Justice) downloaded any 10-K from EDGAR for firm i
R&D INTENSITY	Higher of research and development expense (XRD) and zero divided by sales (SALE)
ROA	Pretax book income (PI) divided by total assets
SIZE	Natural log of total assets plus one

UTB	Year-end UTB balance (TXTUBEND) divided by total assets. For ease of interpretation in regression tests, UTB is the within sample UTB quintile.
UTP DISCLOSURE PERIOD	An indicator coded to equal one beginning in fiscal year 2010 for firms over $100 million in assets, beginning in 2012 for firms with over $50 million in assets, and beginning in a random year between 2010 and 2013 for any firm never subject to Schedule UTP
UTP FIRM	Firms subject to Schedule UTP reporting [i.e., firms that have assets over $100 ($50) million beginning in fiscal year 2010 (2012)]
XBRL USED FOR EXTRACTION	An indicator coded to equal one if the tax footnote was extracted using XBRL code
ZERO TAX EXPENSE	An indicator coded to equal one for firms with zero tax expense

APPENDIX 2 – Examples of M-1 and ETR Reconciliation

Schedule M-1

i

Schedule M-1 Reconciliation of Income (Loss) per Books With Income per Return

Note: Schedule M-3 required instead of Schedule M-1 if total assets are $10 million or more—see instructions

1	Net income (loss) per books		7	Income recorded on books this year not included on this return (itemize): Tax-exempt interest $ _____
2	Federal income tax per books			
3	Excess of capital losses over capital gains .			
4	Income subject to tax not recorded on books this year (itemize): _____		8	Deductions on this return not charged against book income this year (itemize):
	_____		a	Depreciation . . $ _____
5	Expenses recorded on books this year not deducted on this return (itemize):		b	Charitable contributions $ _____
a	Depreciation . . . . $ _____			_____
b	Charitable contributions . $ _____			
c	Travel and entertainment . $ _____		9	Add lines 7 and 8 . . . .
6	Add lines 1 through 5		10	Income (page 1, line 28)—line 6 less line 9

Rate Reconciliation for Biospecifics Technologies, 2008

	Year ended December 31,	
	2008	**2007**
Computed tax expense at statutory rate	34.0%	34.0%
State income taxes, net of federal tax benefit	0.1%	0.1%
Deferred revenues	(9.0%)	(25.7%)
Tax benefit of exercised options and warrant	(6.4%)	(0.4%)
Orphan drug and other tax credits	(2.2%)	-
Stock-based compensation	12.4%	14.3%
Tax benefit of NOL	(14.7%)	-
Depreciation and amortization	(8.4%)	-
Other	(1.4%)	0.2%
Increase (decrease) in valuation allowance	-	(22.5%)
	4.4%	-%

FIGURE 1
IRS Downloads by Major SEC Filing Type

Panel A: IRS Downloads by SEC Filing Type
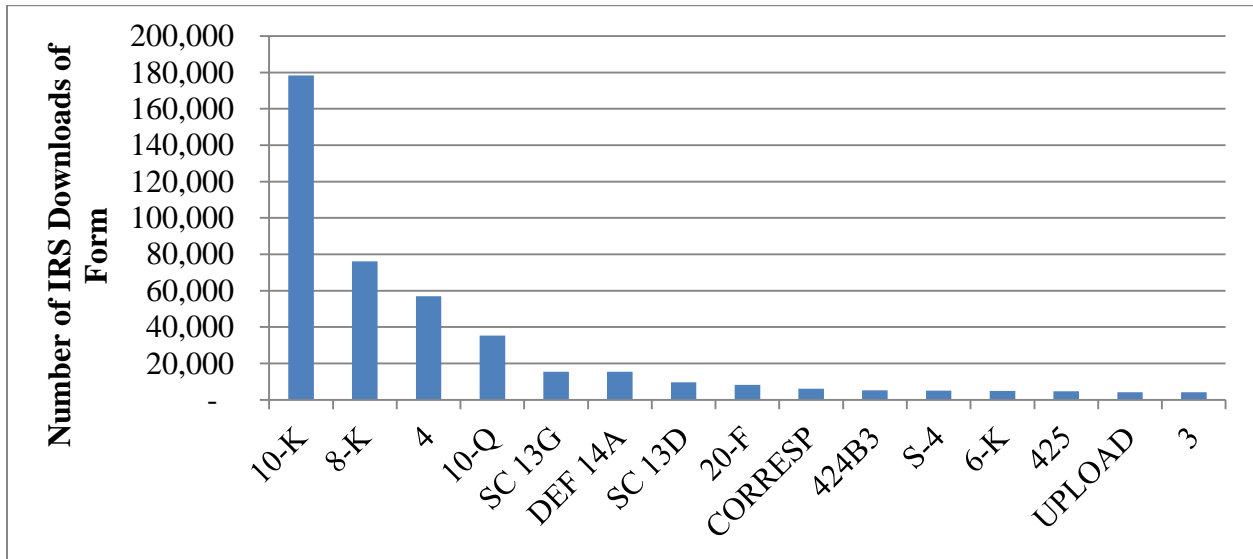
Panel B: IRS Downloads by Major SEC Filing Type over Time
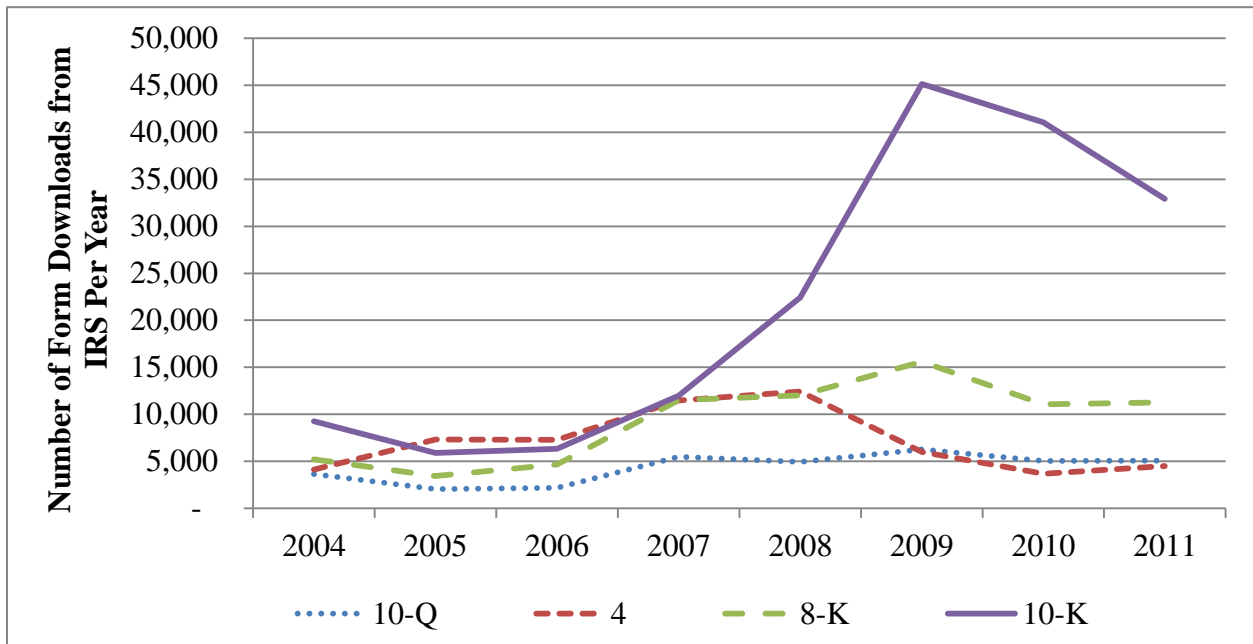
The histogram in Panel A plots the number of times the 15 most common types of forms were downloaded by an individual with an IRS IP addresses in our sample from 2004-2012. Panel B plots the number of the times during each year from 2004 to 2011 that an individual with an IRS IP address downloaded each of the following major forms: Form10-Q (Quarterly Report), Form 4 (Statement of change in beneficial ownerships), Form 8-K (Current Report), and 10-K (Annual Report).

FIGURE 2
IRS Downloads

Panel A: IRS Downloads by Time of Day
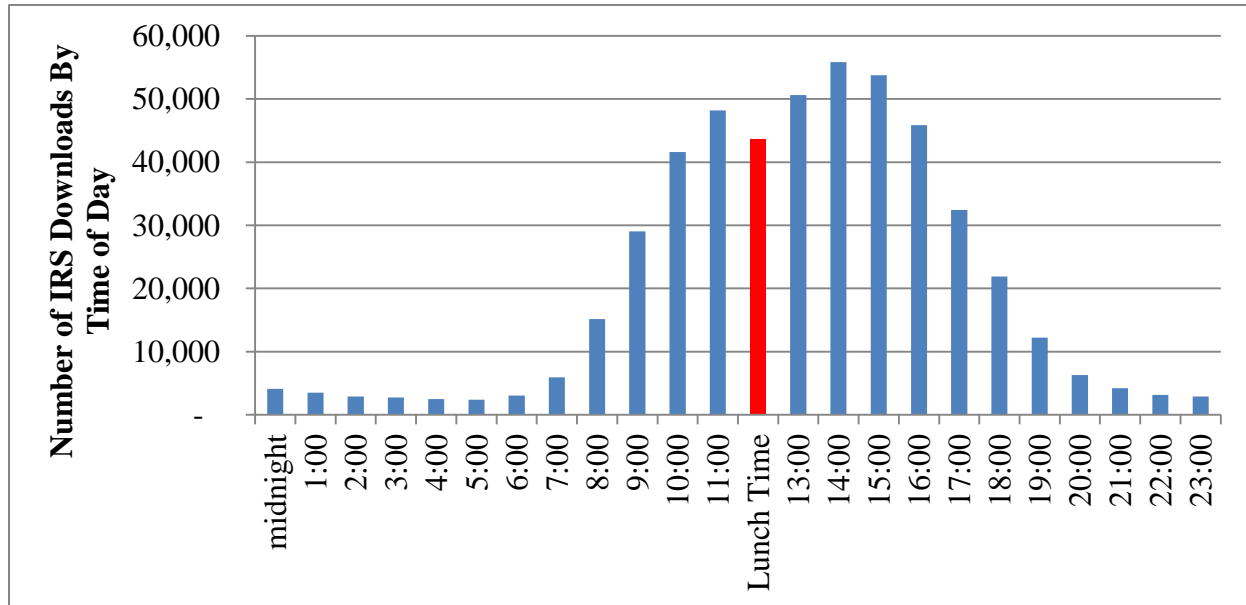
Panel B: IRS Downloads by Day of the Week
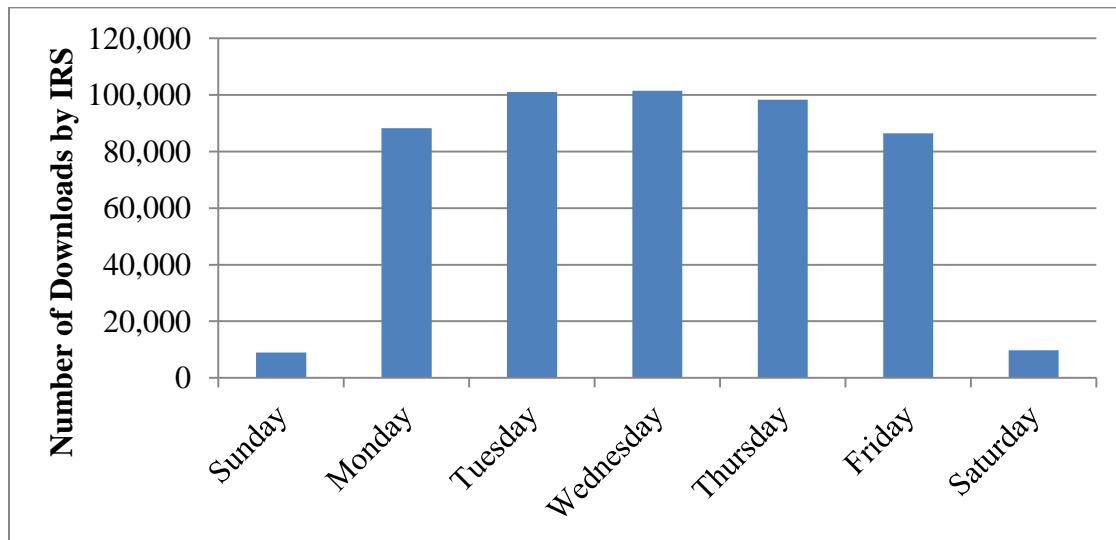
The histogram in Panel A plots the number of total downloads by an individual with an IRS IP address by the time of day (all times Eastern) over the time period from 2004-2012. The histogram in Panel B plots the total downloads by an individual with an IRS IP address by day of the week.

FIGURE 3
Tax Disclosure by Year
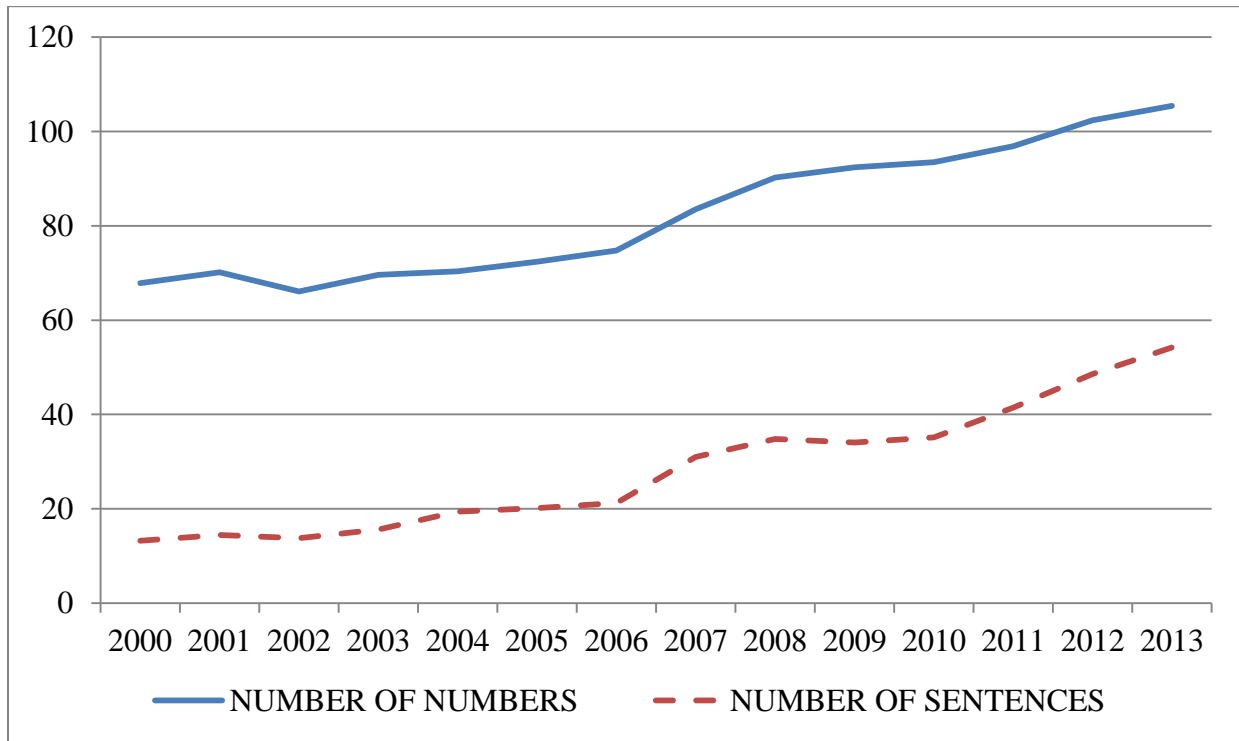
This graph represents the average *NUMBER OF NUMBERS* in the tax footnote by year, and the NUMBER OF *SENTENCES* by year, for firms in our sample from 2000-2013. *NUMBER OF NUMBERS* and NUMBER OF *SENTENCES* are as defined in the Appendix.

FIGURE 4
IRS 10-K Downloads by Various Quintile Groups

A. 10-K Downloads by GAAP ETR Quintile
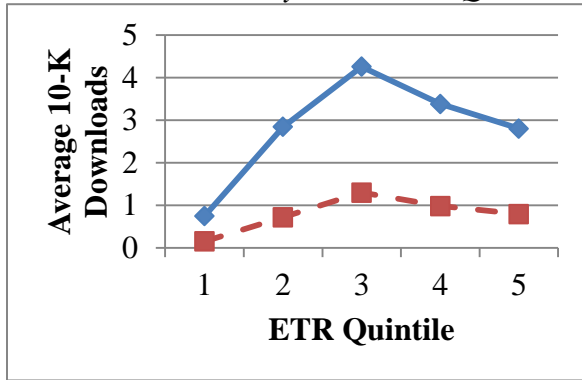
B. 10-K Downloads by CASH ETR Quintile
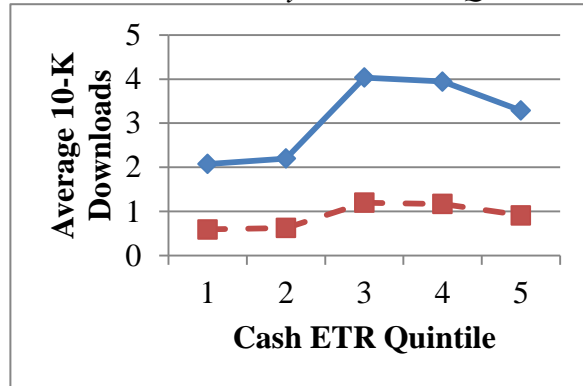
C. 10-K Downloads by BTD Quintile
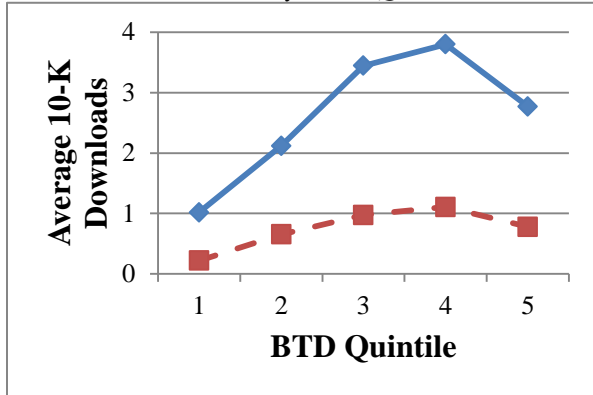
D. 10-K Downloads by UTB Quintile
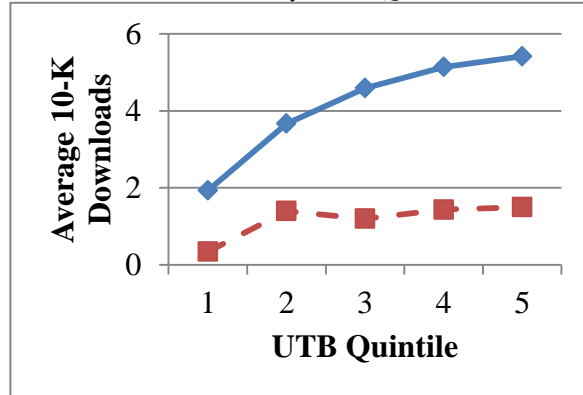
E. 10-K Downloads by ROA Quintile
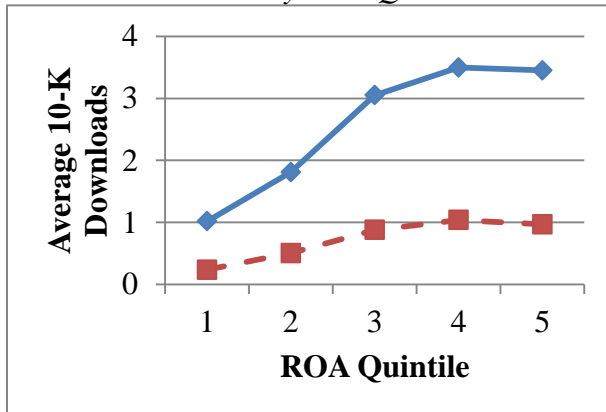
F. 10-K Downloads by CASH Quintile
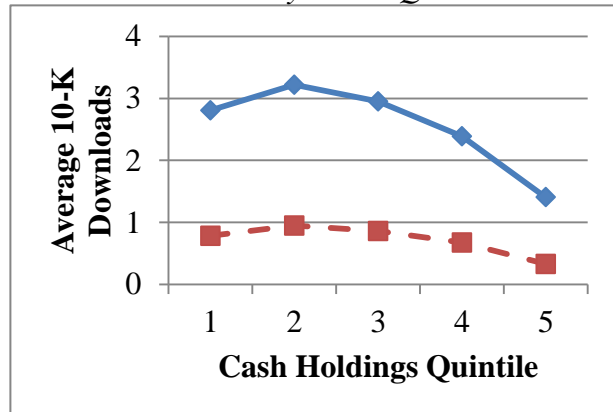
Plots of IRS Attention to 10-K filings by quintiles of select variables (see the Appendix for variable definitions). The sample period is 2004-2012, except for UTBs in Panel D, which begin in 2007 when firms first began disclosing UTBs. In each panel, the upper solid line plots IRS attention and the lower dashed line plots attention by government entities other than the IRS.

TABLE 1

Descriptive Statistics

Panel A: The IRS's use of financial disclosures

	N	Mean	St. Dev.	Median
IRS 10-K DOWNLOADS	5,842	4.85	6.63	2.00
IRS OTHER DOWNLOADS	5,842	5.61	13.06	0.00
OTHER 10-K DOWNLOADS	5,842	1.25	2.40	0.00
GAAP ETR	5,842	0.32	0.16	0.33
CASH ETR	5,842	0.24	0.18	0.23
BTD	5,842	0.03	0.80	0.03
UTB	5,842	0.01	0.01	0.00
SIZE	5,842	6.56	1.98	6.62
R&D INTENSITY	5,842	0.06	0.71	0.02
FOREIGN INCOME	5,842	0.03	0.04	0.01
LEVERAGE	5,842	0.17	0.22	0.10
INVENTORY INTENSITY	5,842	0.15	0.14	0.11
CAPITAL INTENSITY	5,842	0.22	0.20	0.16
ROA	5,842	0.11	0.08	0.09
MARKET TO BOOK	5,842	2.76	6.30	2.14
CHANGE IN NOL	5,842	0.00	0.38	0.00
CASH	5,842	0.38	13.15	0.12

Panel B: Firms' response to perceived IRS use of disclosures

	N	Mean	St. Dev.	Median
NUMBER OF NUMBERS	48,526	79.06	48.00	72.00
NUMBER OF SENTENCES	48,526	25.79	29.23	16.00
FOG INDEX	48,526	20.51	5.63	20.00
ETR	40,184	0.24	0.21	0.28
UTP DISCLOSURE PERIOD	48,526	0.20	0.40	0.00
UTP FIRM x UTP DISCLOSURE PERIOD	48,526	0.13	0.34	0.00
M-3 DISCLOSURE PERIOD	48,526	0.63	0.48	1.00
M-3 FIRM x M-3 DISCLOSURE PERIOD	48,526	0.58	0.49	1.00
SIZE	48,526	5.05	2.47	5.20
ROA	48,526	-0.30	1.28	0.01
MARKET TO BOOK	48,526	2.53	7.26	1.76
LEVERAGE	48,526	0.20	0.31	0.08
INVENTORY INTENSITY	48,526	0.12	0.16	0.06
R&D INTENSITY	48,526	0.52	2.56	0.00
CAPITAL INTENSITY	48,526	0.25	0.28	0.15
FIN48	48,526	0.51	0.50	1.00
HTML CODE	48,526	0.73	0.44	1.00
XBRL USED FOR EXTRACTION	48,526	0.04	0.19	0.00
FOREIGN INCOME INDICATOR	48,526	0.98	0.14	1.00
FOREIGN INCOME	48,526	0.01	0.03	0.00
ZERO TAX EXPENSE	48,526	0.21	0.40	0.00
CHANGE IN NOL	48,526	0.13	0.63	0.00
UTB	48,526	0.00	0.01	0.00
LN(10K NUMBERS)	48,526	7.82	0.77	7.68
LN(10K SENTENCES)	48,526	10.61	0.72	10.55

Panel A of Table 1 contains descriptive statistics for the sample of firm-year observations from 2007-2012 for the analysis pertaining to the IRS's use of financial disclosures. All variables come from Compustat, with the exception of the download count variables, which come from the SEC. These general data are the basis for Tables 2-6 and Table 9, but the sample for each table may vary based on the sample restrictions related to (1) the need for a UTB balance and (2) the need to be profitable in order to calculate a meaningful ETR. Panel B contains descriptive statistics for the sample of firm-year observations from 2007-2012 for the analysis pertaining to firms' response to perceived IRS use of disclosures (i.e., Tables 7-8). All variables come from Compustat, with the exception of the disclosure variables, which are derived from 10-Ks downloaded from EDGAR. See Appendix 1 for variable definitions.

TABLE 2

IRS Attention to Firm Characteristics in 10-K Filings

DEPENDENT VARIABLE   *LOG OF IRS 10-K DOWNLOADS*

VARIABLE	Column 1	Column 2	Column 3	Column 4	Column 5
SIZE			0.195***	0.167***	0.076***
			(10.77)	(36.71)	(6.46)
TOP100			0.397***	0.421***	-0.024
			(7.08)	(14.65)	(-0.50)
MARKET TO BOOK			-0.002*	0.000	0.000
			(-1.83)	(0.97)	(0.77)
MNE			0.866**	1.517***	0.080
			(2.52)	(6.15)	(0.33)
LEVERAGE			-0.015	-0.045**	-0.014
			(-0.56)	(-2.04)	(-0.72)
R&D INTENSITY			-0.003**	0.000	0.000
			(-2.58)	(0.45)	(0.20)
INVENTORY INTENSITY			-0.572***	0.154***	-0.119*
			(-5.45)	(2.99)	(-1.71)
CAPITAL INTENSITY			-0.350***	-0.065**	-0.032
			(-5.62)	(-2.18)	(-0.77)
ROA			-0.021***	-0.019***	-0.007**
			(-5.22)	(-8.57)	(-2.11)
LOSS			0.116***	0.023	0.023
			(5.05)	(1.45)	(1.56)
CHANGE IN NOL			0.003	0.010***	0.006**
			(0.78)	(3.89)	(2.23)
CASH			0.011	-0.059***	-0.022*
			(0.60)	(-5.36)	(-1.78)
FIRM FIXED EFFECTS	YES	NO	YES	NO	YES
YEAR FIXED EFFECTS	NO	YES	NO	YES	YES
S.E. CLUSTERED BY:	FIRM	FIRM	FIRM	FIRM	FIRM
OBSERVATIONS	21,507	21,507	21,507	21,507	21,507
ADJUSTED R²	0.399	0.313	0.413	0.500	0.676

Table 2 presents results from OLS regressions on the relation between IRS Attention and various firm characteristics. *LOG OF IRS 10-K DOWNLOADS* is the log of one plus the count of the number of times in year *t* that a computer from the IRS downloaded one of company *i*'s 10-Ks related to any fiscal year. The sample period goes from 2004-2012 and contains all firms in the sample. See Appendix 1 for variable definitions. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively (two-tailed).

TABLE 3

IRS Attention to Tax Avoidance Characteristics in 10-K Filings

DEPENDENT VARIABLE			LOG OF IRS 10-K DOWNLOADS				
VARIABLE	*PRED.*	**Column 1**	**Column 2**	**Column 3**	**Column 4**	**Column 5**	**Column 6**
CASH ETR	(-)	-0.105**					
		(-2.19)					
GAAP ETR	(-)		-0.015				
			(-0.23)				
DOMESTIC ETR	(-)			-0.000*			
				(-1.84)			
FOREIGN ETR	(-)			0.002			
				(1.16)			
CURRENT ETR	(-)				-0.044		
					(-0.41)		
DEFERRED ETR	(-)				0.019		
					(0.17)		
UTB	(+)					0.050***	
						(5.07)	
BTD	(+)						-0.000
							(-0.06)
SIZE		0.121***	0.095***	0.206***	0.119***	0.062***	0.083***
		(4.00)	(3.15)	(4.07)	(2.76)	(3.38)	(6.66)
MARKET TO BOOK		-0.001	-0.001	0.000	-0.002	0.001	0.001
		(-0.82)	(-0.82)	(0.22)	(-0.97)	(1.07)	(1.02)
MNE		0.430	0.284	0.197	0.655	0.055	-0.033
		(1.14)	(0.71)	(0.43)	(0.94)	(0.17)	(-0.13)
LEVERAGE		-0.058	0.007	-0.118	0.048	-0.011	-0.029
		(-1.01)	(0.12)	(-1.16)	(0.55)	(-0.39)	(-1.40)
R&D INTENSITY		-0.069	-0.005**	0.119	-0.008*	-0.000	-0.000
		(-0.19)	(-2.18)	(0.18)	(-1.91)	(-0.08)	(-0.17)
INVENTORY INTENSITY		-0.185	-0.262*	0.031	-0.347	0.013	-0.128
		(-1.23)	(-1.73)	(0.11)	(-1.55)	(0.11)	(-1.64)
CAPITAL INTENSITY		0.063	0.069	-0.183	0.072	-0.138*	-0.035
		(0.58)	(0.59)	(-0.77)	(0.43)	(-1.86)	(-0.77)
ROA		-0.020	0.082	-0.147	-0.094	-0.004	-0.007*
		(-0.13)	(0.53)	(-0.56)	(-0.42)	(-0.90)	(-1.88)
CHANGE IN NOL		-0.007	-0.001	-0.021	0.015	0.007	0.006
		(-0.39)	(-0.05)	(-0.56)	(0.76)	(1.34)	(1.64)
CASH		-0.037	-0.050	-0.134	0.036	-0.037*	-0.016
		(-0.75)	(-1.02)	(-1.42)	(0.54)	(-1.73)	(-1.18)
LOSS						0.010	0.019
						(0.47)	(1.03)
YEAR & FIRM FIXED EFFECTS		YES	YES	YES	YES	YES	YES
S.E. CLUSTERED BY:		FIRM	FIRM	FIRM	FIRM	FIRM	FIRM
OBSERVATIONS		11,500	11,054	6,151	6,628	13,543	18,930
ADJUSTED R^2		0.682	0.690	0.694	0.737	0.695	0.680

Table 3 presents results from OLS regressions on the relation between IRS Attention and several proxies of tax avoidance. Loss firms are excluded from the four ETR regressions in Columns 1-4 as a negative denominator makes ETRs uninterpretable. Observations with insufficient data to calculate *CURRENT, DEFERRED, DOMESTIC,* or *FOREIGN ETR*s are excluded from the analysis in Columns 3 & 4. In the analysis presented in Columns 5-6, *BTD* and *UTB* are ranked into quintiles for ease of interpretation. The analysis in Column 5 is restricted to observations from 2007-2012 as firms did not report *UTB*s prior to that time. See Appendix 1 for variable definitions. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively (two-tailed).

TABLE 4
IRS Attention versus Other Government Attention to 10-Ks

DEPENDENT VARIABLE		LOG OF IRS 10-K DOWNLOADS	LOG OF OTHER 10-K DOWNLOADS		
VARIABLE	*PRED.*	**Column 1**	**Column 2**	*H₀: Column 1 = Column 2*	
GAAP ETR	*(-)*	0.187*	0.089	χ2	1.10
		(1.69)	(0.99)	P-value	0.294
CASH ETR	*(-)*	-0.188**	-0.015	χ2	5.23**
		(-2.14)	(-0.23)	P-value	0.0222
BTD	*(+)*	-0.001	0.007	χ2	0.53
		(-0.05)	(0.70)	P-value	0.4648
UTB	*(+)*	0.050***	0.004	χ2	15.14***
		(2.99)	(0.32)	P-value	0.0001
SIZE		0.138*	0.138***		
		(1.89)	(2.62)		
R&D INTENSITY		-0.412	0.272		
		(-0.68)	(0.58)		
MNE		0.482	0.344		
		(0.69)	(0.60)		
LEVERAGE		-0.158	0.152		
		(-1.38)	(1.37)		
INVENTORY INTENSITY		-0.134	-0.111		
		(-0.40)	(-0.47)		
CAPITAL INTENSITY		-0.053	-0.129		
		(-0.22)	(-0.71)		
ROA		0.141	-0.176		
		(0.44)	(-0.76)		
MARKET TO BOOK		-0.001	-0.003		
		(-0.26)	(-1.38)		
CHANGE IN NOL		0.023	0.022		
		(0.67)	(1.11)		
CASH		-0.177	-0.106		
		(-1.48)	(-1.27)		
FIRM & YEAR FIXED EFFECTS		YES	YES		
S.E. CLUSTERED BY:		FIRM	FIRM		
OBSERVATIONS		5,842	5,842		
ADJUSTED R²		0.710	0.613		

Table 4 reports the results of regressing two measures of attention—from the IRS and from other government entities—on several measures of tax avoidance. *LOG OF IRS (OTHER GOVERNMENT) 10-K DOWNLOADS* is the log of one plus the count of the number of times in year *t* that a computer from the IRS (another government entity) downloaded one of company *i*'s 10-Ks related to any fiscal year. *BTD* and *UTB* are ranked into quintiles for interpretation. Since losses cause *ETRs* to be uninterpretable and *UTBs* are only available after 2007, the sample used in this table is restricted to profitable observations from 2007-2012. See Appendix 1 for variable definitions. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively (two-tailed).

DEPENDENT VARIABLE		LOG OF IRS 10-K DOWNLOADS	LOG OF OTHER GOV'T 10-K DOWNLOADS		
VARIABLE	PRED.	**Column 1**	**Column 2**	H_0: *Column 1 = Column 2*	
FIN48	*(+)*	0.819***	0.202***	$\chi 2$	894.97***
		(32.42)	(11.19)	P-value	0.0000
GAAP ETR		0.016	0.014		
		(0.17)	(0.22)		
CASH ETR		-0.202***	-0.109**		
		(-2.99)	(-2.38)		
BTD		0.007	0.008		
		(0.72)	(1.09)		
SIZE		0.031	0.153***		
		(0.79)	(5.35)		
R&D INTENSITY		-1.342**	-0.532		
		(-2.40)	(-1.38)		
MNE		0.936*	0.777*		
		(1.69)	(1.82)		
LEVERAGE		-0.230***	0.015		
		(-2.65)	(0.21)		
INVENTORY INTENSITY		-0.860***	-0.231		
		(-3.95)	(-1.32)		
CAPITAL INTENSITY		0.084	-0.224*		
		(0.50)	(-1.79)		
ROA		-0.682***	-0.264		
		(-2.93)	(-1.58)		
MARKET TO BOOK		-0.003	-0.001		
		(-1.11)	(-0.83)		
CHANGE IN NOL		0.011	0.027*		
		(0.37)	(1.95)		
CASH		0.131	0.056		
		(1.59)	(1.21)		
FIRM FIXED EFFECTS		YES	YES		
YEAR FIXED EFFECTS		NO	NO		
S.E. CLUSTERED BY:		FIRM	FIRM		
OBSERVATIONS		9,208	9,208		
ADJUSTED R^2		0.546	0.517		

Table 5 reports the results of regressing two measures of attention—IRS and other—on an indicator for the imposition of *FIN48*. *LOG OF IRS (OTHER GOVERNMENT) 10-K DOWNLOADS* is the log of one plus the count of the number of times in year *t* that a computer from the IRS (another government entity) downloaded one of company *i*'s 10-Ks related to any fiscal year. The test variable, *FIN48,* is an indicator variable set equal to one for years following the implementation of FIN 48 (i.e., 2007-2012) and equal to zero otherwise. *BTD* are ranked into quintiles for interpretation. Since losses cause *ETRs* to be uninterpretable, the sample for this table is restricted to profitable observations from 2004-2012. See Appendix 1 for variable definitions. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively (two-tailed).

TABLE 6

IRS Attention versus Other Government Attention to 10-Ks for Firms Reporting a UTB

DEPENDENT VARIABLE	LOG OF IRS 10-K DOWNLOADS	LOG OF OTHER GOV'T 10-K DOWNLOADS		
VARIABLE	**Column 1**	**Column 2**	H_0: *Column 1 = Column 2*	
*FIN48 * UTB FIRM*	0.234***	0.163***	χ2	2.90*
	(4.27)	(5.11)	P-value	0.0884
GAAP ETR	0.065	0.061		
	(0.84)	(0.97)		
CASH ETR	-0.117**	-0.008		
	(-1.99)	(-0.18)		
BTD	0.005	0.008		
	(0.63)	(1.18)		
SIZE	0.143***	0.127***		
	(3.73)	(4.24)		
R&D INTENSITY	-0.238	-0.151		
	(-0.50)	(-0.38)		
MNE	0.020	0.326		
	(0.04)	(0.80)		
LEVERAGE	-0.073	0.091		
	(-0.97)	(1.32)		
INVENTORY INTENSITY	-0.356*	-0.154		
	(-1.94)	(-0.85)		
CAPITAL INTENSITY	0.157	-0.180		
	(1.12)	(-1.47)		
ROA	0.149	0.012		
	(0.75)	(0.07)		
MARKET TO BOOK	-0.001	-0.001		
	(-0.28)	(-0.59)		
CHANGE IN NOL	0.005	0.028*		
	(0.17)	(1.87)		
CASH	-0.078	-0.040		
	(-1.18)	(-0.85)		
YEAR FIXED EFFECTS	*YES*	*YES*		
FIRM FIXED EFFECTs	*YES*	*YES*		
S.E. CLUSTERED BY:	*FIRM*	*FIRM*		
OBSERVATIONS	*9,208*	*9,208*		
ADJUSTED R²	*0.686*	*0.564*		

Table 6 reports the results of regressing two measures of attention—IRS and other—on an indicator for the imposition of *FIN48* interacted with an indicator for firms that have ever reported a positive unrecognized tax benefit (*UTB FIRM*). *LOG OF IRS (OTHER GOVERNMENT) 10-K DOWNLOADS* is the log of one plus the count of the number of times in year *t* that a computer from the IRS (another government entity) downloaded one of company *i*'s 10-Ks related to any fiscal year. *BTD* are ranked into quintiles for interpretation. Since losses cause *ETRs* to be uninterpretable, the sample for this analysis presented in this table is restricted to profitable observations from 2004-2012. See Appendix 1for variable definitions. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively (two-tailed).

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TABLE 7
The Impact of Schedule M-3 on Tax Footnote Disclosures

DEPENDENT VARIABLE:		NUMBER OF NUMBERS	NUMBER OF SENTENCES	FOG INDEX
VARIABLE	PRED.	**Column 1**	**Column 2**	**Column 3**
M-3 DISCLOSURE PERIOD		-9.980***	-7.920***	0.531
		(-4.59)	(-5.88)	(1.49)
M-3 FIRM * M-3 DISCLOSURE PERIOD	(+/+/-)	9.996***	10.651***	-0.563*
		(5.50)	(9.30)	(-1.75)
SIZE		5.684***	1.096***	-0.085
		(11.43)	(3.23)	(-1.40)
ROA		-1.418***	-0.434**	-0.018
		(-5.32)	(-2.38)	(-0.49)
MARKET TO BOOK		0.006	0.026	0.000
		(0.25)	(1.35)	(0.01)
LEVERAGE		-0.150	0.339	-0.056
		(-0.18)	(0.60)	(-0.52)
INVENTORY INTENSITY		-10.934***	-4.030**	0.297
		(-3.57)	(-2.16)	(0.65)
R&D INTENSITY		-0.069	0.062	-0.007
		(-0.52)	(0.64)	(-0.58)
CAPITAL INTENSITY		-2.964*	0.044	0.075
		(-1.65)	(0.04)	(0.33)
FIN48		39.327***	36.656***	-2.209***
		(14.46)	(23.86)	(-7.49)
HTML CODE		-9.484***	-4.401***	0.080
		(-10.13)	(-7.82)	(0.57)
XBRL USED FOR EXTRACTION		-10.206***	1.073	-0.235
		(-5.99)	(0.67)	(-1.08)
MNE		2.896	2.623*	-0.318
		(1.28)	(1.82)	(-0.90)
FOREIGN INCOME		-3.396	13.331*	-0.645
		(-0.38)	(1.86)	(-0.69)
ZERO TAX EXPENSE		-8.841***	0.216	0.127
		(-8.27)	(0.32)	(1.05)
CHANGE IN NOL		-0.208	0.136	0.010
		(-0.52)	(0.48)	(0.27)
UTB		347.698***	233.106***	4.260
		(10.43)	(9.43)	(1.10)
LN(10K NUMBERS)		0.823		
		(0.87)		
LN(10K SENTENCES)			0.545	
			(1.41)	
FIRM & YEAR FIXED EFFECTS		YES	YES	YES
S.E. CLUSTERED BY:		FIRM	FIRM	FIRM
OBSERVATIONS		48,526	48,526	48,526
ADJUSTED R^2		0.667	0.580	0.523

Table 7 reports the results of regressing tax footnote attributes on an indicator for the imposition of Schedule M-3 (*M-3 DISCLOSURE PERIOD*) interacted with an indicator for firms subject to it (*M-3 FIRM*). *NUMBER OF NUMBERS* is a count of the numbers included in firm *i*'s tax footnote in year *t*. *NUMBER OF SENTENCES* is a count of the sentences included in firm *i*'s tax footnote in year *t*. *FOG INDEX* is the readability score for firm *i*'s tax footnote in year *t*. We include observations from 2000-2013 in this table. See Appendix 1 for variable definitions. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively (two-tailed).

TABLE 8

The Impact of Schedule UTP on Tax Footnote Disclosures

DEPENDENT VARIABLE:		NUMBER OF NUMBERS	NUMBER OF SENTENCES	FOG INDEX
VARIABLE	PRED.	**Column 1**	**Column 2**	**Column 3**
UTP DISCLOSURE PERIOD		-4.323***	-6.373***	0.213
		(-3.36)	(-7.28)	(1.29)
UTP FIRM * UTP DISCLOSURE PERIOD	(+/+/-)	18.669***	16.795***	-0.037
		(13.32)	(15.88)	(-0.20)
SIZE		5.484***	0.894***	-0.104*
		(11.43)	(2.75)	(-1.71)
ROA		-1.304***	-0.321*	-0.017
		(-4.93)	(-1.77)	(-0.47)
MARKET TO BOOK		-0.004	0.016	0.000
		(-0.17)	(0.84)	(0.06)
LEVERAGE		-0.384	0.057	-0.044
		(-0.48)	(0.10)	(-0.41)
INVENTORY INTENSITY		-10.833***	-3.910**	0.304
		(-3.56)	(-2.11)	(0.66)
R&D INTENSITY		-0.082	0.047	-0.006
		(-0.62)	(0.51)	(-0.55)
CAPITAL INTENSITY		-2.954*	0.161	0.072
		(-1.67)	(0.14)	(0.32)
FIN48		32.880***	34.524***	-2.383***
		(13.98)	(25.70)	(-10.01)
HTML CODE		-8.644***	-3.674***	0.085
		(-9.38)	(-6.65)	(0.61)
XBRL USED FOR EXTRACTION		-10.805***	0.494	-0.239
		(-6.45)	(0.32)	(-1.09)
MNE		2.453	2.159	-0.314
		(1.10)	(1.51)	(-0.89)
FOREIGN INCOME		-8.595	9.174	-0.715
		(-0.97)	(1.31)	(-0.77)
ZERO TAX EXPENSE		-9.488***	-0.350	0.130
		(-8.97)	(-0.53)	(1.08)
CHANGE IN NOL		-0.307	0.045	0.011
		(-0.76)	(0.16)	(0.29)
UTB		302.081***	194.320***	3.604
		(9.54)	(8.32)	(0.95)
LN(10K NUMBERS)		-0.373		
		(-0.40)		
LN(10K SENTENCES)			0.266	
			(0.70)	
FIRM & YEAR FIXED EFFECTS		YES	YES	YES
S.E. CLUSTERED BY:		FIRM	FIRM	FIRM
OBSERVATIONS		48,526	48,526	48,526
ADJUSTED R^2		0.670	0.586	0.523

Table 8 reports the results of regressing tax footnote attributes on an indicator for the imposition of Schedule UTP (*UTP DISCLOSURE PERIOD*) interacted with an indicator for firms subject to it (*UTP FIRM*). *NUMBER OF NUMBERS* is a count of the numbers included in firm *i*'s tax footnote in year *t*. *NUMBER OF SENTENCES* is a count of the sentences included in firm *i*'s tax footnote in year *t*. *FOG INDEX* is the readability score for firm *i*'s tax footnote in year *t*. We include observations from 2000-2013 in this table. See Appendix 1 for variable definitions. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively (two-tailed).

TABLE 9

Additional Analysis: IRS Attention to Other Financial Statement Characteristics

DEPENDENT VARIABLE			LOG OF IRS 10-K DOWNLOADS				
VARIABLE	**Column 1**	**Column 2**	**Column 3**	**Column 4**	**Column 5**	**Column 6**	**Column 7**
NSUBS IN TAX HAVEN	0.043*						
	(1.75)						
NSUBS IN FOR. COUNTRY		0.039**					
		(2.06)					
NUMBER OF GEO SEGS			0.078*				
			(1.73)				
WORD COUNT				0.012*			
				(1.95)			
UNIQUE CODE SECTIONS					0.004		
					(0.81)		
IRS REFERENCE						0.004	
						(0.77)	
IRC REFERENCE							0.008
							(1.12)
SIZE	0.073***	0.070***	0.095***	0.077***	0.071***	0.080***	0.080***
	(3.84)	(3.62)	(4.27)	(5.72)	(6.27)	(6.06)	(6.01)
R&D INTENSITY	0.000	0.000	-0.002	0.000	0.000	0.000	0.000
	(0.15)	(0.16)	(-0.83)	(0.11)	(0.23)	(0.05)	(0.06)
MNE	0.129	0.136	-0.111	0.051	0.039	0.042	0.030
	(0.41)	(0.43)	(-0.38)	(0.20)	(0.16)	(0.16)	(0.12)
LEVERAGE	0.001	-0.000	0.007	-0.036	-0.007	-0.035	-0.034
	(0.03)	(-0.01)	(0.18)	(-1.50)	(-0.38)	(-1.45)	(-1.41)
INVENTORY INTENSITY	-0.099	-0.103	-0.140	-0.191**	-0.117*	-0.195**	-0.191**
	(-0.72)	(-0.75)	(-0.98)	(-2.09)	(-1.65)	(-2.13)	(-2.09)
CAPITAL INTENSITY	-0.041	-0.039	-0.103	-0.074	-0.038	-0.071	-0.071
	(-0.53)	(-0.50)	(-1.12)	(-1.25)	(-0.89)	(-1.21)	(-1.21)
ROA	-0.008	-0.008	-0.021**	-0.007	-0.005	-0.008	-0.008
	(-1.02)	(-0.98)	(-2.39)	(-1.43)	(-1.45)	(-1.56)	(-1.56)
MARKET TO BOOK	-0.000	-0.000	0.001	0.001	0.000	0.001	0.001
	(-0.20)	(-0.17)	(0.58)	(1.20)	(0.79)	(1.19)	(1.19)
CHANGE IN NOL	0.007	0.007	-0.007	0.007*	0.006**	0.007*	0.007*
	(1.11)	(1.08)	(-0.90)	(1.65)	(2.12)	(1.67)	(1.66)
CASH	-0.034	-0.032	-0.048	-0.043***	-0.021*	-0.044***	-0.044***
	(-1.51)	(-1.40)	(-1.31)	(-2.85)	(-1.72)	(-2.95)	(-2.94)
YEAR & FIRM FIXED EFFECTS	YES	YES	YES	YES	YES	YES	YES
S.E. CLUSTERED BY:	FIRM	FIRM	FIRM	FIRM	FIRM	FIRM	FIRM
OBSERVATIONS	12,329	12,329	10,546	18,339	20,991	18,339	18,339
ADJUSTED R^2	0.693	0.693	0.686	0.677	0.680	0.677	0.677

Table 9 presents results from OLS regressions on the relation between IRS Attention and several proxies for the extent of a firm's foreign operations (Columns 1-3), the amount of narrative information reported in the 10-K (Column 4), and the amount of technical tax detail referenced in the 10-K (Columns 5-7). For each test, the sample contains all observations with sufficient data to run the test from 2004-2012. See Appendix 1 for variable definitions. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively (two-tailed).