

**MASTER'S THESIS**

*Firm reputation, CSR and Auditor reputation: What are the Consequences of Corporate Tax Avoidance?*

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*One can survive everything, nowadays, except death, and live down  
everything except a good reputation.*  
Oscar Wilde (1854-1900)

## **ABSTRACT**

I examine the relation between firm reputation and corporate tax avoidance and how this relation varies with a firm's corporate social responsibility (CSR) performance. Additionally, I investigate the relation between auditor reputation and corporate tax avoidance. Reputational concerns are often viewed as an important factor constraining corporate tax avoidance. However, while many researchers hypothesize that firm reputation is negatively related to the degree to which firms engage in corporate tax avoidance, this hypothesis has never been tested using (financial) archival data. Moreover, extant research has never investigated whether reputation effects also spill over to a firm's auditor, as stakeholders may hold auditors responsible for tax-related deficiencies in the financial statements. Using a sample of 1,567 publicly-listed U.S firms, I find strong robust evidence that firm reputation is positively associated with corporate tax avoidance. This result suggests that stakeholders attach value to a firm's corporate tax avoidance activities. I also find that this relation is less pronounced when firms are socially responsible, indicating that firms that have a higher reputation view CSR and tax payments as complements rather than substitutes. Further, my evidence suggests that auditor reputation is not significantly associated with corporate tax avoidance, indicating that auditor reputation plays no significant role in the extent to which firms engage in corporate tax avoidance.

**Keywords:** firm reputation, corporate social responsibility; auditor reputation; corporate tax avoidance

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## 1: INTRODUCTION

Corporate tax avoidance, firm reputation and auditor reputation are relevant topics in both management and accounting literatures. However, extant research has mainly examined these concepts independently since little attention has been drawn on the relation between them. At the same time, academicians such as Hanlon & Heitzman (2010) have called for more research on the determinants of tax avoidance. In this study, I provide evidence for the association between firm reputation and corporate tax avoidance. Moreover, I provide evidence for the effect of corporate social responsibility (CSR) activities on the relation between tax avoidance and firm reputation. Lastly, I explore whether the reputation effects of firms spill over to their auditors due to corporate tax avoidance. Note that in existent literature corporate tax avoidance is also called “tax aggressiveness” or “tax sheltering”. All different forms are used interchangeably in this study and are therefore regarded as synonyms.

Benjamin Franklin sharply wrote in 1789: *“In this world nothing can be said to be certain, except death and taxes”*. Of course, his assumption about death cannot be faulted, but paying taxes in the corporate world have become not so certain as it initially may seem like. We all read about Apple, Starbucks and Google, which are actively seeking for possibilities to lower their global effective tax rates, often at risk of losing their reputation. Multinational companies have multiple techniques to do so. For example, by shifting their profits artificially to low-tax jurisdictions and by using hybrid-entities some companies ultimately lower their effective tax rates to almost nihil. This phenomenon is called corporate tax avoidance and lies largely in the legal atmosphere of corporate tax planning. The fact that taxes represent a significant cost to firms and shareholders and those taxes reduce a firm’s pre-tax income and subsequently a firm’s distributable profits (Annuar et al. 2014) might be an important reason for firms to avoid these taxes. Tax avoidance and ways to reduce it are of obvious importance for nations. It can be seen as a problem of law enforcement, public finance and as an ethical problem.

Dyreng et al. (2008) find that a significant part of their sample (twenty-five percent of the publicly traded U.S. firms) appear to be highly effective in reducing their tax payments and are able to sustain low tax rates over periods as long as ten years. However, despite the fact that some firms enthusiastically engage in corporate tax avoidance such as Starbucks and Google, Dyreng et al. (2008) also show on the other hand that other firms pay taxes that even exceed the U.S. federal

corporate tax rate of 35%. Considering the economics of tax shelters, this comes as a surprise as there is a variety of possibilities to avoid taxes, virtually on every scale. These possibilities allow taxpayers to reduce their global tax burden at a very low economic cost. The question why some firms do not make use of tax shelters more extensively, is what existent literature calls the “under-sheltering puzzle” (Weisbach, 2002; Hanlon & Heitzman, 2010; Gallemore et al., 2014). Therefore, we need to understand what limits firms to engage in corporate tax avoidance. It may well be the case that tax-motivated activities not necessarily lead to greater shareholder value. For example, Lev & Nissim (2004) provide evidence that large book-tax differences (difference between accounting income and taxable income) are related with subsequent negative abnormal returns. This study focuses on a possible other explanation that might explain why some firms do not implement (aggressive) tax planning strategies, namely, that firms are concerned about the potential harm on their reputation. This study tries to verify this possible explanation and also focuses on the effect of CSR on the relation between a firm’s reputation and the degree of engaging in corporate tax avoidance, in order to examine whether CSR activities are successful in compensating/hiding their tax sheltering activities. It provides an answer to the following research questions:

*1a) Is there an association between the degree of corporate tax avoidance of firms and their reputation?*

*1b) Does CSR have an effect on the relation between corporate tax avoidance and firm reputation?*

In addition to a firm’s reputation, there might be also the threat of reputational loss for the auditors that ‘help’ the firms to engage in tax avoidance. The financial fraud surrounding the collapse from Enron considerably deteriorated the reputation of auditor Arthur Anderson (AA), ultimately leading to the firm’s demise in 2002. This example shows the severe consequences a firm’s activities (Enron’s accounting fraud) can have on its auditor’s (AA’s) reputation. The link between tax avoiding activities of firms and the reputation of their auditors has not been investigated in previous research, though. Therefore, also this link is explored, which can be stated in the third research question:

2) Does a relation exist between the degree of corporate tax avoidance of firms and the reputation of their auditors?

A loss of reputation is often posited as a factor that limits tax aggressiveness. Commissioner Doug Shulman (2009) from the IRS (Internal Revenue Service) states for example, that tax strategies can pose “significant risks to corporate reputations” and that “in today’s business climate, the general public has little tolerance for overly aggressive tax planning that can be viewed as corporations playing tax games”<sup>1</sup>. Alex van der Velden (partner at Ownership Capital) says: “*Aggressive tax planning is an issue investors are increasingly aware of. While it is legal and routine for companies to ensure they only pay the taxes they are required by law to pay, the public ire that has been created by businesses found aggressively pursuing loopholes has been significant and led to serious reputational issues*”<sup>2</sup>. The accusation of reputational effects as a constraining factor of tax avoidance is also fueled by newspapers and other media. For example, Daily Mirror (2012) reported that Costa Coffee had promoted its 25% corporate tax rate as a gibe at its competitor Starbucks, who is known for aggressively avoiding taxes<sup>3</sup>. Even though the kind of statements above concerning a firm’s loss of reputation due to tax aggressiveness are often regarded as true, there is little rigorous empirical analysis of the link between tax avoidance and a firm’s reputation.

Beyond the risk of reputation loss for the firm itself, audit firm reputation has become an important topic in the news nowadays as well. Recently, an article appeared in the news, suggesting that the reputation of Big 4 audit firms in the UK has suffered “*because of their substantial role in advising clients how to avoid tax, according to the UK Public Accounts Committee (PAC)*”<sup>4</sup>. Moreover, it states that the involvement of Big 4 UK auditors in constructing artificial structures has increased the role of Big 4 UK audit firms in avoiding tax. However, empirical evidence on the loss of reputation due to advisory in how to avoid taxes is scarce. In fact, to my knowledge, this link has never been investigated to date.

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<sup>1</sup> Shulman, D. (2009). Speech to the National Association of Corporate Directors Governance Conference, 19 October 2009.

<sup>2</sup> Van der Velden, A. (2014). Aggressive tax avoidance troubles large investors. *Financial Times*, November 2014.

<sup>3</sup> Costa Coffee has taxing question for Starbucks. *Daily Mirror*, 24 October 2012.

<sup>4</sup> UK Public Accountants Committee (PAC) (2013), Big four reputation harmed by tax avoidance: PAC. *International accounting bulletin*, 13 June 2013.

The majority of prior literature hypothesizes and finds that reputational concerns and effects are negatively related to the degree of tax avoidance that a firm exhibits (Hanlon & Slemrod, 2009; Graham et al., 2014). The intuition is that corporate tax avoidance practices are perceived as unethical by society and therefore likely will lead to negative reputational consequences. However, Gallemore et al. (2014) find that firms that were subject to public scrutiny for having engaged in corporate tax avoidance, bear no reputational costs. Mixed evidence on this topic therefore cannot fully explain the relation between firm reputation and corporate tax avoidance and my study helps to reconcile the different results between existing studies. I add to the line of research that investigates the relation between firm reputation and tax avoidance by conducting a (financial) archival study, to deepen our understanding of the role of firm reputation in corporate tax avoidance. Stakeholders may also hold auditors responsible (besides the firms themselves) for a firm's tax avoidance activities, as they have an indirect role in influencing a firm's tax aggressiveness. Nevertheless, no empirical evidence exists to verify this reasoning and this study tries to fill this gap.

I examine the five-year cash effective tax rates (ETRs) for a sample that consists of 5,608 firm-year observations relating to 1,567 publicly traded U.S firms that also have data on the MSCI database and on AuditAnalytics. My sample period comprises firm years from 2002-2013. I find that firms with a high reputation, where reputation is measured by a firm's reputational capital, engage on average in more corporate tax avoidance than other firms, indicating that stakeholders benefit from tax avoidance practices such that they would presumably prefer that firms engage in corporate tax avoidance. For this reason, reputational concerns do not appear to explain the under-sheltering puzzle which is in line with the results of Gallemore et al. (2014). However, I find that socially responsible firms that also have a higher reputation pay more taxes on average, indicating that these firms view CSR and tax payments as complements (e.g. incorporate tax strategies in their CSR-strategies). I find no statistical significant association between auditor reputation and corporate tax avoidance, which implies that auditor reputation plays no significant role for auditors in discouraging or encouraging firms to engage in corporate tax avoidance.

Despite the increasing relevance of tax avoidance, there is still need for more clarity why some firms engage in corporate tax avoidance and others do not (Hanlon & Heitzman, 2010). This study attempts to answer this call for more research on the "under-sheltering puzzle" and its contribution is threefold. Unlike the papers by Gallemore et al. (2014) and Hanlon & Slemrod



(2009), I do not account for reputational effects a firm faces after revelation that a firm engaged in tax sheltering activities (causation), but rather investigate the association between firm reputation and tax avoidance. Further, it shows how this association varies with the level of CSR activities which never has been investigated before. Additionally, it gives auditors insights in their role in establishing complex tax arrangements and the influence of this role on their reputation, which has not been earlier investigated by extant research either.

The rest of the master's thesis proceeds as follows. In chapter two I discuss relevant theoretical background regarding corporate tax avoidance. In chapter three I discuss prior research on corporate tax avoidance and develop my predictions on the relation between firm reputation and corporate tax avoidance, and how that relation may vary with the level of CSR-performance. Further, I elaborate in this chapter on relevant literature on auditor reputation and develop my predictions on the relation between tax avoidance and auditor reputation. Chapter four describes the sample selection and research design, chapter five shows the empirical results and chapter six concludes.

## **2: THEORETICAL BACKGROUND**

In this chapter I concisely provide the definitions of the relevant concepts and some background information. First, I discuss the definition of corporate tax avoidance that I use. Subsequently, I discuss the ethical dimension of tax avoidance. This chapter ends with other relevant definitions and concepts regarding the key concepts in this study.

### 2.1 Corporate tax avoidance and tax evasion defined

It is important to clarify at the outset what is meant by the term tax avoidance in this study. Tax management, tax aggressiveness, tax sheltering and noncompliance are frequently used to refer to tax behavior with the aim to save taxes. The different forms above to express tax saving activities are often used interchangeably. However, neither of them has a universally well-accepted definition. Hanlon & Heitzman (2010) also acknowledge that the different terms mean different things to different people. Therefore, I use one generic term which encompasses all different terms to describe tax reporting behavior: corporate tax avoidance. In this study, I use the different terms above synonymously while acknowledging differences do exist.

Hanlon & Heitzman (2010) view tax avoidance as a continuum. The left end of the continuum is perfectly legal, where the other end is illegal. The different terms (tax management, tax aggressiveness, tax sheltering etc.) can be anywhere along the continuum, depending on how aggressive the tax planning strategy is. The difficulty in placing a tax strategy on this continuum, is that different people will have a different perception of the degree of aggressiveness of the same transaction. To overcome this ‘problem’, the term corporate tax avoidance in this study captures all transactions on the continuum, both legal and (potentially) illegal.

However, in contrast to the definition of tax avoidance in this study, often the conventional distinction between tax avoidance and tax evasion in literature is that the first term is legal and the latter illegal. Thus, in this study tax evasion is the right end from the continuum of tax avoidance and therefore the most aggressive form of tax avoidance, while in some literature a clear distinction is made between tax evasion (illegal) and tax avoidance (only legal). In other words, in this study is tax evasion a form of tax avoidance. Tax evasion involves intentional non-disclosure or concealment (Hasseldine & Morris, 2013). It comprises all illegal practices and activities that are adopted by a taxpayer to prevent himself from taxation. Though, it is not unusual that complex corporate transactions can be qualified as legal (tax avoidance) where others perceive them as

illegal (tax evasion). Therefore, there is no clear line between tax evasion and tax avoidance (Kamau and Mutiso 2012). This implies that a grey area exists between tax avoidance and tax evasion, as rules might be subject to interpretation and are not always clear.

This grey area causes the difficult task to define tax avoidance in empirical literature, as distinguishing legal tax avoidance from illegal evasion is hard in actual practice, particularly in international tax law. Miller and Oats (2012) for instance describe tax avoidance as the legal minimization of a firm's global tax burden. Hanlon & Heitzman (2010) refer to tax avoidance as the reduction of explicit taxes, reflecting all transactions that affect a firm's tax liability. In line with Hanlon & Heitzman (2010), Lanis & Richardson (2012) broadly define tax aggressiveness as: "*the downward management of taxable income through tax planning activities. It thus encompasses tax planning activities that are legal or that may fall into the gray area, as well as activities that are illegal*". Hence, Hanlon and Heitzman (2010) and Lanis & Richardson (2012) employ a definition of tax avoidance in a broad way, ignoring the distinction between legal and illegal, where the definition of Miller and Oats (2012) only comprises legal arrangements to reduce a tax liability. Thus, for the sake of simplicity, empirical literature does often not make a distinction between legal and illegal activities in order to measure corporate tax avoidance<sup>5</sup>. In short, defining tax avoidance is very complex due to the thin line between legal tax avoidance and illegal tax evasion. According to Freedman, it is "definitional quagmire" (Freedman, 2006).

Similarly, I do not make this distinction either in defining corporate tax avoidance and follow the measure used by Dyreng et al. (2008). This measure will capture both sheltering and aggressive tax planning, but also possible activities that fall somewhere in the grey area or at least have some grey area aspects to them. I define tax avoidance as "*the ability to pay a low amount of tax per dollar of reported pre-tax financial accounting income*". I will elaborate more extensively on this in chapter three.

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<sup>5</sup> Hanlon and Heitzman (2010) give two reasons why distinguishing between legal tax avoidance and illegal tax evasion is not useful. First, most of the tax behavior involves transactions that are often technically legal and second, the legality of a tax avoidance transaction is often determined after the fact.

## 2.2 Corporate tax avoidance: an ethical dimension

Taxes must be viewed as a contribution to society. A state cannot function without taxes. They enable governments to provide the public all sorts of public goods. Oliver Wendel Holmes perfectly expresses the eminent importance of taxes for society and the individual: “*taxes are what we pay for a civilized society*”<sup>6</sup>. This famous statement indicates the reciprocal relation that exists between the state and society. In exchange for paying taxes, we reap the benefits that the state provides us with. The state encourages investment and fosters innovation. Moreover, it ensures safety and protection. In short, a state enables firms to generate revenues. However, companies often regard tax as a cost that should be limited to a minimum as long as it is legally allowed. As a consequence, these companies undermine the reciprocal relation between a state and society: they benefit from opportunities that a state provides them, but are not willing to pay for them. The reciprocal relation shows that taxes are a moral phenomenon. In other words, that taxes have an ethical dimension, besides a legal (juridical) dimension.

The tax behavior of multinational companies as Starbucks, Google and Amazon has changed the public opinion and receives a great deal of attention nowadays. Aggressive tax planning has become a focal point of public criticism in the last decade, due to the recent financial crisis that has affected the world. Society is not impressed anymore by the argument that multinational firms act legally, that is, in compliance with the prevailing legal rules. In the public opinion, the fiscally driven activities of companies neglect the ethical dimension of tax legislation, as taxes form the backbone of the state. The degree of contributing to a state and society embodies a form of distributive justice: taxes determine a (fair) division of the tax burden among the society as a whole. A company that disproportionately contributes (e.g. pay too less taxes relatively), is a free rider. Paying a relative low amount of taxes ignores the moral duty to contribute to society: paying a fiscal *fair share*.

Of course, a taxpayer has the freedom to act in a way in order to minimize its global tax burden. The legislator even stimulates taxpayers regularly to do so, while pursuing a certain objective. For example, in The Netherlands taxpayers have the opportunity to deduct interests on a home loan (“*hypothekrente-aftrek*”), initially with the aim to stimulate the housing market. However, there is an important difference between tax planning and aggressive tax planning.

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<sup>6</sup> Supreme Court of the United States 21 november 1927, *Compania Gen. de Tabacos de Filipinas v. Collector of Internal Revenue*, U.S. 87 (Holmes, O.)

Gribnau (2014) argues that firms do not have to be altruistic regarding taxes, and are therefore ‘allowed’ to choose actions in their own interest (tax planning). However, Gribnau also acknowledges that taxpayers who only serve their self-interest via tax avoidance and tax evasion and for this reason not contribute to society, are free-riders. He believes in the existence of a turning point, where acting legally is not legitimate anymore (aggressive tax planning).

Acting legally concerning tax behavior, requires acting in accordance to the prevailing tax rules. However, rules have an important drawback, namely, that rules are imperfect. It is impossible to perfectly translate the goal to be served into a rule. As a consequence, rules are subject to different interpretations and cause gaps in the tax legislation (e.g. a grey area). The question rises for these reasons, whether companies ought to incorporate ethical considerations in their tax strategies (Gribnau, 2015).

In line with Gribnau (2015), Mintz & Morris (2017) say that, when the rules are unclear, an ethical person (thus also people acting on behalf of a firm) should look beyond his/her own interest (or the interest of the firm) and evaluate the interests of all stakeholders affected by his/her action. They continue: “*ethical decision making requires that a decision maker be willing, at least sometimes, to take an action that may not be in his/her best interest, known as ‘the moral point of view’*”. Similarly, Jennings (2006) says that an organization ethically collapses, when firms have drifted into rationalizations and legalisms, and all for the purpose of getting the results they want and need at almost any cost (e.g. a culture of “*can we do it legally?*”).

In conclusion, when incorporating a moral point of view in firms’ tax strategies, firms should pay their fiscal fair share and should recognize the reciprocal relationship between them and the state and will in this way attach value to the ethical dimension of taxes, which endorses the current public opinion. Society no longer tolerates free-rider-behavior. It will accept tax avoidance as long as firms do not avoid the moral responsibility to contribute and underscore the moral phenomenon called taxes.

### 2.3 The under-sheltering puzzle

As I already mentioned in chapter one, firms have multiple techniques to reduce their global tax burden, particularly by seeking for all kinds of loopholes. The question rises why some firms avail themselves the opportunity to fully exploit these loopholes, while other firms pay the full freight. This phenomenon is in literature coined as the under-sheltering puzzle.

That some firms take advantage of tax sheltering only to a limited amount is quite surprising, given the economics of sheltering according to Weisbach (2002). In this seminal paper regarding “under-sheltering”, he reasons that given the chance of a tax shelter being challenged is low, the chance of this challenge being successful is also low and the chance of losing more than merely back-taxes plus interest is extremely low, engaging in tax avoidance seems to be irresistible. However, the amount of taxes saved due to tax sheltering activities are relatively small compared to the actual corporate tax payments, indicating that significant amounts of corporate tax are not being sheltered. Weisbach (2002) also acknowledges that there are no satisfactory theories so far to explain these facts.

For instance, he makes the plausible comparison with tax compliance behavior and Becker’s model of criminal behavior. The intuition from his comparison is that as long as the benefits of criminal behavior (in this case tax avoidance) outweigh the likelihood of detection, engaging in criminal behavior is profitable. However, he also admits that when a model like this holds in reality, the level of sheltering is still too low, unless risk and risk aversion are very high. But, what determines this risk and risk aversion? What are the determinants of risk (aversion) of tax avoidance? These are questions that all concern to the under-sheltering puzzle.

The fact that the phenomenon “under-sheltering” is coined as a puzzle, has caused a significant increase in literature on this topic; after all, a puzzle has to be solved. Of course, the fact that firms make use of the vast amount of (legal) tax sheltering possibilities is trivial. Therefore, the under-sheltering puzzle literature addresses merely the fact why there is not more tax sheltering. In other words: *“The question is not, why does a chicken cross the road”? It’s, why don’t all of the chickens cross the road?”* (Thornock, 2014)<sup>7</sup>. However, despite the increasing amount of literature on this topic, the puzzle has not been fully solved yet. Therefore, we still have an imperfect understanding why some firms implement tax shelters while others do not.

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<sup>7</sup> Thornock J. R. (2014). Corporations caught avoiding taxes appear to bear no reputational cost. *Website University of Washington*.

## 2.4 Reputational costs and firm reputation: an important distinction

I address different nomenclature in this study, all related to reputation. For this reason, a thorough understanding of the different terms used in this study is essential. Specifically, the distinction between reputational costs and firm reputation is important. Some terms related to reputation are not clearly defined in prior literature, but a clear interpretation of the concepts is indispensable.

Gallemore et al. (2014) who introduced ‘reputational costs’ do not give a clear definition of this term. Desai et al. (2006) speak about ‘reputational penalties’, but their paper lacks a clear definition as well. However, based on these papers, I infer that reputational costs (or penalties) regarding tax avoidance are the costs in a variety of forms that a firm bears due to tax sheltering activities, after they faced public scrutiny. Reputational costs are therefore merely *ex-post* (after facing public scrutiny). Gallemore et al. (2014) distinguish different kinds of reputational costs, among them are CEO turnover, change in sales, and auditor turnover. Thus, reputational costs are costs that a *firm* faces. On the contrary, firm reputation has nothing to do with direct actual costs a firm bears, but rather focuses on the perceived image *society* has on a firm. Nevertheless, the consequence of a negative change in reputation (reputation loss) will likely, but not necessarily, be related with an increase in reputational costs, even though the concepts are different.

The definition of firm reputation involves how a firm is judged by society due to its corporate image. The word ‘image’ indicates the name or icon that symbolizes the organization (Sucher et al., 1999). Herbig et al. (1994) define reputation as follows: “*Reputation is the estimation of the consistency over time of an attribute of an entity. This estimation is based upon the entity’s willingness and ability to repeatedly perform an activity in a similar fashion. Reputation is an aggregate composite of all previous transactions over the life of the entity, a historical notion, and requires consistency of an entity’s actions over a prolonged time for its formation.*” In my thesis, I follow this definition of reputation. Fombrun et al. (2000) has termed the fluctuating value of the company’s reputation as ‘reputational capital’. He defines reputational capital as: “*the market value of the company in excess of its liquidation value and its intellectual capital*”. In this respect, reputational capital can be viewed as internally generated goodwill<sup>8</sup>. He continues that the value of a company’s reputational value is at risk in everyday interaction with

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<sup>8</sup> It is questionable whether firms should recognize internally generated goodwill (e.g. also reputational capital) in their financial statements or not. However, so far, US GAAP and IFRS only allow acquired intangible assets to be recognized in the financial statements.

stakeholders and will fluctuate in the equity markets as stakeholders convey or withdraw support from the company. Reputational capital can grow when managers convince customers to buy the firm's products and when managers induce analysts and reporters to praise the company and recommend a company's shares. On the other hand, a firm's reputational capital is destroyed when stakeholders withdraw their support as they lose confidence in the company's managers, its products and prospects. Thus, reputational capital affects a company's value, as reputational capital can be accumulated or lost over time (Orišek, 2004). Often, it is harder to rebuild a reputation than to build one. In line with this, trust is hard to gain but easy to lose. It is therefore possible that negative perceptions about a firm's tax avoidance activities will influence a firm's reputational capital in a negative way.

### 2.5 CSR and tax avoidance

It is likely that firms that enthusiastically engage in corporate tax avoidance will not be proud of it, as they fear negative media scrutiny. In the public opinion, corporate tax avoidance activities have become an ethical problem (see section 2.2) and might seriously harm a firm's reputation. Therefore, it is feasible that firms want to conceal or compensate for any tax sheltering activities to prevent any reputation damage. In this study, I investigate whether firms are effective in concealing or compensating tax avoidance activities with CSR activities to maintain their reputation. The intuition is that firms want to offset any negative perceptions with respect to their tax strategies and therefore temper the potential negative effects these can have on their reputation.

Firms that are highly committed to CSR are regarded as socially responsible. Socially responsible firms attempt to generate revenues within the confines of the law. Hoi et al. (2013) define CSR activities as “*corporate actions affecting all of the firm's stakeholders including shareholders, employees, communities, government, customers etc.*” Mackey et al. (2007) broadly define CSR as “*voluntary firm actions designed to improve social or environmental conditions*”. Firms that engage in CSR activities generally have goals of being ethical and being good corporate citizens to fulfill the ethical and discretionary domains (Watson, 2015). Clearly, this is at odds with corporate tax avoidance practices, which are perceived as unethical in the public opinion. It is for this reason plausible that a trade-off exists between tax avoidance behavior and being socially responsible and that firms want to conceal tax aggressiveness (unethical) by being socially responsible (ethical). In other words, in order to maintain an image as a good corporate citizen,



firms will possibly compensate tax avoidance practices with CSR activities to build and defend brand names and reputation.

## 2.6 Auditor reputation and corporate tax avoidance

The primary role of an audit is to render an opinion on whether the financial statements are presented fairly, in all material aspects, in accordance with the generally accepted accounting principles (GAAP) and whether these financial statements fairly reflect the client firm's financial condition. Part of the role of an auditor is also to evaluate the tax-related items in the financial statements. Therefore, auditors have an indirect role in influencing a client firm's tax aggressiveness (Kanagaretnam et al., 2016). This role has different implications for an auditor.

First, litigation risk faced by auditors will likely increase due to a higher degree of tax aggressiveness, as investors will usually hold auditors responsible for tax-related deficiencies in the financial statements (Donohoe & Knechel, 2014). Second, showing an incorrect amount of taxable income by a firm will be regarded as non-compliant by the tax authorities, leading to possible accusations of failure to adequately evaluate a client firm's tax position. Furthermore, firms that actively engage in corporate tax avoidance have a higher likelihood of misstatements and restatements because managers have a variety of possibilities to manage earnings (Gupta et al. 2015). All implications might call the integrity of the auditor into question, which might have serious negative consequences on an auditor's reputation.

The fact whether the financial statements fairly represent a firm's financial condition is essential for all different stakeholders, but not in the last place for investors in order to value a firm's stock. The stock valuation process relies heavily on financial statements. Often, managers have the incentive to bias the financial statements to enhance the value of their firms' equity. Under such circumstances, investors might penalize stock prices to the extent of the suspected bias as they consider all financial statements to be "lemons" (Autore et al., 2009; Akerlof, 1970)<sup>9</sup>. However, quality audits can assure investors that financial statements are in compliance with the prevailing accounting and reporting standards. Additionally, they can reduce managers' ability to

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<sup>9</sup> Akerlof recognized that the seller of a used car knew more about the car's value than the buyer. As a result, the buyer was likely to end up overpaying, as the seller would reject any offer lower than the car's true value and accept any higher offer. In turn, car buyers recognized this issue too and would respond by only making low-ball offers for used cars, leaving sellers with high quality cars to exit the market. As a result, only the lowest quality cars (the "lemons") would remain in the market. Reliable information on a used car's value could prevent this market breakdown.

bias financial statements through adequately monitoring them. The confidence of investors in auditor's capacity to minimize this uncertainty depends on investors' perception of the auditor's reputation. The higher investors estimate the auditor's reputation, the more investors have confidence in the financial statements, *ceteris paribus*. This implies that investors will revise stock prices downward when auditor's reputation is unexpectedly harmed. When investors perceive corporate tax avoidance as something negative (as it is unethical in the public opinion), this will have different implications for an auditor as aforementioned. When the auditor's reputation may consequently be harmed, stock prices of firms with the same auditor will presumably fall.

### 2.7 Summary of theoretical concepts

Defining corporate tax avoidance is very complex due to the thin line between legal tax avoidance and illegal tax evasion. Often, empirical literature does not make a distinction between legal corporate tax avoidance and illegal corporate tax avoidance (e.g. tax evasion). I follow the measure used by Dyreng et al. (2008). This measure captures both sheltering and aggressive tax planning, but also possible activities that fall somewhere in the grey area or at least have some grey area aspects to them. The definition of corporate tax I use in this study is: "*the ability to pay a low amount of tax per dollar of reported pre-tax financial accounting income*".

In addition to the legal dimension, corporate tax avoidance has an undeniable ethical dimension. The reciprocal relation between society and a state reflects this ethical dimension: in exchange of paying taxes we benefit from the public goods that the state provides us. Triggered by the financial crisis, society no longer tolerates free-rider-behavior (e.g. paying almost no taxes). It will accept tax avoidance as long as firms do not avoid the moral responsibility to contribute and underscore the moral phenomenon called taxes.

The question rises why some firms avail themselves the opportunity to fully exploit the opportunities to avoid taxes, while other firms pay the full freight. This phenomenon is in literature coined as the under-sheltering puzzle and the puzzle has still not been fully solved yet.

A possible explanation for the under-sheltering puzzle could be the fact that firms fear reputation damage. Firm reputation refers to the overall perceived quality or character by the public towards a firm. It is likely that firms want to offset any negative perceptions with respect to their tax strategies and therefore temper the potential negative effects these can have on their reputation with CSR activities.

Besides reputational harm for a firm, there might be also the threat of reputational loss for auditors that ‘help’ the firms to engage in tax avoidance. Auditors have an indirect role in influencing a client firm’s tax aggressiveness (Kanagaretnam et al., 2016). This role has different implications for an auditor: litigation risk, accusations of failure to adequately evaluate a client firm’s tax position and a higher likelihood of misstatements and restatements. All implications might have serious negative consequences for an auditor’s reputation.

### **3: LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

Corporate tax avoidance has been a highly relevant topic for quite a long time. I distinguish different themes that emerged from existent literature. I discuss each theme separately in section 3.1. For a very broad review of tax avoidance literature, I refer to Hanlon & Heitzman (2010). In section 3.2 I elaborate on the literature and background regarding firm reputation and tax avoidance. Subsequently, in section 3.3 I draw special attention to a niche in the literature that is related to CSR and tax avoidance and the interaction effects with firm reputation. Lastly, I discuss previous literature on auditor reputation in section 3.4. Additionally, I infer my hypotheses in the sections above based on prior research and background theory.

#### 3.1 Literature on corporate tax avoidance

Literature on tax avoidance, tax aggressiveness and tax sheltering has been of interest to researchers for decades. Three general themes emerge from prior literature related to corporate tax avoidance. The first theme examines the association between tax avoidance and firm characteristics. The second investigates the causes and consequences of corporate tax avoidance and the third theme examines how to measure tax avoidance. In the following subsections, I elaborate on each theme separately.

##### 3.1.1 Firm characteristics and corporate tax avoidance

The first theme that emerges from previous literature, focuses on the relation between tax avoidance and firm characteristics. A variety of firm-level characteristics have been examined as determinants of corporate tax avoidance, such as size, economies of scale via foreign operations and profitability. Rego (2003) investigates the association between the level of tax avoidance (measured by effective tax rate) and size, extent of foreign operations, pre-tax income, whether the firm is a multinational corporation, interactions of multinational and size and income, location of the firm and industry indicators. Rego (2003) provides evidence that larger firms have higher effective tax rates and firms with higher pre-tax income have lower effective tax rates, *ceteris paribus*. In addition, Rego (2003) finds that tax avoidance increases with the scale of international operations, leading to higher effective tax rates for domestic only corporations. The negative relation between firm size and effective tax rates is based on the idea that larger firms are more tax avoidant as they enjoy greater economic and political power compared to smaller firms and enjoy

economies of scale. For this reason, they are better able to reduce their effective tax rates accordingly.

Gupta & Newberry (1997) also explore the determinants of the variability in corporate effective tax rates. They provide evidence for a positive significant association between effective tax rates and firm size. Moreover, they find a negative relation between a firm's leverage and effective tax rates. This relies on the idea that firms that have higher amounts of debt can deduct the interest expenses associated with this debt, which lowers the amount of taxable income.

Mills et al. (1998) regress different firm-level variables on a firm's effective tax rate. The independent variables include investment in tax planning, firm size, foreign assets, leverage, level of fixed assets and the inventory intensity of the firm. They show that the amount invested in tax planning is negatively associated with a firm's effective tax rate. Further, they show that a higher leverage of a firm, is associated with a lower effective tax rate, similar to Gupta & Newberry (1997).

### 3.1.2 The causes and consequences of corporate tax avoidance

The bulk of literature regarding tax avoidance tries to explore the main drivers and consequences of a firm's tax avoidance behavior. This theme of literature generally regresses a firm's effective tax rate on a variety of firm-level characteristics as control variables, in addition to their specific variable of interest as independent variable. First, I elaborate on a paper that provides a cause for corporate tax avoidance. Later I account for some papers that indicate the consequences of tax avoidance.

Dyreng et al. (2010) investigate the relation between firm executives and the level of tax avoidance. They tracked the movement of 908 CEO's, CFO's and other executives during a sample period of 15 years (1996-2002) and find that individual executives have significant influence in determining the level of tax avoidance that is undertaken by firms, incremental to firm-specific characteristics of a firm.

Goh et al. (2016) examine the effects of less risky forms of corporate tax avoidance on a firm's cost of equity. Overall, they show that investors perceive less risky and less aggressive tax avoidance as positive, since the cost of equity is lower for less aggressive tax avoiding-firms, relative to firms that engage in more aggressive forms of tax planning. Furthermore, they provide evidence that information quality also matters in the relation between tax avoidance and the cost

of equity. They find that investors discount the value of tax planning for firms with poor information quality.

Another paper that shows the possible consequences of tax avoidance is Wilson (2009). He investigates whether tax avoidance creates shareholder value. He finds that firms that actively engage in tax shelters together with strong corporate governance exhibit positive abnormal returns. Therefore, he provides evidence that tax avoidance is indeed associated with wealth creation for shareholders.

### 3.1.3 Measuring corporate tax avoidance

The last theme of research on corporate tax avoidance that I distinguish investigates how to measure corporate tax avoidance. I discuss the most common utilized measures of corporate tax avoidance in detail. However, the first issue in measuring tax avoidance, is from which source the tax information can be obtained (Hanlon & Heitzman, 2010; Salihu et al., 2015).

The information about the taxable income and tax liability can be obtained from either the financial statements in the company's annual report or in the income tax returns. The main issue is that the information in the tax return is not necessarily the same as the information in a company's financial statements, given the divergences in the objectives and regulatory laws of the financial accounting system and that of tax accounting (Salihu et al., 2015).

Tax returns provide the most accurate information of a company, but this source has major drawbacks. First, tax returns are not publicly available and highly confidential. As a consequence, access is granted to only a few people. Another problem is that even when tax return data is available, the different consolidation rules make it nearly impossible to match any one tax return to any one set of financial statements (Mills & Plesko, 2003). Therefore, it is very hard to ascertain how much tax is being paid on the reported accounting earnings in a filed 10K. Further, it is impossible to measure the market interpretation of the information on the tax return, as this information is not publicly available. Finally, tax regulations are conducted on a national level and U.S tax returns for example provide only the U.S portion of the worldwide activities of a U.S. multinational corporation (Hanlon & Heitzman, 2010). In sum, information on tax returns, even when they would be publicly available, have many problems that makes it not feasible to use this information in tax research. Consequently, tax information on a company's financial statements is

virtually always used in tax research. In the remainder of this section I discuss the different empirical measures of tax avoidance that are used in prior literature.

Salihu et al. (2015) categorize empirical measures for tax avoidance into three groups: tax proportions of business income (ETR), the gap between accounting income and taxable income (book-tax difference, BTD) and other measures. The three measures above can be further divided into several variants.

The effective tax rate (ETR) is often utilized because the ETR helps to estimate the effectiveness in companies' tax planning activities (Mills et al. 1998). Generally, the ETR is measured as the tax liability relative to the accounting income. The ETR can be subdivided into the GAAP ETR (Chen et al., 2010), current ETR (Lanis & Richardson, 2012) and long-run cash ETR (Dyreng et al., 2008; Dyreng et al., 2010). Regardless the form, the ETR is most frequently and widely used as a proxy for corporate tax avoidance. The volatility in tax avoidance is mostly caused by temporary differences. This volatility will disappear over time and for this reason, the long-run cash ETR has a specific advantage over the other variants. Generally, the long cash ETR is measured over 3-10 years (Hanlon & Heitzman, 2010).

The book-tax difference is another common measure for corporate tax avoidance. The size of the difference between pre-tax book income and taxable income indicates more tax avoidance practices. Prior research by Mills et al. (1998) and Wilson (2009) finds that larger book-tax differences are associated with a higher probability of tax avoidance.

The last category of tax avoidance measures according to Salihu et al. (2015), consists of tax avoidance measures, other than book-tax differences and ETRs. For example, Gallemore et al. (2014) use a dummy variable which equals one if a firm is accused of tax shelters and 0 otherwise. Lisowsky et al. (2010) use unrecognized tax benefits (UTB) as a proxy for tax avoidance. The UTB is an accounting reserve for future tax contingencies. The intuition is that a higher reserve for tax contingencies, indicates more uncertainty in the firm's tax position and thus are likely representative of the degree of tax avoidance. In Table 1, the different measures of tax avoidance are summarized, with corresponding computations, descriptions and papers that make use of the specific measures.

**Table 1: Measures of tax avoidance**

| Measure           | Computation   | Description  | Author(s) using the measure |
|-------------------|---|--|-----------------------------|
| GAAP ETR          | $\frac{\text{Worldwide total income tax expense}}{\text{Worldwide total pre-tax accounting income}}$      | Total tax expense per dollar of pre-tax book income.                                     | Chen et al. (2010)          |
| Cash ETR          | $\frac{\text{Worldwide cash taxes paid}}{\text{Worldwide total pre-tax accounting income}}$               | Cash taxes paid per dollar of pre-tax book income.                                       | Dyreng et al. (2008)        |
| Long-run cash ETR | $\frac{\sum (\text{Worldwide cash taxes paid})}{\sum (\text{Worldwide total pre-tax accounting income})}$ | Sum of cash taxes paid over n years divided by the sum of pre-tax earnings over n years. | Dyreng et al. (2008)        |
| Current ETR       | $\frac{\text{Worldwide current income tax expense}}{\text{Worldwide total pre-tax accounting income}}$    | Current tax expense per dollar of pre-tax book income.                                   | Lanis and Richardson (2012) |
| BTD               | pre-tax book income - taxable income  | Total difference between book and taxable income.  | Mills et al. (1998)         |
| UTB               | Disclosed amounts of accrued tax liabilities  | Tax liability accrued for taxes not yet paid on uncertain positions.                     | Lisowsky et al. (2010)      |

Table 1 provides a summary of the different measures for corporate tax avoidance that emerged from prior literature.

### 3.2 Corporate tax avoidance and firm reputation

A research topic rarely investigated in business literature is whether the reputation of a firm influences its level of tax avoidance. Some mixed evidence exists on this topic, though. Contrastingly, much unambiguous literature exists for reputational effects unrelated to tax avoidance, which is also relevant for this study as similar events have proven to cause reputational effects. I first account for this previous research that examines reputational effects in non-tax settings and subsequently proceed with literature that examines the relation between tax avoidance and reputational effects.

#### 3.2.1 Reputational effects in non-tax setting

There is plenty of evidence for non-tax related reputational effects in prior literature. Generally, this literature investigates the reputational effects of various types of misconduct on both firms and managers (Gallemore et al., 2014). For instance, Bowen et al. (2010) show that firms that are subject to exposure by whistleblowers face adverse effects following on the whistle-blowing announcement. They provide evidence that whistle-blowing allegations have an immediate negative impact on the target firm's average-market adjusted returns and lead to more earnings restatements. Dechow et al. (1996) investigate the capital market consequences that firms experience after earnings manipulations became public. They find that firms engaging in earnings



management experienced a significant increase in their cost of capital on the capital market. Likewise, firms that recall defective products bear large losses, even substantially larger than the costs related to the recall itself as the costs spill over to the firm's goodwill (Jarrell et al. 1985). Moreover, the losses also spill over to competitors.

In sum, plenty of evidence exists for negative reputational effects due to varying non-tax related events. The question rises whether these negative effects also occur for firms that engage in tax avoidance. The next subsection elaborates on the reputational effects related to tax sheltering and I infer the first hypothesis regarding firm reputation and tax avoidance from this literature.

### 3.2.2 Reputational effects and tax avoidance

Results of studies related to tax aggressiveness share some characteristics with the non-tax events discussed above, but these results are somewhat more mixed. Previous examples show that firms face adverse effects after different non-tax-related events are perceived as negative by different stakeholders. However, there is little literature that focuses on reputational effects due to tax sheltering. I elaborate on literature that examines the relation between reputational effects and tax avoidance below.

Graham et al. (2014) provide evidence that potential harm on a firm's reputation is an important constraining factor in adopting tax planning strategies. They conducted a survey among nearly 600 tax executives about their experiences concerning tax sheltering. A survey methodology is used, as the link between firm reputation and tax planning is difficult to test with archival data (Graham et al., 2014). They first asked, "has your company ever considered but decided not to implement a tax planning strategy proposed and/or marketed by an accounting, law, investment, or a consulting firm?" If the respondent answered yes, they asked "what factors were important in your company's decision not to implement the tax planning strategy that was proposed?" It appeared that nearly 70% of the firms shun tax planning strategies due to the potential harm to their reputation, which clearly support the expectation for a negative relation between high-reputation firms and corporate tax avoidance.

Previous literature examines the reputational effects for firms accused of engaging in tax shelters, but the evidence is mixed. Hanlon & Slemrod (2009) attempt to examine the costs and benefits that corporations face after it became clear that they performed tax sheltering activities due to media attention. They provide evidence that, on average, a company's stock price declines

after the accusation that a firm is engaging in tax shelters. Similarly, Kim et al. (2014) find strong evidence that future crash risk of firm-specific returns is positively related with tax sheltering. These two papers indicate that firms face negative stock market reactions due to their tax strategies and more generally face negative reputational consequences. Moreover, these papers are in compliance with the conducted survey by Graham et al. (2014), since managers shun tax avoidance due to potential reputation effects that indeed occur after it appeared that a company engaged in tax sheltering.

However, Gallemore et al. (2014) find no evidence for any reputational costs in a study of 113 firms that all faced public scrutiny for having engaged in tax sheltering. As aforementioned, reputational costs are costs that a firm might bear after a firm faced public scrutiny. The examined reputational costs consist of CEO and CFO turnover, auditor turnover, lost sales and increased advertising costs. Gallemore et al. (2014) find that firms bear none of the examined reputational costs as a result of being accused of engaging in tax shelters. Gallemore et al. (2014) explain that it is therefore likely that tax avoidance can benefit the firm and its shareholders, such that investors prefer that the firm engage in some tax avoidance. In this case, no significant or even a positive relation between tax avoidance and firm reputation can be expected (e.g. high-reputation firms will likely engage in tax avoidance as this may positively, or at least not negatively, affect their reputation). Thus, there is mixed evidence in the literature whether reputation effects matter in a firm's decision to engage in tax sheltering activities.

An important limitation that the papers by Gallemore et al. (2014) and Hanlon & Slemrod (2009) have in common, is that they focus on reputation effects *after* firms were publicly identified and accused for engaging in tax avoidance. These papers can therefore not address the contemporaneous association between firm reputation and tax avoidance. A survey methodology conducted by Graham et al. (2014) has some disadvantages as well. For example, some respondents may be unwilling to admit their degree of engaging in tax avoidance behavior. A second disadvantage is that surveys measure beliefs, which obviously not always coincide with actual undertaken actions. In contrast to Gallemore et al. (2014) and Hanlon & Slemrod (2009), I do not merely account for the *ex-post* reputational effects that are possibly linked to a firm's tax avoidance behavior, but rather on the contemporaneous association. Literature that focuses on *ex-post* reputational effects only examines the reputational consequences of firms that were publicly identified as engaging in tax shelters and were caught. For this reason, the researchers in these

studies cannot address the reputational effects for firms that were not publicly identified as having engaged in corporate tax avoidance.

In short, the majority of literature on reputational effects shows negative consequences as a result of engaging in corporate tax avoidance. However, Gallemore et al. (2014) provide important evidence that a firm bears no significant reputational costs after firms were subject to media scrutiny. Because of ambiguity in the relation, I posit the following non-directional hypothesis stated in null form:

*H1a: Firm reputation is unrelated to the extent to which a firm engages in corporate tax avoidance.*

### 3.3 The role of CSR in the relation between tax avoidance and firm reputation

There exists much empirical literature that examines the relation between CSR activities and tax avoidance. However, prior research has never related CSR to tax avoidance in combination with firm reputation. The relation between tax avoidance and firm reputation may not be uniform across firms that engage in a higher or lower extent of CSR. I therefore explore the interactions between CSR and firm reputation and their joint effects on corporate tax avoidance.

#### 3.3.1 CSR and tax avoidance: substitutes or complements?

CSR activities and tax payments can either be viewed as substitutes or complements. A negative association between CSR activities and tax payments is expected when tax payments and CSR are two activities that act as substitutes<sup>10</sup>. When firms view CSR and tax payments as substitutes, they view taxes as a detraction from social welfare as tax payments reduce innovation, job growth and economic development (Davis et al., 2016). In this case, tax payments and CSR activities act as two different concepts, where firms do not implement their tax planning strategies into their CSR strategies and both strategies therefore may collide rather than coincide. Indeed, Davis et al. (2016) provide robust evidence for the fact that taxes and CSR act as substitutes rather than complements. They investigate the relation between the amount of taxes paid and the CSR-ratings for U.S. public

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<sup>10</sup> Note that a negative relation between CSR and tax payments indicates a positive relation between CSR and tax avoidance, as a higher amount of tax payments indicates a lower level of tax avoidance.

corporations and find a significant negative relation. In line with this, Djankov et al. (2010) find “*a consistent and adverse effect of corporate taxes on both investment and entrepreneurship*”. Other research supporting a negative relation reasons that firms engage in CSR to create “moral capital” to reduce the consequences of their involvement in negative events or publicity. Godfrey et al. (2009) provide evidence for this suggestion and find that the share price decline due to tax avoidance is stronger for firms that do not engage in CSR than for firms that score better on CSR. Consistent with Godfrey et al. (2009), Fombrun et al. (2000) suggest that legislators and regulators will react more favorably to companies that ‘do good’, as they are also community members and are more likely to grant the benefit of the doubt to strong corporate citizens. Based on the above, firms with high reputations will likely engage in more tax avoidance activities when CSR performance is higher, since ethical CSR activities will likely compensate unethical tax avoidance practices.

On the other hand, firms view tax payments and CSR as complements when paying taxes is a component of CSR and therefore serve the same purpose. In this case, firms recognize the ethical obligation to act in accordance with the law (paying their fair share) and hence a positive relation between CSR and tax payments is expected. Consistent with this reasoning, Avi-Yonah (2008) advocates the view that from a CSR perspective firms should look beyond the law and should not engage in tax avoidance by using transactions that lack a business purpose. Empirical research also provides evidence for a positive relation between CSR performance and tax payments. Hoi et al. (2013) show that firms that are socially irresponsible (e.g. firms with low CSR-ratings) have generally lower ETRs. This study also implies that firms that score higher on CSR, will have higher ETRs and therefore engage in less tax avoidance. Lanis & Richardson (2015) also show that more socially responsible firms are likely to display less tax avoidance and therefore support the positive relation between CSR and tax payments. In this case, CSR activities and tax avoidance activities coincide with one another and act as complements rather than substitutes. When this positive relation indeed holds between CSR and tax payments, it is likely that higher reputational firms will engage in less tax avoidance when CSR is higher as ethical CSR activities will be aligned with their tax paying strategies (which indicates less tax avoidance).

Because of the two competing views, I state the following non-directional hypothesis in null form:

*H1b: The relation between firm reputation and corporate tax avoidance does not vary with the level of CSR-performance.*

### 3.4 Audit firm reputation and tax avoidance

After the collapse of Enron and its auditor Arthur Andersen (AA), auditor reputation became again a relevant topic in literature and increased awareness of the importance of auditor reputation among different stakeholders, such as investors, firms and obviously the audit firms themselves. However, there already exists extensive literature on auditor reputation even before Enron's and AA's collapse. I first discuss relevant literature on Enron's collapse and the reputational consequences for its auditor AA. Secondly, and most relevant for this study, I discuss literature on audit firm reputation in a tax-setting which serves as a basis for my last hypothesis.

#### 3.4.1 Auditor reputation and the Enron-scandal

The disclosures about the audit of Enron performed by AA seriously harmed AA's reputation, ultimately leading to its demise in 2002. Moreover, AA's clients had to suffer significant losses due to AA's involvement in Enron's accounting fraud. AA's clients started changing its auditor en masse and after the conviction on June 15, 2002, AA's remaining clients needed to seek a new auditor involuntarily (e.g. driven by an exogenous shock; Barton, 2005). Some examples of literature with respect to audit firm reputation and the scandal around AA are papers from Chaney & Philipich (2002), Autore et al. (2009) and Asthana et al. (2010).

Chaney & Philipich (2002) examine the market reactions of AA's clients to public announcements in 2001 and 2002. They provide evidence for significant negative market reactions to the admission of AA that it had shredded documents in early 2002. This implies that investors discounted the audit services of AA due to the fact that investors can rely to a lower extent on the financial statements of AA's clients, which seriously harmed AA's reputation. In addition to this, Autore et al. (2009) find that clients with higher information asymmetry had larger share price declines compared to clients with lower information asymmetry, suggesting that an audit is more valuable when a firm is harder to value. For this reason, they infer that firms with higher information asymmetry rely more heavily on audit firm reputation.

Asthana et al. (2010) find that clients from AA experienced positive abnormal returns after announcing an auditor switch during a three-day window. As already mentioned, clients of AA

initially experienced a severe decline in share prices after AA's indictment for obstruction of justice earlier. Further, Asthana et al. (2010) find that former AA clients with strong corporate governance switch earlier to a new auditor relative to clients with weak corporate governance. They explain that firms with strong corporate governance will earlier disassociate themselves from an auditor with a tainted reputation.

To sum up, former clients from AA experienced severe declines in stock prices as investors discounted the quality of audits performed by AA, which seriously harmed AA's reputation. The story of Enron and AA is an example that investors hold auditors also responsible for their client's (in this case Enron) misconduct.

### 3.4.2 Auditor reputation and tax avoidance

The link between auditor reputation and corporate tax avoidance is clear, but may be ambiguous in light of existent literature. Therefore, the link between auditor reputation and corporate tax avoidance is ultimately an empirical question.

Empirical evidence indicates that large auditors have more valuable reputations. DeAngelo (1981) reasons that large auditors have more incentives to issue more accurate reports, as they have more to lose due to their valuable reputations (e.g. "deeper pockets"). However, despite the fact that large auditors provide more accurate reports, Lennox (1999) finds that large auditors experience more criticism than small auditors, but do not suffer reductions in demand as a consequence.

Lisowsky (2010) provides evidence for a positive relation between Big N auditors and tax sheltering activities, implying that Big N auditors are promoters of tax services. Similarly, McGuire et al. (2012) examine whether auditor expertise is an additional determinant of tax aggressiveness. They document that external audit firms that provide both tax audit and tax services are associated with higher levels of tax aggressiveness for their clients. This evidence indicates that audit firms employ their expertise in helping firms to avoid taxes, rather than discourage firms to exploit tax opportunities. Based on above, it is expected that Big N auditors (e.g. high-reputation auditors) have clients who generally are more tax aggressive than clients from non-Big N auditors (auditors with lower reputation).

This is not in line with the results of Kanagaretnam et al. (2016). They examined, using an international sample from 31 countries, the relation between auditor quality and tax aggressiveness. They provide robust evidence for a negative association between tax aggressiveness and audit quality. Further, they document that this negative association is more pronounced with a stronger level of investor protection, higher auditor litigation risk, a better audit environment and higher capital market pressure. However, audit quality is closely related to audit firm reputation, but not necessarily the same. Nevertheless, Aronmwan et al. (2013) confirm that a positive relation exists between audit quality and audit reputation. Therefore, it is also likely that high-reputation auditors are associated with less tax aggressiveness. Gallemore et al. (2014) investigated whether firms bear reputational costs after they were accused of having engaged in tax shelters. One kind of reputational cost that they examine is auditor turnover. They report no evidence of auditor turnover when clients are accused of engaging in tax sheltering activities.

Collectively, although evidence indicates that large auditors encourage clients to exploit tax sheltering opportunities, other evidence also indicates that this will not cause any reputational damage to them. Accordingly, I state the following non-directional hypothesis in null-form:

*H2: Auditor reputation is unrelated to the extent to which a firm engages in corporate tax avoidance.*

In Table 2, the literature review and hypothesis development is summarized, with corresponding predicted signs.

**Table 2**  
**Summary literature review and hypothesis development**

| <b>Hypothesis number</b> | <b>Author(s) (year)</b>     | <b>Research objective</b>   | <b>Findings</b>  | <b>Sign found</b> | <b>Predicted sign hypothesis</b> | <b>Overall</b>   |
|--------------------------|-----------------------------|---|--|-------------------|----------------------------------|------------------|
| <i>Hypothesis 1a</i>     | Graham et al. (2013)        | Investigate firms' incentives and disincentives for tax planning.   | Potential harm on reputation is an important constraining factor in adopting tax strategies.   | Negative          | Negative                         |                  |
|                          | Gallemore et al. (2013)     | Investigate whether firms and their top executives bear reputational costs from tax sheltering activities.  | No consistent evidence that firms and managers bear significant reputational costs.  | No sign           | No sign                          | <u>Ambiguous</u> |
|                          | Hanlon and Slemrod (2009)   | Examine the stock market reaction to news about corporate tax avoidance.                                    | Evidence that company's stock price declines after the accusation that a firm is engaging in tax shelters.                             | Negative          | Negative                         |                  |
| <i>Hypothesis 1b</i>     | Davis et al. (2016)         | Investigate the relation between the amount of taxes paid and the CSR-ratings for U.S. public corporations. | Provide evidence for a significant negative relation between CSR-ratings and taxes paid.   | Positive          | Positive                         |                  |
|                          | Djankov et al. (2008)       | Examine the association between corporate taxes on investment and entrepreneurship.                         | Evidence for a consistent and large adverse effect of corporate taxes on both investment and entrepreneurship.                         | Positive          | Positive                         |                  |
|                          | Godfrey et al. (2009)       | Examine the effect of CSR on the market reactions to tax shelter revelation.                                | Find that share price declines due to tax avoidance are stronger for firms that do not engage relative to firms that do engage in CSR. | Positive          | Positive                         | <u>Ambiguous</u> |
|                          | Hoi et al. (2013)           | Examines the empirical association between CSR and tax avoidance.   | Find that firms with lower CSR-ratings have generally lower ETRs.  | Negative          | Negative                         |                  |
|                          | Lanis and Richardson (2015) | Examine the association between CSR and corporate tax aggressiveness.                                       | Find that higher levels of CSR disclosure of a corporation are associated with lower tax aggressiveness.                               | Negative          | Negative                         |                  |
| <i>Hypothesis 2</i>      | Lisowsky (2010)             | Examines the relation between Big N auditors and tax sheltering activities.                                 | Finds that Big N auditors are promoters of tax services.   | Positive          | Positive                         |                  |
|                          | Mcguire (2012)              | Examines whether auditor expertise is related to tax aggressiveness.  | Document that external audit firms are associated with higher levels of tax aggressiveness for their clients.                          | Positive          | Positive                         |                  |
|                          | Kanagaretnam et al. (2016)  | Investigate the relation between auditor quality and corporate tax aggressiveness.                          | Find strong evidence for a negative relation between audit quality and tax aggressiveness.   | Negative          | Negative                         | <u>Ambiguous</u> |
|                          | Gallemore et al. (2013)     | Investigate whether firms and their top executives bear reputational costs from tax sheltering activities.  | Find no evidence that clients accused of engaging in tax sheltering activities have a higher auditor turnover.                         | No sign           | No sign                          |                  |

Table 2 summarizes the literature review and hypothesis development. The "Sign found" refers to the relation with corporate tax avoidance. For this reason, a negative sign found between for example CSR and tax payments indicates a positive sign for tax avoidance in relation to CSR.



#### **4: SAMPLE SELECTION AND RESEARCH DESIGN**

In this section I describe my sample, how the theoretical concepts in this study are operationalized and my research models. First, I describe my sample selection. Second, I discuss my measures for corporate tax avoidance, CSR, firm reputation and auditor reputation, respectively. I proceed with discussing the control variables and ultimately infer my regression models.

##### 4.1 Sample selection and data

My sample initially consists of all U.S. firms that are available in Compustat covering the period 2002-2013. I choose this sample period for two reasons. First, I want to exclude AA as an auditor from my sample to be able to measure auditor reputation properly. Second, as from 2002 the CSR database has greatly expanded its coverage. As such, the amount of available CSR data increased significantly from 2002 onwards, even though my specific CSR-data is only available until 2014<sup>11</sup>. Therefore, my initial sample period ends in 2013. The sample consists of only U.S firms to control for different corporate tax rates across different countries.

All data are obtained from the Wharton Research Data Service (WRDS). Specifically, I retrieve data on corporate tax avoidance, firm reputation and auditor reputation from Compustat, as well as other financial data for my control variables. Data on firms' auditors and auditor characteristics is available on AuditAnalytics. CSR-data is collected from the MSCI annual data set of environmental, social and governance ratings of publicly traded firms. This MSCI-database is previously referred to as the Kinder, Lydenberg, and Domini (KLD) database.

The initial sample with all firm years on Compustat during the years 2002-2013 results in 149,321 firm-year observations, corresponding to 120,180 firms. Merging Compustat data with data from the MSCI-database and AuditAnalytics produces a sample of 32,999 firm-year observations. Some firms appear to have AA as an auditor at the end of 2002, even after it collapsed. Therefore, I remove these firm-year observations from my sample. I impose some additional data requirements, requiring that firms have complete data for total assets, price per share, common equity, common shares outstanding, long-term/short-term debt, intangibles, property, plant and equipment (ppe), tax stock-option benefits, pre-tax income and cash holdings.

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<sup>11</sup> The MSCI database is updated at the end of each calendar year. However, for data on the total number of concerns /strengths in one of the 7 dimensions (see section 4.3.3) of CSR is only data available until the end of 2013.

Moreover, I drop duplicate observations of my sample. The restrictions above reduce my sample to 25,786 firm-year observations for 3,720 firms. I require firms to have an unbroken string of cash taxes paid and pretax income for 5 years for every firm-year. Consequently, the remaining sample only comprises firm years from 2006-2013. I eliminate observations with five-year cash ETRs greater than 1 or less than 0 to allow for a meaningful interpretation (Davis et al. 2016), which results in a sample that comprises 5,608 firm-year observations relating to 1,567 publicly traded U.S firms with all data required for my tests. Table 3 below summarizes my sample selection. I winsorized the most extreme 1 percent of all continuous independent variables at the first and ninety-ninth percentiles and hence no additional firm-year observations were deleted.

**Table 3**  
**Derivation of sample, 2002-2013**

| <i>Sample selection procedure</i>  | <i>Firm-year observations</i> | <i>Number of firms</i> |
|--|-------------------------------|------------------------|
| <b>Initial Compustat sample with U.S. firms only</b>   | <b>149,321</b>                | <b>120,180</b>         |
| Lost observations after merging Compustat data with data from AuditAnalytics and the MSCI-database | (116,322)                     |                        |
| <b>Sample after merging all data from Compustat, AuditAnalytics and MSCI-database</b>              | <b>32,999</b>                 | <b>4,800</b>           |
| Firms having AA as auditor   | (9)                           |                        |
| Missing data on total assets   | (122)                         |                        |
| Missing data on price per share  | (36)                          |                        |
| Missing data on common equity/shares outstanding   | (12)                          |                        |
| Missing data on long-term and short-term debt  | (103)                         |                        |
| Missing data on intangible assets  | (461)                         |                        |
| Missing data on ppe  | (982)                         |                        |
| Missing data on tax stock-option benefits  | (5,002)                       |                        |
| Missing data on pretax-income and cash holdings  | (11)                          |                        |
| Dropping duplicates  | (475)                         |                        |
| <b>Sample after imposing restrictions</b>  | <b>25,786</b>                 | <b>3,720</b>           |
| No unbroken string of ETRs over 5 years and ETRs <0 or >1  | (20,178)                      |                        |
| <b>Final sample for firm years 2006-2013</b>   | <b><u>5,608</u></b>           | <b><u>1,567</u></b>    |

Table 3 summarizes the sample derivation. All data were obtained from WRDS. Specifically, financial data is retrieved from Compustat. Data concerning auditors and auditor characteristics is collected from AuditAnalytics. CSR-data is retrieved from the MSCI-database (the former KLD-database). The initial sample contains only data from Compustat for the years 2002-2013. The final sample consists of 5,608 firm year observations for 1,567 unique firms for the years 2006-2013.

## 4.2 Variable description

In this section I address the measures that I use for my variables. I discuss the operationalization of my dependent variable (corporate tax avoidance), independent variables (firm reputation and auditor reputation), interaction variable (CSR) and control variables consecutively.

### 4.2.1 Measuring corporate tax avoidance

In section 2.3 I briefly elaborated on the different measures of tax avoidance that are used in prior literature. In this section, I specifically discuss the measure that I use for corporate tax avoidance.

As I mentioned, I employ the following theoretical definition of corporate tax avoidance: “*the ability to pay a low amount of tax per dollar of reported pre-tax financial accounting income*”. To operationalize this definition, I measure corporate tax avoidance with the long-term cash ETR over a 5 year-period, similar to Dyreng et al. (2008). This conventional measure has two main advantages over using annual ETRs and specifically over using the GAAP ETR. The first advantage is that this approach accounts for the long-term tax avoidance capacity of a firm. Dyreng et al. (2008) argue that it sometimes takes several years for the IRS to audit large corporate returns, challenge positions, and if necessary litigate them. As a consequence, firms might have to pay additional taxes even several years after filing a tax return. This, besides other factors, can make annual ETRs very volatile. A long-term measure of ETRs overcomes this problem and is able to reflect the actual ability of a firm to avoid corporate taxes. The second advantage relies on the fact that this approach uses the Cash ETR rather than the more conventional GAAP ETR. Extant literature provides evidence that the GAAP tax expense and cash taxes paid can vary over time, even over longer horizons (Hanlon, 2003). Further, there can be large differences in single-year GAAP ETRs that do not comprise tax avoidance activities, such as valuation allowances that affect a firm’s tax expense but not the actual cash taxes paid (Dyreng et al., 2008). Moreover, some tax sheltering activities do not affect the GAAP ETRs, but are included in the cash ETR.

The long-run cash ETR for firm  $i$ , measured over a 5-year horizon, can be captured into the following formula:

$$CASH\_ETR5_i = \frac{\sum_{t=1}^5 (Worldwide\ cash\ taxes\ paid)_i}{\sum_{t=1}^5 (Worldwide\ total\ pre-tax\ accounting\ income)_i} \quad (1)$$

#### 4.2.2 Developing a financial measure for firm reputation

Several empirical papers have attempted to assess a firm's reputation. The majority of the papers focuses on reputational indices in order to measure reputation. I first briefly discuss different measures for reputation that are based on these reputational indices and explain the disadvantages of using them. I proceed with elaborating on the measure that I use in this study.

The most widely used measure for firm reputation by academics, is *Fortune's most admired companies* (Gallemore et al., 2014; Bowen et al., 2010). This is an annual survey conducted by Fortune that identifies America's most admired companies by asking participants to rate companies on 9 attributes: innovation, people management, use of corporate assets, social responsibility, quality of management, financial soundness, long-term investment value, quality of products/services and global competitiveness. However, extant literature also raises some doubts about the validity of this measure for several reasons. Firstly, the index was initially not intended to be used for scientific research (Deephouse, 2000). Secondly, it surveys only three constituencies: board members, senior executives and securities analysts. As a consequence, other stakeholders' opinions are not taken into consideration. Two other indices are also used in empirical literature as a proxy for corporate reputation: RepTrak developed by The Reputation Institute and a reputation quotient (RQ) published by The Reputation Institute and Harris Interactive (the Harris-Fombrun Reputation quotient). Both indices evaluate reputation on some other dimensions among some other constituencies that differ from the Fortune's most admired companies survey. However, these indices have some drawbacks as well<sup>12</sup>. Generally, the main disadvantage associated with reputational indices is that it requires a lot of time to (manually) collect the data from the surveys. Therefore, I measure reputation with the only financial valuation of reputation so far in existent literature: the amount of a firm's reputational capital.

Due to the disadvantages of the survey, I follow a less conventional measure for firm reputation: a firm's reputational capital, proposed by Fombrun (1996). Fombrun (1996) defines reputational capital as: "*the excess market value of its shares – the amount by which the company's market value exceeds the liquidation value of its assets*". The liquidation value of its assets will equal the value of the tangible assets on the balance sheet. Corporate reputation (or reputational

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<sup>12</sup> Schreiber (2008) identifies two disadvantages. Firstly, the public rates the company, although it may not have familiarity with that company. Secondly, for many industrial companies, there are many other stakeholders far more important than the general public. Questions about the validity of the RQ survey are similar to those for RepTrak, since both were developed similarly and have common origins with Professor Charles Fombrun.

capital) can be seen as an intangible asset (e.g. internally generated goodwill). When considering reputation as an intangible asset, it is possible to quantify its value by subtracting the amount that would be realized if all tangible assets were sold from the market value of a company, where the market value of a company equals the stock price of a company times its total shares outstanding (e.g. its market capitalization). This estimate of the intangible assets represents the value that the market believes the firm is worth on top of its tangible assets. However, this value is not necessarily representative for a reputation only. Many CFO's argue that the difference between the market capitalization and the liquidation value of the assets overstates the value of reputational capital. However, those CFO's also admit that indeed a large part of the difference is reputational capital (Doorley and Garcia, 2007). The use of reputational capital as a proxy for corporate reputation as proposed by Fombrun (1996) can therefore be perfectly justified, while acknowledging that a small part of the estimation will possibly not represent a firm's reputation. Ultimately, the estimation provides a good indication what the value of a corporate reputation is in the eyes of the market, which includes all or at least some stakeholder groups (Oriesek 2004). A firm's reputation for firm  $i$ , can be measured with the following formula, where the numerator reflects a firm's reputational capital:

$$REPU = \frac{(common\ shares\ outstanding\ x\ share\ price)_i - tangible\ assets_i}{total\ assets_i} \quad (2)$$

#### 4.2.3 Operationalizing CSR

Plenty of literature exists on identifying an accurate measure for social performance. I first discuss the most common measure that captures CSR-performance, which is also the measure that I use in this study: a firm's MSCI-rating. Subsequently, I elaborate on the different approaches that have evolved in prior literature for measuring social performance and discuss the main advantages the MSCI-rating has over its alternatives.

Similar to prior CSR-research, I use the MSCI-rating to measure a firms' CSR-performance. This MSCI-rating is previously referred to as the KLD-rating. It provides integer scores of both strengths and concerns within seven major dimensions as follows: 1) community relations; 2) corporate governance; 3) diversity; 4) employee relations; 5) environment; 6) human

rights and 7) products<sup>13</sup>. Similar to Kim et al. (2012), I exclude corporate governance as a dimension in constructing a CSR-score and use it as a control variable instead, since corporate governance is perceived as a distinct construct from CSR and its influence on corporate tax avoidance is widely examined in prior literature (Davis et al., 2016). In line with Lanis & Richardson (2015) and Davis et al. (2016), I assign a value of +1 for every strength and a value of -1 for every concern on the 6 remaining dimensions above and then sum all strengths and concerns into an overall firm-score for each firm-year: the CSR-index. Subsequently, I create a dummy variable *Social\_Ind*, that equals 1 if a firm has at least a CSR-index of 4 (and is therefore socially responsible) and 0 otherwise<sup>14</sup>. This dummy variable allows me to investigate the interaction-effect between firm reputation and corporate tax avoidance.

Researchers have used a large number of sources in measuring CSR-performance. For example, government environmental reports, various surveys and disclosures of social performance. The most prominent measure for CSR-performance, besides the MSCI-rating, is Fortune's reputation rating. Interestingly, this rating is also used as a common proxy for firm reputation in previous literature. For this reason, in addition to the disadvantages of Fortune's reputation rating itself (see section 4.2), I choose reputational capital as a unique proxy for firm reputation.

Extant research encourages the use of the MSCI-rating as a proxy for CSR-performance instead of alternative measures above and in particular Fortune's reputation rating. For example, Waddock & Graves (1997) support the use of the MSCI-rating (KLD-rating) since "*The KLD is an independent rating service that focuses exclusively on assessment of corporate social performance across a range of dimensions related to stakeholder concerns*". In other words, stakeholders can rely on the objectivity of the MSCI-rating. In accordance with this suggestion, Chand (2006) also asserts that a KLD-based rating offers more objectivity than some alternatives, such as the Fortune's survey data. Another advantage of the KLD-rating over Fortune's data, is that the KLD-data has a strong focus on evaluating a firm's socially responsible decisions, rather than its overall management. Lastly, Sharfman (1996) has validated the construct validity of the

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<sup>13</sup> The MSCI database also provides concerns for the following controversial business sectors: alcohol, firearms, gambling, military, nuclear power and tobacco. I did not consider any of these categories in constructing a CSR-score, as these categories do not pertain to firms' tax avoidance activities.

<sup>14</sup> I choose a threshold for the CSR-index of at least 4 in order to clearly distinct socially responsible firms from the other firms and still have enough firm-year observations for firms that are socially responsible.

KLD-rating even though he admits that future research is necessary. However, more recent research has also proven the construct validity of the KLD-rating, such as Lanis & Richardson (2015) and Davis et al. (2016), which validates the use of the MSCI-rating in order to proxy for CSR-performance.

#### 4.2.4 Measuring auditor reputation

Research with respect to auditor reputation is scarce, in contrast to more extensive research on firm reputation. For this reason, there has not been developed a conventional proxy in prior literature that captures auditor reputation. I therefore make a link between auditor quality and auditor reputation that will serve as a fundament from which I derive my measure.

Auditors provide assurance to stakeholders of the accounting information in a firm's financial statements. Prior literature provides consistent evidence that Big N auditors differ in audit quality from non-Big N auditors (Choi & Wong, 2007; Kanagaretnam et al., 2016). Big N auditors have proven to be better able to detect material misstatements in accounting information and are more willing to document what they find than Non-Big N auditors (Kanagaretnam et al., 2016). Furthermore, Big N firms are better equipped to continually update their technologies and programs due to economies of scale and to anticipate changes in the business environment (Choi & Wong, 2007). Evidence above clearly supports the view that Big N auditors are associated with higher quality than Non-Big N auditors. A common proxy for auditor quality is therefore a dummy variable for Big N/Non-Big N auditors.

Auditor reputation and auditor quality may not be equivalents, but that the two concepts are closely related seems to be trivial. DeAngelo (1981) argues that auditor size is a proxy for both auditor reputation and auditor quality and that Big N auditors with more valuable reputations at stake have more incentives to ensure that the accounting information in the financial statements properly reflect the firm's financial condition (relative to non-Big N auditors). In line with this, prior research finds that Big N auditors enhance the financial reporting quality in public firms (Choi et al., 2008; Kanagaretnam et al., 2010). Aronmwan et al. (2013) show that, to fortify the close connection between auditor reputation and auditor quality even further, a highly positive

significant association between auditor reputation and auditor quality exists. Altogether, I therefore use an indicator variable for Big 4/Non-Big 4 membership to proxy for auditor reputation (*BIG4*)<sup>15</sup>.

#### 4.2.5 Control variables

In order to control for other factors that in addition to my variable of interest might explain part of the variance in corporate tax avoidance, I include a set of control variables in my models. Existing literature considers these control variables as important determinants of corporate tax avoidance. I include the following control variables in my models: 1) *SIZE*, 2) *LEV* (leverage), 3) tax benefit of stock options (*TBO*), 4) growth (market-to-book-ratio, *MTB*), 5) foreign income (*For\_Inc*), 6) pre-tax profitability (*PTROA*), 7) research and development (*R&D*), 8+9) net operating loss carryforward (*NOLCF*, *NOLCF\_Ind*), 10) property, plant and equipment (*PPE*), 11) corporate governance (*GOVERNANCE*) 12) cash-holdings (*CASH*), selling, general and administrative expenses 13) (*SGA*) and 14) the amount of intangible assets (*INTANG*). I discuss each variable and its predicted relation with corporate tax avoidance below.

*SIZE*: Rego (2003) provides evidence that large firms are better able to reduce their tax obligations relative to smaller firms, indicating a negative relation between firm size and a firm's effective tax rate. This negative relation is based on the idea that larger firms are more tax avoidant as they enjoy greater economic and political power compared to smaller firms and enjoy economies of scale. For this reason, they are better able to reduce their effective tax rates accordingly (Zimmerman, 1983; Lanis & Richardson, 2015).

*LEV*: Gupta et al. (1997) find a positive relation between a firm's leverage (total debt/total assets) and corporate tax avoidance. The intuition is that firms with higher leverage have lower effective tax rates due to tax-deductible interest payments associated with the amount of debt outstanding.

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<sup>15</sup> The number of Big N firms has reduced from Big 8 to Big 4 over time due to mergers and the collapse of Arthur Anderson. As my sample period comprises only firm years after 2002, my BigN/Non-BigN proxy equals Big4/Non-Big4 since Enron collapsed in 2002 and mergers took place even before 2002.



*R&D*: Similar to a firm's leverage, Gupta et al. (1997) find that firms that have higher R&D expenditures have lower tax burdens on average, due to the fact that R&D expenditures are tax-deductible. Hence, a positive (negative) relation between R&D and corporate tax avoidance (a firm's tax payments) is expected.

*For\_Inc*: Firms that generate revenues from foreign operations will possibly enjoy tax credits, originating from their engagement in international trade. Tax credits reduce a firm's tax burden. While the United States taxes worldwide income, a variety of possibilities allow firms to offset tax liabilities from low tax-jurisdictions with excess taxes paid in high-tax jurisdictions. Therefore, I expect a negative coefficient of *For\_Inc*.

*TBO*: Firms gain tax benefits from the exercise of stock options by employees. These benefits decrease a firm's tax payments and hence a positive association between the amount of tax benefits of stock options and tax avoidance is expected. Davis et al. (2016) support this expectation with empirical evidence. They find that the amount of tax benefits of stock options has a significant negative association with a firm's effective tax rate.

*MTB*: Firms with stable growth avoid on average more taxes. Growth is measured as the market-to-book ratio of a firm. Dyreng et al. (2008) indeed provide evidence for this suggestion and found evidence that the growth of companies performs a key role in avoiding taxes, especially in small businesses. Based on Dyreng et al. (2008), a positive relation between tax avoidance and growth is expected. However, Davis et al. (2016) provide evidence for a positive significant relation between tax payments and growth. Therefore, I make no prediction on the coefficient of *MTB*.

*PPE*: Firms with high capital intensity are found to be positively associated with corporate tax avoidance due to accelerated depreciation charges corresponding to asset lives (Lanis and Richardson 2014). Although aggregating over 5 years will at least partly mitigate a portion of these temporary differences, a negative association between a firm's effective tax rate and the amount of property, plant and equipment is expected.

*GOVERNANCE*: I include a variable that controls for the effect of corporate governance on corporate tax avoidance. For example, Lanis & Richardson (2011) find that a higher proportion of independent directors on the board is associated with less tax avoidance. Similar to Davis et al. (2014), I measure *GOVERNANCE* with corporate governance ratings in the MSCI-database. The score equals the number of corporate governance strengths minus the number of corporate governance concerns.

*CASH*: Davis et al. (2016) and Dyreng et al. (2010) provide evidence for significant liquidity effects in relation to corporate tax avoidance. Similarly, I include cash holdings by a firm as a control variable in my models. They found mixed results and for this reason I make no sign prediction for *CASH*.

*NOLCF*, *NOLCF\_Ind*: When firms have tax losses carry forward, they have the ability to settle previous losses with future profits. Obviously, when tax losses will be settled with profits in a given year, taxable income for the year decreases and in turn the amount of taxes paid as well. Hence, a negative relation between the amount of tax losses carry forward (*NOLCF*) with tax payments is expected, as well as a negative relation between tax payments and an indicator variable that equals 1 if a firm has available tax losses carry forward and 0 otherwise (*NOLCF\_Indicator*).

*INTANG*: I include the level of intangible assets as a control variable for a firm's ability to locate income, as firms without physical assets can more easily shift income to low-tax jurisdictions without the burdens that would accompany a firm with fixed assets (Hanlon, 2005; Dyreng et al., 2008). Thus, I predict a negative relation between the level of intangible assets and the rate of cash taxes paid.

*PTROA*: I use a proxy for profitability, as it is found to be significantly related to corporate tax avoidance according to prior literature. I expect firms that are highly profitable over a 5-year period to be less able to maintain low effective tax rates over time, since short-term opportunities to lower a tax burden will disappear. Moreover, more profitable firms are more likely to shun tax avoidance, due to additional political scrutiny of such firms (Kanagaretnam et al., 2016). For this reason, I predict a positive coefficient on *PTROA* in my models.

*SGA*: I include selling, general and administrative expenses as a control variable in my models because they are tax deductible and therefore lower the amount of taxable income. However, Davis et al. (2016) found a significant positive association. Due to conflicting expectations, I make no sign prediction for *SGA*.

### 4.3 Research models

#### 4.3.1 Hypothesis 1a

To examine the association between firm reputation and corporate tax avoidance (hypothesis 1a), I estimate the following OLS regression model:

$$\begin{aligned}
 CASH\_ETR5_{i,t} = & \beta_0 + \beta_1*REPU_{i,t} + \beta_2*SIZE_{i,t} + \beta_3*LEV_{i,t} + \beta_4*R\&D_{i,t} + \beta_5*For\_Inc_{i,t} + \beta_6*TBO_{i,t} + \beta_7*MTB_{i,t} + \\
 & \beta_8*PPE_{i,t} + \beta_9*GOVERNANCE_{i,t} + \beta_{10}*CASH_{i,t} + \beta_{11}*NOLCF_{i,t} + \beta_{12}*NOLCF\_Ind_{i,t} + \beta_{13}*INTANG_{i,t} + \beta_{14}*PTROA_{i,t} \\
 & + \beta_{15}*SGA_{i,t} + \sum \beta_j Industry_j + \sum \beta_t Year_t + \varepsilon_{i,t}
 \end{aligned} \tag{3}$$

where  $i$  are the firms 1-1,567 and  $t$  the period 2006-2013. *Industry* and *Year* are indicator variables to control for industry-fixed effects and year-fixed effects, respectively<sup>16</sup>. All other variable names with corresponding definitions are summarized in Appendix A. Variable of interest in regression (3) is *REPU*, where a positive coefficient indicates that higher (lower) reputation firms engage in less (more) tax avoidance and a negative coefficient indicates that higher (lower)-reputation firms engage in more (less) tax avoidance.

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<sup>16</sup> I define industries as in the classification in Frankel et al. (2002) that is based on the following SIC (Standard Industrial Classification) codes: agriculture (0100–0999), mining and construction (1000–1999, excluding 1300–1399), food (2000–2111), textiles and printing/publishing (2200–2799), chemicals (2800–2824, 2840–2899), pharmaceuticals (2830–2836), extractive (2900–2999, 1300–1399), durable manufacturers (3000–3999, excluding 3570–3579 and 3670–3679), transportation(4000–4899), utilities (4900–4999), retail (5000–5999), services (7000–8999, excluding 7370–7379) and computers (3570–3579,3670–3679, 7370–7379). I control for industry-fixed effects on the first 2 digits of the SIC code.

### 4.3.2 Hypothesis 1b

To investigate whether the association between firm reputation and tax avoidance varies with the level of CSR performance (hypothesis 1b), I extend model (3) as follows:

$$CASH\_ETR5_{i,t} = \beta_0 + \beta_1*REPU_{i,t} + \beta_2*Social\_Ind_{i,t} + \beta_3*REPU*Social\_Ind_{i,t} + \beta_4*SIZE_{i,t} + \beta_5*LEV_{i,t} + \beta_6*R\&D_{i,t} + \beta_7*For\_Inc_{i,t} + \beta_8*TBO_{i,t} + \beta_9*MTB_{i,t} + \beta_{10}*PPE_{i,t} + \beta_{11}*GOVERNANCE_{i,t} + \beta_{12}*CASH_{i,t} + \beta_{13}*NOLCF_{i,t} + \beta_{14}*NOLCF\_Ind_{i,t} + \beta_{15}*INTANG_{i,t} + \beta_{16}*PTROA_{i,t} + \beta_{17}*SGA_{i,t} + \sum \beta_j Industry_j + \sum \beta_t Year_t + \varepsilon_{i,t} \quad (4)$$

Again,  $i$  are the firms 1-1,567 and  $t$  the period 2006-2013. My hypothesized variable of interest is the interaction between socially responsible firms and firm reputation ( $REPU*Social\_Ind$ ). A positive (negative) coefficient would mean that firms with higher reputation view CSR-performance and corporate tax avoidance as complements (substitutes) relative to lower-reputation firms.

### 4.3.3 Hypothesis 2

Lastly, I investigate the relation between auditor reputation and tax avoidance (hypothesis 2) using the following regression model:

$$CASH\_ETR5_{i,t} = \beta_0 + \beta_1*BIG4_{i,t} + \beta_2*SIZE_{i,t} + \beta_3*LEV_{i,t} + \beta_4*R\&D_{i,t} + \beta_5*For\_Inc_{i,t} + \beta_6*TBO_{i,t} + \beta_7*MTB_{i,t} + \beta_8*PPE_{i,t} + \beta_9*GOVERNANCE_{i,t} + \beta_{10}*CASH_{i,t} + \beta_{11}*NOLCF_{i,t} + \beta_{12}*NOLCF\_Ind_{i,t} + \beta_{13}*INTANG_{i,t} + \beta_{14}*PTROA_{i,t} + \beta_{15}*SGA_{i,t} + \sum \beta_j Industry_j + \sum \beta_t Year_t + \varepsilon_{i,t}^{17} \quad (5)$$

where  $i$  are the firms 1-1,567 and  $t$  the period 2006-2013. Variable of interest is  $BIG4$ , where a positive coefficient indicates that high (low) auditor reputation is related with less (more) tax avoidance and a negative coefficient indicates that high (low) auditor reputation is associated with more (less) tax avoidance.

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<sup>17</sup> I did not include  $REPU$  as a control variable in this model, as  $REPU$  has not been found to be significantly related with corporate tax avoidance in all prior literature (Gallemore et al., 2014) at the moment of formulating my hypotheses. Including non-related control variables in my model may unnecessarily reduce the model's adjusted R-squared. After producing my results,  $REPU$  turned out to be significantly associated with a firm's effective tax rates in model (3). For this reason, I checked whether the inclusion of  $REPU$  significantly changed the results of model (5). However, including  $REPU$  did not significantly change these results.

All continuous independent variables in all models are winsorized at the first and ninety-ninth percentiles to control for outliers that may bias the results. I eliminate observations for *Cash\_ETR5* higher than 1 or smaller than 0, to allow for a meaningful interpretation. Moreover, in all models the regression standard errors are adjusted to robust standard errors. The standard errors are therefore corrected for heteroscedasticity. I use mean values for all continuous variables over the same 5-year period, as my *Cash\_ETR5* is also measured over 5 years.

#### 4.4 Predictive Validity Frameworks

The Predictive Validity Frameworks, also known as “Libby Boxes” (Libby, 1981), are presented in Appendix C and D. Appendix C shows the framework of the relations between firm reputation, CSR and corporate tax avoidance and Appendix D presents the framework of the relation between auditor reputation and corporate tax avoidance. In the frameworks the links between the dependent, independent, interaction and control variables are clearly depicted. This framework is widely used in experimental accounting research and very helpful in setting up a research study and its research design. In the frameworks, link one captures the hypothesized relation. Links two and three reflect the operationalizations (e.g. measurements) of the constructs. The extent to which the measurements capture the underlying theoretical constructs is referred to as the construct validity. Link four captures the relation I empirically test and link five represents the control variables (e.g. the effect of other factors on corporate tax avoidance).

## 5: EMPIRICAL RESULTS

In this chapter I address the empirical results. I start with discussing the descriptive statistics and the Pearson pairwise correlation matrix. I proceed with discussing the implications and results of the multivariate tests in order to provide an answer to my hypotheses. I end with sensitivity analyses, to verify the results for robustness.

### 5.1 Descriptive statistics

The descriptive statistics of my variables of the full sample that consists of 1,567 firms are reported in Table 4. The mean and median *Cash\_ETR5* is approximately 26%. Given the U.S. statutory tax rate of 35%, this result suggests that on average significant amounts of taxes are avoided. Moreover, this result is in line with previous research<sup>18</sup>. The mean *REPU* equals 0.413, implying that publicly traded U.S firms on average have an amount of reputational capital that equals approximately 41% of total assets. The mean of *CSR\_index* is positive, suggesting that firms have on average more “strengths” than “concerns”. In other words, the average firm is regarded as socially responsible rather than irresponsible. The mean of *BIG4* equals 0.898, which means that almost 90% of the 5,608 firm-years has a Big 4 auditor (a high-reputation auditor) and 10% a non-Big 4 auditor. For all other variables, the respective mean, minimum, maximum, 25<sup>th</sup> percentile, median and 75<sup>th</sup> percentile are also reported in Table 4. For all variables, except for *For\_inc*, an acceptable range of variation is observed as well as a reasonable level of consistency between means and medians that implies normality of distributions. The mean *For\_Inc* is approximately 25% with a median *For\_Inc* of approximately 0,008%. This indicates that most firms have a relatively small amount of foreign income.

### 5.2 Correlation matrix

I report the pair-wise Pearson correlation results in Table 5. The correlations show that firm reputation is significantly negatively correlated (at a 10% level) with the cash effective tax rate. This result implies that the higher the reputation of a firm, the higher the likelihood of corporate

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<sup>18</sup> For example, Davis et al. (2016) report a mean and median Cash effective tax rate over a 5-year period of 0,26 and 0,259 respectively.

tax avoidance. Auditor reputation is negatively correlated as well (at a 1% level), indicating that firms having a Big 4 auditor engage in more corporate tax avoidance on average.

**Table 4**  
**Descriptive Statistics**

| <i>Variable name</i>     | <i>N</i> | <i>Mean</i> | <i>Std Dev</i> | <i>Min</i> | <i>Max</i> | <i>25th Pctl</i> | <i>50th Pctl</i> | <i>75th Pctl</i> |
|--------------------------|----------|-------------|----------------|------------|------------|------------------|------------------|------------------|
| <i>CASH_ETR5</i>         | 5,608    | 0.258       | 0.144          | 0.000      | 0.987      | 0.167            | 0.257            | 0,334            |
| <i>REPU</i>              | 5,608    | 0.413       | 1.048          | -0.911     | 4.417      | -0.303           | 0.196            | 0,860            |
| <i>BIG4</i>              | 5,608    | 0.898       | 0.302          | 0.000      | 1.000      | 1.000            | 1.000            | 1,000            |
| <i>NOLCF_Ind</i>         | 5,608    | 0.533       | 0.499          | 0.000      | 1.000      | 0.000            | 1.000            | 1,000            |
| <i>NOLCF</i>             | 5,608    | 0.060       | 0.140          | 0.000      | 0.892      | 0.000            | 0.004            | 0,052            |
| <i>CSR_index</i>         | 5,608    | 0.349       | 2.775          | -7.000     | 18.000     | -1.000           | 0.000            | 1,000            |
| <i>Social_Ind</i>        | 5,608    | 0.084       | 0.278          | 0.000      | 1.000      | 0.000            | 0.000            | 0,000            |
| <i>GOVERNANCE</i>        | 5,608    | -0.272      | 0.714          | -4.000     | 2.000      | -1.000           | 0.000            | 0,000            |
| <i>SIZE</i>              | 5,608    | 7.630       | 1.565          | 4.704      | 12.04      | 6.491            | 7.465            | 8,600            |
| <i>MTB</i> <sup>19</sup> | 5,608    | 2.599       | 2.919          | -9.934     | 17.39      | 1.388            | 2.017            | 3,071            |
| <i>LEV</i>               | 5,608    | 0.204       | 0.179          | 0.000      | 0.868      | 0.060            | 0.176            | 0,296            |
| <i>INTANG</i>            | 5,608    | 0.186       | 0.190          | 0.000      | 0.751      | 0.027            | 0.122            | 0,298            |
| <i>TBO</i>               | 5,608    | 0.002       | 0.004          | 0.000      | 0.021      | 0.000            | 0.001            | 0,002            |
| <i>PTROA</i>             | 5,608    | 0.073       | 0.086          | -0.185     | 0.366      | 0.020            | 0.062            | 0,116            |
| <i>For_Inc</i>           | 5,608    | 0.246       | 0.577          | -1.350     | 3.564      | 0.000            | 0.008            | 0,372            |
| <i>SGA</i>               | 5,608    | 0.193       | 0.185          | 0.000      | 0.866      | 0.030            | 0.154            | 0,293            |
| <i>RD</i>                | 5,608    | 0.023       | 0.044          | 0.000      | 0.213      | 0.000            | 0.000            | 0,024            |
| <i>PPE</i>               | 5,608    | 0.232       | 0.229          | 0.002      | 0.859      | 0.056            | 0.148            | 0,338            |
| <i>CASH</i>              | 5,608    | 0.154       | 0.150          | 0.003      | 0.659      | 0.042            | 0.096            | 0,225            |

Table 4 provides the descriptive of my final sample that consists of 5,608 firm-year observations. Variables are defined in Appendix A.

<sup>19</sup> A negative *MTB* indicates a negative amount of equity in the denominator, since a negative market value is not possible by definition. Even though a negative value *MTB* is rationally hard to interpret (in the most extreme case indicates a negative equity of 1\$ a negative *MTB*, where a value of 1\$ positive would have resulted in the same *MTB*, but positive), it is not uncommon in prior literature to keep these values. Eliminating negative *MTB*'s did not significantly change the results.

**Table 5**  
**Pair-wise Pearson correlation matrix**

|    | 1                          | 2                   | 3                   | 4                           | 5                   | 6                   | 7                   | 8                   | 9                   | 10                  | 11                  | 12                  | 13                  | 14                         | 15                  | 16                         | 17                            | 18                 | 19          |
|----|----------------------------|---------------------|---------------------|-----------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------------|---------------------|----------------------------|-------------------------------|--------------------|-------------|
|    | <i>CASH</i><br><i>ETR5</i> | <i>SIZE</i>         | <i>MTB</i>          | <i>Social</i><br><i>Ind</i> | <i>LEV</i>          | <i>INTANG</i>       | <i>TBO</i>          | <i>PTROA</i>        | <i>For_Inc</i>      | <i>SGA</i>          | <i>R&amp;D</i>      | <i>PPE</i>          | <i>NOLCF</i>        | <i>NOLCF</i><br><i>Ind</i> | <i>CASH</i>         | <i>CSR</i><br><i>index</i> | <i>GOVER-</i><br><i>NANCE</i> | <i>REPU</i>        | <i>BIG4</i> |
| 1  | 1.000                      |                     |                     |                             |                     |                     |                     |                     |                     |                     |                     |                     |                     |                            |                     |                            |                               |                    |             |
| 2  | -0.053 <sup>a</sup>        | 1.000               |                     |                             |                     |                     |                     |                     |                     |                     |                     |                     |                     |                            |                     |                            |                               |                    |             |
| 3  | 0.005                      | -0.082 <sup>a</sup> | 1.000               |                             |                     |                     |                     |                     |                     |                     |                     |                     |                     |                            |                     |                            |                               |                    |             |
| 4  | -0.054 <sup>a</sup>        | 0.369 <sup>a</sup>  | 0.085 <sup>a</sup>  | 1.000                       |                     |                     |                     |                     |                     |                     |                     |                     |                     |                            |                     |                            |                               |                    |             |
| 5  | -0.155 <sup>a</sup>        | 0.231 <sup>a</sup>  | -0.076 <sup>a</sup> | 0.029 <sup>c</sup>          | 1.000               |                     |                     |                     |                     |                     |                     |                     |                     |                            |                     |                            |                               |                    |             |
| 6  | -0.021                     | 0.026               | 0.020               | 0.051 <sup>a</sup>          | 0.192 <sup>a</sup>  | 1.000               |                     |                     |                     |                     |                     |                     |                     |                            |                     |                            |                               |                    |             |
| 7  | -0.021                     | -0.255 <sup>a</sup> | 0.301 <sup>a</sup>  | -0.025                      | -0.176 <sup>a</sup> | 0.0195              | 1.000               |                     |                     |                     |                     |                     |                     |                            |                     |                            |                               |                    |             |
| 8  | 0.094 <sup>a</sup>         | -0.114 <sup>a</sup> | 0.328 <sup>a</sup>  | 0.074 <sup>a</sup>          | -0.171 <sup>a</sup> | 0.003               | 0.467 <sup>a</sup>  | 1.000               |                     |                     |                     |                     |                     |                            |                     |                            |                               |                    |             |
| 9  | -0.017                     | 0.040 <sup>b</sup>  | -0.017              | 0.063 <sup>a</sup>          | -0.030 <sup>c</sup> | 0.068 <sup>a</sup>  | -0.028 <sup>c</sup> | 0.018 <sup>a</sup>  | 1.000               |                     |                     |                     |                     |                            |                     |                            |                               |                    |             |
| 10 | 0.088 <sup>a</sup>         | -0.407 <sup>a</sup> | 0.203 <sup>a</sup>  | 0.013                       | -0.221 <sup>a</sup> | 0.078 <sup>a</sup>  | 0.279 <sup>a</sup>  | 0.219 <sup>b</sup>  | 0.041 <sup>b</sup>  | 1.000               |                     |                     |                     |                            |                     |                            |                               |                    |             |
| 11 | -0.151 <sup>a</sup>        | -0.232 <sup>a</sup> | 0.165 <sup>a</sup>  | 0.072 <sup>a</sup>          | -0.227 <sup>a</sup> | 0.045 <sup>a</sup>  | 0.215 <sup>a</sup>  | -0.037 <sup>b</sup> | 0.096 <sup>a</sup>  | 0.286 <sup>a</sup>  | 1.000               |                     |                     |                            |                     |                            |                               |                    |             |
| 12 | -0.172 <sup>a</sup>        | 0.042 <sup>b</sup>  | -0.026              | -0.012                      | 0.292 <sup>a</sup>  | -0.300 <sup>a</sup> | -0.127 <sup>a</sup> | 0.035 <sup>a</sup>  | -0.056 <sup>a</sup> | -0.150 <sup>a</sup> | -0.231 <sup>a</sup> | 1.000               |                     |                            |                     |                            |                               |                    |             |
| 13 | -0.222 <sup>a</sup>        | -0.197 <sup>a</sup> | 0.009               | -0.036 <sup>b</sup>         | 0.079 <sup>a</sup>  | 0.023               | -0.042 <sup>b</sup> | -0.247 <sup>a</sup> | 0.069 <sup>a</sup>  | 0.141 <sup>a</sup>  | 0.316 <sup>a</sup>  | -0.042 <sup>b</sup> | 1.000               |                            |                     |                            |                               |                    |             |
| 14 | -0.134 <sup>a</sup>        | -0.110 <sup>a</sup> | 0.029 <sup>c</sup>  | 0.030 <sup>c</sup>          | 0.089 <sup>a</sup>  | 0.258 <sup>a</sup>  | 0.013               | -0.088 <sup>a</sup> | 0.139 <sup>a</sup>  | 0.158 <sup>a</sup>  | 0.169 <sup>a</sup>  | -0.042 <sup>b</sup> | 0.377 <sup>a</sup>  | 1.000                      |                     |                            |                               |                    |             |
| 15 | -0.020                     | -0.359 <sup>a</sup> | 0.194 <sup>a</sup>  | -0.003                      | -0.375 <sup>a</sup> | -0.147 <sup>a</sup> | 0.395 <sup>a</sup>  | 0.205 <sup>a</sup>  | 0.076 <sup>a</sup>  | 0.287 <sup>a</sup>  | 0.539 <sup>a</sup>  | -0.317 <sup>a</sup> | 0.222 <sup>a</sup>  | 0.101 <sup>a</sup>         | 1.000               |                            |                               |                    |             |
| 16 | -0.058 <sup>a</sup>        | 0.430 <sup>a</sup>  | 0.086 <sup>a</sup>  | 0.758 <sup>a</sup>          | 0.015               | 0.057 <sup>a</sup>  | -0.007              | 0.088 <sup>a</sup>  | 0.084 <sup>a</sup>  | 0.042 <sup>b</sup>  | 0.089 <sup>a</sup>  | -0.050 <sup>a</sup> | -0.042 <sup>b</sup> | 0.024                      | 0.013               | 1.000                      |                               |                    |             |
| 17 | 0.002                      | -0.011              | -0.009              | 0.121 <sup>a</sup>          | -0.035 <sup>b</sup> | -0.075 <sup>a</sup> | -0.066 <sup>a</sup> | 0.008               | -0.004              | -0.028 <sup>c</sup> | -0.050 <sup>a</sup> | 0.043 <sup>b</sup>  | -0.036 <sup>b</sup> | -0.050 <sup>a</sup>        | -0.063 <sup>a</sup> | 0.186 <sup>a</sup>         | 1.000                         |                    |             |
| 18 | -0.030 <sup>c</sup>        | -0.365 <sup>a</sup> | 0.478 <sup>a</sup>  | 0.039 <sup>b</sup>          | -0.238 <sup>a</sup> | 0.210 <sup>b</sup>  | 0.640 <sup>a</sup>  | 0.650 <sup>a</sup>  | 0.036 <sup>b</sup>  | 0.395 <sup>a</sup>  | 0.359 <sup>a</sup>  | -0.118 <sup>a</sup> | 0.055 <sup>a</sup>  | 0.089 <sup>a</sup>         | 0.492 <sup>a</sup>  | 0.054 <sup>a</sup>         | -0.054 <sup>a</sup>           | 1.000              |             |
| 19 | -0.074 <sup>a</sup>        | 0.205 <sup>a</sup>  | 0.055 <sup>a</sup>  | 0.102 <sup>a</sup>          | 0.114 <sup>a</sup>  | 0.104 <sup>b</sup>  | 0.036 <sup>b</sup>  | 0.023               | 0.019               | 0.011               | 0.034 <sup>c</sup>  | 0.088 <sup>a</sup>  | -0.014              | 0.083 <sup>a</sup>         | -0.032 <sup>c</sup> | 0.130 <sup>a</sup>         | -0.051 <sup>a</sup>           | 0.027 <sup>c</sup> | 1.000       |

Table 5 reports the pair-wise Pearson correlation matrix. Variable names with corresponding definitions are summarized in Appendix A. In Table 5, a denotes significance at a 1% level, b at a 5% level and c at a 10% level.



Similar to auditor and firm reputation, socially responsible firms will also likely engage in more tax avoidance than other firms (significant at a 1% level, both *Social\_Ind* and *CSR\_index*). This result suggests that CSR and tax avoidance are substitutes, but does not allow us to make inferences about the interaction-effect of CSR and firm reputation on corporate tax avoidance as only multivariate analysis can measure such an effect.

Table 4 also shows the correlations between the other explanatory variables. Based on these correlations, only moderate levels of collinearity exist between the explanatory variables used in this study (the highest correlation is between *REPU* and *PTROA*, 0.650 at a 1% level)<sup>20</sup>.

### 5.3 Results hypothesis 1a and 1b

Table 6 provides the results of estimating equation (3) and (4). Column (1) provides the regression results of the association between firm reputation and corporate tax avoidance with only industry and fixed year effects, in order to investigate whether there is a relation without the inclusion of control variables. I extend column (1) with column (2), which presents the unbiased results with the inclusion of a set of control variables and verifies hypothesis *1a*. Column (3) shows the regression results with respect to hypothesis *1b*, an extension of column (2) with the interaction variable. In Table 6, year and industry indicator variables are not tabulated for brevity.

The coefficient of *REPU* in column (1) is not significant, indicating that no significant relation exists between firm reputation and tax avoidance. However, this result is biased and therefore not reliable due to the omission of control variables (endogeneity problems), but gives a first indication for the relation between firm reputation and corporate tax avoidance. Interestingly, in column (2) the coefficient of *REPU* (-0.0167) is significantly negative (at the 1% level). This result implies that firms having a higher reputation pay on average a lower amount of taxes than firms having a lower reputation. For this reason, the answer to research question *1a*) is “yes” and hypothesis *H1a* can be rejected: there is a significant positive association between corporate tax avoidance and firm reputation<sup>21</sup>. Note that I only seek to provide evidence on an association

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<sup>20</sup>According to Lanis & Richardson (2015) and Hair et al. (2006) is collinearity at a moderate level for a pair of explanatory variables when the correlation coefficient lies between 0,25 and 0,75. A moderate level of collinearity is not problematic. Moreover, I measure VIF (variance inflation factors) to test for multicollinearity. A VIF greater than 10 indicates redundancy in the measures (Hair et al., 2006). The maximum VIF for my variables is 4,97. Thus, there is no evidence for multicollinearity concerns.

<sup>21</sup> As aforementioned, please beware of the fact that a negative relation between firm reputation and tax payments suggests a positive relation between firm reputation and tax avoidance.

between the reputation and tax avoidance, not causation. Consequently, this result does *not* indicate that firms' reputation is higher after they engaged in tax avoidance, nor the other way around. The result is surprising when expecting that firms would shun tax avoidance as they fear any potential reputation damage and it can therefore not explain the under-sheltering puzzle. However, the result is in line with prior research (Gallemore et al. 2014) which make the results plausible. It is likely that firms benefit from corporate tax avoidance simply because they save money that otherwise would have flowed to the tax authorities. In turn, shareholders benefit as well such that shareholders would presumably prefer that firms engage in corporate tax avoidance.

Similar to the results of equation (3) given in column (2), the coefficient of *REPU* in equation (4) given in column (3) is also significantly negative (-0.0177 at a 1% level). This result again indicates that firms with higher reputation engage in more tax avoidance on average. *Social\_Ind* is negative (-0.0076), suggesting that firms that score high on CSR are sheltering more taxes on average than firms that perform worse on CSR. This coefficient is consistent with prior research (Davis et al. 2016) and with CSR and tax payments acting as substitutes rather than complements, which means that firms use their ethical performance on CSR to rationalize engaging in (unethical) corporate tax avoidance. Nevertheless, this result is not significant and for this reason I infer that socially responsible firms do not have significantly different values of *CASH\_ETR5* than other firms. However, the coefficient of *REPU\*Social\_Ind* in column 3) is significantly positive (0.0129 at a 1% level). This result shows that higher-reputation firms that score high on CSR view CSR and tax payments as complements rather than substitutes. Firms with a higher reputation that score high on CSR therefore pay more taxes on average than firms with a higher reputation that perform worse on CSR (1,29% more, as a percentage of pretax income). This result provides evidence that the relation between firm reputation and corporate tax avoidance indeed varies with a firm's CSR-performance. Consequently, hypothesis *H1b* can be rejected and research question *1b*) can be answered with "yes". The result is remarkable: firms with a higher reputation on average engage in more tax avoidance, but when these firms score high on CSR they engage in less tax avoidance. Therefore, high-reputation firms that are socially responsible do not compensate tax avoidance with CSR-performance, but rather align CSR-performance in a way that tax avoidance strategies are incorporated in their CSR-strategy.

All control variables that have significant coefficients are in line with the predictions, except for *INTANG* that has a positive significant coefficient where a negative coefficient was

expected. Therefore, the theories behind the significant control variables can be confirmed, except for *INTANG*. The control variables for which I did not make sign predictions are *MTB* and *SGA*. For *MTB* I found no significant relation with the 5-year effective tax rate, although the positive coefficient is in line with Davis et al. (2016). *SGA* is significantly negatively associated with corporate tax avoidance, suggesting that higher selling, general and administrative expenses decrease the likelihood of corporate tax avoidance. This result is also in line with Davis et al. (2016), but not in line with the notion that these kinds of expenses lower the amount of taxable income and subsequently a firm's effective tax rate.

Overall, the results in Table 6 indicate that firm reputation is significantly positively associated with corporate tax avoidance. This association is less pronounced for firms having a higher reputation that are socially responsible (score high on CSR-performance), indicating that high-reputation firms that are also socially responsible view CSR and tax avoidance as complements rather than substitutes.

**Table 6**  
**Regression results hypothesis 1a and 1b**

| <i>Variable name</i>   | <i>Predicted sign</i> | <i>(1)</i><br><i>No control</i><br><i>variables</i> | <i>(2)</i><br><i>Regression</i><br><i>equation (3)</i> | <i>(3)</i><br><i>Regression</i><br><i>equation (4)</i> |
|------------------------|-----------------------|---|--|--|
| <i>REPU</i>            | ?                     | 0,0002<br>(0,0020)                                  | -0.0167 <sup>a</sup><br>(0.00361)                      | -0.0177 <sup>a</sup><br>(0.00365)                      |
| <i>REPU*Social_Ind</i> | ?                     |   |  | 0.0129 <sup>a</sup><br>(0.00466)                       |
| <i>Social_Ind</i>      | ?                     |   |  | -0.00796<br>(0.00705)                                  |
| <i>SIZE</i>            | -                     |   | -0.0100 <sup>a</sup><br>(0.00142)                      | -0.0104 <sup>a</sup><br>(0.00162)                      |
| <i>MTB</i>             | ?                     |   | 0.00123<br>(0.000882)                                  | 0.00127<br>(0.000885)                                  |
| <i>LEV</i>             | -                     |   | -0.0552 <sup>a</sup><br>(0.0131)                       | -0.0565 <sup>a</sup><br>(0.0132)                       |
| <i>INTANG</i>          | -                     |   | 0.0260 <sup>a</sup><br>(0.0148)                        | 0.0245 <sup>c</sup><br>(0.0148)                        |
| <i>TBO</i>             | -                     |   | -3.637 <sup>a</sup><br>(0.547)                         | -3.682 <sup>a</sup><br>(0.549)                         |
| <i>PTROA</i>           | +                     |   | 0.201 <sup>a</sup><br>(0.0369)                         | 0.202 <sup>a</sup><br>(0.0369)                         |
| <i>For_Inc</i>         | -                     |   | 0.00458<br>(0.00431)                                   | 0.00457<br>(0.00430)                                   |
| <i>SGA</i>             | ?                     |   | 0.101 <sup>a</sup><br>(0.0147)                         | 0.101 <sup>a</sup><br>(0.0147)                         |
| <i>R&amp;D</i>         | -                     |   | -0.311 <sup>a</sup><br>(0.0683)                        | -0.324 <sup>a</sup><br>(0.0689)                        |
| <i>PPE</i>             | -                     |   | -0.0803 <sup>a</sup><br>(0.0181)                       | -0.0816 <sup>a</sup><br>(0.0181)                       |
| <i>NOLCF</i>           | -                     |   | -0.173 <sup>a</sup><br>(0.0180)                        | -0.172 <sup>a</sup><br>(0.0181)                        |
| <i>NOLCF_Ind</i>       | -                     |   | -0.00565<br>(0.00409)                                  | -0.00635<br>(0.00411)                                  |
| <i>CASH</i>            | -                     |   | 0.0275<br>(0.0190)                                     | 0.0273<br>(0.0190)                                     |
| <i>GOVERNANCE</i>      | -                     |   | 0.00218<br>(0.00272)                                   | -0.00355<br>(0.00331)                                  |
| <i>Constant</i>        | ?                     |   | 0.441 <sup>a</sup><br>(0.0529)                         | 0.442 <sup>a</sup><br>(0.0539)                         |
| Observations           |                       | 5,608   | 5,608  | 5,608  |
| R-squared              |                       | 0,153   | 0,225  | 0,226  |
| Fixed year effects     |                       | YES   | YES  | YES  |
| Industry effects       |                       | YES   | YES  | YES  |

In Table 6, a denotes significance at a 1% level, b at a 5% level and c at a 10% level with robust standard errors in parentheses. Variable names with corresponding definitions are summarized in Appendix A.

## 5.4 Results hypothesis 2

Table 7 provides the regression results of the relation between auditor reputation and corporate tax avoidance (equation 5). In column 1, I regress corporate tax avoidance on auditor reputation and year and industry fixed-effects and exclude the firm-level control variables. In column 2, I report the results with the inclusion of firm-level control variables.

Column 1 reports a significant negative coefficient of BIG4 (-0.0144 at a 5% level). This is in line with the notion that firms with high-reputation auditors are associated with more corporate tax avoidance, indicating that high-reputation auditors have an encouraging role in engaging in tax avoidance. However, this result is only an indication, as the exclusion of control variables gives a strongly biased result.

The coefficient of BIG4 in column 2 is non-significantly positive. Therefore, in contrast with column 1, I find no significant relation between auditor reputation and tax avoidance. This implies that auditor reputation plays no significant role for auditors in influencing firms to engage in corporate tax avoidance. This result is not in line with prior research, who found that Big N auditors (that have a high reputation) are promoters of tax services and use their expertise to in helping firms to avoid taxes. All significant control variables are consistent with expectations. Thus, hypothesis *H2* cannot be rejected and the answer to research question 2) is “no”.

**Table 7**  
**Regression results hypothesis 2: relation between auditor reputation and corporate tax avoidance**

| <i>Variable name</i> | <i>Predicted sign</i> | (1)<br><i>No control variables</i> | (2)<br><i>Regression equation (5)</i> |
|----------------------|-----------------------|------------------------------------|---------------------------------------|
| <i>BIG4</i>          |                       | -0,0144 <sup>b</sup><br>(0,0068)   | 0.000147<br>(0.00670)                 |
| <i>SIZE</i>          | -                     |                                    | -0.00893 <sup>a</sup><br>(0.00145)    |
| <i>MTB</i>           | ?                     |                                    | 0.000158<br>(0.000833)                |
| <i>LEV</i>           | -                     |                                    | -0.0483 <sup>a</sup><br>(0.0131)      |
| <i>INTANG</i>        | -                     |                                    | 0.00561<br>(0.0142)                   |
| <i>TBO</i>           | -                     |                                    | -4.754 <sup>a</sup><br>(0.513)        |
| <i>PTROA</i>         | +                     |                                    | 0.118 <sup>a</sup><br>(0.0314)        |
| <i>For_Inc</i>       | -                     |                                    | 0.00483<br>(0.00434)                  |
| <i>SGA</i>           | ?                     |                                    | 0.0953 <sup>a</sup><br>(0.0146)       |
| <i>R&amp;D</i>       | -                     |                                    | -0.359 <sup>a</sup><br>(0.0684)       |
| <i>PPE</i>           | -                     |                                    | -0.0822 <sup>a</sup><br>(0.0181)      |
| <i>NOLCF</i>         | -                     |                                    | -0.180 <sup>a</sup><br>(0.0180)       |
| <i>NOLCF_Ind</i>     | -                     |                                    | -0.00457<br>(0.00410)                 |
| <i>CASH</i>          | -                     |                                    | 0.00791<br>(0.0185)                   |
| <i>GOVERNANCE</i>    | -                     |                                    | 0.00235<br>(0.00273)                  |
| <i>Constant</i>      | ?                     |                                    | 0.429 <sup>a</sup><br>(0.0540)        |
| Observations         |                       | 5,608                              | 5,608                                 |
| R-squared            |                       | 0.1535                             | 0.222                                 |
| Year effects         |                       | YES                                | YES                                   |
| Industry effects     |                       | YES                                | YES                                   |

In Table 7, a denotes significance at a 1% level, b at a 5% level and c at a 10% level with robust standard errors in parentheses. Variable names with corresponding definitions are summarized in Appendix A.

## 5.5 Sensitivity analysis and additional tests

### 5.5.1 Alternate measures for corporate tax avoidance

In my main analysis, I use the variable *CASH\_ETR5* to capture corporate tax avoidance. I also test for robustness of my results using two other measures for corporate tax avoidance. First, I use an indicator variable *TAXAGGR* for tax avoidance that equals 1 if a *CASH\_ETR5* is in the top quintile (e.g. have the lowest effective tax rates) and 0 otherwise. This indicator variable captures the more aggressive forms of corporate tax avoidance. If tax avoidance affects a firm's reputation, any reputational consequences will likely occur for firms that engage in the more aggressive forms of tax avoidance. Additionally, auditors presumably care more about the most aggressive forms of corporate tax avoidance. I use a firm's *GAAP\_ETR5* as a second alternate measure for corporate tax avoidance. This measure is more commonly used in prior literature and may differ from the *CASH\_ETR5*, but has proven to be able to capture corporate tax avoidance as well. The results of the analyses with alternative measures for tax avoidance with respect to the relation between tax avoidance and firm reputation are reported in Table 8. I conducted a logistic regression for the regression with *TAXAGGR* as dependent variable, as this is an indicator variable.

I continue to find that firm reputation is significantly positively associated with corporate tax avoidance. The coefficients of firm reputation in relation with *TAXAGGR* (column 1) and *GAAP\_ETR5* (column 2) are 0.428 and -0.0561 respectively, both at a 1% level. Note that the sign of the coefficient of *TAXAGGR* is positive and the sign of the *GAAP\_ETR5* negative. Again, lower effective tax rates indicate a higher amount of tax avoidance, which explains the inverse signs. This result confirms the relation I find between firm reputation and tax avoidance with *CASH\_ETR5* as dependent variable.

### 5.5.2 An alternate proxy for CSR-performance

To strengthen my inferences that socially responsible firms use CSR and tax avoidance as complements, I also explore another proxy for CSR to verify whether the opposite holds as well. This proxy is the opposite of the variable *Social\_Ind* and also an indicator variable. This indicator (*Irres\_Ind*) variable equals one if a firm scores lower than -4 (e.g. is irresponsible) on the *CSR\_index* and 0 otherwise. Table 8 reports the results in column (3). The results indicate that socially irresponsible firms do not have significantly different values of effective tax rates than other firms (coefficient of *Irres\_Ind* is 0.0192; not significant). This is also the case for the variable

*Social\_Ind.* Variable of interest is *REPU\*Irres\_Ind*. The coefficient of *REPU\*Irres\_Ind* in column (3) is significantly negative (-0.0324 at a 10% level). This result shows that higher-reputation firms that score low on CSR view CSR and tax payments also as complements rather than substitutes: firms having higher reputations engage significantly more in corporate tax avoidance (coefficient of *REPU* is -0.0165; at a 1% level) and when these firms are regarded as irresponsible, they engage on average even more in corporate tax avoidance. Therefore, this result strengthens the idea that firms view tax payments and CSR as complements rather than substitutes.

### 5.5.3 An alternate proxy for auditor reputation

A potential concern with the previous analyses on auditor reputation is the self-selection bias and unobserved heterogeneity. To mitigate this concern, I compare the change in corporate tax avoidance for firms that switch auditors from year  $t-1$  to year  $t$  ( $\Delta CASH\_ETR5 = CASH\_ETR5_t - CASH\_ETR5_{t-1}$ ). This analysis increases confidence in the association between corporate tax avoidance and auditor reputation. The intuition is that, when higher auditor reputation is associated with more tax avoidance, a change from a non-Big4 auditor to a Big4 auditor will likely be accompanied with a positive change in corporate tax avoidance (e.g. a negative change in effective tax rate) and vice versa. As I found no significant relation between auditor reputation and corporate tax avoidance in previous analyses, I expect that an auditor-switch will not be followed with a change in corporate tax avoidance. The results of the univariate analyses, based on t-tests, are reported in Table 9. Consistent with previous analyses and the expectation stated above, none of the conducted t-tests provide evidence that an auditor switch is followed by a significant change in effective tax rates / corporate tax avoidance. The effective tax rates increase on average with 0.23% for firms that switch from a Non-Big4 auditor to a Big4 auditor, whereas it decreases with on average 0,94% for firms that switch from a Big4 to a non-Big4 auditor. As none of the tests are statistically significant, I infer that a switch from a lower-reputation auditor to a higher-reputation auditor and vice versa does not lead to a significant change in corporate tax avoidance. This result is consistent with previous analyses and strengthens the notion that the reputation of the auditor does not matter for the likelihood of the degree of tax avoidance a firm engages in. When using auditor switch (*SWITCH*: equals 1 if a firm has an auditor switch in a year and 0 otherwise) as an alternate measure for auditor reputation in regression analyses, none of the coefficients of *SWITCH* are significant. Even after combining the alternative measures for corporate tax avoidance and



auditor reputation, no significant results for auditor reputation are observed. The results are documented in Table 10.

**Table 8**  
**Sensitivity analysis hypothesis 1a +1b: relation between firm reputation, CSR and corporate tax avoidance**

| <i>Variable name</i>  | <i>Predicted sign</i> | <i>(1) DV:<br/>TAXAGGR</i>       | <i>(2) DV:<br/>GAAP_ETR5</i>     | <i>(3) DV:<br/>CASH_ETR5</i>      |
|-----------------------|-----------------------|----------------------------------|----------------------------------|-----------------------------------|
| <i>REPU</i>           | ?                     | 0.428 <sup>a</sup><br>(0.0846)   | -0.0561 <sup>a</sup><br>(0.0135) | -0.0165 <sup>a</sup><br>(0.00361) |
| <i>REPU*Irres_Ind</i> | ?                     |                                  |                                  | -0.0324 <sup>c</sup><br>(0.0192)  |
| <i>Irres_Ind</i>      | ?                     |                                  |                                  | 0.0124<br>(0.0202)                |
| <i>SIZE</i>           | -                     | 0.0652 <sup>b</sup><br>(0.0328)  | 0.00325<br>(0.00383)             | -0.0105 <sup>a</sup><br>(0.00145) |
| <i>MTB</i>            | ?                     | -0.0361 <sup>b</sup><br>(0.0152) | 0.00306<br>(0.00312)             | 0.00124<br>(0.000884)             |
| <i>LEV</i>            | -                     | 1.721 <sup>a</sup><br>(0.285)    | -0.192 <sup>a</sup><br>(0.0618)  | -0.0563 <sup>a</sup><br>(0.0131)  |
| <i>INTANG</i>         | -                     | -1.353 <sup>a</sup><br>(0.361)   | -0.0293<br>(0.125)               | 0.0251 <sup>c</sup><br>(0.0148)   |
| <i>TBO</i>            | -                     | 29.69 <sup>c</sup><br>(16.25)    | 5.699 <sup>a</sup><br>(1.592)    | -3.724 <sup>a</sup><br>(0.547)    |
| <i>PTROA</i>          | +                     | -10.03 <sup>a</sup><br>(0.779)   | 0.680 <sup>a</sup><br>(0.110)    | 0.204 <sup>a</sup><br>(0.0369)    |
| <i>For_Inc</i>        | -                     | -0.0802<br>(0.0826)              | -0.0104<br>(0.00878)             | 0.00469<br>(0.00431)              |
| <i>SGA</i>            | ?                     | -3.521 <sup>a</sup><br>(0.475)   | 0.220 <sup>c</sup><br>(0.130)    | 0.100 <sup>a</sup><br>(0.0147)    |
| <i>R&amp;D</i>        | -                     | 8.369 <sup>a</sup><br>(1.431)    | -0.302<br>(0.213)                | -0.314 <sup>a</sup><br>(0.0683)   |
| <i>PPE</i>            | -                     | 2.163 <sup>a</sup><br>(0.408)    | 0.0906<br>(0.0669)               | -0.0815 <sup>a</sup><br>(0.0181)  |
| <i>NOLCF</i>          | -                     | 3.430 <sup>a</sup><br>(0.399)    | -0.228 <sup>b</sup><br>(0.0955)  | -0.173 <sup>a</sup><br>(0.0181)   |
| <i>NOLCF_Ind</i>      | -                     | 0.330 <sup>a</sup><br>(0.106)    | 0.0205<br>(0.0133)               | -0.00587<br>(0.00410)             |
| <i>CASH</i>           | -                     | 0.840 <sup>c</sup><br>(0.451)    | 0.0100<br>(0.124)                | 0.0246<br>(0.0189)                |
| <i>GOVERNANCE</i>     | -                     | 0.0446<br>(0.0663)               | 0.00177<br>(0.00920)             | -0.00315<br>(0.00326)             |
| <i>Constant</i>       | ?                     | -3.911 <sup>a</sup><br>(1.130)   | 0.165<br>(0.112)                 | 0.444 <sup>a</sup><br>(0.0531)    |
| Observations          |                       | 5,414                            | 5,608                            | 5,608                             |
| R-squared             |                       | 0.2733                           | 0.046                            | 0.225                             |
| Fixed year effects    |                       | YES                              | YES                              | YES                               |
| Industry effects      |                       | YES                              | YES                              | YES                               |

In Table 8, a denotes significance at a 1% level, b at a 5% level and c at a 10% level with robust standard errors in parentheses. Variable names with corresponding definitions are summarized in Appendix A.

**Table 9**  
**Relation between auditor switches and change in corporate tax avoidance**

| <i>Switch</i>        | <i>No. of Switches</i> | <i>Mean <math>\Delta</math>CASH_ETR5</i> | <i>p-value</i> |
|----------------------|------------------------|--|----------------|
| Non-Big 4 to Big 4   | 21                     | 0.227%                                   | 0.234          |
| Big 4 to non-Big 4   | 21                     | -0.935%                                  | 0.272          |
| All auditor switches | 42                     | -0.354%                                  | 0.414          |

Table 10 provides the results of the t-tests regarding the change in CASH\_ETR5 after an auditor switch. The table reports the number of switches, the mean  $\Delta$ CASH\_ETR5 ( $CASH\_ETR5_t - CASH\_ETR5_{t-1}$ ) and the p-values of the conducted t-tests of whether  $\Delta$ CASH\_ETR5 differs from zero.

**Table 10**  
**Sensitivity analysis hypothesis 2: relation between auditor reputation and corporate tax avoidance**

| <i>Variable name</i> | <i>Predicted sign</i> | <i>(1) DV: TAXAGGR</i>         | <i>(2) DV: GAAP_ETR5</i>        | <i>(3) DV: CASH_ETR5</i>           | <i>(4) DV: TAXAGGR</i>         | <i>(5) DV: GAAP_ETR5</i>          |
|----------------------|-----------------------|--------------------------------|---------------------------------|------------------------------------|--------------------------------|-----------------------------------|
| <i>BIG4</i>          | ?                     | -0.187<br>(0.145)              | -0.0126<br>(0.0642)             |                                    |                                |                                   |
| <i>SWITCH</i>        | ?                     |                                |                                 | 0.00480<br>(0.0105)                | -0.0900<br>(0.242)             | 0.00246<br>(0.0333)               |
| <i>SIZE</i>          | -                     | 0.0530<br>(0.0336)             | 0.00765<br>(0.00573)            | -0.00889 <sup>a</sup><br>(0.00142) | 0.0418<br>(0.0328)             | 0.00692 <sup>c</sup><br>(0.00391) |
| <i>MTB</i>           | ?                     | -0.00912<br>(0.0150)           | -0.000522<br>(0.00277)          | 0.000158<br>(0.000833)             | -0.00944<br>(0.0150)           | -0.000552<br>(0.00272)            |
| <i>LEV</i>           | -                     | 1.518 <sup>a</sup><br>(0.285)  | -0.168 <sup>a</sup><br>(0.0565) | -0.0483 <sup>a</sup><br>(0.0131)   | 1.518 <sup>a</sup><br>(0.285)  | -0.169 <sup>a</sup><br>(0.0589)   |
| <i>INTANG</i>        | -                     | -0.766 <sup>b</sup><br>(0.335) | -0.0968<br>(0.128)              | 0.00571<br>(0.0142)                | -0.768 <sup>b</sup><br>(0.334) | -0.0975<br>(0.132)                |
| <i>TBO</i>           | -                     | 64.42 <sup>a</sup><br>(15.12)  | 2.004<br>(1.433)                | -4.755 <sup>a</sup><br>(0.514)     | 63.44 <sup>a</sup><br>(15.13)  | 1.940<br>(1.456)                  |
| <i>PTROA</i>         | +                     | -8.283 <sup>a</sup><br>(0.674) | 0.400 <sup>a</sup><br>(0.0961)  | 0.118 <sup>a</sup><br>(0.0315)     | -8.291 <sup>a</sup><br>(0.678) | 0.402 <sup>a</sup><br>(0.0926)    |
| <i>For_Inc</i>       | -                     | -0.0738<br>(0.0833)            | -0.00970<br>(0.00894)           | 0.00483<br>(0.00434)               | -0.0754<br>(0.0831)            | -0.00958<br>(0.00878)             |
| <i>SGA</i>           | ?                     | -3.183 <sup>a</sup><br>(0.454) | 0.203<br>(0.132)                | 0.0952 <sup>a</sup><br>(0.0146)    | -3.197 <sup>a</sup><br>(0.455) | 0.202<br>(0.129)                  |
| <i>R&amp;D</i>       | -                     | 9.299 <sup>a</sup><br>(1.444)  | -0.458 <sup>b</sup><br>(0.209)  | -0.359 <sup>a</sup><br>(0.0684)    | 9.217 <sup>a</sup><br>(1.438)  | -0.463 <sup>b</sup><br>(0.223)    |
| <i>PPE</i>           | -                     | 2.272 <sup>a</sup><br>(0.403)  | 0.0853<br>(0.0639)              | -0.0820 <sup>a</sup><br>(0.0181)   | 2.263 <sup>a</sup><br>(0.405)  | 0.0844<br>(0.0681)                |
| <i>NOLCF</i>         | -                     | 3.475 <sup>a</sup><br>(0.396)  | -0.254 <sup>a</sup><br>(0.0923) | -0.180 <sup>a</sup><br>(0.0180)    | 3.477 <sup>a</sup><br>(0.395)  | -0.253 <sup>a</sup><br>(0.0940)   |
| <i>NOLCF_Ind</i>     | -                     | 0.304 <sup>a</sup><br>(0.105)  | 0.0243 <sup>c</sup><br>(0.0143) | -0.00455<br>(0.00410)              | 0.301 <sup>a</sup><br>(0.105)  | 0.0241 <sup>c</sup><br>(0.0136)   |
| <i>CASH</i>          | -                     | 1.334 <sup>a</sup><br>(0.433)  | -0.0552<br>(0.127)              | 0.00804<br>(0.0185)                | 1.313 <sup>a</sup><br>(0.433)  | -0.0557<br>(0.130)                |
| <i>GOVERNANCE</i>    | -                     | 0.0380<br>(0.0664)             | 0.00232<br>(0.00925)            | 0.00233<br>(0.00273)               | 0.0391<br>(0.0665)             | 0.00233<br>(0.00911)              |
| <i>Constant</i>      | ?                     | -3.718 <sup>a</sup><br>(1.140) | 0.133<br>(0.136)                | 0.429 <sup>a</sup><br>(0.0538)     | -3.808 <sup>a</sup><br>(1.138) | 0.125<br>(0.115)                  |
| Observations         |                       | 5,414                          | 5,608                           | 5,608                              | 5,414                          | 5,608                             |
| R-squared            |                       | 0,269                          | 0,043                           | 0,222                              | 0,269                          | 0,043                             |
| Year effects         |                       | YES                            | YES                             | YES                                | YES                            | YES                               |
| Industry effects     |                       | YES                            | YES                             | YES                                | YES                            | YES                               |

In Table 9, a denotes significance at a 1% level, b at a 5% level and c at a 10% level with robust standard errors in parentheses. Variable names with corresponding definitions are summarized in Appendix A.

### 5.6 Additional analysis: capturing auditor reputation and firm reputation in one model

Based on my main analyses above, firm reputation is significantly positively related with corporate tax avoidance, whereas no significant relation exists between auditor reputation and corporate tax avoidance. In Chapter two, section 2.4.1, I made a clear distinction between reputational costs and reputation. However, it is likely that a firm bears no reputational costs or even enjoys reputational benefits after it is has been subject to media scrutiny, as previous analyses indicate that firm reputation is positively associated with tax avoidance. Moreover, it is plausible that any reputational consequences of a firm due to tax avoidance will not spill over to their auditors, as auditor reputation is not significantly associated with corporate tax avoidance. With an additional analysis, I try to verify these suggestions and to find support for the evidence that I found in prior analyses.

Starbucks has been in the spotlight last years, since it was accused of avoiding taxes on a broad scale. It has been widely reported in the news worldwide and is therefore a perfect example of a company that might face any reputational consequences due to tax avoidance. However, it is plausible that when Starbucks appeared in the news for the first time, not only Starbucks but also other companies that actively engage in corporate tax avoidance bear reputational effects. I measure the stock-market effect for U.S. firms of my initial sample on the date of the first press release of Starbucks for its involvement in corporate tax avoidance. In order to determine the first press release of Starbucks on tax avoidance, I use the LexisNexis research tool to conduct a media analysis. According to this analysis, Starbucks' first press release was on 15 October 2012. Thus, this date is my event date. I calculate the cumulative abnormal returns (CAR) 1 day before and 1 day after this event date (3-day window). I use an estimation window of 30 days to calculate the normal returns, where the value weighted returns were accounted for as the market return. Stock market data was collected from the Center for Research in Security Prices (CRSP). The following equation is used to estimate the relation between a firm's return ( $R_{i,t}$ ) and the market portfolio ( $R_{m,t}$ ), where  $i$  represents the firm and  $t$  represents time in trading days:

$$R_{i,t} = \beta_i + \beta_i * R_{m,t} + \varepsilon_{i,t} \quad (6)$$

After estimating the normal returns, using an estimation window of 30 days before event date, I calculate the abnormal returns using the following equation:

$$AR_{i,t} = R_{i,t} - (\beta_i + \beta_i * R_{m,t}) \quad (7)$$

Lastly, the cumulative abnormal returns are calculated over the event window  $t-1$  until  $t+1$  with the following equation:

$$CAR_3 = \sum_{t-1}^{t+1} AR_{i,t} \quad (8)$$

After calculation of  $CAR_3$ 's, I conduct the following regression model in order to estimate the relation between reputational costs of a firm, auditor reputational costs and corporate tax avoidance:

$$GAAP\_ETR5_{i,t} = \beta_0 + \beta_1 * CAR_{3i,t} + \beta_2 * CAR_3 * AUSB_{i,t} + \beta_3 * SIZE_{i,t} + \beta_4 * LEV_{i,t} + \beta_5 * R\&D_{i,t} + \beta_6 * For\_Inc_{i,t} + \beta_7 * TBO_{i,t} + \beta_8 * MTB_{i,t} + \beta_9 * PPE_{i,t} + \beta_{10} * GOVERNANCE_{i,t} + \beta_{11} * CASH_{i,t} + \beta_{12} * NOLCF_{i,t} + \beta_{13} * NOLCF\_Ind_{i,t} + \beta_{14} * INTANG_{i,t} + \beta_{15} * PTROA_{i,t} + \beta_{16} * SGA_{i,t} + \sum \beta_j Industry_j + \varepsilon_{i,t} \quad (9)$$

This model is very similar to regression model (5), but the  $CASH\_ETR5$  is replaced by the  $GAAP\_ETR5$  because investors will likely pay more attention to the tax expense as stated in the financial statements rather than the amount of cash taxes paid. Moreover, the relation between firm reputation and corporate tax avoidance is robust according to my previous analyses, indicating that both  $CASH\_ETR5$  and  $GAAP\_ETR5$  indeed proxy corporate tax avoidance very well.  $AUSB$  is an indicator variable that equals 1 if it has the same auditor as Starbucks at the event date and 0 otherwise. Variables of interest in this model are  $CAR_3$  and interaction variable  $CAR_3 * AUSB$ . The first provides the association between the stock market reaction (reputational effects) and corporate tax avoidance and the latter measures whether this association varies when a firm has the same auditor as Starbucks. A negative coefficient for  $CAR_3$  indicates that firms with higher cumulative abnormal returns in the event window are associated with more tax avoidance, meaning that firms that engage in more tax avoidance enjoy positive reputational effects. A positive sign suggests that firms that engage in more tax avoidance bear reputational costs, as higher cumulative abnormal returns are associated with higher effective tax rates and hence lower cumulative abnormal returns with lower effective tax rates. A positive coefficient for the interaction variable indicates that firms with the same auditor as Starbucks that have higher cumulative abnormal returns engage in less tax avoidance on average than other firms, suggesting that Starbucks' auditor bears no reputational costs. A negative coefficient for the interaction variable suggests that firms with higher returns that have Starbucks' auditor engage in more tax avoidance on average than other firms, which

suggests that Starbucks' auditor face positive reputational effects. The results of regression (10) are reported in Table 11.

The initial sample that comprises 5,608 firm-year observations has been reduced to 1,200 observations, due to the fact that only the year 2012 is included in my sample and logically I therefore do not control for year effects. The significant negative coefficient for  $CAR_3$  (-0.858, at a 10% level) indicates that firms that have better stock market returns are associated with more corporate tax avoidance on average. This result suggests that firms do not bear reputational costs but enjoy positive reputational effects instead and supports my main analyses that firms having a higher reputation are associated with lower effective tax rates. Interestingly, I find no significant coefficient for my interaction variable, suggesting that firms having the same auditor as Starbucks that have higher returns do not significantly engage in more or less corporate tax avoidance. Therefore, the relation between tax avoidance and stock market returns does not vary when firms have the same auditor as Starbucks, meaning that auditor reputation stays unaffected. This result is in line with my prior main analyses, as I found that auditor reputation has no significant association with corporate tax avoidance.

Overall, the results of the additional analysis indicate that firms that engage in more tax avoidance are associated with higher stock market returns (positive reputational effects) on average. Moreover, the effect of auditor reputation on this relation is not significant and therefore auditor reputation is unaffected. These results are consistent with my main analyses and support the notion that a higher firm reputation is associated with more tax avoidance on average and that auditor reputation is not significantly associated with corporate tax avoidance.

**Table 11**  
**Additional analysis: relation between stock market returns and corporate tax avoidance**

| <i>Variable name</i>         | <i>Predicted sign</i> | <i>(1) DV:<br/>GAAP_ETRS</i>   |
|------------------------------|-----------------------|--------------------------------|
| <i>CAR<sub>3</sub></i>       | ?                     | -0.858 <sup>c</sup><br>(0.481) |
| <i>CAR<sub>3</sub>* AUSB</i> | ?                     | 2.031<br>(1.769)               |
| <i>SIZE</i>                  | -                     | -0.000695<br>(0.00536)         |
| <i>MTB</i>                   | ?                     | 0.00453<br>(0.00441)           |
| <i>LEV</i>                   | -                     | -0.133<br>(0.0839)             |
| <i>INTANG</i>                | -                     | -0.0498<br>(0.0511)            |
| <i>TBO</i>                   | -                     | 2.958<br>(2.746)               |
| <i>PTROA</i>                 | +                     | 0.622 <sup>a</sup><br>(0.194)  |
| <i>For_Inc</i>               | -                     | -0.000849<br>(0.0227)          |
| <i>SGA</i>                   | ?                     | -0.0688<br>(0.116)             |
| <i>R&amp;D</i>               | -                     | -0.595<br>(0.493)              |
| <i>PPE</i>                   | -                     | 0.0187<br>(0.0565)             |
| <i>NOLCF</i>                 | -                     | -0.406 <sup>b</sup><br>(0.206) |
| <i>NOLCF_Ind</i>             | -                     | -0.00688<br>(0.0226)           |
| <i>CASH</i>                  | -                     | -0.0945<br>(0.0598)            |
| <i>GOVERNANCE</i>            | -                     | 0.0141<br>(0.0183)             |
| <i>Constant</i>              | ?                     | 0.289 <sup>a</sup><br>(0.0597) |
| Observations                 |                       | 1,200                          |
| R-squared                    |                       | 0.104                          |
| Fixed year effects           |                       | NO                             |
| Industry effects             |                       | YES                            |

In Table 11, a denotes significance at a 1% level, b at a 5% level and c at a 10% level with robust standard errors in parentheses. Variable names with corresponding definitions are summarized in Appendix A.

## 6: CONCLUSION

I investigate the relation between corporate tax avoidance (measured by five-year cash ETRs) and firm reputation and how this relation varies with a firm's CSR performance. Additionally, I examine the relation between corporate tax avoidance and auditor reputation. Prior literature provides mixed evidence on the relation between reputational concerns/effects and the degree of tax avoidance that a firm exhibits (Hanlon & Slemrod, 2009; Graham et al., 2014; Gallemore et al. 2014). My study helps to reconcile the differences between these existing studies by conducting a (financial) archival study.

Using a sample of 5,608 firm-year observations relating to 1,567 publicly traded U.S firms, I find that high reputation firms are likely to engage in more corporate tax avoidance on average than low reputation firms. Thus, research question *1a*) can be answered in the affirmative and the result is in line with the results of Gallemore et al. (2014), who find that firms face no reputational costs after having engaged in corporate tax avoidance. However, the result is not in compliance with the results of Hanlon & Slemrod (2009) and Graham et al. (2014), who both document negative reputational effects due to tax avoidance. Furthermore, I also find that the relation between corporate tax avoidance and firm reputation (research question *1b*) is significantly moderated by CSR: socially responsible firms that also have a high reputation engage in less tax avoidance on average. In contrast to Davis et al. (2016), this means that high reputation firms view CSR and paying taxes as complements rather than substitutes. Lastly, contrary to Lisowsky (2010) who finds that Big N auditors promote tax avoidance, my evidence indicates that auditor reputation is not significantly associated with corporate tax avoidance. For this reason, research question 2) can be answered in the negative. My results are robust to alternative proxies for corporate tax avoidance, CSR-performance and auditor reputation and I also find similar results for an additional analysis on stock market returns.

Overall, these results indicate that stakeholders reward companies on average for the fact that they engage in more tax avoidance. On one hand, this result is surprising as in the media corporate tax avoidance is seen as a highly unethical practice. On the other hand, stakeholders and shareholders in particular benefit from corporate tax avoidance simply because money that otherwise would have flowed to the tax authorities stays in the company itself. The results suggest that shareholders consider the financial aspect as more important than the ethical aspect of corporate tax avoidance and firm reputation can therefore not explain the under-sheltering puzzle.



However, socially responsible firms that also have a high reputation are likely to pay more taxes, indicating that a high CSR-performance has a tempering effect on the extent to which a high reputation firm engages in corporate tax avoidance. This evidence suggests that high reputation firms that are socially responsible view the payment of corporate taxes as complementing CSR activities. Evidence that I find on the relation between auditor reputation and corporate tax avoidance implies that firms audited by high reputation auditors exhibit neither a higher nor a lower degree of corporate tax avoidance. Thus, my results indicate that auditor reputation plays no significant role for auditors in influencing firms to engage in corporate tax avoidance.

My results have implications for directors and managers who consider reputation concerns as an important factor that constrains tax avoidance activities. The results of my study suggest that, at least for U.S. companies, tax payments are not viewed as an important factor that negatively influence a firm's reputation. In fact, stakeholders reward companies to some extent for engaging in corporate tax avoidance. Further, my results have implications for corporate stakeholders who view CSR-performance as an important ethical obligation that firms have towards their stakeholders. My evidence indicates that high reputation firms that are socially responsible exhibit less tax avoidance than other firms, meaning that shareholders on average indeed reward firms that view tax payments and CSR as complements. Finally, this study provides valuable insights for regulators and policymakers who seek to determine the factors or circumstances that increase the likelihood of tax avoidance.

My study is subject to several limitations. First, I note that my reported relations may not result from causal relations, but are rather observed associations as I cannot directly identify the mechanisms through which firm reputation affects corporate tax avoidance. Nevertheless, this limitation may also be a contribution because prior literature (Gallemore et al., 2014; Hanlon & Slemrod, 2009) mainly addresses the ex-post effects tax avoidance. This literature cannot address the reputational effects for firms that were not publicly identified as engaging in tax avoidance, while I am able to investigate these effects as well. Second, I only account for publicly traded U.S. companies, which may influence the generalizability of my results in two ways: a) the results may not hold for private companies and b) the results may not be generalizable over different countries. Third, my results provide evidence for only a relatively short period of time and the view of stakeholders on corporate tax avoidance in relation to firm reputation might change or is changing over time. For example, recent evidence by Dyreng et al. (2016) documents that public pressure

from outside may force some firms to disclose tax avoidance activities and can exert a significant influence on the tax behavior of large publicly-traded firms. If this phenomenon can evolve into a growing trend, the perception of corporate tax avoidance and in turn also its association with firm reputation might change. Last, the construct validities of reputational capital as a proxy for firm reputation and Big4/non-Big4 auditors as a proxy for auditor reputation may not be fully appropriate, since the first one not solely captures firm reputation (as mentioned earlier) and the latter can serve as a proxy for other constructs as well (for example audit quality).

Future research into firm reputation and tax avoidance could examine several important issues. Firstly, future research might focus on developing another financial measure for firm reputation instead of using the conventional reputational indices, as the measure proposed by Fombrun (1996) may not merely capture firm reputation. Secondly, a more thorough analysis can be carried-out on the relation between auditors and the degree of tax avoidance of their clients. Specifically, research can be done on the characteristics of auditors that explain the variance in corporate tax avoidance. Lastly, the under-sheltering puzzle is now more a puzzle than ever, since reputational concerns cannot explain firms' reluctance to engage in tax avoidance. Therefore, the question why some firms engage in tax avoidance while others shun it is very much an open question that may be answered by future research.

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**Appendix A**  
**Variable definitions**

| <i>Variable name</i>   | <i>Variable definition</i>  | <i>Data source</i>                                  |
|------------------------|---|---|
| <i>CASH_ETR5</i>       | The 5-year sum (t-4 to year t) of cash taxes paid (TXPD) divided by the 5-year sum of pre-tax income (PI) less special items(SPI). I only include firms with a <i>CASH_ETR5</i> between 0 and 1. Missing data on SPI is reset to 0.   | Compustat   |
| <i>GAAP_ETR5</i>       | The 5-year sum (t-4 to year t) of income tax expense (TXT) divided by the 5-year sum of pre-tax income (PI) less special items(SPI). I only include firms with a <i>GAAP_ETR5</i> between 0 and 1. Missing data on SPI is reset to 0. | Compustat   |
| <i>TAXAGGR</i>         | Indicator variable that equals 1 if a firm's <i>CASH_ETR5</i> is in the top quintile (have the lowest effective tax rates) and 0 otherwise.   | Compustat   |
| <i>REPU</i>            | The amount of total common shares outstanding (CSHO) times the price per share (PRCC_F) minus total tangible assets, divided by total assets (AT).  | Compustat   |
| <i>CSR_index</i>       | Total strengths minus total concerns in following MSCI-categories: community, diversity, employee relations, environment and product.   | MSCI-database (previously referred to KLD-database) |
| <i>Social_Ind</i>      | Indicator variable that equals 1 if the firm's <i>CSR_INDEX</i> >4 and 0 otherwise.   | MSCI-database (previously referred to KLD-database) |
| <i>Irres_Ind</i>       | Indicator variable that equals 1 if the firm's <i>CSR_INDEX</i> <-4 and 0 otherwise.  | MSCI-database (previously referred to KLD-database) |
| <i>BIG4</i>            | Indicator variable that equals 1 if the firm's auditor is a Big 4 auditor (Deloitte, EY, PwC and KPMG) and 0 otherwise.   | AuditAnalytics                                      |
| <i>SWITCH</i>          | Indicator variable that equals 1 if a firm switches to another auditor and 0 otherwise.   | AuditAnalytics                                      |
| <i>CAR<sub>3</sub></i> | Cumulative abnormal returns over a 3-day event window.  | CRSP  |
| <i>AUSB</i>            | Indicator variable that equals 1 if a firm has the same auditor as Starbucks on the event date (12 October 2012) and 0 otherwise.   | AuditAnalytics                                      |
| <i>INTANG</i>          | Intangible assets (INTAN) scaled by total assets (AT).  | Compustat   |
| <i>SIZE</i>            | Natural logarithm of total assets (AT).   | Compustat   |
| <i>LEV</i>             | long-term debt (DLTT) plus short-term debt (DLC) scaled by total assets (AT).   | Compustat   |
| <i>TBO</i>             | Tax benefit of stock options (TXBCOF) scaled by total assets (AT).  | Compustat   |
| <i>MTB</i>             | Price per share (PRCC_F) times total common shares outstanding (CSHO) over book value equity (CEQ).   | Compustat   |
| <i>For_Inc</i>         | Absolute value of pretax foreign income (PIFO) divided by absolute value of pretax-income (PI).   | Compustat   |
| <i>PTROA</i>           | pretax-income (PI) divided by total assets (AT).  | Compustat   |
| <i>R&amp;D</i>         | Research and development expenditures (XRD) scaled by total assets (AT). Missing data on XRD is reset to 0.   | Compustat   |
| <i>NOLCF</i>           | Net operating loss carry forward (TLCF) divided by total assets (AT).   | Compustat   |
| <i>NOLCF_Ind</i>       | indicator variable that equals one if the firm has a net operating loss carry forward (TLCF) and 0 otherwise.   | Compustat   |



**Appendix A (continued)**  
**Variable definitions**

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|                   |  |   |
|-------------------|--|---|
| <i>PPE</i>        | property, plant and equipment (PPENT) divided by total assets (AT).  | Compustat   |
| <i>GOVERNANCE</i> | Number of corporate governance strengths (CGOV_STR_NUM) less the number of corporate governance concerns (CGOV_CON_NUM). | MSCI-database (previously referred to KLD-database) |
| <i>CASH</i>       | cash holdings (CHE) divided by total assets (AT).  | Compustat   |
| <i>SGA</i>        | Selling, general and administrative expenses (XSGA) scaled by total assets (AT).   | Compustat   |

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Appendix A reports the variable names and variable definitions with corresponding data sources.

**Appendix B**  
**Starbucks' first press release of corporate tax avoidance**

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# The Telegraph

telegraph.co.uk

October 15, 2012 Monday 8:58 PM GMT

Starbucks UK tax bill comes under scrutiny;

Starbucks, which has \$40bn (£24.9bn) market valuation, paid nothing in UK corporation tax last year, despite making sales of £398m.

BYLINE: By Helia Ebrahimi Senior City Correspondent  
SECTION: FINANCE

LENGTH: 396 words

The disparity in its turnover and what it pays in UK corporation tax has made Starbucks the latest US company to come under the spotlight for its negligible contribution to Her Majesty's Revenues & Customs.

Its nearest UK rival, Costa, owned by Whitbread, had a similar amount of turnover, with £377m of sales in the year ending March 3, 2011. But Costa's tax bill came to £15m - 30.5pc of its profits.

Starbucks' UK annual results for the year ending October 2, 2011, show the company made a £32.9m loss, which is why it is not liable for tax. However, there is very little detail in why its UK operations have spent almost a decade in the red.

According to the latest filing at Companies House, Starbucks "cost of sales" was £319m, including £124m of staff costs, an undisclosed amount of money paid in rent, and an £8.9m tax credit from 2010. Starbucks was left with a gross profit of £78.4m, against which £107.2m of "administrative expenses" were charged. The result was an operating loss of £28.8m and a loss before tax of £32.9m.

Meanwhile, Costa had £101m of sales costs against its £377m of 2011 revenues and administrative expenses of £36.3m. Its operating costs were £49.3m and its taxable profits stood at £49.7m.

Starbucks is a multinational business and has a highly complex financial structure. Aside from the parent group's operations in the US, Starbucks also has a European HQ in Amsterdam, and a coffee bean subsidiary in Switzerland.

Starbucks UK also pays its Seattle parent 6pc in royalty fees, which is considered very high in the industry, as Starbucks is charging its wholly-owned UK division more than what most companies charge franchisees.

However, in a statement, Starbucks insisted it had "paid and will continue to pay its fair share of taxes in full compliance with all UK tax laws, as it always has."

The company went on to say that in the eyes of regulators, Starbucks was a "good tax payer" which behaved in a moral way that balanced profit with a social conscience.

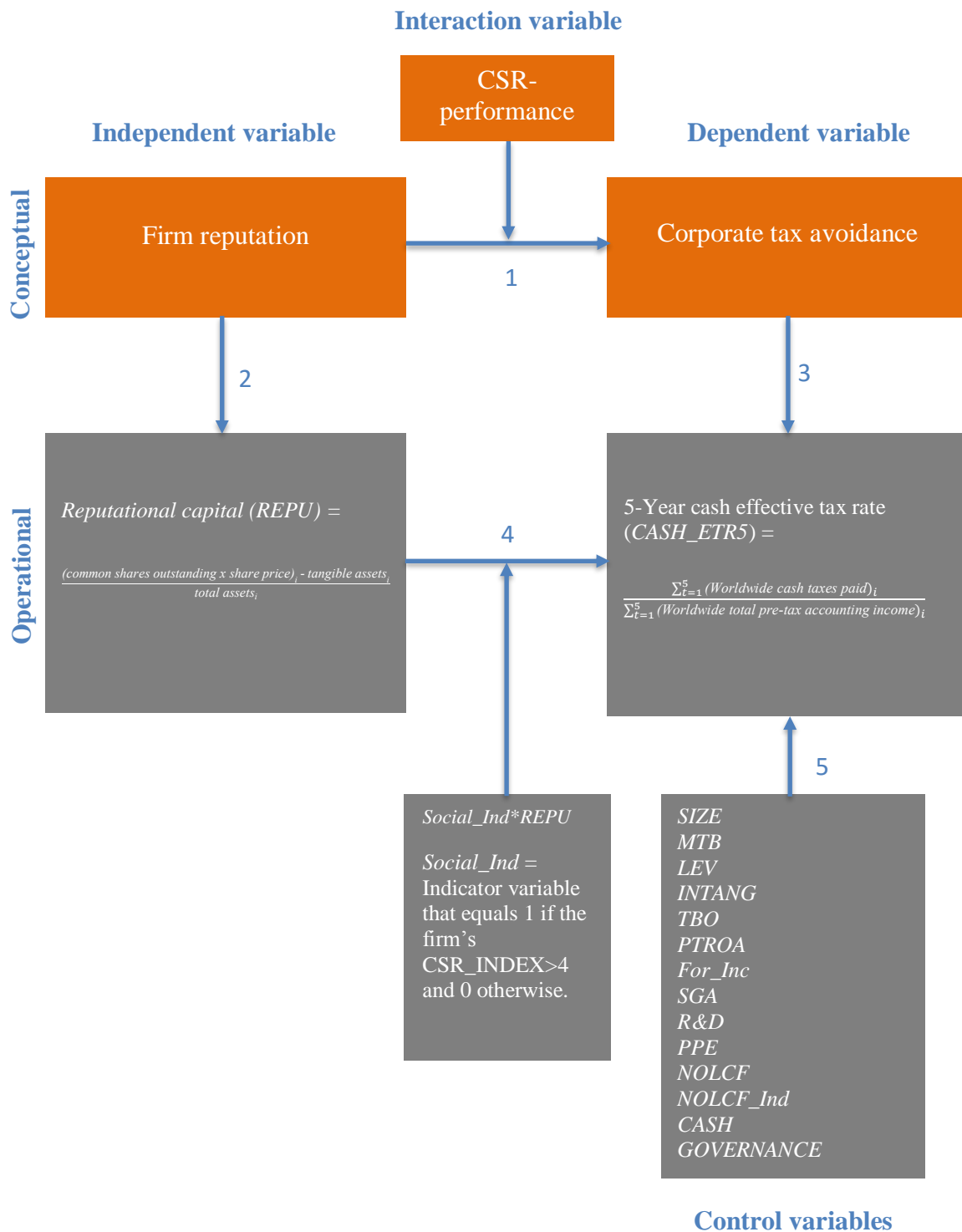
In the last year, both corporations and individuals have come under increased scrutiny following a jump in the amount of tax avoidance schemes that have lost the government billions in tax revenues.

HMRC said that companies like Starbucks were constantly "discussed" but that just because there was a high turnover it did not mean the company was liable for Tax in the UK.

LOAD-DATE: October 19, 2012  
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**Appendix C**  
**Libby box: The relation between firm reputation, CSR and corporate tax avoidance**



**Appendix D**  
**Libby box: The relation between auditor reputation and corporate tax avoidance**

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