

# THE COST OF SELF-REPORTING

ISRAEL KLEIN\*

## ABSTRACT

*The American taxpayer, whether a publicly-traded 100 billion dollar corporation or a single-mother working part-time, is legally required to self-assess their tax liability and then send a tax return along with a check to the IRS. While acting as an agent of the government for the purpose of assessing and collecting taxes, the taxpayer can engage in opportunistic reporting which, although not necessarily in conformity with the tax code, is expected to result in a tax savings since in all likelihood, the submitted return will not be audited.*

*By investigating opportunistic reporting and the factors bringing it about, this article presents some novel findings with respect to the tremendous cost in lost tax revenues when tax is collected through self-reporting, and the means available for reducing the cost of using taxpayers as collection agents.*

*Opportunistic reporting leads to more than \$20 billion in lost tax revenues every year. Nevertheless, popular tax parameters prevalent in regulatory discourse and legal research do not convey information about these practices, hence opportunistic reporting and the circumstances allowing it are left obscure and unaddressed by the legal system.*

*Novel empirical analysis of alternative tax parameters reveals that R&D expenses are prominent factors in generating opportunistic reporting. Thus, the remedy suggested by the article—using insights from agency theory—is to allow companies to report such expenses in tax returns only if these same expenses are recognized and reported as R&D expenses in all other company financial statements – those furnished to other stakeholders, such as investors, creditors and regulators.*

## INTRODUCTION

The current debate over changes required to the corporate tax regime is fueled by arguably unfair low taxes paid by large US corporations.<sup>1</sup> American corporations

---

\* Hebrew University of Jerusalem (HUJI); Harvard Law School (HLS) (Visiting Researcher, 2016/17); I would like to thank Lucian Bebchuk, Alma Cohen, Jesse Fried, Michelle Hanlon, Coen Maas, Stephen Shay, Thomas Brennan.

<sup>1</sup> See e.g. Christopher Helman, *What America's Biggest Companies Pay in Taxes*, FORBESONLINE (Apr. 18, 2017) <https://www.forbes.com/sites/christopherhelman/2017/04/18/what-americas-biggest-companies-pay-in-taxes/#2904e84a2f51> (last visited Aug. 13, 2017); Patricia Cohen, *Profitable Companies, No Taxes: Here's How They Did It*, N. Y. TIMES (Mar. 9, 2017)

engaged in multinational operations, e.g., Apple Inc., are accused of keeping billions of dollars' worth of unreported profits in foreign subsidiaries<sup>2</sup> only to avoid US tax. A key parameter in the current debate is the low effective tax rate (ETR) reported by such public companies.<sup>3</sup> The ETR represents the ratio of a company's overall tax liability to its pre-tax income; companies such as Intel and Google (Alphabet Inc.) reported effective tax rates for 2016 as low as 20.3% and 22.23% (respectively), well below the current statutory federal corporate tax rate of 35%.

While the financial press has compared companies' low ETR rates with the statutory tax rate<sup>4</sup>—suggesting public companies do not pay their fair share<sup>5</sup>—legal researchers<sup>6</sup> have looked at the underlying reporting phenomena: Companies reporting high pre-tax income on their annual financial statements—prepared for investors according to financial accounting standards<sup>7</sup>—while simultaneously stating a much lower taxable income on their 1120s filed with the Internal Revenue Service (IRS).<sup>8</sup> The gap between the high income reported to investors (known as “book income”) and the much lower income reported to the IRS (known as “tax income”) has caused legal scholars to suggest aligning investor-reporting with tax-reporting, thereby curtailing aggressive tax behavior intended to lower tax income by the effect it will have on book income.<sup>9</sup>

---

<https://www.nytimes.com/2017/03/09/business/economy/corporate-tax-report.html> (last visited Aug. 13, 2017).

<sup>2</sup> See Fadi Shaheen, *The GAAP Lock-out Effect and the Investment Behavior of Multinational Firms*, 67 *Tax L. Rev.* 211 (2014) (discusses the investment behavior of multinational firms with respect to their locked-out foreign earnings); See also Paul Hannon & Sam Schechner, *Tim Cook Says Apple Could Send Cash Back to U.S. Next Year*, *WALL ST. J.* (Sep. 1, 2016) <https://www.wsj.com/articles/apple-chief-executive-expects-ireland-to-appeal-eu-tax-ruling-1472720654>

<sup>3</sup> *Supra* note 1.

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*

<sup>6</sup> See e.g., Daniel Shaviro, *The Optimal Relationship between Taxable Income and Financial Accounting Income: Analysis and a Proposal*, 97 *GEO. L.J.* 423 (2009) (proposes a simple and uniform percentile adjustment on financial accounting income); Mihir A. Desai, *The Degradation of Reported Corporate Profits*, 19 *J. ECON. PERSP.* 171 (2005) (suggests beginning with accounting-based measures of income and then identifying exceptions); Celia Whitaker, *Bridging the Book-Tax Accounting Gap*, 115 *YALE L.J.* 680, 688 (2005) (advocates a system of near-total book-tax conformity that uses financial income – as reported to investor – as the starting point for taxable income); Gil B. Manzon & George A. Plesko, *The Relation Between Financial and Tax Reporting Measures of Income* 55 *TAX L. REV.* 175 (2002) (explores the magnitude and source of differences between book and taxable income).

<sup>7</sup> Israel Klein, *The Gap in the Perception of the GAAP*, 54 *Am. Bus. L. J.* 581, 594-603 (2017) (reviews accounting norms and their prescribers).

<sup>8</sup> Form 1120 – U.S. Corporation Income Tax Return, see in general IRS, *Form 1120, U.S. Corporation Income Tax Return*, INT. REV. SER. <https://www.irs.gov/uac/about-form-1120> (last visited Aug. 13, 2017)

<sup>9</sup> “Yet the persistent book-tax gap, or excess of reported financial accounting income over taxable income, reflects not these differences but corporate managers' incentives to engage in two socially undesirable activities: tax sheltering on behalf of shareholders and earnings management on their own behalf ... requiring book-tax conformity would have the desirable feature of creating Madisonian tension

While ETR and the gap between book income and tax income (book-tax difference, or “BTD”), two classic tax parameters, have justifiably taken center-stage in past discussions of changes required in the corporate tax regime,<sup>10</sup> this article argues that the continued focus on classic tax parameters has caused enormous revenue loss—not informed by the classic parameters—to be overlooked by policy makers.

Specifically, this article argues that classic parameters convey information about companies’ “conformant” tax practices (in this context, the word “conformant” is used to denote tax practices in conformity with the tax code), i.e., companies reducing their tax liability by adopting tax positions that conform to the tax code and also take advantage of esoteric “loopholes” in the code and questionable—though not (yet) explicitly-prohibited—interpretations of the code, in order to reduce a company’s tax liability. While providing information on conformant practices, classic parameters, nevertheless, do not convey information about “opportunistic” practices that involve non-conformant use of tax doctrines, i.e., companies using the opportunity to self-report in order to take legal positions that correspond frivolously or not at all with the tax code; such as not filing local tax returns in some states where the company has local revenues.<sup>11</sup>

Such more recent opportunistic practices are considered to represent the most aggressive and problematic tax behavior endorsed by corporations. While conformant practice reduces tax liability by “tweaking” tax results to an extent still within the limits of prevailing tax doctrine, opportunistic practice reduces taxes by taking advantage of the tax system’s underlying collection infrastructure, i.e., the requirement that companies self-report. Yet, due to the predominance of classic parameters in the discourse,<sup>12</sup> opportunistic practices and the treatment of the roots of their prominence remain overlooked by policy makers.

Following the theoretical, and as explained below, the normative distinction between conformant positions and opportunistic positions, this article points to the fact that, practically speaking, President Trump’s current reform planned for the corporate

---

between the managers' twin aims, reducing the incentive to play games and the scope of what they could accomplish.” (Shaviro, *supra* note 6 at 484).

<sup>10</sup> See e.g. Treasury Dep’t, *The Problem of Corporate Tax Shelters: Discussion, Analysis and Legislative Proposals* 84 (1999), 1999 TNT 127-12, July 2, 1999, available on LEXIS, Tax Analysts File, discussed in Terry Shevlin, *Corporate Tax Shelters and Book-Tax Differences*, 55 TAX L. REV. 427, 427 (2002) (a Treasury report that indicated a growing spread between book and taxable income, which Treasury interpreted as being possibly due to growing corporate tax shelter activity).

<sup>11</sup> See Andrew Jones, *FASB—The IRS’s New Best Friend: How Fin 48 Affects the Taxpayer-IRS Relationship and Potential Taxpayer Challenges*, 25 GA. ST. UL REV. 767 (2009); Israel Klein, *A Change in Accounting, A Change in Law*, 42 DEL. J. CORP. L., 10 (forthcoming 2017) [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2840968](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2840968) (Once a business has a substantive connection or a physical/economic presence in a state—a tax nexus—the business is subject to state income tax. As a general rule, if a taxpayer has nexus in a particular state, the taxpayer must file a return in that state).

<sup>12</sup> See Michelle Hanlon & Shane Heitzman, *A Review of Tax Research*, 50 J. Acct. & Eco. 127, 160 & TABLE 1 (2010) (provides an extensive literature review of tax parameter research); see also Helman, *supra* note 1 & Cohen *supra* note 1 for an example from the press tax discourse

tax regime,<sup>13</sup> i.e., reducing the general corporate tax rate,<sup>14</sup> aligns with an analysis of conformant positions; however, it does not address other acute policy requirements pointed out by an analysis of opportunistic positions. Specifically, it does not address changes required in the federal tax treatment of research and development activities (R&D).<sup>15</sup> Following the introduction of a novel conceptualization and analysis of opportunistic reporting,<sup>16</sup> this article further suggests changes to the corporate tax regime required in order to address the most significant catalyst of opportunistic positions,<sup>17</sup> i.e., the current federal corporate R&D tax regime.

This article integrates theoretical, empirical and normative components in the discussion which proceeds in four sections accompanied by a statistical appendix. Section I discusses how taxes are collected in the U.S., i.e., by legally requiring taxpayers to self-report their tax liability, and how this method inevitably allows taxpayers to make use of different types of reporting positions. Section II presents a novel distinction between conformant reporting positions and opportunistic reporting positions; it is argued that the latter do not enjoy the same extent of systematic legitimacy as the former. Section III discusses the information gap that currently exists in a company's reporting positions. It argues that classic tax parameters—relying on reported company tax expenses—do not provide information about opportunistic tax positions. In order to compete with this information gap, an alternative measurement capable of compensating for the missing information is proposed. A limited analysis of that measurement using three years of disclosures from 500 companies included in the S&P 500 provides indication of the great magnitude of opportunistic reporting, and the enormous economic cost to the American public of collecting taxes by allowing taxpayers to self-report. The section that follows, Section IV, continues with an extended empirical analysis of seven years of data taken from the financial disclosures of 9,295 publicly traded companies (2009-2015, totaling 53,441 observations). It then discusses the normative implications suggested by the empirical findings and places special emphasis on the policy implications for the existing R&D tax regime. Specifically, empirical findings indicate a statistically significant correlation between opportunistic reporting and R&D expenses, suggesting R&D expenses are a prominent factor in creating opportunistic reporting. These quantitative empirical findings are further supported by aggregated qualitative information disclosed by the IRS.<sup>18</sup> As a remedy, the section suggests utilizing insights from agency theory in order to eliminate the option of claiming R&D tax deductions and tax credits based on opportunistic

---

<sup>13</sup> See *2017 Tax Reform for Economic Growth and American Jobs* [http://newsletters.usdbriefs.com/2017/Tax/TNV/170426\\_1suppA.pdf](http://newsletters.usdbriefs.com/2017/Tax/TNV/170426_1suppA.pdf) [hereinafter: "2017 Tax Reform"]

<sup>14</sup> *Id.* ("15% business tax rate; [o]ne time tax on trillions of dollars held overseas").

<sup>15</sup> See also Stephen E. Shay; J. Clifton Fleming Jr.; Robert J. Peroni, R&D Tax Incentives: Growth Panacea or Budget Trojan Horse, 69 *Tax L. Rev.* 419, [ii] (2016) (calls for a thorough reexamination of the U.S. R&D tax incentive regime).

<sup>16</sup> See *infra* Sec. II.

<sup>17</sup> See *infra* Sec. IV.

<sup>18</sup> Schedule UTP, see *infra* Sec. IV.B.

reporting. The Appendix contains full statistical information about the empirical model and data used in the analysis, and discusses further findings.

## I. SELF-REPORTING

The American taxpayer, whether a \$100 billion publicly-traded corporation or a single-mom working part-time, is legally<sup>19</sup> required to self-assess<sup>20</sup> and self-report<sup>21</sup> their tax liabilities. Instead of establishing a governmental system that will *ex ante* administratively assess each taxpayer's individual tax liability, an "administrative-assessment system," such as exists—to different extents—in countries like Belgium and Germany,<sup>22</sup> the U.S. Congress and Treasury chose<sup>23</sup> to empower taxpayers with authority to self-assess their taxes,<sup>24</sup> a practice known as "self-reporting."<sup>25</sup> Specially-designed IRS forms regulate and guide tax reporting; nevertheless, taxpayers themselves are required to apply the Internal Revenue Code and Regulation (collectively referred below to as "the tax code" or simply "the code") and self-report.<sup>26</sup>

### A. Taxpayers as Assessment Officers<sup>27</sup>

One consequence of the historical choice to adopt self-reporting is when the factual circumstances of an individual taxpayer does not correspond to any section of the relevant code or, when a particular transaction made by a company corresponds to more than one section of the code (or, to rubrics on the 1040 form)—which are subject to

---

<sup>19</sup> See 26 U.S. Code § 6012 - Persons required to make returns of income; 26 CFR 1.6012-2 - Corporations required to make returns of income.

<sup>20</sup> See also Nicholas Barr, Simon James & Alan Prest, SELF-ASSESSMENT FOR INCOME TAX 3-4 (1977) (defines self-assessment for personal income tax as having the taxpayer responsible for calculation of total income, total tax-free income, total taxable income and total taxes due; verification activities are carried out by the tax administration only on a sample of tax returns).

<sup>21</sup> *Supra* note 19.

<sup>22</sup> Andrew Okello, *Managing Income Tax Compliance through Self-Assessment*, IMF Working Papers 14/41 (2014) <https://www.imf.org/external/pubs/ft/wp/2014/wp1441.pdf> (last visited Aug. 13, 2017).

See OECD, TAX ADMINISTRATION 2015: COMPARATIVE INFORMATION ON OECD AND OTHER ADVANCED AND EMERGING ECONOMIES (OECD Publishing, 2015) for a comparison of what is done in different countries around the world.

<sup>23</sup> See also EDWIN R. A. SELIGMAN, THE INCOME TAX – A STUDY OF THE HISTORY, THEORY AND PRACTICE OF INCOME TAXATION AT HOME AND ABROAD (1911) (a survey of tax collection practices from around the world conducted with the objective of proposing what sort of method best fits the U.S.'s new income tax).

<sup>24</sup> See ANN MUMFORD, TAXATION CULTURE: TOWARDS A THEORY OF TAX COLLECTION LAW 18 (2002) (discusses self-assessment, while comparing the U.S. and the U.K., and arguing that the U.S. decision to adopt self-reporting is explained based on cultural backgrounds and clashes with England).

<sup>25</sup> Barr, James & Prest, *supra* note 20.

<sup>26</sup> ANN MUMFORD, TAXATION CULTURE: TOWARDS A THEORY OF TAX COLLECTION LAW 18 (2002)

<sup>27</sup> Edward Yorio, *Federal Income Tax Rulemaking: An Economic Approach*, 51 FORDHAM L. REV. 1, 47 (1982) ("A central feature of the federal income tax system is that it relies primarily on self-assessment and voluntary compliance by taxpayers. Although taxes must be withheld on certain forms of income, each taxpayer essentially determines his own tax liability.")

distinct tax consequences—taxpayers are legally required to take an interpretive position and decide on their own how to report. Needless to say, some taxpayers will work hard to deliberately reduce correspondence to the code’s sections as a means of arguing for favorable tax results. However, even an unsophisticated taxpayer will once in a while find herself hesitating between different sections of the code (e.g., is a certain expense deductible or not?) and hence be required to decide among different reporting positions (e.g., whether to deduct it from gross income or not).

In certain circumstances,<sup>28</sup> for example, if asked to do so by a taxpayer facing a transaction with unclear tax consequences,<sup>29</sup> the IRS will become involved in an *ex ante* assessment of individual tax liability<sup>30</sup> and in such circumstances<sup>31</sup> will typically issue a private letter ruling.<sup>32</sup> However, in general,<sup>33</sup> the IRS—in comparison with other revenue services conducting inquisitorial assessments in administrative-assessment collection systems—is generally not engaged in *ex ante* determination of taxpayers’ tax liability, and does not interfere *ex ante* with the assessment made through self-reporting.<sup>34</sup>

It is the individual American taxpayer that is required to assess and submit a summarized annual return after taking all necessary reporting positions into consideration so as to calculate the total tax due, and accordingly, mail a check to the IRS. In contrast with the era in which a tax assessment was akin to a judgment, when the taxpayer's only remedy against an erroneous assessment was to sue for a refund,<sup>35</sup> today’s self-reporting requires the taxpayer to determine the assessment, and it is now

---

<sup>28</sup> See Yehonatan Givati, *Walking a Fine Line: A Theory of Line Drawing in Tax Law*, 34 VA. TAX REV. 469 (2015) (provides guidance to tax authorities on how to select the best instrument with which to draw the line—rulemaking/adjudication/private letter ruling/licensing—in a given situation).

<sup>29</sup> See Rev. Proc. 2015-1 (describes the forms in which the service provides advice to taxpayers).

<sup>30</sup> See also Joshua D. Blank, *The Timing of Tax Transparency*, 90 S. CAL. L. REV. (forthcoming, 2017) (argues that documents related to a specific taxpayer’s tax affairs that reflect *ex ante* tax administration should be publicly accessible)

[http://lsr.nellco.org/cgi/viewcontent.cgi?article=1436&context=nyu\\_lewp](http://lsr.nellco.org/cgi/viewcontent.cgi?article=1436&context=nyu_lewp)

<sup>31</sup> See *id.* at 22 for other *ex ante* Tax Administration acts by the IRS.

<sup>32</sup> See Treas. Reg. § 601.201 (1968) (the historical foundation of the administrative act); Rev. Proc. 2015-1, § 2.01 (“A ‘letter ruling’ is a written determination issued to a taxpayer by an Associate office in response to the taxpayer’s written inquiry, filed prior to the filing of returns or reports that are required by the tax laws, about its status for tax purposes or the tax effects of its acts or transactions. A letter ruling interprets the tax laws and applies them to the taxpayer’s specific set of facts”); Yehonatan Givati, *Resolving Legal Uncertainty: The Unfulfilled Promise of Advance Tax Rulings*, 29 VA. TAX REV. 137, 139 (2009).

<sup>33</sup> Although the IRS in general does not interfere proactively in *ex ante* assessment, the IRS’s Volunteer Income Tax Assistance (VITA) program offers free tax help to people who generally make \$54,000 or less, persons with disabilities, the elderly, and limited-English-speaking taxpayers who need help preparing their own tax returns. The Tax Counseling for the Elderly (TCE) program offers free tax help for all taxpayers, particularly those who are 60 years of age and older. TCE volunteers specialize in answering questions about pensions and retirement-related issues unique to seniors.

<sup>34</sup> See *supra* note 31.

<sup>35</sup> See Boris I. Bittker & Kenneth M. Kaufman, *Taxes and Civil Rights: "Constitutionalizing" the Internal Revenue Code*, 82 YALE L. J. 51, 56 (1972) (discusses common law origin of tax assessment).

up to the tax authority to find a remedy—in the form of auditing the return. As IRS official numbers indicate,<sup>36</sup> *ex post* assessments are rare, therefore in most cases a taxpayer's position will not face any legal scrutiny, in effect, promoting the view of taxpayers as their own assessment officers.

### *B. Systemic Advantages Associated with Self-Reporting*

Historically, the US has been applying self-reporting since the 1910s.<sup>37</sup> Over the years, legal scholars have pointed to three<sup>38</sup> main justifications for preferring<sup>39</sup> such a tax collection system over any alternative version of an administrative-assessment system: First, self-reporting systems are believed to be, overall, more cost-efficient in performing accurate tax collection; it is cheaper for taxpayers to gather the information required for accurate assessment of their income than for the revenue authority to collect the data. Second, self-reporting allows citizens to actively and directly participate in a fundamental democratic obligation of their citizenship—paying taxes. The citizen is not only required to comply and pay a tax liability determined for him by the government, but rather to participate in calculating the liability through self-reporting.<sup>40</sup> Last but not least, as compared to administrative-assessment, self-assessment is believed to be less intrusive and inquisitorial,<sup>41</sup> and is therefore believed to reduce clashes between the government and the citizen (without, in the process, losing too much revenue due to fraud). Recent OECD data surveying dispute rates in countries that apply self-assessment and in those with administrative-assessment systems, provide evidence supporting fewer clashes in countries using self-reporting.<sup>42</sup>

### *C. The Agency Costs of Self-Reporting*

The advantages associated with self-reporting have been causing more and more countries around the world to adopt self-reporting in lieu of administrative-assessment for the purpose of tax collection.<sup>43</sup> Following a global expansion during the last 30

---

<sup>36</sup> See e.g. 2016 IRS Data Book, INTERNAL REVENUE SERVICE, 21 <https://www.irs.gov/pub/irs-soi/16datbk.pdf> (last visited Aug. 13, 2017) [hereinafter: 2016 IRS Data Book]

<sup>37</sup> Okello, *supra* note 22 at 12.

<sup>38</sup> Edward Yorio, *The President's Tax Proposals: A Major Step in the Right Direction*, 53 FORDHAM L. REV. 1255, 1256 (1985); Yorio, *supra* note 27 at 47.

<sup>39</sup> Compare Simon James, *Self-Assessment for Income Tax* BRITISH TAX REV. 204 (1994) and Simon James, *Correspondence*, 6 BRITISH TAX REVIEW 206(1995) (advocating a U.K. transfer to self-assessment) with Cedric Sandford, *Self-Assessment for Income – Another View* BRITISH TAX REV. 674 (1994) (objects to a U.K. transfer to self-assessment, arguing constitutional reasons will cause it not to work in the U.K.).

<sup>40</sup> Yorio, *supra* note 27 at 47 (“A political asset of a self-assessment system is that citizens in a democracy participate directly in what is a fundamental, albeit onerous, duty of citizenship.”)

<sup>41</sup> See also Nicholas Barr, Simon James & Alan Prest, SELF-ASSESSMENT FOR INCOME TAX 3-4, 130-153 (1977) (Summarizes and discusses the pros and cons of self-assessment for personal income tax).

<sup>42</sup> OECD, COMPARATIVE INFORMATION ON OECD AND OTHER ADVANCED AND EMERGING ECONOMIES 303 (Forum on Tax Administration, Centre for Tax Policy and Administration, OECD, 2013) available at: [http://www.keepeek.com/Digital-Asset-Management/oecd/taxation/tax-administration-2013\\_9789264200814-en#page305](http://www.keepeek.com/Digital-Asset-Management/oecd/taxation/tax-administration-2013_9789264200814-en#page305) (last visited Aug. 13, 2017).

<sup>43</sup> *Id.*

years,<sup>44</sup> today more than half of OECD countries apply self-reporting principles for the purpose of collecting personal income tax, and more than two thirds for collecting corporate income tax.<sup>45</sup>

From a broad regulatory perspective, self-reporting for tax purposes reflects a larger phenomenon of substituting regulation in the form of simple obedience requirements with more complex self-compliance which requires the subject to perform some regulatory tasks, supposedly in-lieu of the regulator itself.

One example of a non-tax regime where self-compliance replaces simple-obedience is car inspections. In many states (e.g., Delaware), renewal of registration for a car which is out-of-state at the time of the inspection deadline can be made through an “Out-of-State Inspection Packet,”<sup>46</sup> which allows the car’s owner to self-inspect the car at a local dealership or mechanic in lieu of the state’s local authorized agents, and then file a self-generated validation with the DMV that the car meets all requirements needed to renew the registration.

The shift of regulatory tasks, whether tax assessment or any other regulatory process conducted through self-compliance, places the individual in a quasi-principal-agent relationship with the regulator.<sup>47</sup> Ultimately, additional agency-costs are created for the regulatory process.<sup>48</sup>

Broadly speaking “principal-agent relationships” are created whenever a principal expects an agent to perform certain tasks in-lieu of the principal, e.g., managers running public companies for shareholders. In such relationships, agency costs are generated whenever an appointed agent’s actions affect the principal’s wealth differently than it does the agent’s wealth,<sup>49</sup> e.g., managers prefer paying themselves high salaries over high dividends to shareholders.

---

<sup>44</sup> See Okello, *supra* note 22 at 12.

<sup>45</sup> OECD, *supra* note 42.

<sup>46</sup> See *Smog Check and Car Inspection in Delaware*, Del. DMV <http://www.dmv.org/de-delaware/smog-check.php> (last visited Aug. 13, 2017).

<sup>47</sup> See Michael C. Jensen & William H. Meckling, *Theory of the Firm*, 3 J. FIN. ECON. 305, 5 (1976) (“We define an agency relationship as a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent.”); see also Jennifer F. Reinganum & Louis L. Wilde, *Income tax compliance in a principal-agent framework*, 26 J. PUB. ECO. 1 (1985) (analyzes income tax compliance in a way which incorporates observation found in other models in the economics literature).

<sup>48</sup> *Id.*, see also Zohar Goshen & Richard Squire, *Principal Costs: A New Theory for Corporate Law and Governance*, 117 COLUM. L. REV. 767, 775-778 (2016) (describes agency-cost essentialism).

<sup>49</sup> Cf. Adolf A. Berle and Gardiner C. Means, *THE MODERN CORPORATION AND PRIVATE PROPERTY* (1932).

Economic literature<sup>50</sup> recognizes three main types of costs generally associated with principal-agency relationships:<sup>51</sup> 1. Monitoring expenditures, incurred by the principal, designed to limit aberrant activities of the agent;<sup>52</sup> 2. Bonding expenditures incurred by the agent, that is, resources spent by the agent to guarantee that certain actions that would harm the principal will not be taken or to ensure that the principal will be compensated if such actions are taken;<sup>53</sup> 3. A residual loss, that is, the reduction in welfare experienced by the principal as a result of the divergence between the agent's decisions and those decisions which would maximize the welfare of the principal.<sup>54</sup>

As compared with a system in which taxes are collected by a state's assessment officer through an inquisitorial assessment process based on information provided by the taxpayer, collecting tax through self-reporting increases the agency costs associated with collecting the tax. While under administrative assessment, monitoring is required to prevent omission of information by the taxpayer, under self-reporting, monitoring is required not only to prevent omission of relevant information but also to prevent mistakes and deliberate abuse in processing the information and determining tax liability. Similarly, taxpayers incur extended bonding costs in their efforts to accurately comply with the tax authorities' requirements (i.e., the tax code requirements) in their reports. The taxpayer's role is changed from that of a passive actor who complies with the authority's requests for information, to a self-acting assessor who must know what information to include in the process, etc. To wit, many taxpayers face the need to purchase special computer software to assist them in fulfilling their obligation to self-assess their taxes and submit returns. Although, Intuit Inc., the company developing the popular TurboTax® software used by many Americans to prepare their tax returns, has reported a decline in its sales for the last tax season (April, 2017), the company still expected revenues of over one billion dollars.<sup>55</sup>

The increased monitoring and bonding expenditures are accompanied by a third exacerbated residual loss (the third type of agency cost discussed in the literature) created by self-reporting. Requiring taxpayers to self-report opens up the range of possibilities for taxpayers to act in divergence from expected practice and hence, results in a loss in collections as compared to the tax that would have been collected under an administrative assessment system.

As the next section of the article explains, the residual loss resulting from self-reporting *per-se* is represented by a distinct type of reporting position in which taxpayers use the opportunity given to them under self-reporting to adopt a position

---

<sup>50</sup> Cf. Michael C. Jensen & William H. Meckling, *Theory of the Firm*, 3 J. FIN. ECON. 305 (1976) (establishing the theoretical framework); Michael C. Jensen, *Agency Costs of Free Cash Flow*, Corporate Finance Takeovers, 76 AMER. ECON. REV. 323 (1986) (discussing the part debt plays in reducing agency costs).

<sup>51</sup> Jensen & Meckling, *supra* note 50 at 310.

<sup>52</sup> *Id.*

<sup>53</sup> *Id.*

<sup>54</sup> *Id.*

<sup>55</sup> Nathan Bomey, *TurboTax is not happy Americans are dragging their feet filing taxes*, USA TODAY (Feb. 8, 2017) <https://www.usatoday.com/story/money/2017/02/08/intuit-turbo-tax/97635840/>

which does not necessarily correspond to the tax code and which would not necessarily be used were its tax liability determined in an inquisitorial process. Such positions became possible due to self-reporting and lucrative due the low rate of returns being audited and *ex post* reassessed by the IRS.<sup>56</sup>

## II. REPORTING POSITIONS

Under self-reporting, the taxpayer acts as an agent of the state for the purpose of collecting tax. In acting as the state's agent, the taxpayer can minimize tax payments by using self-reporting to take tax positions that lead to favorable tax results.

For example, if the taxpayer is a law school student filing reports with the IRS,<sup>57</sup> she can take a favorable tax position claiming that interest paid on her credit cards used during her time in school all result from *necessary expenses*<sup>58</sup> related to *attendance at a higher education institution*<sup>59</sup> and therefore should be seen as *qualified student loans*<sup>60</sup> which allow the interest paid on such loans to be deducted from the taxpayer's gross income.

As mentioned, since most tax returns filed with the IRS go unaudited—the most recent IRS data indicates that only 0.6% of all returns are audited<sup>61</sup>—a taxpayer can go beyond claiming a tax deduction for the interest paid on an American Express card used to finance living expenses during her university years.<sup>62</sup> She can take a reporting position that some expenses, such as flights to the university—and not only the interest paid for financing them—should be seen as expenses *required for the attendance of the*

---

<sup>56</sup> See 2016 IRS Data Book, *supra* note 36 at 21 (“The IRS audited a total of almost 1.2 million tax returns, approximately 0.6 percent of all returns filed in Calendar Year (CY) 2015.”)

<sup>57</sup> See in general IRS Publication 501, *Exemptions, Standard Deduction, and Filing Information* <https://www.irs.gov/pub/irs-pdf/p501.pdf> (last visited Aug. 13, 2017).

<sup>58</sup> See IRS Publication 970, *Tax Benefits for Education*, 31 (hereinafter: “IRS Publication 970”) (“For purposes of the student loan interest deduction, these expenses are the total costs of attending an eligible educational institution, including graduate school. They include amounts paid for the following items ... Other necessary expenses (such as transportation)”) available at: <https://www.irs.gov/pub/irs-pdf/p970.pdf> (last visited Aug. 13, 2017).

<sup>59</sup> *Id.*, at 31.

<sup>60</sup> *Id.*

<sup>61</sup> See 2016 IRS Data Book, *supra* note 36 at 21.

<sup>62</sup> A position supported by a formal IRS publication, see IRS Publication 970 *supra* note 58, at 32 (“[I]nterest, which includes interest on credit card debt, is student loan interest if the borrower uses the line of credit (credit card) only to pay qualified education expenses.” Qualified education expenses are defined to include other necessary expenses (such as transportation) (see *supra* footnote 58)).

taxpayer at an eligible educational institution, as defined by § 25A<sup>63</sup> and therefore, also tax deductible.<sup>64</sup>

Although claiming flights to university is frivolously supported by the tax code<sup>65</sup> (unlike claiming a deduction for the credit card interest paid to finance such flights),<sup>66</sup> self-reporting makes even such tax positions a possible source for minimizing tax payments. While law school students might not endorse such a questionable interpretation of the tax code, empirical results, presented in the following sections, show that companies take billions of dollars in deductions and other tax benefits through such positions.

### *Conformant Positions versus Opportunistic Positions*

In modeling different types of positions taken by taxpayers in a self-reporting regime, one distinction can be drawn based on the extent a subjective position corresponds to the tax code. When a taxpayer faces circumstances where tax results are not explicitly covered by the tax code—either because of unique circumstances, or, because the tax code asks the taxpayer to consider different factors when deciding the appropriate result—the taxpayer can estimate the chances of each possible position being voided if later scrutinized (audited) by the IRS. Based on the taxpayer’s expectation, a dichotomous distinction can be drawn between positions the taxpayer takes believing they will hold up if audited, and positions taken but not expected to hold up in an audit (if such does take place). Respectively, two types of positions can be defined: Conformant Positions and Opportunistic Positions.

#### 1. Conformant Positions

Conformant Positions are defined as reporting positions that a self-reporting taxpayer adopts because they conform<sup>67</sup> highly to the tax code;<sup>68</sup> therefore, such positions are adopted—and they de-facto determine the taxpayer’s tax liability—irrespective of the nature of the collection system which applies to the taxpayer. Since

---

<sup>63</sup> 26 U.S. Code § 25A (defines Qualified Tuition and Related Expenses, among others for the purpose of tax deductibility under 26 U.S. Code § 222, as “tuition and fees required for the enrollment or attendance of the taxpayer at an eligible educational institution for courses of instruction of such individual at such institution.”).

<sup>64</sup> 26 U.S. Code § 222 (“In the case of an individual, there shall be allowed as a deduction an amount equal to the qualified tuition and related expenses paid by the taxpayer during the taxable year.”); , Qualified Tuition and Related Expenses, defined in 26 U.S. Code § 25A (quoted in *supra* note 63) does not seem to cover flights.

<sup>65</sup> In general, for education expenses to be deductible they must be such paid to the institution as a condition of enrollment or attendance (*see* IRS Publication 970 *supra* note 58, at 38).

<sup>66</sup> *Supra* note 62.

<sup>67</sup> The question of whether a position which is literally possible under the tax code conforms to the code or not is a legal question. The assumption is that the taxpayer, or those with whom she consulted, can analyze the legal question and at least provide guidance with respect to most cases, even if not to the rare and difficult ones.

<sup>68</sup> Conformant positions are interpretative positions that solve tax uncertainty with an interpretative argument which although are not yet an explicit part of the tax doctrine, conform to it; therefore, if the position were to be audited and litigated – it has more-likely-than-not chance of prevailing.

the position conforms to the tax code, it can be assumed that the same position would also be accepted if the tax liability were determined in an inquisitorial assessment process, i.e., if the decision whether to adopt the position or not was made by a state officer and not the taxpayer (administrative assessment).

## 2. Opportunistic Positions

In contrast to conformant positions, opportunistic positions are reporting positions that a taxpayer does not find to be in high-conformity with the tax code, but nevertheless adopts in self-reporting due to their *de-facto* expected tax benefits.<sup>69</sup> Remember, only a small number of tax returns are audited by the IRS;<sup>70</sup> therefore, a taxpayer acting under a self-reporting regime can adopt positions which, though they have only frivolous support under the tax code (even in the taxpayer's own opinion), they are expected to result in a lower tax liability since the probability is high that the position will not be audited, and thus the benefits reaped will not be questioned and voided.

With respect to their relationship to the type of tax collection system, conformant positions can be said to be tax collection system-agnostic (for self-assessment or administrative-assessment), while opportunistic positions prevail only under self-assessment and represent an agency cost resulting from the use of self-reporting. A taxpayer will only adopt or advocate a position he does not find to be in conformity with the tax code in cases where he can expect some possible gain from taking that position.

As the rest of the article shows, although information about opportunistic positions is not conveyed by classic tax parameters and is therefore omitted from routine tax analyses, alternative information sources can reveal the main roots of opportunistic positions. This leads to a proposal for a method to reduce their prevalence.

### **III. ANALYZING OPPORTUNISTIC POSITIONS**

While tax parameters disclosed by a company in its financial statements convey information about a company's conformant positions, they leave opportunistic positions obscure. As an alternative measure, information included in a note to a company's financial statements can be used to compensate for this lack and at the same time, provide data indicating the enormous cost to the U.S. tax system of using self-reporting as a collection mechanism. As discussed in the next section, this alternative measure can also be used to fight opportunistic positions and reduce the overall economic price of self-reporting.

---

<sup>69</sup> Opportunistic positions are positions that reduce tax liability by an interpretation of the factual circumstances or the Code, which are literally possible but nevertheless do not comply with the tax doctrine. For example, claiming a deductible expense in circumstances marginally similar to those already prohibited by past tax court rulings. In a sense, opportunistic positions reduce tax which actually should have been paid.

<sup>70</sup> *Supra* note 61 (reporting 0.6% overall rate of returns audited).

A. *The Information Gap*

Classic tax parameters,<sup>71</sup> such as a company's ETR<sup>72</sup> or BTDT,<sup>73</sup> mentioned routinely in legal<sup>74</sup> and finance<sup>75</sup> articles, are calculated based on the company's reported tax expenses disclosed in its financial statements.<sup>76</sup> These disclosures are governed by generally accepted accounting principles (GAAP).<sup>77</sup> In the past, GAAP required companies to include the effect of all tax positions taken in the disclosed tax expenses. No matter how frivolous a position was, i.e., the chances it would be voided if audited, if a reporting position had an effect on current or expected tax payments, by reducing current tax payments, for example, that effect had to be reflected in the disclosed tax expenses.<sup>78</sup> Nevertheless, a new disclosure rule issued by the Financial Accounting Standards Board (FASB) in 2006, FASB Interpretation No. 48 ("FIN 48"),<sup>79</sup> created a distinction between different tax positions in accordance with their expected ability—as evaluated by the company and its advisors—to sustain an audit.<sup>80</sup>

---

<sup>71</sup> In their extensive literature review, Hanlon & Heitzman review twelve measures of tax avoidance (they define avoidance broadly as "the reduction of explicit taxes") commonly used in the literature: 1. GAAP ETR; 2. Current ETR; 3. Cash ETR; 4. Long-Run Cash ETR; 5. ETR Differential; 6. DTAX; 7. Total BTDT; 8. Temporary BTDT; 9. Abnormal total BTDT; 10. Unrecognized tax benefits; 11. Tax shelter activity; 12. Marginal tax rate.

Of these twelve parameters, only one parameter, unrecognized tax benefits, is capable of providing information on opportunistic positions. See Michelle Hanlon & Shane Heitzman, *supra* note 12 at 160 & TABLE 1 (2010) for full explanation of the different parameters.

<sup>72</sup> *Supra* text preceding note 3

<sup>73</sup> *Supra* text preceding note 10.

<sup>74</sup> E.g., Joshua D. Blank, *Reconsidering Corporate Tax Privacy*, 11 N.Y.U. J.L. & BUS. 31 (2014) (discussing ETR and other parameters, including unrecognized tax benefits, in the context of tax privacy); Montano Cabezas, *Giving Credit Where it is Due: Rethinking the Corporate Tax Paradigm*, 35 VA. TAX REV. 60 (2015) (discusses the use of ETR in "fair share" tax rhetoric).

<sup>75</sup> For a comprehensive literature review, see Hanlon & Heitzman *supra* note 71.

<sup>76</sup> See Hanlon & Heitzman *supra* note 71, at 158 ("Most tax avoidance measures are obtained from financial statement data because tax returns are not publicly available and access is granted to only a few ... [y]et, it is well known that there are many problems with computing estimates of taxable income from financial statements").

<sup>77</sup> See also Klein, *supra* note 7 (argues the GAAP is politically biased).

<sup>78</sup> This was the *de-facto* result of implementing existing GAAP standards, and possibly specifically under Statement of Financial Accounting Standards No. 109 – Accounting for Income Taxes, and Statement of Financial Accounting Standards No. 5 - Accounting for Contingencies, as applied before FIN 48 was released by the FASB; see FIN 48, *infra* note 79 at 2 ("Statement 109 contains no specific guidance on how to address uncertainty in accounting for income tax assets and liabilities. As a result, diverse accounting practices have developed resulting in inconsistency in the criteria used to recognize, derecognize, and measure benefits related to income taxes."); see also Jones, *supra* note 11 at 771-778 (2009) for a review of what FIN 48 requires from taxpayers.

<sup>79</sup> Fin. Accounting Standards Bd. Interpretation No. 48, Accounting for Uncertainty in Income Taxes: An interpretation of FASB Statement No. 109, (2006) [hereinafter: "FIN 48"].

FIN 48 (codified at ASC 740-10) requires businesses to analyze and disclose income tax risks. It was effective in 2007 for publicly traded entities, and is now effective for all entities adhering to US GAAP.

<sup>80</sup> Including a resolution of the related appeals or litigation processes, if any, see *id.* at ¶ 6.

Assume a software company was expected to end year 2005 with earnings of \$1,000,000, and therefore be subject to a tax liability of \$350,000 in federal taxes (under a tax rate of 35%). Projecting the high tax payment expected, the company's tax director shops tax departments in different law firms for a legal opinion that will support the company in claiming some of that year's expenses for technical support for existing products as *qualified research expenses*,<sup>81</sup> thus entitling the company to R&D credits under § 41.<sup>82</sup> A supporting tax opinion<sup>83</sup> from one of the law firms is obtained,<sup>84</sup> expressing an opinion that reporting the technical support department's expenses as *qualified research expenses*, which entitles the company to \$100,000 in tax credits "is not frivolous."<sup>85</sup> Accordingly, the tax director files a tax return for 2005 that declares an overall tax liability of only \$250,000.

Meanwhile, the company's 2005 financial statements, prepared according to GAAP rules, reflect the effect of the R&D position, and disclose the reduced tax expenses. Thus, the company reports earnings of \$1,000,000 and tax expenses of \$250,000 to its investors, which resulted in an ETR of 25% (250,000/1,000,000). The low ETR captures the effect the position had on the company's tax liability as stated in its return filed with the IRS.

However, as of the FASB's issuance of FIN 48<sup>86</sup> in 2006, companies preparing GAAP financial statements are required to examine all tax positions taken and recognize tax benefits only from those positions which the company believes have a "more likely than not" chance to be upheld in an IRS audit (or the resulting litigation following the audit).<sup>87</sup>

As a result, at present, if the software company were expecting a profit of \$1,000,000 and the same R&D position was taken, resulting in a self-reported tax liability of only \$250,000, when the company prepares its GAAP statements and implements FIN 48, the company cannot recognize the effect of the position, i.e., it may not recognize the \$100,000 R&D credit as a reduction in its tax expenses reported to investors since the position has only "not frivolous" chances of being upheld (and

---

<sup>81</sup> See *infra* note 115.

<sup>82</sup> 26 U.S. Code § 41 - Credit for increasing research activities; See *infra* text accompanying notes 115-118.

<sup>83</sup> See Robert P. Rothman, *Tax Opinion Practice*, 64 *Tax Lawyer* 301 (2011) for the different types of tax opinions ("Perhaps the lowest level at which there is some modicum of comfort as to a position (short of 'a snowball's chance in hell') is that the position is 'not frivolous.'" *id.*, at 35).

<sup>84</sup> See *Id.*, at 35-37 for a discussion of a practitioner's ability to provide opinions with such low comfort levels.

<sup>85</sup> See Rothman *supra* note 83, at 16-37 (discusses different comfort levels used by tax practitioners).

<sup>86</sup> *Supra* note 79.

<sup>87</sup> See FIN 48 *supra* note 79, at ¶¶ 5-7; Shaviro, *supra* note 6 at 459-460 (discusses the instrumental accounting property implemented in FIN 48); Jones, *supra* note 11.

therefore does not meet the recognition threshold of “more likely than not” of being upheld in an audit, as required by FIN 48).<sup>88</sup>

Consequently, although the company will pay only \$250,000 in federal taxes due to self-reporting a credit of \$100,000, the tax expenses disclosed in the financial statements will be equal to \$350,000,<sup>89</sup> and the company’s ETR, calculated based on the company’s financial statements, will be equal to 35% (\$350,000/\$1,000,000), and will not capture the effect of the opportunistic position taken, i.e., claiming R&D credits, which reduced the company’s tax payment by \$100,000.

Thus, although the company did *de facto* reduce actual tax payments by \$100,000, FIN 48 prevents it from reporting or representing this reduction to investors as a tax benefit that generates profits for the company. On the one hand, by disallowing recognition of profit arising from opportunistic reporting, it can be argued that FIN 48 cut incentives for aggressive tax planning.<sup>90</sup> However, at the same time, if managers are still incentivized to engage in opportunistic reporting (e.g., as a means of increasing a company’s cash reserves by reducing cash tax payments) then, not recognizing profits from opportunistic reporting enables such reporting to keep “flying under the radar” and to not be detectable through examination of tax parameters such as the company’s ETR.

The same analysis holds for all tax parameters that utilize companies’ tax expenses as reported in the company’s GAAP financial statements,<sup>91</sup> e.g., TBD,<sup>92</sup> ETR differential,<sup>93</sup> etc. Hence, whenever ETR or other classic tax parameters are used as an indication of a company’s tax behavior,<sup>94</sup> they, in fact, only tell part of the story—that of the conformant position; the use of non-conformant positions, i.e., opportunistic positions, is left mostly obscure by the classic parameters.

### *B. Filling the Information Gap*

Why did the FASB preclude companies from recognizing the tax benefits gained by taking opportunistic positions? At the time, legal scholars<sup>95</sup> pointed to the

---

<sup>88</sup> FIN 48 *supra* note 79, at ¶ 6 (“An enterprise shall initially recognize the financial statement effects of a tax position when it is more likely than not, based on the technical merits, that the position will be sustained upon examination.”)

<sup>89</sup> See FIN 48 *supra* note 79, at ¶ 17 (“As a result of applying this Interpretation, the amount of benefit recognized in the statement of financial position may differ from the amount taken or expected to be taken in a tax return for the current year.”)

<sup>90</sup> See *infra* note 103.

<sup>91</sup> See also *supra* note 71 & 76.

<sup>92</sup> *Supra* text preceding note 10.

<sup>93</sup> ‘ETR differential’ is the difference of between a firm’s GAAP ETR and the statutory tax rate, see Hanlon & Heitzman, *supra* note 71 at TABLE 1.

<sup>94</sup> See e.g. Helman, *supra* note 1 & Cohen *supra* note 1

<sup>95</sup> See Shaviro, *supra* note 6 459 (2008) (“FIN 48, a recent FASB pronouncement concerning accounting for uncertainty in federal income taxes, arguably includes a component of instrumental accounting, although not one that is overtly acknowledged as such.”); Jones, *supra* note 11 at 791 (“However, FIN 48 not only regulates financial reporting, but also substantially affects the legal relationship between the taxing agencies and taxpayers.”).

instrumental nature of the interpretation, i.e., disincentivizing public companies from taking aggressive tax positions: Since companies are required to neutralize the effect of such positions on bottom line profit, they become less appealing to managers of public companies.<sup>96</sup> On the other hand, promulgation of instrumental accounting has been consistently and explicitly denied by the FASB.<sup>97</sup>

Whether instrumental or not, FIN 48 has heretofore unrealized “hidden” benefits that can help bring to light opportunistic positions that withhold billions of dollars in uncollected taxes from the US public. While not allowing the effect of opportunistic positions to be recognized in the tax expenses reported in financial statements, the FASB did require companies to disclose aggregated numbers for all such unrecognized positions in the notes to the financial statements.<sup>98</sup> This information is included as part of a tabular disclosure which shows, among other things, cumulative changes in a company’s “unrecognized tax benefits” (“UTBs”).

UTBs represent the cumulative difference between all tax benefits gained by taking reporting positions in tax returns filed with the IRS, and the equivalent benefits which meet the recognition threshold established by FIN 48.<sup>99</sup> FIN 48 allows a company to recognize benefits resulting from taking reporting positions insofar as “it is more likely than not, based on the technical merits, that the position will be sustained upon examination [by the IRS] ... [T]he term “more likely than not” means a likelihood of more than 50 percent; the terms “examined and upon examination” also include resolution of the related appeals or litigation processes, if any.”<sup>100</sup> Accordingly, UTBs represent the difference between positions which the taxpayer believes are more likely than not to sustain an audit, and all other position taken in its returns, i.e., opportunistic positions, which the taxpayer does not believe will be sustained in an audit, meaning, they are not in high conformity with the tax code (otherwise, why would they not sustain an audit?) and therefore would not be used to determine the taxpayer tax liability in an inquisitorial non-self-reporting regime.

In order to understand the enormous magnitude of opportunistic positions and the cumulative economic price of self-reporting, of specific interest are UTB numbers appearing as Current Year Increases in UTB. This UTB parameter represents new positions which the company took in the reported financial year while, as mentioned, believing they are not in high conformity with the tax code and therefore will not be sustained in an audit and a judgment of final resort. How big are these positions? Three

---

<sup>96</sup> Shaviro *supra* note 695, at 460 (“Denying any positive earnings effect to the prospect of non-detection and to long-shot prospects of victory on aggressive tax positions has the arguably beneficial effect of discouraging managers from playing the audit lottery even where doing so would increase expected share value.”)

<sup>97</sup> See ROBERT VAN RIPER, SETTING STANDARDS FOR FINANCIAL REPORTING: FASB AND THE STRUGGLE FOR CONTROL OF A CRITICAL PROCESS 23-24 (1994) (quoting Armstrong, Kirk, and Beresford—past FASB chairmen—arguing that standards promulgated by the organization merely portray economic reality, without implying an agenda) *compare* Klein *supra* note 7 (argues GAAP norms are not neutral but political and promote an exclusive agenda—that of investors).

<sup>98</sup> FIN 48, *supra* note 79 at ¶¶ 20-21.

<sup>99</sup> *Id.*

<sup>100</sup> FIN 48, *supra* note 79 at ¶ 6.

years of data collected from companies included in the S&P 500 index provide indications.

*C. Opportunistic Positions—Indications from S&P 500 Companies*

Examining the disclosures of companies included in the S&P 500 index reveals that as of December 31, 2015 S&P 500 companies alone took more than \$185 billion worth of opportunistic positions.

Moreover, as Table 1 below shows, “Total Opportunistic Positions,” representing the total number of positions (new positions minus positions that were cleared during the year) increased for every year examined (2014 to 2016). These yearly increases point to the fact that opportunist positions are not being fully recycled.

“Recycling” means that while new opportunistic positions are adopted by the company, some of the existing opportunistic positions taken in previous years are cleared either because the company settled with the IRS, the statute of limitations passed, or because of changes in the tax code and regulation (e.g., new ruling letter released) which altered the chances for an existing position to sustain an audit.

We would expect that a company that discloses a high number of UTBs increases its chances of being audited<sup>101</sup> and therefore, once audited, would clear positions—either because tax due was paid or the position was settled. Nevertheless, data shows that at the macro level, such recycling does not happen in full,<sup>102</sup> and the absolute amount of opportunistic positions increases every year, suggesting the IRS does not get to the bottom of opportunistic reporting,<sup>103</sup> and therefore the positions are not fully cleared and are left on companies’ balance sheets.

---

<sup>101</sup> See in general Jones, *supra* note 11 (discusses the expected effects of FIN 48 on taxpayers).

<sup>102</sup> For example, in 2014, companies adopted \$21,992 million worth of opportunistic positions (Table 1, “New Opportunistic Position Taken in the Past Reporting Year” disclosed during 2015); at the end of the year, the total value of opportunistic positions had increased by \$2,863 million (\$165,794 – \$162,931) suggesting that positions valued only at \$19,129 (\$21,992-\$2,863) were recycled. In 2015, companies adopted \$25,304 million worth of opportunistic positions; at the end of the year, the total value of opportunistic positions has increased by \$19,763 million (\$185,557 - \$165,794), suggesting the vast majority of the yearly addition to opportunistic positions was not offset by an equivalent recycling of positions.

<sup>103</sup> This fact supports those who, unlike Jones (*supra* note 11), expected FIN 48 disclosures not to provide much assistance to the IRS, see Zahn Bozanic et al., *IRS Attention*, 55 J. ACCT. RES. 79, 89 (2017) (“upon introduction of the new financial accounting standard by the FASB, Jones suggests that the FASB became the IRS’s “new best friend.” In contrast, others have suggested FIN 48 would be of little use to the IRS, both because the FIN 48 numbers are highly aggregated (both in terms of specific transactions, and jurisdictionally), and because the IRS may have superior information in the tax return.”)

**TABLE 1. Opportunistic Positions in S&P 500 Companies<sup>104</sup>**

As of Date (Year Numbers were Disclosed)	Total Opportunistic Positions	New Opportunistic Positions Taken in the Past Reporting Year
	(In millions USD)	
December 31 <sup>st</sup> , 2015 (2016)	\$185,557	\$25,304
December 31 <sup>st</sup> , 2014 (2015)	\$165,794	\$21,992
December 31 <sup>st</sup> , 2013 (2014)	\$162,931	\$20,134

As Table 1 further shows, the economic cost of self-reporting totaled more than \$20 billion annually—represented by new opportunistic positions taken in the past reporting year—for the five hundred companies included in the S&P 500 index alone.<sup>105</sup>

Although S&P 500 companies are not a representative sample of the entire population of U.S. companies,<sup>106</sup> they are part of that population and can indicate the “tip of the iceberg” of the enormous economic price the U.S. tax system pays for self-reporting.

#### **IV. REDUCING THE COST OF SELF-REPORTING**

The overall annual cost of tax collection through self-reporting goes well beyond the \$20 billion in lost revenue from S&P 500 companies. Nevertheless, the cost of the immediate alternative, that is, running an inquisitorial assessment system (i.e., an administrative assessment system), might also be very high.<sup>107</sup> A different approach to minimizing the loss of tax revenue caused by self-reporting would be to focus on specific tax regimes where opportunistic positions prevail, and improve collection for these regimes by making opportunistic reporting more difficult.

<sup>104</sup> Just as the market value of traded companies changes, and consequently their relevant size, so too has the S&P 500 index changed during the three years examined. In order to create a continuous and comparable measurement during the years, opportunistic positions data as reported in the years 2016/2015/2014 was calculated based on the financial statements for the years 2015/2014/2013 of companies included in the S&P 500 index (Compustat SPII code 10) for January 31<sup>st</sup> of the years 2016/2015/2014 (respectively).

<sup>105</sup> To be more accurate, the cost of self-reporting does not equal a simple addition of all the opportunistic positions, but rather the expected return thereof, i.e., the monetary value of every position multiplied by the probability the position will be upheld. Because the expectation of these positions is by definition less than 50%, otherwise the tax benefits from the positions would not be recognized as UTB under FIN 48 (*see supra* note 88), the yearly cost is somewhere between 10 to 20 billion dollars.

<sup>106</sup> Companies included in the S&P 500 index are the largest companies—in market capitalization terms—listed on the NYSE or NASDAQ.

<sup>107</sup> To wit, in FY2016, when assessment is conducted by taxpayers, the IRS used almost 79,000 full time equivalent positions to conduct its work, *see* 2016 IRS Data Book, *supra* note 36, at 63.

*A. Uncovering the Roots of Opportunistic Reporting*

Extending the analysis of UTBs, discussed above, into a model that analyzes disclosures from 9,295 public companies for a period of seven years (resulting in 53,441 observations) reveals that the most prominent expense category generating opportunistic reporting is R&D activities. This conclusion is reached by using a statistical model that tests the correlation between opportunistic positions and other financial parameters using multivariable logistic regression.

Multivariable logistic regression is a statistical tool that allows the researcher to assess the reliability and power of a list of selected factors (independent variables) in predicting the tested outcome (the dependent variable). As specifically used in this study, it examines how different reported financial parameters predict the appearance of opportunistic positions. While assessing their effect on opportunistic positions, the multivariable model isolates the effect of every individual factor by controlling for all other factors; the model can thereby predict the independent effect of every factor tested on opportunistic reporting (the dependent variable in the model).

The model controls for the following factors (a full review of the parameters, and the different effects controlled by them, are discussed in the Appendix): 1. Total Income Taxes; 2. Market Value; 3. Gross Profit; 4. Goodwill; 5. Total Assets (excluding intangible assets); 6. Intangible Assets; 7. Interest Expenses; 8. R&D Expenses; 9. The Company's Auditor; 10. The Company's Sector; 11. The Financial Year (Data Year).

The model's statistical results are summarized in the following table (Table 2, the full results are presented in the Appendix):

**TABLE 2. Summarized Statistical Results**

<b>Factor Name</b>	<b>Effect</b> (Observed Coefficient with New Opportunistic Positions)	<b>Significance Level</b> (P. Value)	<b>95% Conf. Interval</b> (Std. Err clustered by comp.)
Total Income Taxes	.0037763	0.351	[-.0041637 .0117163]
Market Value	.0005665	0.107	[-.0001221 .0012551]
Gross Profit	.0001397	0.912	[-.0023235 .0026028]
Goodwill	.0017755	0.407	[-.0024202 .0059712]
Total Assets (excluding Intangible Assets)	-.0000139	0.906	[-.000244 .0002162]
Intangible Assets	.0009677	0.490	[-.0017802 .0037157]
Interest Expenses	.0010435	0.927	[-.0213586 .0234457]
R&D Expenses	.0325515	0.000	[.0147217 .0503813]

As can be seen from Table 2, the effect of a company's total tax liability (Total Income Taxes) on opportunistic reporting is not statistically significant; hence, a possible hypothesis explaining opportunistic reporting as a ratio of overall taxes due,

i.e., companies with higher tax liability will be engaged in more opportunistic reporting in order to reduce tax payments than companies with lower tax liability, is not supported by the findings. This is also the case regarding possible hypotheses that associate opportunistic reporting with the size of a company (Market Value or Total Assets), or its profitability (Gross Profit), e.g., larger or more affluent companies are more engaged in opportunistic reporting. Moreover, opportunistic reporting does not appear to be significantly associated with either higher amounts of intangible property (Intangible Assets) or higher interest payments (Interest Expenses), two elements commonly used in international tax planning.

Of all controlled factors presented, the factor which has the strongest effect and the only one whose significance level is below 1% (except for three other multi-variables discussed below) is R&D Expenses.<sup>108</sup> It can therefore be reliably argued that it is a prominent factor affecting opportunistic positions.

In addition to R&D expenses, three other multivariable controlled parameters also showed partially significant coefficients; they are: The Company's Auditor, The Company's Sector and The Financial Year (Data Year). These specific findings, elaborated and thoroughly discussed in the Appendix, might broadly suggest that some auditing firms and some operation sectors are more closely associated with the disclosure of opportunistic positions than others and that some measures taken by the IRS in fighting tax aggressiveness might have been at least partially successful.

Although they were shown to have a partially significant effect on opportunistic reporting, a conclusive interpretation of the effect, as discussed in the Appendix,<sup>109</sup> for the identity of the company's auditor, the company's sector of operation and the financial year of the data, is not as straightforward or as clear as it is for the effect of R&D expenses.

### *B. The R&D Tax Incentive Regime*

Self-reported R&D expenses can be used in opportunistic reporting under a number of sections of the tax code, all intended to incentivize R&D activities.<sup>110</sup> In general, the

---

<sup>108</sup> This means that the chances that there is no connection between R&D Expenses and New Opportunistic Positions ('no connection' is the null hypothesis) given these empirical findings are less than 0.01% (0.000), i.e., that the null hypothesis is rejected by mistake is less than 0.1%

In general, the significance level for studies is set to 5%, hence the significance level between R&D Expenses and new opportunistic positions is much better than the typical requirement in statistical studies.

<sup>109</sup> *Infra* Sec. IV to the Appendix.

<sup>110</sup> See in general Shay, Fleming & Peroni, *supra* note 15 (examines prominent tax incentive provisions that relate to businesses' R&D activity); Staff of Joint Comm. on Tax'n, 112th Cong., JCX-61-12, Background and Present Law Relating to Manufacturing Activities Within the United States 62-63 (Comm. Print 2012), <https://www.jct.gov/publications.html?func=startdown&id=4473>. (describes the array of legal, expenditure, and tax law policies intended to promote R&D and innovation activity) [hereinafter: "Staff of Joint Comm. on Tax'n"].

R&D tax incentives regime has been recently subjected to heavy criticism by legal scholars<sup>111</sup> though, not yet for its part in generating opportunistic reporting (as discussed here).<sup>112</sup> With respect to reporting opportunism, two main components of the regime deserve special attention; these are the favorable rules regarding the deductibility of R&D expenses and the tax credits they endow.

As a general rule, business expenses associated with the development or creation of an asset whose useful life extends beyond the current year must be capitalized and depreciated over said useful life.<sup>113</sup> However, §174 allows the taxpayer to not capitalize such expenses but rather to currently deduct all reasonable R&D expenditures paid or incurred in connection with a trade or business.<sup>114</sup> In addition to the favorable deduction regime, §41 allows the taxpayer to claim a research credit equal to twenty percent of the amount by which the taxpayer's qualified research expenses<sup>115</sup> for a taxable year exceeds its base amount for that year<sup>116</sup> (generally computed based on the average amount of the taxpayer's gross receipts for the four preceding years).<sup>117</sup> Thus, the research credit is generally available with respect to incremental increases in research expenses.<sup>118</sup>

Amounts defined as research and experimental expenditures and entitled to a favorable deduction regime and tax credits, generally include costs incurred in the experimental or laboratory sense related to the development or improvement of a product, e.g., salaries for those engaged in research or experimentation efforts.<sup>119</sup>

---

<sup>111</sup> Shay, Fleming & Peroni., *supra* note 15.

<sup>112</sup> Shay, Fleming & Peroni, *supra* note 15, criticize the prominent theoretical policy premises underlying the current R&D tax incentives regime; they argue *inter alia* that a private market failure of under-investment in innovative knowledge has not been sufficiently established to warrant application of the existing R&D tax incentives; that economic theory fails to explain sufficiently how knowledge leads to innovation that drives economic growth; and question whether the objectives of the existing R&D tax incentive regime would not be achieved more effectively through a regulatory response or a direct expenditure grant program administered by agencies such as NSF and NIH.

<sup>113</sup> 26 U.S. Code § 162 allows taxpayers to deduct all ordinary and necessary expenses incurred during the taxable year in carrying trade or business. However, 26 U.S. Code § 263(a) requires the capitalization of costs of acquiring, producing, and improving tangible and intangible properties, while requiring the taxpayer to determine—according to regulation released by the Treasury (e.g., Treas. Reg. § 1.263(a)-4 and -5) whether expenditures related to a property are currently deductible business expenses or non-deductible capital expenditures.

<sup>114</sup> 26 U.S. Code § 174; *See also* Staff of Joint Comm. on Tax'n, *supra* note 110 at 62.

<sup>115</sup> Defined by §41(b)(1) generally as the sum of in-house research expenses and contract research expenses which are paid or incurred by the taxpayer during the taxable year in carrying on any trade or business.

<sup>116</sup> An alternative simplified research credit with a 14 percent rate and a different base amount may be claimed in lieu of this credit, *see* Staff of Joint Comm. on Tax'n, *supra* note 110 at 63.

<sup>117</sup> IRC 41; *See also* Staff of Joint Comm. on Tax'n, *supra* note 110 at 63-64.

<sup>118</sup> Staff of Joint Comm. on Tax'n *supra* note 110, at 63.

<sup>119</sup> Treas. Reg. sec. 1.174-2(a)(1).

However, they do not include salaries paid to managers (acting as such).<sup>120</sup> In more than one case, over-allocating managers' salaries as research expenses—resulting in additional R&D credits—were denied in final litigation between the IRS and the taxpayer.<sup>121</sup>

In addition, qualified research expenses do not include expenses incurred once the uncertainty concerning the development or improvement of a product is eliminated.<sup>122</sup> For example, research activities substantially related to style, taste, cosmetic, or seasonal design factors do not qualify for R&D credits.<sup>123</sup> Therefore, in the development of every (successful) product, e.g., Microsoft Windows 10, there is a stage, once the product is established enough, that the company must start capitalizing expenses and stop reporting them as tax deductible or as generating tax credits.<sup>124</sup> Once the “establishment phase” approaches, if a company wishes to keep enjoying the R&D tax incentives, its tax director must be creative, e.g., opportunistic, and adopt a position that the product has not yet been “established.” For example, this means that there is still enough uncertainty that would justify claiming R&D credits for technical support expenses for the product or, that the technical support provided has contributed to the development of a future product and should therefore be considered as qualified expenses eligible for R&D tax credits under § 41 or, immediate deductibility, capitalization or amortization, according to the company's selection under the favorable deduction regime established by § 174. Both the current deductibility of R&D expenses and the tax credits to which they entitle the company provide taxpayers with incentives for opportunistic reporting.

Explaining the empirical findings—showing a positive and significant correlation between R&D expenses and opportunistic positions—as indicative of opportunistic reporting by way of R&D expenditures, is further supported by findings published by the IRS regarding Schedule UTP (Uncertain Tax Positions Statement).<sup>125</sup>

---

<sup>120</sup> Sec. 1.41-2(d)(1), Income Tax Regs; *See Shami v. COMMISSIONER OF INTERNAL REVENUE*, 2012 T.C. Memo 78 (T.C. 2012) (“If an employee has performed both qualified services and nonqualified services, only the amount of wages allocated to the performance of qualified services constitutes qualified research expenses”); *Suder v. COMMISSIONER OF INTERNAL REVENUE*, 2014 T.C. Memo 201 (T.C. 2014) (managers' salaries were recognized as qualified R&D expenses to the extent that they were factually engaged in developing and working on new products).

<sup>121</sup> *See e.g. Shami v. COMMISSIONER OF INTERNAL REVENUE*, *supra* note 120.

<sup>122</sup> 26 CFR 1.174-2(a)(1) (“Costs may be eligible under 26 U.S. Code § 174 if paid or incurred after production begins but before uncertainty concerning the development or improvement of the product is eliminated.”)

<sup>123</sup> *See* Staff of Joint Comm. on Tax'n, *supra* note 110 at 65; §41(d)(3).

<sup>124</sup> To be more accurate, in order to prevent a double benefit, overall deductible R&D expenses claimed are reduced by the amount of R&D credits claimed (§280C(c), Staff of Joint Comm. on Tax'n, *supra* note 110 at 66).

<sup>125</sup> Schedule UTP, Uncertain Tax Position Statement, for 2010, 2011, 2012 and 2013. UTP Filing Statistics (last updated 30-Jul-2015), <http://www.irs.gov/Businesses/Corporations/UTPFilingStatistics> (last visited Aug. 13, 2017).

*The Cost of Self-Reporting.* Please do not cite or circulate.

Schedule UTP is a tax form that “asks for information about tax positions that affect the U.S. federal income tax liabilities of certain corporations that issue or are included in audited financial statements and have assets that equal or exceed \$10 million.”<sup>126</sup>

In its most updated publication summarizing data from taxpayers submitting Schedule UTPs, the IRS states research credit as the number one issue disclosed by taxpayers submitting Schedule UTP. Hence, when asked to “flag” positions that affect reported tax liabilities, the most frequently-mentioned issue by taxpayers is R&D credits. Although the IRS is not provided with monetary information about the uncertain tax positions in the submitted Schedule UTP,<sup>127</sup> and accordingly, the publication does not provide such information, its partial qualitative findings support the connection between R&D activities and opportunistic reporting.

How can this information be harnessed in order to reduce the cost of self-reporting? One option would be to target the R&D tax regime and make expenditures related to R&D activities less subject to opportunistic reporting.

### *C. Fighting Opportunistic Positions*

As mentioned, empirical findings establish a significant correlation between reported R&D expenses on companies’ financial statements and opportunistic positions. This connection between the two parameters suggests a hypothesis that R&D activity lays the ground for opportunistic reporting in which companies inflate R&D expenditures in order to opportunistically gain greater tax deductibility or additional tax credits.

Specifically, the hypothesis is that companies involved in excessive R&D activities (therefore report high R&D expenses) also tend to opportunistically report (for tax purposes) additional expenditures either not related to R&D activities as R&D expenditures, or those that should be capitalized and not currently deductible as R&D expenses entitled to credits or current deductibility (therefore reporting high UTB).<sup>128</sup> As mentioned, this analysis with reference to its interpretation regarding R&D tax credits, is supported to some extent by the qualitative Schedule UTP findings reported by the IRS.<sup>129</sup>

Assuming that a change from self-reporting to inquisitorial assessment is not a feasible or welcome option,<sup>130</sup> what can be done? Maintaining self-reporting at the current scope while increasing the audit rate for returns by specifically targeting

---

<sup>126</sup> Internal Revenue Service, Instructions for Schedule UTP (Form 1120) (2016) <https://www.irs.gov/instructions/i1120utp/ch01.html> (last visited Aug. 13, 2017).

<sup>127</sup> See *supra* note 103.

<sup>128</sup> See *supra* text accompanying note 122-123.

<sup>129</sup> *Supra* text accompanying notes 125-127.

<sup>130</sup> Among others, some have argued the American self-reporting system is a cultural element of American society (e.g., Mumford, *supra* note 24) and a result of the objection to the British. Therefore, self-reporting can be claimed as representing more than just a collection system, but an essential and very basic perception which should be kept despite its high costs in lost revenues. See *also infra* text accompanying note 144

problematic regimes (such as the R&D tax credit) or, moving from self-assessment to inquisitorial assessment for only certain tax regimes would both require additional resources from the IRS which is already under heavy budgetary pressure.<sup>131</sup>

One alternative that will not require the IRS to invest more resources in additional audits, however has the potential of curtailing some of the opportunistic reporting of R&D expenditures, would be to link specific tax parameters that are self-assessed with external non-IRS controls, i.e., those that exist when companies self-report information to investors and other stakeholders. Specifically, it is not suggested that book-tax reporting be harmonized,<sup>132</sup> as was generally discussed by legal scholars in the past.<sup>133</sup> Rather, the suggestion is to link distinct tax parameters, for example, those found to be affected by opportunistic positions, with the reporting of these same parameters to investors. “Linking” does not necessarily mean unifying parameters reported for taxes and for investors. It can also mean requiring that R&D expenses reported as tax deductible to the tax authorities be reported as such only as for reported as such in the financial statements published to investors (but not vice-versa, i.e., not all R&D expenses reported to investors would have to be reported as such for tax purposes).

In the specific case of R&D expenditures, it can mean that tax regulations would require that every expenditure the company treats as an R&D expense for the purpose of reporting taxes, must be reported as such, i.e., as R&D expenses, in the company’s financial statements.

This recommendation addresses opportunistic reporting that involves inflated R&D expenses reported for tax purposes, beyond those reported as such in the financial statements. However, it does not deal with opportunistically reported inflated R&D expenses both for taxes and financial statements. Nonetheless, the proposal has almost zero compliance costs since it targets only expenditures which should not be qualified as deductible expenses (or entitled to tax credits), does not distort non-tax reporting, and it is therefore worthwhile pursuing.

U.S. accounting disclosure rules (US-GAAP) require companies to expense almost all expenditures involved in R&D activity.<sup>134</sup> The threshold for capitalizing under US-

---

<sup>131</sup> See e.g. Michael Cohn, *IRS union fights proposed budget cuts*, ACCOUNTING TODAY (July 26, 2017) <https://www.accountingtoday.com/news/irs-union-fights-proposed-budget-cuts> (last visited Aug. 13, 2017); *supra* note 107.

<sup>132</sup> See also David I. Walker & Victor Fleischer, *Book/Tax Conformity and Equity Compensation*, 62 Tax L. Rev. 399 (2009) (argues that book/tax conformity carries unexplored costs that reduce its attractiveness as a policy prescription, at least in the context of equity compensation); Shevlin, *supra* note 10 at 436 (argues that if tax rules became more closely aligned with book income rules, book income rules would be adjusted over time to become more like the current tax rules, and the valuable role played by current financial accounting in investment decisions would be substantially diminished).

<sup>133</sup> See references in *supra* note 6.

<sup>134</sup> In comparison, under IFRS, as a general principle a company is required to capitalize expenditures once it reaches the point of developing the product (in general: demonstrating technical feasibility, intent to complete the asset, and ability to sell the asset in the future), see Ernst & Young, *US GAAP versus IFRS the basic*, 16 (2011) [hereinafter: Ernst & Young ]

GAAP rules is much higher than the threshold included in § 174. While § 174 does not allow deductibility (and, in principle, § 41 R&D disallows tax credit eligibility), once uncertainty concerning the development or improvement of a product is eliminated,<sup>135</sup> US-GAAP rules still require expenditures to be expensed and not capitalized.<sup>136</sup> Therefore, requiring expenditures, treated as R&D expenditures for tax purposes, to be treated as R&D expenses for financial reporting, is expected to affect only expenditures which should not be recognized as R&D expenditures for tax purposes in the first place, and the reporting thereof in tax returns. Under financial disclosures rules, once an expenditure has even a weak connection to R&D, it must be expensed (and not capitalized). Therefore, truly inflated R&D expenses would be the only expenditures that would now be disqualified from recognition as R&D expenses for tax purposes since they would not qualify to be expensed in financial statements.

A similar approach of linking tax reporting with book-reporting has already been implemented by the tax code with respect to the reporting of inventories. Under § 472, a company reporting inventory using the last in first out (LIFO) method must use the same method in reports prepared for investors and other stakeholders.<sup>137</sup> Otherwise, LIFO is prohibited from use for tax reporting.<sup>138</sup>

Overall, implementing a similar principle in reporting R&D expenditures to what is currently in effect for LIFO, can contribute to the reduction of opportunistic R&D reporting in two distinct ways. First, it will eliminate the incentive that exists for managers to over-report expenditures as R&D expenses in order to gain tax benefits. The tax code currently allows a company to treat expenditures as R&D expenses for tax purposes irrespective of how expenditures are reported in the company's financial statements.<sup>139</sup> Thus, managers can opportunistically report expenditures that are capitalized in the financial statements as R&D expenses in the company's tax returns. However, once R&D expenditures reported as expenses for tax purposes must also be reported as R&D expenses in the financial statements, managers over-expensing for tax purposes will face an overall negative effect on the bottom line profit reported to investors. The expenditures will have to be reported as R&D expenses (reducing the profit) and, because of FIN 48's requirement not to recognize any tax benefits arising from opportunistic reporting, the equivalent reduction in the actual tax paid will not be recognized as reducing the company's tax expenses. Managers will be better-off by

---

[http://www.ey.com/Publication/vwLUAssets/US\\_GAAP\\_v\\_IFRS:\\_The\\_Basics/\\$FILE/US%20GAAP%20v%20IFRS%20Dec%202011.pdf](http://www.ey.com/Publication/vwLUAssets/US_GAAP_v_IFRS:_The_Basics/$FILE/US%20GAAP%20v%20IFRS%20Dec%202011.pdf) (last visited Aug. 13, 2017) for a comparison between R&D disclosures rules under US-GAAP and IFRS.

<sup>135</sup> See *supra* note 122.

<sup>136</sup> Ernst & Young, *supra* note 134.

<sup>137</sup> 26 U.S. Code § 472(c).

<sup>138</sup> *Id.*

<sup>139</sup> §174(a)(1) (“[a] taxpayer may treat research or experimental expenditures which are paid or incurred by him during the taxable year in connection with his trade or business as expenses which are not chargeable to capital account. The expenditures so treated shall be allowed as a deduction.”)

capitalizing such expenditures and not reporting them as R&D expenses in the company's tax return.

Second, since R&D numbers reported for tax purposes would now be reported as such in the company's financial statements as well, they would become subject to the examination of the company's independent auditor, whose evaluation of the financial statements would now also cover the numbers reported as R&D expenditures to the IRS. Opportunistic reporting would now have to contend with the company's independent auditor.

#### *D. The General Suggestion*

Linking specific parameters used in tax reporting to parameters reported to investors and other stakeholders might sound like an original tax idea, but it is nevertheless a tax implementation of one of the most fundamental solutions proposed for an agency problem arising between managers and shareholders, discussed by Michael Jensen as far back as 1986.

In his famous article,<sup>140</sup> *Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers*, Jensen, who had, ten years earlier, published together with William Meckling, one of the most frequently ever cited articles discussing agency theory,<sup>141</sup> explains how debt helps reduce monitoring costs for shareholders and mitigates the problem of free cash flow in corporations. One of the novel general principles used by Jensen in that article is that shareholders can reduce costs incurred in monitoring managers through financing the company with debt. Once the company owes funds to a non-shareholder, that debtor also monitors managers' conduct and therefore reduces the monitoring burden of shareholders. Moreover, it is not only the additional "pair of eyes" now monitoring managers, but also managers' additional responsibility and need to serve the debt which incentivizes them to better serve company's best interests.

Implementing the same idea with respect to collecting taxes means that the tax authority can reduce monitoring costs by linking parameters used in reporting taxes to other similar parameters monitored in external, non-tax regimes and thereby cause stakeholders other than the IRS to be involved in monitoring the accurate self-reporting of the parameters. As explained, this methodology can be used in fighting opportunistic reporting of R&D expenditures, and can also be used for improving self-reporting under other sections of the tax code, and thereby reduce the overall cost of self-reporting.

### CONCLUSION

Collecting taxes by requiring taxpayers to self-report their tax liability lays the ground for opportunistic reporting in which taxpayers adopt tax positions they do not necessarily believe are in conformity with the tax code. Such positions are, nevertheless, taken due to their expected tax savings and in the likelihood that these positions will never be audited. Such opportunistic reporting represents an agency cost

---

<sup>140</sup> Michael Jensen, *Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers*, 76 AMER. ECON. REV. 323 (1986).

<sup>141</sup> Jensen & Meckling, *supra* note 47.

valued at more than \$20 billion a year in lost tax revenue (\$20 billion is the “tip of the iceberg” and the figure representing the loss of revenue from S&P 500 companies alone).

Despite the enormous cost in terms of lost tax revenue, opportunistic reporting has not yet received its due attention from legal scholars or policymakers. Classic tax parameters (e.g., companies’ effective tax rate - ETR) do not reveal information about opportunistic practices because of the disclosure rules’ requirement not to recognize tax benefits achieved by opportunistic reporting.

While the difference between companies’ disclosed ETR and the statutory rate caused the current administration to suggest lowering the general corporate tax rate,<sup>142</sup> the treatment of opportunistic reporting—left obscure by classic tax parameters—eludes the government’s radar.

Acknowledging that changing the modern self-reporting system back to a full inquisitorial assessment process<sup>143</sup> in which assessment is conducted by the state and not by the taxpayer<sup>144</sup> is neither feasible nor desired in the general de-regulation atmosphere prevailing in the U.S. today, a different approach is taken by this article in order to reduce the loss of tax revenues caused by requiring taxpayers to self-assess their taxes.

Following the novel conceptualization of opportunistic positions and the agency costs they create for the tax system, this article uses extensive empirical findings to analyze the factors that generate opportunistic reporting. Data, covering disclosures from more than nine thousand companies during a seven-year period, resulting in a total number of observations (n) of 53,441 firm-years,<sup>145</sup> shows a significant correlation between opportunistic positions and R&D expenses.

In order to minimize opportunistic tax reporting of excessive R&D expenses (and credits), this article suggests linking the reporting of R&D expenditures for tax purposes to the reports made to investors. Different than past scholars’ suggestions,<sup>146</sup> which proposed an overall harmonization of book-tax reporting, this article suggests an approach of targeted linking for specific parameters<sup>147</sup> reported on tax returns with similar parameters reported to investors. Specifically, in light of the empirical findings

---

<sup>142</sup> 2017 Tax Reform, *supra* note 13.

<sup>143</sup> See e.g. Bittker & Kaufman, *supra* note 35.

<sup>144</sup> *Id.*

<sup>145</sup> Not all companies contributed seven distinct observations, see the Appendix, *infra* at Table A1 and accompanying text.

<sup>146</sup> 2017 Tax Reform, *supra* note 13 (“15% business tax rate; [t]erritorial tax system (to level the playing field for American companies; [o]ne time tax on trillions of dollars held overseas”)

<sup>147</sup> See also Shaviro, *supra* note 6 at 475 (discusses the possibility of a wide range of reconciliation percentages between taxable and financial accounting income); Yoram Keinan, *Book Tax Conformity for Financial Instruments*, 6 FLA. TAX REV. 676 (2004) (suggests that GAAP will provide guidance pertaining to taxation of financial instruments).

*The Cost of Self-Reporting.* Please do not cite or circulate.

discussed, it is suggested that tax deductible R&D expenditures (or their resulting tax credits) can only be reported (entitled) as such in a company's tax return if they are also reported as R&D expenditures to investors (and other stakeholders).

This solution is based on insights from agency theory, and represents a realistic approach capable of reducing some of the cost of self-reporting while keeping the general framework and its advantages<sup>148</sup> intact.

---

<sup>148</sup> *Supra* Section I.B.

## APPENDIX

The Appendix describes the financial data and the model used in the study, and discusses findings in addition to those already discussed in the article.

### I. THE DATA

The data used in the study is derived from the 2009-2015 financial statements of all 9,295 individual public companies included in Standard & Poor's Compustat North America (Fundamental Annual) database ("S&P's Compustat").<sup>149</sup>

Although not completely flawless,<sup>150</sup> S&P's Compustat database has been claimed to be "the most widely used database of financial statement information for accounting and finance research."<sup>151</sup> The database is primarily drawn from SEC filings, which are then standardized to allow for better comparisons, and is supplemented with additional data sources, as needed.<sup>152</sup> For a North American company to be added to the S&P's Compustat database, the company must file distinct 10K's or 10Q's with the SEC.<sup>153</sup>

Intragroup correlation between multiple observations contributed by a single company as well as possible timing effects (observations are composed from a time span of seven years during which tax regimes can change and affect opportunistic reporting) have been taken into consideration by the model implemented in the study.

### II. THE MODEL

The study's core interest is to test which factors, if any, are associated with opportunistic reporting. The regression utilized in the study employs the following model:

---

<sup>149</sup> S&P's Compustat was accessed through Wharton Data Research Services, *Wharton Research Data Service*, WHARTON, UNIV. OF PA., <https://wrds-web.wharton.upenn.edu/wrds> (last visited Aug. 20, 2017).

<sup>150</sup> See Northwestern Kellogg Research Support, *Database Biases and Errors*, KELLOGG, NORTHWESTER UNIV., [http://www.kellogg.northwestern.edu/rs/services/trainingandreference/database\\_biases\\_and\\_errors.aspx](http://www.kellogg.northwestern.edu/rs/services/trainingandreference/database_biases_and_errors.aspx) (last visited Aug. 20, 2017) for a literature review of articles that point to different problems with the S&P's Compustat database.  
[http://www.kellogg.northwestern.edu/rs/services/trainingandreference/database\\_biases\\_and\\_errors.aspx](http://www.kellogg.northwestern.edu/rs/services/trainingandreference/database_biases_and_errors.aspx)

<sup>151</sup> See Ryan J., Casey, et al, *Do Compustat Financial Statement Data Articulate?* 1 J. FIN. REPORTING 37, 44 (2015); see also Rui Dai, *International Accounting Databases on WRDS: Comparative Analysis* (March 12, 2012). Available at SSRN: <https://ssrn.com/abstract=2938675> (arguing that in contrast to recognition of S&P's Compustat database as the primary source for accounting data for empirical studies of US public companies, no such consensus exists among researchers of international finance).

<sup>152</sup> *Id.*

<sup>153</sup> *Id.*

$$\begin{aligned} \text{New Opportunistic Positions}_i = & \mathbf{B}_0 + \beta_1 \text{ Income Taxes Total}_i + \beta_2 \text{ Market Value}_i \\ & + \beta_3 \text{ Gross Profit}_i + \beta_4 \text{ Goodwill}_i + \beta_5 (\text{Assets Total}_i - \text{Intangible Assets Total}_i) \\ & + \beta_6 \text{ Intangible Assets Total}_i + \beta_7 \text{ Interest \& Related Expenses Total}_i \\ & + \beta_8 \text{ R\&D Expense}_i + \beta_{9..28} \text{ Auditor}_i + \beta_{29..39} \text{ GIC Sector}_i + \beta_{40..46} \text{ Data Year}_i + \epsilon \end{aligned}$$

In order to overcome outliers included in the population, the study used bootstrapping with 500 repeats creating a “sample of samples” which was used in a linear multivariable regression with repeating measures.

Not all 53,441 distinct observations contained all tested factors, e.g., some observations were missing information; therefore, due to such database’s constraints, the final number of observations included in the regression was 24,693.

### III. FUNDAMENTAL PARAMETERS USED IN THE STUDY AND STUDY’S SETTINGS

The following parameters were used in the study’s model:

The Parameter	Description
New Opportunistic Positions =	<p>As FIN 48 does not allow a company to recognize tax benefits which do not fulfill a threshold of “more likely than not” chances to sustain an audit,<sup>154</sup> opportunistic reporting results with unrecognized tax benefits recognized in the company’s financial statements. Thus, opportunistic positions taken during the year amount to the increases in unrecognized tax benefits arising from uncertain tax positions taken in the current year.<sup>155</sup></p> <p>The study assumes that not mentioning at all “increases in unrecognized tax benefits arising from uncertain tax positions taken in the current year,” as required by FIN 48,<sup>156</sup> is identical to reporting an increase in the amount of zero; thus, for all observations where TXTUBPOSINC contains no value, it is assigned a zero (‘0’). Although relaxing this assumption has almost no effect on the results or their interpretation, it serves to prevent the number of qualified observations from dropping to only 14,771 qualified observations, and also overcomes a statistical disadvantage of failed replications in the bootstrap (relaxing the assumption resulted in 38 failed replications out of 500).</p>
Income Taxes Total =	<p>Equals all income taxes imposed by federal, state and foreign governments.</p> <p>Controls for a possible explanation that opportunistic reporting is affected by the total tax liability a company has, i.e., a company subjected to higher taxes due will be more opportunistic.</p>

<sup>154</sup> FIN 48, *supra* note 79 at ¶ 6.

<sup>155</sup> FIN 48, *supra* note 79 at ¶ 21.a(2); coded in S&P’s Compustat database as ‘TXTUBPOSINC’.

<sup>156</sup> FIN 48, *supra* note 79 at ¶ 21.a(2).

*The Cost of Self-Reporting.* Please do not cite or circulate.

- Market Value = Equals common shares outstanding multiplied by the month-end price that corresponds to the period end date.  
Controls for a possible explanation that opportunistic reporting is affected by the size of the company.
- Gross Profit = The difference between Sales/Turnover (Net) less Cost of Goods Sold (COGS).  
Controls for a possible explanation that opportunistic reporting is affected by the gross profit, and therefore the expected tax liability, of the company.
- Goodwill = The excess cost over equity of an acquired company.  
Controls for a possible explanation that opportunistic reporting is affected by different types of M&A activities, e.g., goodwill depreciation under § 197.<sup>157</sup>
- Assets Total - Intangible Assets Total = The total assets/liabilities of a company less its intangibles.  
Controls for a possible explanation that opportunistic reporting is affected by asset value, e.g., opportunistic value overloading.
- Intangible Assets Total = The excess of cost over equity acquired in assets of purchased subsidiaries which are still unamortized or not eliminated by a direct charge to a capital account, e.g., patents.  
Controls for a possible explanation that opportunistic reporting is affected by the reporting of acquired intangibles, e.g., revenue offsetting through royalties paid to offshore companies.
- Interest Related Expenses Total & = The periodic expense to the company of securing short- and long-term debt  
Controls for a possible explanation that opportunistic reporting is affected by the debt issues, e.g., the payment of interest.
- R&D Expense = Costs incurred during the year that relate to the development of new products or services.  
Controls for a possible explanation that opportunistic reporting is affected by R&D activity.
- Auditor = A code indicating the auditing firms that audited the financial statements of a company.  
Controls for a possible explanation that opportunistic reporting is affected by a company's auditor. See Table A4 below for a list of codes representing auditors that appear in the study's population.
- GIC Sector = The first level in the hierarchy of the Global Industry Classification Standard (GICS). See Table A6 below for a list of GIC Sectors which appear in the study's population.

---

<sup>157</sup> 26 U.S. Code § 197 - Amortization of Goodwill and certain other Intangibles

Controls for a possible explanation that opportunistic reporting is affected by the type of activity the company is engaged in.

Data Year = The fiscal year of the current fiscal year-end month. If the current fiscal year-end month falls in January through May, this item is the current calendar year minus 1 year. If the current fiscal year-end month falls in June through December, this item is the current calendar year.

Controls for the effect of changes in the tax code or economic cycles and other seasonal effects on opportunistic reporting.

#### IV. DISCUSSION

A factor in the econometric model was determined as having an effect if the model resulted in an observed coefficient which is significant at the 5% level. Thus, in order to support an argument that a factor has an effect on opportunistic reporting, the probability that the econometric observed effect is random (the zero hypothesis is mistakenly rejected) must be less than 5% (of all econometric observed effects, the effect of R&D expenses is the most significant, with a level of less than 0.1%).

In addition to the significant effect R&D expenses have on opportunistic reporting, the study points to three more parameters which show a significant effect (at the level of 5%) on New Opportunistic Positions, and therefore as additional parameters which should be considered in the effort to reduce the cost of self-reporting.

##### A. Auditor

The use of three specific accounting firms as the company's financial statements external auditor is revealed by the econometric model as having a significant effecting on opportunistic reporting. These three accounting firms are 1. Ernst & Young; 2. PricewaterhouseCoopers; and 3. BKD (Baird, Kurtz and Dobson). Their effect and significance levels are presented in Table A3.

**TABLE A3. Auditors Having a Significant Effect on Opportunistic Reporting**

Name of Accounting Firm	Effect (Observed Coefficient with New Opportunistic Positions)	Significance Level (P. Value)	95% Conf. Interval (Std. Err clustered by comp.)
Ernst & Young	-2.400582	0.009	[-4.197146 - .6040178]
PricewaterhouseCoopers	-3.120213	0.039	[-6.080044 -.160381]
BKD (Baird, Kurtz and Dobson)	1.582937	0.042	[.0576889 3.108185]

As can be seen from the table, while the first two accounting firms have a negative effect (negative observed coefficient) on New Opportunistic Positions, i.e., the use of these

firms is associated with less opportunistic reporting, the third firm has a positive effect, i.e., the use of this firm is associated with more opportunistic reporting.

Although these findings are surprising and provocative, further empirical work would have to be done in order to achieve any normative conclusion or policy recommendation since the connection indicated by the model is only between the disclosure rate of such positions and the auditing firms. It does not reveal whether the accounting firm is positively correlated with opportunistic positions because it promotes such practices to its clients and thus the high number of New Opportunistic Positions reflects a higher rate of opportunistic reporting that is presumably promoted by the accounting firm. Or alternatively, that the accounting firm objects to such behavior and is therefore more strict in demanding disclosures and non-recognition of any opportunistic tax benefit under FIN 48 and thus, the client's high numbers do not result from their abnormal reporting behavior but rather from the auditor's stringent disclosure requirements.

Either way, the findings point to significant coefficients associated with some specific accounting firms and not others, and different types of effects (positive and negative); these open up new, provocative avenues of thought which should incentivize more research in this direction.

**TABLE A4. Auditors Included in the Study's Population**

Ernst & Young		Crowe Chizek
Deloitte & Touche		Grant Thornton
KPMG		J H Cohn
PricewaterhouseCoopers		McGladrey and Pullen
Other		Moore Stephens
Altschuler, Melvoin and Glasser		Moss Adams
BDO Seidman		Pannell Kerr Foster
BKD (Baird, Kurtz and Dobson)		Plante & Moran
Cherry, Bekaert and Holland		Richard A. Eisner
Clifton, Gunderson		Spicer & Oppenheim

Due to their scant appearance in the database, the five least frequent auditors (Altschuler, Melvoin and Glasser (n=2), Clifton, Gunderson (n=33), Moore Stephens (n=48), Pannell Kerr Foster (n=69), Spicer & Oppenheim (n=1)) were all grouped together under "Other" auditors.

#### *B. GIC Sectors*

In a fashion similar to the effect specific auditing firms have on opportunistic reporting, some specific sectors are especially associated with opportunistic reporting.

**TABLE A5. Specific Sectors Showing a Significant Effect Associated with Opportunistic Reporting**

Sector	<b>Effect</b> (Observed Coefficient with New Opportunistic Positions)	<b>Significance Level</b> (P. Value)	<b>95% Conf. Interval</b> (Std. Err clustered by comp.)
Energy	2.421291	0.029	[.2423336 4.600249]
Consumer Staples <sup>158</sup>	-4.17195	0.027	[-7.866934 -.4769662]

The positive effect associated with the energy sector, which is independent of the effect of R&D expenses, can be explained by specific opportunistic reporting available for companies in the energy sector, e.g., tax credits. However, understanding the causes for the negative effect associated with the Consumer Staples sector requires more research.

**TABLE A6. GIC Sectors Included in the Study's Population**

Sector	Original GIC Code	Sector	Original GIC Code
Energy	10	Financials	40
Materials	15	Information Technology	45
Industrials	20	Telecommunication Services	50
Consumer Discretionary	25	Utilities	55
Consumer Staples	30	Real Estate	60
Health Care	35		

### *C. Data Year*

Controlling for the effect of year in the model shows that timing has a significant effect on opportunistic reporting. As explained,<sup>159</sup> this effect is independent of all other factors tested, and results from the sole difference in the year the position was taken.

In general, all years have a negative effect when measured against the basic year (2009). This can be explained as an effect stemming from the use of Schedule UTP. Since 2010 certain companies have been required to submit this schedule; the study shows that starting from that year companies have reduced opportunistic reporting (as compared to 2009). These findings support the use of Schedule UTP, and show it is effective; nevertheless, R&D Expenses is still a prominent factor generating opportunistic reporting.

<sup>158</sup> Consumer Staples sector includes sub-sectors of essentials such as food, beverages, household items, etc.

<sup>159</sup> See *supra* Sec. IV.A.