Nijmegen School of Management
Department of Economics and Business Economics
Master's Thesis Economics (MAN-MTHEC)

The relationship between CSR decoupling and Corporate Tax avoidance: The moderating effect of Country- and firm-level governance

By Jelle Ressing (1027005)

Nijmegen, 23 augustus 2022

Program: Master's Program in Economics
Specialisation: Accounting and Control
Supervisor: D. Reimsbach

Radboud Universiteit

Abstract

This study provides no significant evidence for the positive relationship between CSR decoupling and tax avoidance. However, additional analyses show that different tax avoidance measures provide significant evidence for either a positive or a negative relationship with internal, external and the total sum of CSR actions. Furthermore, this study investigates the potential moderating effect of country- and firm-level governance on the relationship between CSR decoupling and tax avoidance. CSR decoupling can be defined as the discrepancy between the internal CSR performance and the external CSR disclosure. The measure for CSR decoupling is based on the renowned study of Hawn & Ioannou (2016) which created a variable based on 44 internal- and external actions. Corporate tax avoidance is calculated based on three different effective tax rate (ETR) measures. In order to investigate the relationship between CSR decoupling and tax avoidance, the study makes use of an ESG Europe sample of 556 firms during the 8-year period of 2013-2020. Using fixed-effects models, the results show no significant positive relationship between CSR decoupling and tax avoidance. Country-level governance is significantly strengthening the positive relationship between CSR decoupling and corporate tax avoidance. However, due to the insignificant relationship between CSR decoupling and tax avoidance, the significant moderating effect of Country-level governance does not make sense. The expected effect of firm-level governance as a strengthening moderator in the relationship between CSR decoupling and tax avoidance cannot be confirmed. This paper provides insights into in what the relationship is between CSR decoupling and tax avoidance based on a European sample. Furthermore, the study provides evidence on the potential moderating effect of country- and firm-level governance in this relationship. These insights can be of value for stakeholders, board members and policymakers.

Table of Contents

Abstract 2
1. Introduction 4
2. Theoretical framework and hypotheses 8
2.1 CSR decoupling & Corporate tax avoidance 8
2.1.1 CSR decoupling 8
2.1.2 Corporate tax avoidance 11
2.1.3 Relationship between CSR decoupling and corporate tax avoidance 12
2.2 The effect of the country-level corporate governance index on the relationship between CSR decoupling and corporate tax avoidance 12
2.3 The effect of the firm-level governance performance on the relationship between CSR decoupling and corporate tax avoidance 14
3. Method 16
3.1 Sample and Data 16
3.2 Variables 18
3.2.1 Dependent variable 18
3.2.2 Independent variable 19
3.2.3 Moderator variables 20
3.2.4 Control variables 21
3.3 Model 23
4. Results 25
4.1 Descriptive results 25
4.2 Empirical Results 27
4.2.1 Results model 1 27
4.2.2 Results Model 2 31
5. Conclusion and Discussion 33
6. References 36
7. Appendix 41
7.1 Cronbach's Alpha of Internal- and External actions 41
7.2 CSR decoupling variable internal actions 41
7.3 CSR decoupling variable external actions ..... **Error! Bookmark not defined.**
7.4 Variance inflation factors 44
7.5 Breusch and Pagan Lagrange multiplier test 45
7.6 Hausman test 45
7.7 Wooldridge test 45
7.8 Modified Wald test 45

Radboud Universiteit

1. Introduction

Nowadays, companies tend to engage in CSR practices more often. In 2019, 90% of the companies on the S&P 500 index participated in CSR practices (Waheed and Zhang, 2022). Companies feel the pressure of stakeholders to participate in CSR activities so that they fulfil social responsibilities (Rupp et al., 2006). However, companies have to deal with conflicting interests of different stakeholders, some stakeholders want the firm to focus on making profits to enhance efficiency and wealth maximization while other stakeholders put pressure on the firm to focus on sustainable development (Sana Malik, Sumayya Chughtai, and , Kausar Fiaz Khawaja, 2020). A common way for firms to reveal that they engage in CSR practices is to publish a CSR report. Non-financial reporting is a way for firms to represent the result of their own thoughts about what relates to CSR, what its importance is and how their thoughts about CSR can be shared with their stakeholders (Perrini, 2006). As with any other form of doing business, CSR reporting provides CEOs with opportunities to manipulate the information that is reported to the outside world (Aureli et al., 2020)

This phenomena is called CSR decoupling, which indicates the discrepancies between the internal actions that a firm makes in terms of CSR practices (e.g. emission reduction) and what the firm publishes to the outside world in the form of for instance a non-financial report or CSR articles, which are external actions (Hawn and Ioannou, 2016). Decoupling CSR involves knowingly publishing false non-financial information, which can be seen as an unethical practice. Although companies are not legally obliged to publish high-quality CSR reports, decoupling its CSR reports may harm the reputation of the firm (Graafland and Smid, 2019). An aspect that can be seen as part of corporate social responsibility performance is the payment of taxes as this is the main source of financing public goods and services (Ortas and Gallego-Álvarez, 2020). However, companies tend to maximize their profits and this can lead to the issue of tax avoidance. Tax avoidance can also be seen as a way of doing questionable business as companies try to minimize their tax payments. However, tax avoidance does not always have a positive effect on the financial performance of a firm.

Besides focussing on the relationship between CSR decoupling and tax avoidance, there might be other variables that influence the relationship. Ortas & Gallego-Álvarez (2020) state in their research about the relationship between CSR performance and tax aggressiveness, that country-level factors might affect the relationship. A state's progressiveness is found to be strengthening the positive relationship between CSR decoupling and tax avoidance (Visser, Reimsbach, & Braam, 2022). Politics and progressiveness of a state are comparable to country-level governance, so country-level governance is likely to strengthen the relationship between CSR decoupling and tax avoidance (Kovermann & Velte, 2019). According to Desai & Dharmapala (2009), the effectivity of corporate tax avoidance will be determined by the performance of the governance institutions of the firm. Companies with well-governed structures tend to be more rationalized and can better weigh their

options regarding tax avoidance. On the other hand, poor governed firms do experience a lower net effect on the overall performance of the firm (Desai & Dharmapala, 2009). As shown by these statements, the level of corporate tax avoidance may be influenced by governance, which could explain why CSR decoupling and corporate tax avoidance are linked. According to Hanlon and Heitzman (2010), tax avoidance falls on the continuum from the perfectly legal to the outright illegal. Both CSR decoupling and tax avoidance can be seen as irresponsible behaviour of firms in order to maximize their own wealth (Hoi, Wu, and Zhang, 2013)

Previous research related to the relationship between CSR decoupling and tax avoidance is incomplete as most of the literature related to CSR and tax avoidance is related to the relationship between CSR performance and tax avoidance. Jones, Baker, and Lay (2017) state that higher levels of CSR disclosure are related to lower levels of tax avoidance. They examine the relationship between CSR disclosure and tax avoidance in a wider international context using data on sustainability that is gathered through ethical investment research services. Furthermore, (Jones et al., 2017) implement firm-specific factors as moderator variables in order to test whether the firm-specific factors has an effect on the relationship. Examples of such firm-specific factors are firm size, industry and financial performance. In accordance to this research, Ortas and Gallego-Álvarez (2020) stated that the relationship between CSR and corporate tax avoidance had not been defined. Research was conducted into the relationship between CSR performance and tax avoidance based on cultural characteristics of countries to solve this issue. As well as Jones et al. (2017), Ortas and Gallego-Álvarez (2020) stated that the results support the existence of a negative influence of CSR performance on firms' tax avoidance levels. Their findings were consistent with previous empirical evidence of Hanlon and Heitzman (2010) which illustrates that the higher the companies' commitment to environmental and social issues, the less inclined they are to engage in socially irresponsible behaviours such as corporate tax avoidance (Ortas and Gallego-Álvarez, 2020).

Both CSR decoupling and corporate tax avoidance can be seen as socially irresponsible behaviour. The idea that there could be a relationship between CSR decoupling and corporate tax avoidance stems from the study of Dowling (2014), the author found out that companies proudly proclaim their social responsibility on their websites yet they have been found to actively avoid paying corporate tax. In this situation, companies publish a decoupled CSR report as they state that firms pay taxes as part of their corporate social responsibility. However, they have been found to actively avoid paying taxes which indicates that they both engage in corporate tax avoidance practices and CSR decoupling. This indicates that there could be a certain association between CSR decoupling and corporate tax avoidance.

Furthermore, this study will focus on the role of both the country-level governance and firm-level governance on the relationship between CSR decoupling and firms' corporate tax avoidance.

Ortas and Gallego-Álvarez (2020) mentioned in their study that this might be an interesting perspective to focus on as these governance factors might have an influence on the amount of corporate tax avoidance and whether companies disclose correct non-financial information. Due to the potential moderating effects of corporate- and firm-level governance on the relationship between CSR decoupling and tax avoidance, the following research question will be formulated: *To what extent do country- and firm-level governance affect the relationship between CSR decoupling and corporate tax avoidance?*

Recent literature states that there is a negative relationship between country-level governance and CSR decoupling (Montenegro, 2021). Firms that are located in countries with weaker corporate governance are less incentivized to participate in CSR decoupling while firms in countries with poor corporate governance are more inclined to decouple their CSR performance due to less control by the government.

Focussing on tax avoidance, Kovermann & Velte (2019) stated that in the period between 2005-2016, more than half of the US firms do pay tax rates in the range of 30%-40% while roughly one out of the 10 US firms, had an effective tax rate below 20%. It raises the question why the effective tax rates of firms in one country differ so much. Due to these differences, Bauer (2016) initiated the theory that corporate governance might be an important factor in understanding corporate tax avoidance. Tax avoidance is affected by several factors of firm- and country level corporate governance. According to Kovermann & Velte (2019); Board composition, capital market pressure, incentive alignment between management and shareholders and finally ownership structure positively affects the level of corporate tax avoidance at a firm. Firms have the incentive to minimize the payment of taxes considering the negative effects that it may have on the reputation of the firm. These factors can be considered as firm-level governance factors. Furthermore, there is evidence that country-level factors also affect the amount of corporate tax avoidance at a firm. Zeng (2019) states that firms resident in countries with stronger country-level governance engage less in corporate tax avoidance due to the pressure of the government. Features that can be considered as part of high-quality corporate governance on the country-level are high government effectiveness and stronger enforcement of law and control

There have been several scandals in the last few years that highlight the link between CSR decoupling and corporate tax avoidance. The Volkswagen scandal was a typical example of CSR decoupling, through manipulating CO2 emission reports, they tried to fool around with the American authorities (Holtbrügge and Conrad, 2020). Furthermore, there are each year dozens of companies who avoid paying taxes. Cohen (2021) published that companies such as Nike and FedEx paid for at least three years straight no federal taxes in the US. As a result, it will be interesting to see whether

companies that decouple their CSR information also engage in tax avoidance practices, since both can be perceived as questionable practices.

Prior research on this topic states that there must be a relationship between CSR decoupling and corporate tax avoidance. Despite engaging in tax avoidance practices, firms tend to report that they behave in an ethical manner, according to Sikka (2010). The Enron scandal is a typical example of this phenomena, in late 2001, under the weight of frauds by senior management, Enron collapsed and the gaps between its talk and action came to public attention (Madrick, Powers, and Winokur, 2002). Despite a code of ethics, Enron's financial statements made no mention of any of its tax avoidance schemes. Furthermore, WorldCom, a US telecommunications company, committed fraud through engaging in corporate tax avoidance practices. Nevertheless, they claimed to be encouraging ethical business conduct. The board of directors of WorldCom published a statement to the outside world in which they mentioned that "fraud and dishonesty would not be tolerated" (Beresford, 2003, p. 289). The studies of Madrick et al. (2002) and Beresford (2003) focused on the relationship between CSR performance and corporate tax avoidance. Although they mentioned the possible relationship between CSR decoupling and tax avoidance, no further research was done regarding this topic.

This indicates that there is a research gap in this topic. Besides that, through using country-and firm-level governance as moderator variables, this study will add relevance to the existing literature and it can possibly show a certain pattern in this relationship that can be useful for practice. For this research, regressions will be used to investigate the relationship between CSR decoupling and corporate tax avoidance. Furthermore, as mentioned in the study of Ortas & Gallego-Álvarez (2020), country-level characteristics might affect the relationship between CSR performance and tax avoidance. Through using country-level governance as a moderating variable, this study contributes to the existing literature as this effect has not been investigated. Third, this study can be seen as an extensive version on the study of Ortas & Gallego-Álvarez (2020) as this study has a narrow focus on CSR performance and tax avoidance. In addition, this study focuses on CSR decoupling and the effect of tax avoidance on CSR decoupling and its determinants.

The remainder of this empirical study is classified into several sections. The second section will discuss the literature review and theoretical framework for the hypothesis development concerning the relationship between CSR decoupling and corporate tax avoidance. Following, in section 3, we describe the used methodology for the empirical analysis. In the subsequent section, we provide our empirical results, followed by section 5, which includes the conclusions and discussion. Section 6 includes all the references and section 7 shows the appendices that are connected to the information and results that are presented in this study.

2. Theoretical framework and hypotheses

2.1 CSR decoupling & Corporate tax avoidance

2.1.1 CSR decoupling

Most of the large companies worldwide issue reports related to sustainability and corporate social responsibility. Examples of publishments are CSR reports, codes of conducts and documents about sustainable business practices or related documents that explain the social and environmental responsibility of the company (Holtbrügge & Conrad, 2020). However, Brine, Brown, & Hackett (2007) criticize the fact that the focus is more on the willingness of companies to participate in CSR practices and less on the quality of the CSR reports and if it represents the real performance of the company. As a consequence of that, some companies introduce CSR strategies, but decouple their reasons for participating in CSR practices from the decisions they make. According to Meyer & Rowan (1977), CSR decoupling can be defined as a gap between a organizations' formal structures and their continuous activities. Another definition is "the organizational misalignment between surface structures and actual activities" (Haack, Schoeneborn, & Wickert, 2012). CSR decoupling does not occur always intentionally, sometimes managers do not have the capabilities to transfer communication into actions which causes differences between intentions and actions. Furthermore, there are several reasons which lead to situations in which decoupling of CSR practices occur. Decoupling is more likely in disorganized fields, characterized by ambiguity, multiple conflicting expectations, limited regulatory commitment and higher transaction costs (Holtbrügge & Conrad, 2020). However, in most cases CSR decoupling occurs intentionally because managers try to satisfy the outside world with a high quality CSR report. Good quality CSR reports satisfy potential investors and other stakeholders which eventually could lead to an improved financial performance (Graafland & Smid, 2019)

CSR decoupling can be separated into two groups, internal and external CSR actions. Internal actions reflect practices that involve real actions to create organizational capabilities among its employees and to be in line with requirements of actors upon which the organizations depends the most. The best example of such actors are the employees and internal actions are related to the wellbeing of the actors (Hawn & Ioannou, 2016). Furthermore, in the context of CSR, internal actions focus on CSR practices that improve the performance within the company. For instance, Adopting and implementing company policies related to CSR (for example, adopting policies to improve water and energy efficiency) or forming a board-level CSR committee (Hawn & Ioannou, 2016).

For this research, 22 internal actions are formulated based on the internal actions that are created by Hawn & Ioannou. The internal actions are related to the CSR performance internal to the firm. These actions are answered in the dataset with percentages or a 1 or 0. Examples of internal actions are: "Percentage of women on the board of directors", "does the company have a policy to support the career" and "does the company have a policy to improve its energy efficiency".

External actions, on the other hand, reflect CSR practices that are visible to the outside world. In other words, it is focused on communication from the company to the potential investors and other stakeholders. Main factors that play a critical role in gaining validity through using external CSR actions are media attention, inter-organizational status, validity of external ties and organizational status (Hawn & Ioannou, 2016). Furthermore, in the context of CSR, external actions focus on CSR practices that include for instance, CSR reports and publishments that reflect certain actions that the company has taken and the realization of public sustainability reports in order to communicate the social and environmental performance of the company to the potential investors and other stakeholders (Ghoshal & Moran, 1996). According to the stakeholder theory, firms must try to align with the demands of stakeholders. Furthermore, firms should take the expectations of stakeholders into account to behave legitimate because this could possibly lead to lawsuits and protests (Parmar, Freeman & Harrison, 2010). It is very important for firms to aim for legitimacy as it provides the firm right and access to required resources and it leads to a better corporate reputation which might attract future investors (Seele & Gatti, 2017). Stakeholders do have different values for either financial as environmental and social performance. Internal stakeholders are often concerned with the social performance of the firm, as they are part of the employees in the workspace (Marquis, Toffel, & Zhou, 2016). On the other hand, external stakeholders are often more concerned about the environmental performance of the company as it can harm the external reputation of the firm (Jia et al., 2019). Due to these different belongings, firms should focus on internal CSR actions as these actions should improve their CSR performance. Legitimacy is a very important aspect for stakeholders and by improving the CSR performance, stakeholders will be more satisfied and they will support the way of doing business (Waheed & Zhang, 2022).

In order to communicate to the outside world, firms make use of external CSR. The information that is published should consist both financial and non-financial information, because stakeholders not only want to receive information about the financial performance of the firm (Vartiak, 2016). Publishing CSR reports to stakeholders decreases the information asymmetry which also increases the legitimacy of the firm. The increasement of legitimacy will lower the cost of capital and maximize the financial returns from the initial investment in CSR (Sauerwald & Su, 2019). For firms, it is voluntary to publish CSR reports. This has several advantages as voluntary CSR reporting leads to better implementation by the management of the firm (Seele & Gatti, 2017). However, there are also several disadvantages which could eventually lead to firms participating in CSR decoupling. Voluntary CSR reporting stimulates free-riding behaviour of firms and it lacks transparency as only firms with good quality CSR reports publish it (Ramus & Montiel, 2005). The voluntary and flexible nature of the published CSR reports might not represent the reality of the CSR performance of the firm (Holtbrügge & Conrad, 2020). The firm itself is the only party who knows the real CSR performance of the company so participating in CSR decoupling is very easy.

There are two ways of decoupling the CSR reports. First, firms can overstate their CSR performance or only publish the positive CSR information. This creates a skewed view of reality as their real performance is worse than what they publish. In this case, firms can implement policies to falsely reflect the legitimate behaviour and furthermore try to build good relationships with their stakeholders in order to cover the bad CSR performance (Hawn & Ioannou, 2016). This is often known as greenwashing. Greenwashing can be exactly defined as "a comprehensive range of communications that make people think that the firm performs good in terms of environmental performance while this is not the case" (Lyon & Montgomery, 2015). Second, firms can engage good CSR practice without communicating that to stakeholders. In that case, it can be defined as brownwashing (Hawn & Ioannou, 2016). Firms possibly understate their CSR achievements, e.g. understate their charitable contributions or payments that are beneficial for their employees.

Greenwashing is the decoupling method that is most often used as this increases the legitimacy of the firm through signalling good CSR performance (Seele & Gatti, 2017). When the quality of the reported CSR performance increases, stakeholders will be more satisfied and more likely to invest in the company. Although the CSR performance did not increase, stakeholders are more satisfied because they do not know the real CSR performance of the firm (Lyon & Montgomery, 2015). Greenwashing might also occur when firms want to distract the attention from negative CSR performance through publishing positive CSR performance. Firms might also have an incentive to turn to brownwashing. Brownwashing does not often occur but if that is the case, it is often due to the fact that stakeholders react negatively to CSR information if the current actions are not the same as the actions in the past (Holtbrügge & Conrad, 2020).

2.1.2 Corporate tax avoidance

Paying taxes is not beneficial for any company in the world. It is a significant cost to the company and it results in lower cash flows for both the firm itself and to the shareholders of a company (Chen, Huang & Yi, 2015). For that reason, firms often seek for possibilities to reduce the cost of taxes through corporate tax avoidant activities. If managers determine to participate in tax avoidant activities, they determine the trade-off between costs and benefits of tax avoidance. The big benefit of corporate tax avoidance is logically the greater tax savings that result from corporate tax avoidance. Not only shareholders benefit in first instance from corporate tax avoidance, also managers can benefit when they are compensated for greater cash flows (Desai & Dharmapala, 2009). Important to mention is that tax avoidance is seen as a legal way of minimizing the amount of income tax. Tax avoidance is a legal strategy that can be used to avoid paying taxes or try to minimize the tax bills that need to be paid (Dyreng, Hanlon & Maydew 2008). Various credits can be used to take advantage of corporate tax avoidance, e.g. accelerated depreciation, awarding stock options, maximizing tax credits or accelerated depreciation. In contrast to tax evasion which is illegal because it is an attempt to defeat the imposition of taxes. It entails the intentionally misrepresentation of the taxpayer's affairs to the tax authorities to reduce the taxpayer's tax liability, which includes dishonest tax reporting, declaring less income, profits or gains than the amounts actually earned, overstating deductions, bribing officials in countries with high corruption rates and hiding money (Slemrod, 2007).

However, generally, tax avoidance is often seen as an obscure way of doing business. The last few decades there has been a lot of attention for corporate tax avoidance which led to the Tax Reform Act of 1986 in the U.S. (Dyreng et al., 2008). This Tax Reform Act was the largest revise of the U.S. tax code in history. There is a spectrum with on the one hand, taxes that are costs and companies try to minimize those costs through tax planning and tax management and on the other hand of the spectrum there is tax evasion is illegal (Huseynov & Klamm, 2012). Corporate tax avoidance can be measured in several ways, Hanlon & Heitzman (2010) review 12 different measures of tax avoidance. For this study, three different tax avoidance measures will be used. The GAAP ETR will be used (total income tax expense divided by pre-tax income) as the first measure. This measure is a common used method in several other studies (Desai & Dharmapala, 2009; Dyreng et al., 2008). The second measure is the Cash ETR measure, which is the total cash expense divided by pre-tax income. Finally, the third tax avoidance measure is the current ETR measure. Current ETR is calculated as the total current tax expense divided by the pre-tax income. Eventually, the difference between the statutory income of each country and the ETR is the level of tax avoidance of each firm.

2.1.3 Relationship between CSR decoupling and corporate tax avoidance

As both CSR decoupling and corporate tax avoidance can have a negative influence on the performance of the company due to critics on the way of doing business, there might be an association between both CSR decoupling and Corporate tax avoidance. Research on the relationship between CSR decoupling and corporate tax avoidance is lacking because most of the literature is focusing on the relationship between CSR performance and corporate tax avoidance. Lanis & Richardson (2012) conclude that companies with better CSR performance are less tended to engage in corporate tax avoidance practices. Companies often decouple their CSR performance when the real CSR performance is poor. Paying taxes can be seen as responsible behaviour and trying to minimize those payments may harm the reputation of companies (Huseynov & Klamm, 2012). Due to the fact that corporate tax payments represent the main financing for several public goods and services (e.g. education, public transport and defence). Furthermore, the willingness to participate in corporate tax avoidance practices is determined by the attitude of the company towards CSR reporting (Lanis & Richardson, 2012). Concluding, Dowling (2014) states that corporate tax payments represent a firm contribution which is in favour of the stakeholders' well-being. This initiates that well performing firms in terms of CSR are not likely to participate in corporate tax avoidance. The other way around, there can be expected that firms which decouple their CSR information are more likely to also participate in corporate tax avoidance. Based on these expectations, the following hypothesis is formulated:

H1: CSR decoupling and corporate tax avoidance are positively associated

2.2 The effect of the country-level corporate governance index on the relationship between CSR decoupling and corporate tax avoidance

Corporate governance deals with the method that ensure shareholders in firms get a return on their investments each year (Shleifer & Vishny, 1997). Corporate governance differs widely across countries all over the world. Investors want professional managers of firms to behave in the way that maximizes their return, subject to the condition that managers do not take too much risk so that it may eventually harm the performance of the firm(Jo & Harjoto, 2012). Most advanced market economies do perform well in terms of corporate governance, which can be seen further on in the corporate governance index (Kaufmann, 2004). In some of the less developed economies of the world, corporate governance does practically not exist. This results in a diversion of assets by managers and firms in these countries often do not have external capital supply which stagnates the development of firms in those countries (Doidge, Andrew Karolyi, & Stulz, 2007). For this study, the corporate governance index will be used to illustrate the differences in corporate governance among countries all over the world (Kaufmann, 2004).

Khan & Lockhart (2022) mention in their study about CSR decoupling in developing countries a few things that suggest a certain effect of the quality of country-level corporate governance on the amount of CSR decoupling. First they state that corporate governance in developing countries is relatively poor, characterized by low accounting standards, weak market regulation and poor domestic institutions. Furthermore, the worldwide pressure to participate in CSR practices is increasing and firms located in developing countries want to meet the expectations resulting from this increasing pressure (Doh et al., 2017). In such situations, firms take advantage of the poor corporate governance in these countries in order to gain legitimacy. All these factors result that firms in countries with poor corporate governance are more likely to decouple their CSR performance (Khan & Lockhart, 2022).

Furthermore, there is also a certain relationship between the quality of corporate governance and the quality of corporate social responsibility. According to Jo & Harjoto (2012), there is a positive relationship between the quality of corporate governance and the quality of corporate social responsibility. This suggests that good quality corporate governance will lead to less CSR decoupling as CSR decoupling implies poor CSR performance. Furthermore, investor protection is part of the overarching corporate governance. According to Scholtens & Kang (2013), there is a negative interaction between investor protection and CSR decoupling. An environment with strong investor protection is a greater incentive to not participate in CSR decoupling.

Focussing at the role of country-level governance as a moderating variable, the study of Visser, Reimsbach & Braam (2022) mentions the potential effect of a state's progressiveness on the relationship between CSR decoupling and corporate tax avoidance. The state's progressiveness is separated into two different pillars: public service spending and labour rights and wages. Country-level governance is about the government effectiveness, political stability and regulatory quality (Tang, 2019). Furthermore, according to Grosanu et al. (2015) country-level governance and a state's progressiveness are interrelated. Given these findings, this study can make use of the mentioned effect as is given by the study of Visser et al., (2022). This study expects a positive relationship between CSR decoupling and corporate tax avoidance and high-level country governance strengthens the relationship between CSR decoupling and tax avoidance. Due to the fact that the existence and strength of the positive relationship between CSR decoupling and tax avoidance is conditional on the quality of the country-level governance, the following hypothesis can be formulated:

H2: A positive relationship between CSR decoupling and tax avoidance is stronger for firms located in countries with a high-quality governance than for firms located in countries with a lower-quality governance

2.3 The effect of the firm-level governance performance on the relationship between CSR decoupling and corporate tax avoidance

Governance at firm level has to do with all the rules, practices and processes that create the relationships between shareholders, the board of directors, managers and other employees (Shleifer & Vishny, 1997). Governance at firm level is very important for developing a good quality relationship between the capital providers outside the firm, e.g. shareholders, and on the other hand management and the employees of the firm who take care of the firm through providing human capital. Good governance practices will help to prevent the agency problem between external capital providers and managers (Armstrong et al., 2015). As a result, good governance on the firm level will lead to less moral hazard among managers.

CSR decoupling is often seen as irresponsible behaviour when a firm decides to participate in it. Following the study of Armstrong et al. (2015), which initiates that good corporate governance prevent irresponsible behaviour, Stuebs & Sun (2015) state that there is a positive association between corporate governance and CSR performance. In other words, high quality corporate governance on the firm level leads to high quality CSR performance. In addition, the results suggest good corporate governance leads to good CSR performance in the following year, so there is a certain lag in the relationship (Stuebs & Sun, 2015). Abdel-khalik (2002) proposed that firm-level governance drastically changed after the Enron scandal in the early 00's. The Enron scandal led to changes that resulted in improved auditor selection, retention and compensation. Furthermore, there is less information asymmetry between the investors and the managers of firms and the quality of (non-) financial reporting has increased (Kanagaretnam, Lobo & Whalen, 2007). Stuebs & Sun (2009) found that governance is positively associated with a firm's environmental performance. Concentrated ownership plays an important role in that association, as it improves environmental performance. The idea is that concentrated ownership creates strong governance which facilitates better environmental cost management (Stuebs & Sun, 2015).

Based on the different theoretical perspectives on the effect of corporate governance on the relationship between CSR decoupling and corporate governance, the following expectations are formulated. First, good quality firm-level corporate governance lead to higher quality CSR performance, this means that CSR decoupling will be less at firms that have good corporate governance. Furthermore, corporate governance is about dealing with the interests of both managers and shareholders (Kanagaretnam et al., 2007). Due to the lack of good corporate governance, poor governing firms are less able to manage both the interests of managers and stakeholders. Second, good corporate governance leads to effective corporate tax avoidance while poor governed firms often do not participate in corporate tax avoidance. According to the principal-agent theory, managers of poor

governed firms will not act effectively against high taxes and are more likely to be risk averse due to the fear of job loss (Kovermann & Velte, 2019).

Firm-level governance is "the process in which the conduct of enterprises is controlled and supervised". Members of the board of directors control the activities of the company and regulate the financial statements and book-tax gaps (Stephenson & Vracheva, 2015). The main tasks of the board of directors are to protect the rights of the shareholders, conduct a effective risk management policy and build corporate legitimacy. A firm's success depends on the sincerity towards its shareholders and for that reason, high quality firm-level governance leads to a stronger positive relationship between CSR decoupling and tax avoidance in comparison to lower quality firm-level governance. Due to the fact that firm with high quality governance do not want to harm their reputation and take the risk of financial damage, they are less incentivized to either decouple their CSR information or avoid tax payments (Jain & Jamali, 2016). Given these statements, the following hypothesis can be formulated:

H3: A positive relationship between CSR decoupling and tax avoidance is stronger for firms with a high quality corporate governance structure than for firms with a weaker corporate governance structure

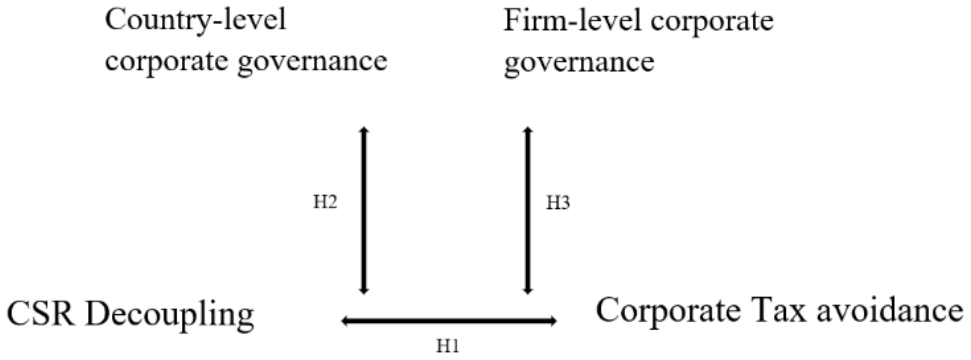

Figure 1. Graphical overview of Hypotheses

However, it is important to investigate whether country- and firm-level corporate governance are different from one another. If that is not the case, it is not possible to use two separate variables that measure both the same. Cohen (2020) mentioned in his study three possible relationships between country- and firm-level corporate governance. First, both corporate governance measures could be substitutes, where both measures are relatively equal. Second, both corporate governance measures could be complementary where the knowledge of one variable implies no knowledge of the other. Finally, both corporate governance measures could be independent variables that do not have a relationship with each other. Cohen (2020) states that most literature is related to the complementary relationship between both corporate governance measures. This indicates that country- and firm-level corporate governance do not measure the same as both measures are complementary (Koch et al., 2013). Due to this conclusion, the usage of both country- and firm-level corporate governance as separate variables is justified.

3. Method

3.1 Sample and Data

For this research, the sample consists of all listed European firms for which the CSR decoupling, corporate tax avoidance and corporate governance variables are available in the Refinitiv Asset4 database in Eikon. Eikon is used as the database from which the data will be gathered because it consists of all the data that is related to ESG performance. All the 44 variables related to CSR decoupling, 22 for internal CSR and 22 for external CSR, are available within Eikon. Furthermore, the financial data that is related to corporate tax avoidance is also available for the firms included in the sample. Finally, the corporate governance performance on the firm-level is gathered from the ESG index. The G-score (governance-score) is measured in Eikon through the TRESG management score, which measures a company's commitment and effectiveness towards following best practice corporate governance principles. Finally, corporate governance on the country-level will be measured based on the corporate governance index created by the World Bank institute (Kaufmann, 2004). The goal of this study is to investigate the relationship between CSR decoupling and corporate tax avoidance and how the relationship is potentially moderated by the corporate governance on both the country- and firm level.

The analysis will be conducted on a sample of 556 firms that are located in Europe. The total number of observations in this case is 3899. This is due to the fact that the CSR decoupling variable is using a lagged time period. This makes the first year (2013) of the sample useless. The decision to employ and European sample was because the focus of the already existing literature on this topic was mostly on the American firms and especially on the S&P 500 (Ortas and Gallego-Álvarez, 2020). Furthermore, the study focuses on country-level corporate governance that could influence the relationship between CSR decoupling and corporate tax avoidance. For that reason, this study focuses on multiple countries and not one singular country. The European sample will be analysed for a period of 8 years (2013-2020). The GRI guidelines had a significant update in 2013 after several years, this update led to changes in the reporting behaviour of firms (Jones et al., 2016). Due to the changes, there is more ESG data available for the firms which is important for the quality of the data sample. The last year of observation is 2020 as this is the most recent year that consists of enough data to be useful for this study. The final sample proved to be a balanced sample with for each firm 8 observations (2013-2020).

The initial sample consisted of 987 firms but a lot of firms were missing data for the variables which eventually created the internal and external actions variables. Due to the fact that the internal and external CSR variable consisted of both 22 actions, it would be hard to use firms with missing data for this variable as this is the dependent and main variable in this study. Besides that, other studies related to CSR decoupling also made use of a balanced sample due to problems with missing values for the CSR decoupling variable (Gull et al., 2022; Sauerwald & Su, 2019). The sample eventually consists of a total of 4,448 observations divided over 556 firms across Europe.The distribution of the sample around Europe is a bit skewed towards the UK as they have around 31% of the total firms in the sample. However, this is not strange because the government of the UK is one of the leading aspects in paying attention to CSR reporting worldwide (Obara & Peattie, 2018). Table 2 gives an overview of the number of firms per country in the sample of 556 firms in Europe. Down below the industry distribution of the sample can be seen. As in line with previous studies related to a sample of ESG firms in Europe, most firms are part of the manufacturing sector as this is the biggest industry in the world (Naudé & Cameron, 2019).

TABLE 1: SAMPLE INDUSTRY DISTRIBUTION

SIC code	SIC category	Observations		Firms	
		No.	**%**	**No.**	**%**
1000 - 1499	Mining	176	3,96	22	3,96
1500 - 1799	Construction	192	4,32	24	4,32
2000 – 3999	Manufacturing	1,712	38,49	214	38,49
4000 – 4999	Transportation, communications, electric, gas and sanitary service	672	15,11	84	15,11
5000 – 5199	Wholesale trade	144	3,24	18	3,24
5200 – 5999	Retail trade	288	6,47	36	6,47
6000 – 6799	Finance, insurance and real estate	768	17,27	96	17,27
7000 – 8999	Services	440	9,89	55	9,89
9900 – 9999	Non-classifiable	56	1,26	7	1.26
Total	**10**	**484**	**100**	**209**	**100**

Notes: The table shows the absolute and relative sample distribution focussing on the different groups of industries. Each firm has 8 observations and that can be seen if you divide the number of observations by the total number of firms. The distribution is based on the SIC index and the data is gathered through the ASSET4 database

TABLE 2: SAMPLE COUNTRY DISTRIBUTION

Country	Number of firms	Country	Number of firms
Austria	10	Netherlands	15
Belgium	21	Norway	4
Czech Republic	2	Poland	3
Denmark	18	Portugal	2
Finland	23	Russia	8
France	74	Spain	32
Germany	64	Sweden	11
Greece	10	Switzerland	58
Hungary	4	Turkey	1
Ireland	8	United Kingdom	171
Italy	17		

Notes: The table shows the sample distribution separated by the different countries. The table shows that the sample is a bit skewed towards the UK. However, this can also be seen as logical as the UK is one of the biggest countries and they promote to engage in CSR practices.

3.2 Variables

3.2.1 Dependent variable

In this study, the dependent variables is CSR decoupling. CSR decoupling is measured based on the indices that are created and initiated in the study of Hawn & Ioannou (2016). The study is based on indices that are created to measure CSR decoupling. CSR decoupling is divided into two different aspects that determine whether a company decouples their CSR performance or not. In first instance, 25 factors were created to measure internal CSR performance and 25 factors were created to measure the external CSR performance. Due to developments in the Refinitiv Asset4 database, it is no longer possible to gather information related to the same internal and external factors that determine CSR decoupling. However, due to these developments, there are internal factors added which describe internal CSR performance and some factors are replaced for other factors which measure almost the same performance. The internal actions are mainly focused on policies that need to assure that the firm is internally dealing with issues like gender diversity, employee health and waste reduction. The external actions are mainly focused on reporting the CSR performance to the outside world. Examples are reports on HIV/Aids policies, human rights contracts and day care services. An overview of all the internal and external actions is included in the Appendix of this study, this shows all the 22 internal and external actions that are used for this study.

CSR decoupling refers to the discrepancy between internal and external actions related to CSR performance. Each different action gets a score of either 1 or 0. 1 point is awarded to the firm if it scores a yes on the statement that is related to the specific factor, 0 points are awarded to the firm if it scores a no, which means that this policy or report is not present in the firm. Some of the internal actions reflect a certain percentage as a score. In this case, 1 point is awarded to the firm if the percentage is above the median of all the different firms. So if the firm score 40% on a certain action and the median of all the firms is 35%, the firm receives 1 point. Eventually, all the internal and external actions will be separately summed up in order to measure whether a firm does not decouple or if it either brownwashes or greenwashes. When the internal actions lagged with one year minus the external actions are equal to zero, it means that the firm does not decouple their CSR performance. When the internal actions minus the external actions are below zero, it means that the firms is considered to be greenwashing. The external actions overstate the internal CSR performance. When the internal actions minus the external actions are above zero, it means that the firms is considered to be brownwashing. Brownwashing happens when firms understate the internal CSR performance through reporting CSR information that is worse than reality. Finally, the internal actions lagged by one year minus the external actions will be divided by the logged amount of total assets (Hawn & Ioannou, 2016).

3.2.2 Independent variable

The independent variable in this study is corporate tax avoidance, which will be substantiated through calculating the difference between the statutory tax rate of each different country and the three different renowned tax avoidance measures: The GAAP ETR, the Cash ETR and the Current ETR. The reason for using three different measures is to correct for standard errors that may occur when using one single corporate tax avoidance measure (Chen et al., 2010). Corporate tax avoidance refers to the usage of the tax regime in a single territory to one's own advantage to minimize the amount of tax that needs to be paid to the government. As already mentioned, the generally accepted accounting principles effective tax rate (GAAP_ETR) is the first measurement that will be used as it reflects tax avoidance through permanent book-tax differences (Chen et al., 2010). The formula that measures the GAAP ETR is as follows:

GAAP ETR: Total Tax Expense / Pre-tax Income

The second measure that will be employed is the cash effective tax rate (Cash_ETR). This measure reflects both the permanent and temporary book-tax differences. In contrast to the GAAP ETR, this measure avoids the overstatement of current tax expense (Chen et al., 2010). The formula that measures the Cash ETR is as follows:

Cash ETR: Cash Taxes Paid / Pre-tax Income

The third and last measure that will be used to calculate the tax avoidance among firms is the Current effective tax rate (Current_ETR). This measure reflects the tax deferral strategies of a firm, in this case the current income tax is used as against the total tax expense. This is an advantage over the GAAP ETR. The formula that measures the Current ETR is as follows:

Current ETR: Current Income Tax Expense / Pre-tax Income

In terms of gathering the data related to measuring tax avoidance, this study used the Thomson Reuters (ASSET4) database through datastream and Compustat. Total tax expense and Pre-tax income were available in the ASSET4 database while the Cash Taxes Paid and the Current Income Tax Expense were only available through Compustat. Eventually the difference between the statutory tax rate and the three different ETR measures will show that a company with a low value does avoid less taxes than a firm with a bigger difference between the statutory rate and the different measures of ETR. In this case we expect a positive coefficient for tax avoidance if we look at the relationship with CSR decoupling.

3.2.3 Moderator variables

The moderator variables that are used in this study are related to corporate governance. First, the CGI index is used to show the corporate governance levels across the European countries. The corporate governance index can be seen as a measurement of the level of corporate governance of each country. The CGI (corporate governance index) is based on the percentage of firms in a country that publish information about the ratings related to the country's level of government effectiveness, political stability and absence of terrorism and the regulatory quality. (Tang, 2019). This Corporate governance index is created by Kaufmann (2004) who did research on commission of the World Bank Institute about Corruption, Governance and security around the world. The corporate governance index can be seen as a country-level factor as it focusses on the percentage of firms reporting on corporate governance in a country. CGI is measured through firms answering questions that relate to corporate governance (e.g., the relationship between board and management). The corporate governance index ratings has a range of 0-100. Countries with higher ethical standards score close to 100 and countries with poor corporate governance score closer to 0 (Kaufmann, 2004). This variable varies over time so it can be used for the Fixed effects model which will be used in this study.

Furthermore, this study uses a variable that measures the corporate governance on the firm-level. The ESG score consists of a score for the environmental part, the social part and the governance part. This rate also uses a range from 0-100. The corporate governance performance on the firm-level is measured using a variable that is available through the Refinitive Asset4 database. This database consists of a G-score variable that measures the governance score which is part of the overall ESG score. The G-score reflects the firms' commitment and effectiveness towards following best practice

corporate governance principles. Firms that score high on this scale do have good governance within their company and firms scoring low on the scale have relatively poor corporate governance.

Six different moderating variables are used to test for hypothesis 2 and 3. Due to the usage of three different tax avoidance measures, six moderating variables are created. This is the formulation of the six different moderating variables:

TABLE 3: FORMULATION OF MODERATING VARIABLES

MOD1A	CL_Gover * Tax_Avoid_GAAP
MOD1B	FL_Gover * Tax_Avoid_GAAP
MOD2A	CL_Gover * Tax_Avoid_Cash
MOD2B	FL_Gover * Tax_Avoid_Cash
MOD3A	CL_Gover * Tax_Avoid_Current
MOD3B	FL_Gover * Tax_Avoid_Current

3.2.4 Control variables

Several control variables will be used to see whether the relationship between CSR decoupling and corporate tax avoidance changes as the explanatory value of the control variables can partly be assigned to the relationship between CSR decoupling and corporate tax avoidance. In order to select the right variables which could influence the relationship between CSR decoupling and tax avoidance, existing literature will be consulted. The following variables are held constant in order to enhance the internal validity of this study as this may be harmed if control variables are not implemented. This will eventually help with establishing a correlational relationship between CSR decoupling, corporate tax avoidance and governance on the country- and firm-level (Spector & Brannick, 2011). According to the existing literature, The return on assets, the debt-to-assets ratio, the market-to-book ratio, Board size and Analyst coverage are seen as important determinants of either the quality of CSR reporting or the amount of tax avoidance (Hoi et al., 2013; Jones et al., 2017). Return on assets (ROA), market-to-book ratio (MTB) and Debt-to-assets ratio (LEV) could influence the decision of firms whether to participate in corporate tax avoidance and in CSR decoupling as poor and smaller firms may not have the financial abilities to perform well in terms of CSR and paying taxes according to the rules (Hoi et al., 2013). Return on assets and the market-to-book ratio are both financial parameters and are expected to both be negatively associated with tax avoidance (Yuniarwati et al., 2017). Financially well-performing firms are less incentivized to participate in tax avoidance because these firms already pay normal tax rates and are still performing well. Furthermore, ROA and MTB are expected to be negatively related to CSR decoupling as financially well-performing firms are more likely to attract potential investors through responsible behaviour (Brine et al., 2013). Third, the debt-to-asset ratio (LEV) is expected to have a significant positive effect on tax avoidance as firms with a higher leverage

ratio have bigger debts and for that reason these firms are more incentivized to participate in tax avoidance practices (Dyreng et al., 2008).

In relation to CSR decoupling, board size (B_Size) is implemented as a control variable in order to control for board characteristics that might influence the CSR decoupling variable. According to Sauerwald & Su (2019), board size is positively associated with CSR decoupling as board size decreases the quality of non-financial performance. When boards of firms become bigger, the agency problem inside the board and between the board and other stakeholders increases and this will have a negative effect on decision-making related to non-financial performance (Abdel-khalik, 2002). The fifth and final control variable that is used to control for visibility is analyst coverage (AN_COV) that influences a firm's decisions regarding CSR practices. Analyst coverage is measured as the amount of analysts that cover a firm each year, divided by the logarithm of the total assets of the firm. This measurement is used in several other studies such as (García-Sánchez & Martínez-Ferrero, 2019). Analyst coverage is expected to have a significant negative effect on CSR decoupling as a higher visibility makes it more difficult to hide the CSR decoupling practices.

TABLE 3: VARIABLE DESCRIPTION

Variable	Description	Measurement
CSRD	Corporate Social Responsibility Decoupling (CSRD) is the 'gap' between a firms' CSR-related internal actions and external actions. Measured as the absolute difference of the sum of internal actions lagged by 1 year and external actions divided by the natural logarithm of total assets of a firm.	Score
Tax_Avoid_GAAP	The Tax_Avoid_GAAP measures the GAAP ETR through dividing the total tax expense by the pre-tax income. Eventually the tax avoidance is measured as the difference between the statutory tax rate and the GAAP ETR	Percentage
Tax_Avoid_Cash	The Cash_ETR measures the Cash ETR through dividing the Cash taxes paid by the pre-tax income. Eventually the tax avoidance is measured as the difference between the statutory tax rate and the Cash ETR	Percentage
Tax_Avoid_Current	The Current_ETR measures the Current ETR through dividing the Current income tax expense by the pre-tax income. Eventually the tax avoidance is measured as the difference between the statutory tax rate and the Current ETR	Percentage
CL_GOV	Country-Level governance reflects a score of the firms in a country that publish information about the ratings related to the country's protection of minority of shareholders, nepotism and corporate governance .	Score
FL_GOV	Governance at firm level has to do with all the rules, practices and processes that create the relationships between shareholders, the board of directors, managers and other employees.	Score
LEV	Leverage is formulated as the debt-to-asset ratio. Leverage will be measured through dividing total debt by total assets.	Percentage
MTB	Market-to-book ratio is a financial valuation metric used to measure a company's current market value relative to its book value.	Percentage
AN_COV	Analyst coverage depicts the absolute amount of analyst which cover a firms' financial statements. The absolute amount is divided by the natural logarithm of the firms' assets.	Score

B_SIZE	Board size is the absolute number of board members at the end of the fiscal year.	Number
ROA	Return on assets (ROA) depicts profitability relative to a firms assets and is measured by operating income divided by total assets.	Percentage

3.3 Model

In this study a panel data analysis will be conducted for which the Stata, an analytical program, is used. In the case of a panel data study, several models can be used to investigate certain relationships between variables. A panel data study can be conducted through a Random Effects regression model, a Fixed Effects regression model, a pooled regression model or a multilevel regression model.

For this study, a fixed-effects model will be used to empirically test the hypotheses that are formulated. In order to test whether to use the Fixed-effects instead of a Random effects model or pooled OLS model, the Breusch Pagan Lagrange multiplier test and Hausman test were implemented and both tests had the same outcome as can be seen in the Appendix 7.4 and 7.5. Both probability values were below 0.05 which means that both null hypotheses could be rejected and this means that the fixed-effects model fits the data the best. Existing literature in this topic also make use of a fixed-effects model which keeps the non-random parameters constant such as year, firm, industry and country (Chen et al., 2010; Hawn & Ioannou, 2016; Ortas & Gallego-Álvarez, 2020). Additionally, several control variables are added to control for effects of unmeasured variables which are correlated with the independent variables. These control variables are Leverage, Market-to-Book ratio, Analyst Coverage, Board size and Return on Assets. Finally, all the variables are winsorized at the 1% and 99% level in order to correct for potential effects of outliers that may be significant.

The study of Hawn & Ioannou (2016) can be seen as a guideline for this study how to run regressions with the CSR decoupling variable in it. For that reason, model 1 will be separated into four different regressions that each deal with another CSR variable. The first regression deals with the CSR decoupling variable, the second deals with the Internal Actions, the third deals with the External Actions and the fourth deals with the total sum of the internal- and external actions. These analysis are used to gain a better insight into the relationship between the independent variables and the different CSR variables. Furthermore, the Wooldridge test (7.7) and the Modified Wald test (7.8) are used to test for heteroscedasticity and autocorrelation in both models. Both tests showed that heteroscedasticity and autocorrelation is present in the model. For that reason, the regressions were run using Driscoll-Kraay standard errors in order to correct for the presence of heteroscedasticity and autocorrelation as also can be seen in the study of (Hoechle, 2007). The first equation below is in line with the study of Hawn & Ioannou (2016) as can be seen at the separated dependent variables. This equation is used to test the first hypothesis as it looks at the relationship between CSR decoupling and its aspects and corporate tax avoidance. Besides that, both equations are controlling for leverage, market-to-book ratio, analyst coverage, board size and return on assets. The second equation tests the

second and third hypotheses as the moderating variables are included. In order to correct for robustness, three different variables are included to measure tax avoidance (Chen et al., 2010). Due to these three tax avoidance measures, six different moderating variables are included in order to test the moderating effect of Country- and firm-level governance on the relationship between CSR decoupling and corporate tax avoidance. Both regressions include fixed effects (θ) and an error term (ε)

(1) $$CSRD; IA; EA; SUM = \propto + \beta_1 Tax_Avoid_{GAAP} + \beta_2 Tax_Avoid_{Cash} + \beta_3 Tax_Avoid_{Current} + \beta_4 FL_{GOV} + \beta_5 \mathrm{CL_{GOV}} + \beta_6 Leverage + \beta_7 Market_{Book} + \beta_8 Analyst_{Coverage} + \beta_9 Board_{Size} + \beta_{10} \mathrm{Return_{Assets}} + \theta + \varepsilon$$

(2) $$CSRD; IA; EA = \propto + \beta_1 Tax_Avoid_{GAAP} + \beta_2 Tax_Avoid_{Cash} + \beta_3 Tax_Avoid_{Current} + \beta_4 CL_{GOVER} * Tax_Avoid_{GAAP} + \beta_5 FL_{GOVER} * Tax_Avoid_{GAAP} + \beta_6 CL_{GOVER} * Tax_Avoid_{Cash} + \beta_7 FL_{GOVER} * Tax_Avoid_{Cash} + \beta_8 CL_{GOVER} * Tax_Avoid_{Current} + \beta_9 CL_{GOVER} * Tax_Avoid_{Current} + \beta_{10} CL_{GOVER} + \beta_{11} FL_{GOVER} \ \beta_{12} Leverage + \beta_{13} Market_{Book} + \beta_{14} Analyst_{Coverage} + \beta_{15} Board_{Size} + \beta_{16} Return_{Assets} + \theta + \varepsilon$$

4. Results

4.1 Descriptive results

Table 3 and 4 present the descriptive statistics and the Pearson correlation matrix of the variables that are used for this study. The main variables of this study are the CSR decoupling variable and the three effective tax rates. The mean of the CSR decoupling variable is 0.349 which is comparable with the mean of the CSR decoupling variable in the study of (Hawn & Ioannou, 2016). Furthermore, the values of the internal- and external actions are also in line with the conclusions of Hawn & Ioannou, (2016), the internal actions are significantly higher than the external actions. Besides that, the three ETR measures are comparable so that reflects a good internal validity of all the three measures.

The Pearson correlation matrix does not give unexpected results so multicollinearity does not exist in the model. Furthermore, in order to confirm the absence of multicollinearity in the model, variance inflation factors were estimated. These factors indicate no problems as all the values are below 2 with a mean value of 1.33. These values indicate no suspicions for multicollinearity as the threshold for multicollinearity is 10

Table 4: Descriptive statistics

Variable	Observations	Mean	Std. Dev.	Min	Max
CSR Decoupling	3,899	.349	.188	-.063	.785
Internal Actions	4,448	15.79	3.567	0	22
External Actions	4,448	10.075	3.983	0	20
Tax_Avoid_GAAP	4,448	.054	.264	-.924	1.583
Tax_Avoid_Cash	4,448	.039	.225	-1.088	.999
Tax_Avoid_Current	4,448	.059	.202	-.720	.983
Country Level Governance	4,448	84.832	10.09	32.713	98.086
Firm Level Governance	4,448	57.922	27.268	2.75	99.21
Debt-to-asset ratio	4,448	24.687	16.548	0	72.99
Market-to-book ratio	4,448	2.901	3.467	-3.53	22.4
Analyst Coverage	4,448	0.9363	0.4481	0.108	2.325
Board-Size	4,448	11.042	3.861	5	21
Return on Assets	4,448	5.512	7.31	-18.94	32.51

Table 5: Pearson correlation matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) CSRD	1.000													
(2) IA	0.120	1.000												
(3) EA	-0.504	0.738	1.000											
(4) SUM	-0.227	0.923	0.941	1.000										
(5) Tax_Avoid_GAAP	-0.006	0.030	0.027	0.031	1.000									
(6) Tax_Avoid_Cash	0.016	0.003	-0.003	0.000	0.346	1.000								
(7) Tax_Avoid_Current	0.027	0.001	-0.014	-0.001	0.303	0.674	1.000							
(8) CL_Gover	0.062	-0.039	-0.054	-0.050	-0.035	-0.032	-0.030	1.000						
(9) FL_Gover	0.043	0.373	0.285	0.350	-0.017	0.011	0.021	-0.001	1.000					
(10) LEV	0.050	0.203	0.139	0.181	-0.059	-0.084	-0.072	-0.049	0.062	1.000				
(11) MTB	0.077	0.016	-0.011	0.002	0.055	0.029	0.040	0.145	-0.002	-0.052	1.000			
(12) AN_COV	-0.172	0.341	0.425	0.414	0.061	0.066	0.084	0.126	0.200	-0.013	0.139	1.000		
(13) B_Size	-0.337	0.232	0.417	0.355	0.031	0.035	0.031	-0.252	0.020	0.076	-0.152	0.280	1.000	
(14) ROA	0.050	-0.033	-0.049	-0.045	0.071	0.063	0.100	0.044	-0.077	-0.230	0.416	0.094	-0.160	1.000

Notes: Internal, external and total sum of CSR actions are added as variables due to the additional analyses that are done to gather more information.

4.2 Empirical Results

4.2.1 Results model 1

Table 6 presents the results of the Fixed-Effects regression that has been run to estimate the first equation. As already mentioned, due to the presence of heteroscedasticity and autocorrelation, the first model runs the regression with Driscoll-Kraay standard errors. The first equation is formulated in order to test the first hypothesis by predicting the relationship between CSR decoupling and corporate tax avoidance. The equation consisted of three different measures for corporate tax avoidance which may control for the robustness of the corporate tax avoidance variable. As in line with the study of Hawn & Ioannou (2016), additional analysis is possible through separating the CSR decoupling variable into four different aspects. The first column represents the CSR decoupling variable which is formulated as the discrepancy between internal- and external actions divided by the logarithm of the total assets of the firm. The second column shows the internal CSR actions which can be considered as the actions related to CSR performance. The third column represents the external CSR actions which can be considered as the actions related to CSR disclosure to the outside world. Finally, the fourth column represents the total sum of both the internal- and external actions and this measures the total contribution of a firm in terms of CSR.

The first column of table 6 provides no empirical evidence which supports hypothesis 1 if GAAP ETR is the measure for tax avoidance. The Tax_Avoid_GAAP rate is significantly negatively related to CSR decoupling. This means that when CSR decoupling increases, tax avoidance decreases. A possible reason for that could be that the CSR decoupling variable and the Tax_Avoid_ETR variable are both not 100% reliable measures for calculating CSR decoupling and corporate tax avoidance as is mentioned by both the studies of Hawn & Ioannou (2016) and Chen et al. (2010). Hawn & Ioannou (2016) mention that there are potential endogeneity issues inherent in formulating the gap between internal- and external CSR actions. According to them, you need to be cautious about making any causal claims when dealing with the CSR decoupling variable. Another reason might be the methodological construction of the CSR decoupling variable which might cause the results to be contrary to what is expected when formulating the hypotheses. The mean of the internal actions (performance) is 15.79 and the mean of the external actions (disclosure) is 10.07. The coefficients of the GAAP ETR in column 2 and 3 show that the coefficient for the relationship between GAAP ETR and external actions is significantly more negative than the coefficient for the internal actions. This indicates that corporate tax avoidance has a bigger negative effect on external actions than on internal actions. In line with the sample Hawn & Ioannou (2016) used, firms are significantly more incentivized to focus on CSR performance (internal actions) than on CSR disclosure (external actions) which may not be a good view of reality. However, Tax_Avoid_ETR is significantly positively related to CSR decoupling which supports hypothesis 1. A possible reason for the difference between GAAP ETR and Cash ETR is that Tax_Avoid_Cash avoids the overstatement of current tax expense due to

the accounting for the income tax benefits of the stock option of employees (Chen et al., 2010). This can possible influence the coefficient of the GAAP ETR measure. The Current ETR measure is insignificant so these results do not describe a potential relationship.

The results in column 2 of table 6 show that the GAAP tax avoidance measure is significantly positively related to CSR performance (Internal actions). This is not in line with the expectations of Ortas & Gallego-Álvarez (2020) and does not confirm that corporate tax avoidance is negatively related to the first determinant of the CSR decoupling variable. In contrast to GAAP ETR, Cash ETR is significantly negatively related to the internal actions which meets the expectations. The expectation that Country-level governance is positively related to CSR performance is not supported by the findings in column 2 of table 6 as the results state that country-level governance is significantly negatively related to CSR performance. However, firm-level governance is significantly positively related to CSR performance and is in line with the expectations that well-governed firms do attach more value towards CSR as this may eventually improve the financial performance of a firm (Jain & Jamali, 2016). Furthermore, column 2 shows that leverage is significantly positively related to internal actions which are in line with the studies of Jones et al. (2017) and Waheed & Zhang (2022) that CSR investments are positively related to the debt ratio of a firm. Besides that, analyst coverage and board size are both found to be significantly negatively related to internal actions. This is in line with the arguments of Madrick et al., (2002) that the amount of analysts covering a firm and the size of the board does have a negative effect on the CSR performance of a firm and thus on the internal actions.

The third column of table 6 indicates that GAAP ETR has a significantly positive effect on the disclosure of CSR performance (external actions). As already mentioned, in that case tax avoidance is positively related to the disclosure of CSR information. The expectations are in line with these results as avoiding the payment of taxes is seen as corporately social undesirable behaviour (Ortas & Gallego-Álvarez, 2020). In that case, firms are incentivized to increase the amount of CSR information as this will help to alleviate potential public concerns and to show to the outside world that they meet the expectations of the community. For that reason, the effect of GAAP ETR on external actions as can be seen in column 3 are in line with the expectations. In comparison to column 2, the coefficient of Tax_Avoid_GAAP in relationship with external actions is than with internal actions which indicates greenwashing. As line with the second column, country-level- and firm-level governance are significantly negatively and positively related to external actions. Country-level governance is measured as the average ratio of corruption, government effectiveness, political stability and absence of terrorism and the regulatory quality.

A possible reason for the negative relationship between country-level governance and external actions could be that there is a variety in strength if you look at the different legal environments of countries. According to Miniaoui et al. (2019), the relationship between a firm's CSR disclosure (external actions) and country-level governance vary positively with the strength of the legal environment. The strength of a countries' legal environment does not determine the quality of the corporate governance of a country (Miniaoui et al., 2019). Due to the effect of the strength of a countries' legal environment on the amount of CSR disclosure, it could be the case that countries with a weak legal environment are in excess in the sample that is used for this study. Same as in relationship to the internal actions, Firm-level governance is significantly positively related to the external actions, which is in line with the expectations.

Finally, in the column 4 the results are presented that show the relationship of the independent, moderating and control variables with the total sum of internal and external CSR actions. According to Ortas & Gallego-Álvarez (2020), corporate tax avoidance is negatively related to the overall CSR performance. Column 4 shows that Cash ETR confirms that corporate tax avoidance is significantly positively related to the overall CSR performance (SUM). However, Tax_Avoid_GAAP is significantly positively related which is not in line with the expectations. Furthermore, same as in relationship to the internal- and external actions, country-level governance is negatively related to the sum of internal- and external actions. For this unexpected result, the same argument as for the negative relationship with external actions could be used. Finally, firm-level governance leads to an improvement of the overall CSR performance as can be seen by the significantly positive results in column 4.

Table 6: Fixed-Effects Regression Results

VARIABLES	(1) CSRD	(2) Internal actions	(3) External actions	(4) SUM
Tax_Avoid_GAAP	-0.0113**	0.273**	0.329***	0.602***
	(0.00328)	(0.0992)	(0.0674)	(0.148)
Tax_Avoid_Cash	0.0122*	-0.249**	-0.247*	-0.496**
	(0.00613)	(0.0886)	(0.120)	(0.200)
Tax_Avoid_Current	0.0110	0.125	0.108	0.233
	(0.0141)	(0.160)	(0.118)	(0.267)
CL_Gover	-0.000419	-0.189**	-0.109*	-0.297**
	(0.000624)	(0.0595)	(0.0461)	(0.105)
FL_Gover	-0.000493**	0.0329***	0.0217***	0.0545***
	(0.000197)	(0.00684)	(0.00464)	(0.0114)
LEV	-0.000149	0.0129***	0.0125***	0.0254***
	(0.000186)	(0.00265)	(0.00267)	(0.00509)
MTB	0.000175	-0.00112	-0.0122	-0.0134
	(0.000677)	(0.0145)	(0.00932)	(0.0210)
AN_COV	0.00486	-1.457***	-0.880***	-2.337***
	(0.0190)	(0.167)	(0.190)	(0.343)
B_Size	0.00175	-0.0457*	-0.0570***	-0.103**
	(0.00190)	(0.0207)	(0.0157)	(0.0341)
ROA	0.000423	-0.0134	-0.0201***	-0.0335**
	(0.000363)	(0.00716)	(0.00397)	(0.0107)
Constant	0.332***	31.49***	19.32***	50.81***
	(0.0435)	(4.687)	(3.776)	(8.434)
Industry fixed effects	Y	Y	Y	Y
Country fixed effects	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y
Observations	3,892	4,448	4,448	4,448
R-squared	0.0078	0.1634	0.0994	0.1571

Notes: *, **, *** indicate that the estimated coefficients are significant at 10%, 5% and 1% levels. The model is run based on Driscoll Kraay robust standard errors due to problems related to heteroscedasticity and autocorrelation. The variables used in this model are described in table 3 and the values for these variables are described in table 4.

4.2.2 Results Model 2

Table 7 presents the results of equation 2, which is a fixed effects regression model and is run with Driscoll-Kraay standard errors due to the same heteroscedasticity and autocorrelation problems as in equation 1. Table 7 includes the results of the effect of the moderating variables country-level governance and firm-level governance on the relationship between CSR decoupling and corporate tax avoidance which are predicted in hypotheses 2 and 3. In accordance with model 1, model 2 also consists additional analyses that measure the effect of the independent variables on the internal- and external actions which is in line with the study of Hawn & Ioannou (2016). As in line with the results in table 6, the tax avoidance measures do not show a significant positive relationship between CSR decoupling and tax avoidance. In contrast to table 6, the first column of table 7 do not even present significant results for the tax avoidance measures. The results in column 1 of table 7 provide supporting evidence for hypothesis 2 which states that country-level governance has a significantly positive effect on the relationship between CSR decoupling and tax avoidance. MOD1A, which represents the tax avoidance based on the GAAP ETR multiplied by the country-level governance.

Despite the insignificant Tax avoidance measures in table 7, tax avoidance and firm-level governance separately are significantly affecting CSR decoupling as can be seen in the first column of table 6. However, when these variables are interacted with each other, the effect of tax avoidance on CSR decoupling disappears. The first column does not show evidence for a significant positive effect of firm-level governance on the relationship between CSR decoupling and tax avoidance. This means that there is no significant evidence that supports hypothesis 3. Finally, the control variables show relatively the same results as in table 6. Leverage is significantly positively related to internal- and external actions as can be seen in the second and third column of table 6 and 7. Market-to-book ratio is insignificant for both internal- and external actions. Furthermore, Analyst coverage, Board size and return on assets are all three significantly negatively related to CSR decoupling for both column 2 and 3 in table 6 and 7.

Table 7: Fixed-Effects Regression Results

	(1)	(2)	(3)
VARIABLES	CSRD	Internal actions	External actions
Tax_Avoid_GAAP	0.0386	0.556	0.194
	(0.0353)	(0.454)	(0.483)
Tax_Avoid_Cash	-0.00364	1.436*	0.553*
	(0.0307)	(0.737)	(0.270)
Tax_Avoid_Current	0.0132	-1.953***	-0.807*
	(0.0277)	(0.492)	(0.368)
MOD1A	0.000447**	-0.00366	-0.00195
	(0.000227)	(0.00507)	(0.00465)
MOD1B	5.27e-05	0.00275	0.00526**
	(5.36e-05)	(0.00367)	(0.00203)
MOD2A	0.000670	-0.0187	-0.0109***
	(0.000534)	(0.00999)	(0.00288)
MOD2B	-0.000717	0.00495	0.00517
	(0.000402)	(0.00693)	(0.00386)
MOD3A	-0.000245	0.0184**	0.0142**
	(0.000597)	(0.00726)	(0.00479)
MOD3B	0.000324	0.000923	-0.00860
	(0.000428)	(0.00659)	(0.00665)
CL_Gover	-0.000424	-0.188**	-0.109*
	(0.000611)	(0.0598)	(0.0464)
FL_Gover	0.000502**	0.0324***	0.0218***
	(0.000181)	(0.00691)	(0.00478)
LEV	-0.000172	0.0128***	0.0126***
	(0.000188)	(0.00265)	(0.00269)
MTB	0.000199	-0.000854	-0.0129
	(0.000667)	(0.0142)	(0.00990)
AN_COV	0.00456	-1.429***	-0.869***
	(0.0188)	(0.156)	(0.190)
B_Size	0.00181	-0.0434*	-0.0554***
	(0.00193)	(0.0195)	(0.0142)
ROA	0.000406	-0.0133	-0.0200***
	(0.000364)	(0.00712)	(0.00410)
Constant	0.331***	31.44***	19.28***
	(0.0424)	(4.688)	(3.797)
Industry fixed effects	Y	Y	Y
Country fixed effects	Y	Y	Y
Year fixed effects	Y	Y	Y
Observations	3,892	4,448	4,448
R-Squared	0.0092	0.1657	0.1005

Notes: *, **, *** indicate that the estimated coefficients are significant at 10%, 5% and 1% levels. The model is run based on Driscoll Kraay robust standard errors due to problems related to heteroscedasticity and autocorrelation. The variables used in this model are described in table 3 and the values for these variables are described in table 4.

MOD1A: CL_Gover * Tax_Avoid_Cash; **MOD1B**: FL_Gover * Tax_Avoid_GAAP; **MOD2A**: CL_Gover * Tax_Avoid_Cash; **MOD2B**: FL_Gover * Tax_Avoid_Cash; **MOD3A**: CL_Gover * Tax_Avoid_Current; **MOD3B**: FL_Gover * Tax_Avoid_Current

5. Conclusion and Discussion

This study had the aim to investigate the relationship between CSR decoupling and corporate tax avoidance controlling for robustness errors through using three different tax avoidance measures in line with existing literature (Chen et al., 2010; Dyreng et al., 2008; Ortas & Gallego-Álvarez, 2020). Furthermore, this study examined the potential moderating effect of country- and firm-level governance on the relationship between CSR decoupling and tax avoidance. For this study, an European ESG sample of 556 firms was used over a period of 8 years (2013-2020). The results show that there is a significantly negative relationship between CSR decoupling and tax avoidance when using the GAAP ETR as a measure for tax avoidance. This result is not consistent with the expectations that CSR decoupling is positively related to tax avoidance. However, Cash ETR is significantly positively related to CSR decoupling which is in line with the expectations. The inconsistency in the ETR measures is remarkable as those measures should be relatively the same (Chen et al., 2010). The difference between the negative significant effect of Tax_Avoid_GAAP and the positive Tax_Avoid_Cash may indicate the problems related to the reliability of the tax avoidance measure as already mentioned in the study of Aronmwan & Okafor (2019). Slemrod (2007) argues in his study that it is hard to determine conceptually, how much of the difference between the statutory tax rate and the different ETR's can be described as tax avoidance.

Besides the inconsistency of the ETR measures, CSR decoupling can also be considered as a measure that has problems with its reliability (Hawn & Ioannou, 2016). Contrary to the expectations of the legitimacy theory, the sample of this study shows that firms are more incentivized to pay attention to CSR performance than to CSR disclosure. According to Hawn & Ioannou (2016), future research should focus more on the dynamic context by connecting a specific internal action to an external action. Considering the current CSR decoupling measure, it could have more value to focus on the effect of the different ETR measures on the internal, external and total sum of the CSR actions. The GAAP ETR measure is significantly positively related to internal- and external actions and the total sum of CSR actions. The higher positive coefficient for external actions than for internal actions is in line with the expectations of the study of Ortas & Gallego-Álvarez (2020). Furthermore, the Cash ETR measure is significantly negatively related to internal- and external actions and the total sum of CSR actions. The Current ETR measure is insignificant in relation to CSR decoupling and all the other three additional variables.

Besides the relationship between CSR decoupling and tax avoidance, the study also includes other variables that may have a relationship with CSR decoupling. Country-level governance is found to have an insignificant effect on the level of CSR decoupling. However, it has a significant negative relationship with the amount of internal- and external actions and the total sum of CSR actions. This is not in line with the expectations as well governed countries are expected to support companies to

engage in CSR practices so a negative effect is not in line with the expectations. By contrast, firm-level governance is significantly negatively related to CSR decoupling and significantly positive to the three additional analyses. This supports the existing evidence that high-quality firm-level governance supports responsible behaviour such as CSR engagement (Gull et al., 2022). Furthermore, all the control variables are found to be insignificant in relationship to the CSR decoupling variable.

Furthermore, six moderating variables were created to test for the moderating effect of country- and firm-level governance on the relationship between CSR decoupling and tax avoidance. The three different tax avoidance measures were interacted with country- and firm-level governance. The results in table 7 presented supporting evidence for the strengthening positive moderating effect of country-level governance on the relationship between CSR decoupling and tax avoidance. Moderator 1A, which tested the interaction between the GAAP ETR tax avoidance and country-level governance. This was in line with the study of Visser et al. (2022). This study claimed that a state's progressiveness significantly strengthens the relationship between CSR decoupling and tax avoidance. Country-level governance comparable with a countries' political state because both variable contain the same determinants (Stuebs & Sun, 2015). Moderators 2A and 3A which also tested the moderating effect of country-level governance did not provide any significant evidence for hypothesis 2. The results further indicate no significant evidence for the moderating effect of firm-level governance on the relationship between CSR decoupling and tax avoidance. All the three moderating variables for firm-level governance are insignificant so no conclusions can be made about the potential moderating effect of firm-level governance.

There are several limitations that need to be taken into account when interpreting the results of this study. The first limitation is related to the construction of the sample and to the data accumulation. The construction of the CSR decoupling variable consists of internal- and external actions which are both divided into 22 different determinants. The determinants are binary variables based on a 'yes' or 'no' or percentages that eventually will be classified as a 'yes' or 'no'. These binary variables which can be answered with a 'yes' or 'no' are questionable (Graafland & Smid, 2019). One of the determinants is: "Does the company make use of renewable energy?", the problem related to this determinant is that rise or decrease in the percentage use of renewable energy does not significantly have a effect on the CSR decoupling variable. In other words, a firm can continue decoupling their CSR information even though the CSR decoupling variable would say that the firm does correctly report their CSR information. Firms can engage in CSR decoupling practices while having zero or little impact on the construction of the variable. This might be a good reason for why the major part of the sample has a higher amount of internal CSR actions than external CSR actions which is against the expectations of the legitimacy theory (Graafland & Smid, 2019). This problem might be solved in future through developing a new CSR decoupling measure that corrects for problems such as the

undetectable CSR decoupling related to the construction of the binary variables which determine the CSR decoupling variable.

Second, A problem related to CSR engagement is that CSR is of a voluntary nature. This means that there is a possible selection bias related to the construction of the CSR decoupling variable (Hawn & Ioannou, 2016). Besides that, this study made use of a balanced sample due to the problems with missing data related to the construction of the CSR decoupling variable. However, the firms in this sample are generally the firms who are incentivized to behave responsible in order to be in line with the expectations of (potential) stakeholders. The study of Hawn & Ioannou (2016) tried to correct for the differences in firm size by dividing the internal- and external actions and the discrepancy between internal- and external actions by the total assets of a firm. This does correct for some problems related to difference in firm size. However, as already stated, most of the firms in this sample are large firms who extensively report about their CSR engagement. Furthermore, 31% of the sample consists of firms located in the UK. This may give a skewed view of the relationship between CSR decoupling and tax avoidance in Europe. For that reason, future research may focus on creating a balanced sample in terms of firms located in countries. Besides that, using a differentiated sample based on firm size and cultural settings. Finally, the sample is also biased due to the fact that the study can only make use of firms that are listed which could also bias the data set.

Third, CSR decoupling as measured by (Hawn & Ioannou, 2016) and tax avoidance as measured by Chen et al. (2010) and Ortas & Gallego-Álvarez (2020) are not 100% a representation of the reality. Possible endogeneity issues are inherent in evaluating the impact of CSR decoupling on tax avoidance and the effect of the internal- and external actions on tax avoidance. Furthermore, the three different ETR measures are used to correct for robustness errors. However, according to Ortas & Gallego-Álvarez (2020), the ETR measures are not able to capture all the aggressive tax practices, such as conforming avoidance so the results should be interpreted considering these limitations.

Finally, the usage of the country- and firm-level governance moderating variables has some complications. As already mentioned in section 2.3, it is questionable whether the variables can be used separately. The relationship between country- and firm-level governance can be defined in three different ways. Both corporate governance measures could be substitutes, complementary or independent variables that do not have a relationship. According to Cohen (2020), country- and firm-level governance do not measure the same thing because both measures are seen as complementary. However, different measures can be used to define country- and firm-level governance so further research on the distinction between country-level governance and firm-level governance could extensively describe the relationship and possibly prevent problems related to autocorrelation.

6. References

Abdel-khalik, A. Rashad. 2002. “Reforming Corporate Governance Post Enron: Shareholders’ Board of Trustees and the Auditor”. *Journal of Accounting and Public Policy* 21(2):97–103. doi: 10.1016/S0278-4254(02)00040-6.

Anon. 2019. “The Past and Future of Manufacturing in Central and Eastern Europe: Ready for Industry 4.0?” *SSRN Electronic Journal*. doi: 10.2139/ssrn.3390128.

Armstrong, Christopher S., Jennifer L. Blouin, Alan D. Jagolinzer, en David F. Larcker. 2015. “Corporate Governance, Incentives, and Tax Avoidance”. *Journal of Accounting and Economics* 60(1):1–17. doi: 10.1016/j.jacceco.2015.02.003.

Aronmwan, Edosa, en Chinwuba Okafor. 2019. “CORPORATE TAX AVOIDANCE: REVIEW OF MEASURES AND PROSPECTS”. 8:21–42.

Aureli, Selena, Mara Del Baldo, Rosa Lombardi, en Fabio Nappo. 2020. “Nonfinancial Reporting Regulation and Challenges in Sustainability Disclosure and Corporate Governance Practices”. *Business Strategy and the Environment* 29(6):2392–2403. doi: 10.1002/bse.2509.

Bauer, Andrew M. 2016. “Tax Avoidance and the Implications of Weak Internal Controls”. *Contemporary Accounting Research* 33(2):449–86. doi: 10.1111/1911-3846.12151.

Beresford, Dennis. 2003. “Report of Investigation”. 345.

Brine, Matthew, Rebecca Brown, en Greg Hackett. z.d. “Corporate Social Responsibility and Financial Performance in the Australian Context”. *Economic Round-Up* (Autumn 2007):47–58. doi: 10.3316/informit.254072917099846.

Chen, Shuping, Xia Chen, Qiang Cheng, en Terry Shevlin. 2010. “Are Family Firms More Tax Aggressive than Non-Family Firms?” *Journal of Financial Economics* 21.

Chen, Wei, Zhuo Huang, en Yanping Yi. 2015. “Is there a structural change in the persistence of WTI–Brent oil price spreads in the post-2010 period?” *Economic Modelling* 50:64–71. doi: 10.1016/j.econmod.2015.06.007.

Cohen, Oded. 2020. “Firm-Level and Country-Level Corporate Governance: Does One Substitute or Complement the Other?” *SSRN Electronic Journal*. doi: 10.2139/ssrn.3606639.

Cohen, Patricia. 2021. “Big Companies Like FedEx and Nike Paid No Federal Taxes - The New York Times”. Geraadpleegd 16 maart 2022 (https://www.nytimes.com/2021/04/02/business/economy/zero-corporate-tax.html).

Desai, Mihir A., en Dhammika Dharmapala. 2009. “Earnings Management, Corporate Tax Shelters, and Book-Tax Alignment”. *National Tax Journal* 62(1):169–86.

Doh, Jonathan, Suzana Rodrigues, Ayse Saka-Helmhout, en Mona Makhija. 2017. “International business responses to institutional voids”. *Journal of International Business Studies* 48:293–307. doi: 10.1057/s41267-017-0074-z.

Doidge, Craig, G. Andrew Karolyi, en René M. Stulz. 2007. “Why Do Countries Matter so Much for Corporate Governance?” *Journal of Financial Economics* 86(1):1–39. doi: 10.1016/j.jfineco.2006.09.002.

Dowling, Grahame R. 2014. “The Curious Case of Corporate Tax Avoidance: Is it Socially Irresponsible?” *Journal of Business Ethics* 124(1):173–84.

Dyreng, Scott D., Michelle Hanlon, en Edward L. Maydew. 2008. “Long-Run Corporate Tax Avoidance”. *The Accounting Review* 83(1):61–82.

García-Sánchez, Isabel-María, en Jennifer Martínez-Ferrero. 2019. “Chief executive officer ability, corporate social responsibility, and financial performance: The moderating role of the environment”. *Business Strategy & the Environment (John Wiley & Sons, Inc)* 28(4):542–55. doi: 10.1002/bse.2263.

Ghoshal, Sumantra, en Peter Moran. 1996. “Bad for Practice: A Critique of the Transaction Cost Theory”. *The Academy of Management Review* 21(1):13–47. doi: 10.2307/258627.

Graafland, Johan, en Hugo Smid. 2019. “Decoupling Among CSR Policies, Programs, and Impacts: An Empirical Study”. *Business & Society* 58(2):231–67. doi: 10.1177/0007650316647951.

Grosanu, Adrian, Cristina Bota-Avram, Paula Răchișan, Roumen Vesselinov, en Adriana Tiron Tudor. 2015. “The Influence of Country-Level Governance on Business Environment and Entrepreneurship: a Global Perspective”. *Amfiteatru Economic* 17:65–70.

Gull, Ammar Ali, Nazim Hussain, Sana Akbar Khan, Zaheer Khan, en Asif Saeed. 2022. “Governing Corporate Social Responsibility Decoupling: The Effect of the Governance Committee on Corporate Social Responsibility Decoupling”. *Journal of Business Ethics*. doi: 10.1007/s10551-022-05181-3.

Haack, Patrick, Dennis Schoeneborn, en Christopher Wickert. 2012. “Talking the Talk, Moral Entrapment, Creeping Commitment? Exploring Narrative Dynamics in Corporate Responsibility Standardization”. *Organization Studies* 33. doi: 10.1177/0170840612443630.

Hanlon, Michelle, en Shane Heitzman. 2010. “A Review of Tax Research”. *Journal of Accounting and Economics* 50(2–3):127–78. doi: 10.1016/j.jacceco.2010.09.002.

Hawn, Olga, en Ioannis Ioannou. 2016. “Mind the Gap: The Interplay between External and Internal Actions in the Case of Corporate Social Responsibility”. *Strategic Management Journal* 37(13):2569–88. doi: 10.1002/smj.2464.

Hoechle, Daniel. 2007. “Robust Standard Errors for Panel Regressions with Cross-Sectional Dependence”. *The Stata Journal* 7(3):281–312. doi: 10.1177/1536867X0700700301.

Hoi, Chun Keung, Qiang Wu, en Hao Zhang. 2013. “Is Corporate Social Responsibility (CSR) Associated with Tax Avoidance? Evidence from Irresponsible CSR Activities”. *The Accounting Review* 88(6):2025–59.

Holtbrügge, Dirk, en Marcus Conrad. 2020. “Decoupling in CSR reports: A Linguistic Content Analysis of the Volkswagen Dieselgate scandal”. *International Studies of Management & Organization* 50(3):253–70. doi: 10.1080/00208825.2020.1811523.

Huseynov, Fariz, en Bonnie K. Klamm. 2012. “Tax Avoidance, Tax Management and Corporate Social Responsibility”. *Journal of Corporate Finance* 18(4):804–27. doi: 10.1016/j.jcorpfin.2012.06.005.

Jain, Tanusree, en Dima Jamali. 2016. “Looking Inside the Black Box: The Effect of Corporate Governance on Corporate Social Responsibility”. *Corporate Governance: An International Review* 24(3):253–73. doi: 10.1111/corg.12154.

Jia, Yu, Jinglu Yan, Tianyuan Liu, en Jun Huang. 2019. “How Does Internal and External CSR Affect Employees’ Work Engagement? Exploring Multiple Mediation Mechanisms and Boundary

Conditions". *International Journal of Environmental Research and Public Health* 16(14). doi: 10.3390/ijerph16142476.

Jo, Hoje, en Maretno A. Harjoto. 2012. "The Causal Effect of Corporate Governance on Corporate Social Responsibility". *Journal of Business Ethics* 106(1):53–72.

Jones, Peter, Daphne Comfort, en David Hillier. 2016. "Managing Materiality: A Preliminary Examination of the Adoption of the New GRI G4 Guidelines on Materiality within the Business Community: Managing Materiality within the Business Community". *Journal of Public Affairs* 16(3):222–30. doi: 10.1002/pa.1586.

Jones, Stewart, Max Baker, en Ben Forrest Lay. 2017. "The relationship between CSR and tax avoidance: an international perspective". *Australian Tax Forum* 32(1):95–127.

Kanagaretnam, Kiridaran, Gerald J. Lobo, en Dennis J. Whalen. 2007. "Does Good Corporate Governance Reduce Information Asymmetry around Quarterly Earnings Announcements?" *Journal of Accounting and Public Policy* 26(4):497–522. doi: 10.1016/j.jaccpubpol.2007.05.003.

Kaufmann, Daniel. 2004. "Corruption, Governance and Security: Challenges for the Rich Countries and the World". *SSRN Electronic Journal*. doi: 10.2139/ssrn.605801.

Khan, Majid, en James Lockhart. 2022. "Corporate Social Responsibility Decoupling in Developing Countries: Current Research and a Future Agenda". *Business and Society Review* 127(1):127–43. doi: 10.1111/basr.12254.

Koch, Christopher Von, Ola Nilsson, Micael Jönsson, en Karin Jonnergård. z.d. "The Interaction between Country-Level and Firm-Level Corporate Governance".

Kovermann, Jost, en Patrick Velte. 2019. "The Impact of Corporate Governance on Corporate Tax Avoidance—A Literature Review". *Journal of International Accounting, Auditing and Taxation* 36:100270. doi: 10.1016/j.intaccaudtax.2019.100270.

Lanis, Roman, en Grant Richardson. 2012. "Corporate Social Responsibility and Tax Aggressiveness: An Empirical Analysis". *Journal of Accounting and Public Policy* 31(1):86–108. doi: 10.1016/j.jaccpubpol.2011.10.006.

Lyon, Thomas P., en A. Wren Montgomery. 2015. "The Means and End of Greenwash". *Organization & Environment* 28(2):223–49. doi: 10.1177/1086026615575332.

Madrick, Jeff, William C. Powers, en Herbert S. Winokur. 2002. "Review of Report of Investigation by the Special Investigative Committee of the Board of Directors of Enron Corp, William C. Powers Jr., Herbert S. Winokur Jr." *Challenge* 45(3):117–27.

Marquis, Christopher, Michael W. Toffel, en Yanhua Zhou. 2016. "Scrutiny, Norms, and Selective Disclosure: A Global Study of Greenwashing". *Organization Science* 27(2):483–504. doi: 10.1287/orsc.2015.1039.

Meyer, John W., en Brian Rowan. 1977. "Institutionalized Organizations: Formal Structure as Myth and Ceremony". *American Journal of Sociology* 83(2):340–63.

Miniaoui, Zeineb, Faten Chibani, en Khaled Hussainey. 2019. "The impact of country-level institutional differences on corporate social responsibility disclosure engagement". *Corporate Social Responsibility & Environmental Management* 26(6):1307–20. doi: 10.1002/csr.1748.

Montenegro, Tânia Menezes, en this link will open in a new window Link to external site. 2021. “Tax Evasion, Corporate Social Responsibility and National Governance: A Country-Level Study”. *Sustainability* 13(20):11166. doi: https://doi.org/10.3390/su132011166.

Obara, Louise J., en Ken Peattie. 2018. “Bridging the Great Divide? Making Sense of the Human Rights-CSR Relationship in UK Multinational Companies”. *Journal of World Business* 53(6):781–93. doi: 10.1016/j.jwb.2017.10.002.

Ortas, Eduardo, en Isabel Gallego-Álvarez. 2020. “Bridging the gap between corporate social responsibility performance and tax aggressiveness: The moderating role of national culture”. *Accounting, Auditing & Accountability Journal* 33(4):825–55. doi: 10.1108/AAAJ-03-2017-2896.

Parmar, Bidhan L., R. Edward Freeman, en Jeffrey S. Harrison. z.d. “Stakeholder Theory: The State of the Art”. 57.

Perrini, Francesco. 2006. “The Practitioner’s Perspective on Non-Financial Reporting”. *California Management Review* 48(2):73–103. doi: 10.2307/41166339.

Ramus, Catherine A., en Ivan Montiel. 2005. “When Are Corporate Environmental Policies a Form of Greenwashing?” *Business & Society* 44(4):377–414. doi: 10.1177/0007650305278120.

Robinson, John R., Yanfeng Xue, en May H. Zhang. 2012. “Tax Planning and Financial Expertise in the Audit Committee”. *SSRN Electronic Journal*. doi: 10.2139/ssrn.2146003.

Rupp, Deborah E., Jyoti Ganapathi, Ruth V. Aguilera, en Cynthia A. Williams. 2006. “Employee Reactions to Corporate Social Responsibility: An Organizational Justice Framework”. *Journal of Organizational Behavior* 27(4):537–43. doi: 10.1002/job.380.

Salhi, Bassem, Rakia Riguen, Maali Kachouri, en Anis Jarboui. 2019. “The mediating role of corporate social responsibility on the relationship between governance and tax avoidance: UK common law versus French civil law”. *Social Responsibility Journal* 16(8):1149–68. doi: 10.1108/SRJ-04-2019-0125.

Sana Malik, , Sumayya Chughtai, en , Kausar Fiaz Khawaja. 2020. “An Insight into Determinants of Corporate Social Responsibility Decoupling: Evidence from Pakistan”. 3.

Sauerwald, Steve, en Weichieh Su. 2019. “CEO Overconfidence and CSR Decoupling”. *Corporate Governance: An International Review* 27(4):283–300. doi: 10.1111/corg.12279.

Scholtens, Bert, en Feng-Ching Kang. 2013. “Corporate Social Responsibility and Earnings Management: Evidence from Asian Economies”. *Corporate Social Responsibility and Environmental Management* 20(2):95–112. doi: 10.1002/csr.1286.

Seele, Peter, en Lucia Gatti. 2017. “Greenwashing Revisited: In Search of a Typology and Accusation-Based Definition Incorporating Legitimacy Strategies”. *Business Strategy and the Environment* 2(26):239–52. doi: 10.1002/bse.1912.

Shleifer, Andrei, en Robert W. Vishny. 1997. “A Survey of Corporate Governance”. *The Journal of Finance* 52(2):737. doi: 10.2307/2329497.

Slemrod, Joel. 2007. “Cheating Ourselves: The Economics of Tax Evasion”. *Journal of Economic Perspectives* 21(1):25–48. doi: 10.1257/jep.21.1.25.

Spector, Paul E., en Michael T. Brannick. 2011. “Methodological Urban Legends: The Misuse of Statistical Control Variables”. *Organizational Research Methods* 14(2):287–305. doi: 10.1177/1094428110369842.

Stuebs, Martin T., en Li Sun. 2009. “Social Responsibility and Firm Efficiency in the Business Services Industry”. *SSRN Electronic Journal*. doi: 10.2139/ssrn.1435032.

Stuebs, Marty, en Li Sun. 2015. “Corporate governance and social responsibility”. *International Journal of Law and Management* 57(1):38–52. doi: 10.1108/IJLMA-04-2014-0034.

Tang, Tanya Y. H. 2019. “The Value Implications of Tax Avoidance Across Countries”. *Journal of Accounting, Auditing & Finance* 34(4):615–38. doi: 10.1177/0148558X17742821.

Vartiak, Lukas. 2016. “CSR Reporting of Companies on a Global Scale”. *Procedia Economics and Finance* 39:176–83. doi: 10.1016/S2212-5671(16)30276-3.

Visser, Max, Daniel Reimsbach, en Geert Braam. 2022. “Corporate social responsibility, tax avoidance and the political role of the state: A normative perspective and empirical evidence”.

Waheed, Abdul, en Qingyu Zhang. 2022. “Effect of CSR and Ethical Practices on Sustainable Competitive Performance: A Case of Emerging Markets from Stakeholder Theory Perspective”. *Journal of Business Ethics* 175(4):837–55. doi: 10.1007/s10551-020-04679-y.

Yuniarwati, Icenik Ardana, Sofia Dewi, en Caroline Lin. 2017. “Factors That Influence Tax Avoidance in Indonesia Stock Exchange”. *Chinese Business Review* 16. doi: 10.17265/1537-1506/2017.10.005.

Zeng, Tao. 2019. “Country-level governance, accounting standards, and tax avoidance: a cross-country study”. *Asian Review of Accounting* 27(3):401–24. doi: 10.1108/ARA-09-2018-0179.

7. Appendix

7.1 Cronbach's Alpha of Internal- and External actions

Table 8: Cronbach's Alpha Internal- and External Actions

	Internal Actions	**External Actions**
Inter-item covariance	0.0208578	0.0258496
Reliability coefficient	0.7892	0.7875
Number of items	22	22

7.2 CSR decoupling variable internal actions

Table 9: CSR Decoupling Internal Actions

	Datapoints of Hawn & Ioannou (2016)	**Operationalization**	**Description**
1	Board gender diversity	Data used in the construction of the CSR decoupling variable	Percentage of women on the board of directors
2	Non-executive board members on the audit committee	Deleted due to too much missing values	N.A.
3	Non-executive board members on the nomination committee	Deleted due to too much missing values	N.A.
4	Independent board members on the board of directors	Deleted due to too much missing values	N.A.
5	Policy skills training	Data used in the construction of the CSR decoupling variable	Does the company have a policy to support the skills training of its employees?
6	Policy career development	Data used in the construction of the CSR decoupling variable	Does the company have a policy to support the career development of its employees?
7	Policy employee health & safety	Data used in the construction of the CSR decoupling variable	Does the company have a policy to improve employee health & safety within the company?
8	Policy supply chain health & safety	Data used in the construction of the CSR decoupling variable	Does the company have a policy to improve employee health & safety in its supply chain?
9	Policy environmental supply chain management	Data used in the construction of the CSR decoupling variable	Does the company use environmental criteria in the selection process of its supplies or sourcing partners?
10	Renewable energy use	Data used in the construction of the CSR decoupling variable	Does the company make use of renewable energy?
11	Policy energy efficiency	Data used in the construction of the CSR decoupling variable	Does the company have a policy to improve its energy efficiency?
12	Policy water efficiency	Data used in the construction of the CSR decoupling variable	Does the company have a policy to improve its water efficiency?

13	Policy water technology	Data used in the construction of the CSR decoupling variable	Does the company develop products or technologies that are used for water treatment, purification, or that improve water-use efficiency?
14	Policy emissions	Data used in the construction of the CSR decoupling variable	Does the company have a policy for ensuring equal treatment of minority shareholders, facilitating shareholder engagement, or limiting the use of anti-takeover devices?
15	Shareholder right policy	Data used in the construction of the CSR decoupling variable	Does the company have a policy for ensuring equal treatment of minority shareholders, facilitating shareholder engagement, or limiting the use of anti-takeover devices?
16	Stock option grant by shareholder vote	Data used in the construction of the CSR decoupling variable	Does the company require that shareholder approval is obtained prior to the adoption of any stock-based compensation plans?
17	Executive compensation policy	Data used in the construction of the CSR decoupling variable	Does the company have a policy for performance-oriented compensation that attracts and retains the senior executives and board members?
18	Board structure policy	Data used in the construction of the CSR decoupling variable	Does the company have a policy for maintaining a well-balanced membership of the board?
19	Audit committee expertise	Data used in the construction of the CSR decoupling variable	Does the company have an audit committee with at least three members and at least one 'financial expert' within the meaning of Sarbanes-oxley?
20	CSR sustainability committee	Data used in the construction of the CSR decoupling variable	Does the company have an CSR committee or team?
21	Policy freedom of association	Data used in the construction of the CSR decoupling variable	Does the company have a policy to guarantee the freedom of association universally applied independent of local laws?
22	Human rights policy	Data used in the construction of the CSR decoupling variable	Does the company have a policy for the exclusion of child, forced, or compulsory labor?
23	Competitive employee benefit policy	Data used in the construction of the CSR decoupling variable	Does the company have an environmental management team?
24	Policy work-life balance	Data used in the construction of the CSR decoupling variable	Does the company have a corporate governance board committee
25	Policy diversity and opportunity	Data used in the construction of the CSR decoupling variable	Does the company have a policy to drive diversity and equal opportunity?

Table 10: CSR Decoupling External Actions

	Datapoints of Hawn & Ioannou (2016)	Operationalization	Description
1	Organic products initiatives	Data used in construction of CSR decoupling variable	Does the company reportedly develop or market products and services that foster specific health and safety benefits for the consumers?
2	Internal promotion	Data used in construction of CSR decoupling variable	Does the company claim to favor promotion from within?
3	HIV-AIDS program	Data used in construction of CSR decoupling variable	Does the company report on policies or programs on HIV/AIDS for the workplace or beyond?
4	Crisis management systems	Data used in construction of CSR decoupling variable	Does the company report on crisis management systems or reputation disaster recovery plans to reduce or minimize the effects of reputation disasters?
5	Green buildings	Data used in construction of CSR decoupling variable	Does the company report about environmentally friendly or green sites or offices?
6	Toxic chemicals reduction	Data used in construction of CSR decoupling variable	Does the company report on initiatives to reduce, reuse, substitute, or phase out toxic chemicals or substances?
7	Staff transportation impact reduction	Data used in construction of CSR decoupling variable	Does the company report on initiatives to reduce the environmental impact of transportation of its staff?
8	CO2 emission reduction in production process	Not available in the database. Replaced by reduction of e-waste.	Does the company report on initiatives to recycle, reduce, reuse, substitute, treat or phase out total waste?
9	Waste reduction initiatives	Data used in construction of CSR decoupling variable	Does the company report on initiatives to recycle, reduce, substitute or phase out total waste?
10	VOC emission reduction	Data used in construction of CSR decoupling variable	Does the company report on initiatives to reduce, substitute or phase out volatile organic compounds (VOC)?
11	NOx and Sox emissions reduction	Data used in construction of CSR decoupling variable	Does the company report on initiatives to reduce, reuse, recycle, substitute, or phase out Sox (sulphur oxides) or NOx?
12	Other emissions reduction	Not available in the database. Replaced by partnerships with party non-profit organizations focused on improving the environment.	Does the company report on partnerships or initiatives with specialized NGOs, industry organizations, governmental or supragovernmental organizations, which are focused on improving environmental issues?
13	GRI report guidelines	Deleted due to too much missing values	N.A.
14	Reporting in opportunities, challenges and dilemmas	Not available in the database. Replaced by targets for emission reduction	Has the company set targets or objectives to be achieved on emission reduction?
15	CSR sustainability report global activities	Deleted due to too much missing values	N.A.
16	Human rights	Data used in construction	Does the company report or show to be ready to

	breaches contractor	of CSR decoupling variable	end a partnerships with a sourcing partner if human rights criteria are not met?
17	Human rights contractor	Data used in construction of CSR decoupling variable	Does the company report or show to use human rights criteria in the selection or monitoring process of its suppliers or sourcing partners?
18	Provide employees with insurance	Not available in the database. No suitable replacement available	N.A.
19	Provide bonus to employees	Not available in the database. No suitable replacement available	N.A.
20	Day care services	Data used in construction of CSR decoupling variable	Does the company claim to provide daycare services for its employees?
21	Policy community involvement	Data used in construction of CSR decoupling variable	Does the company have a policy to strive to be a good corporate citizen?
22	Policy business ethics	Data used in construction of CSR decoupling variable	Does the company have a policy to respect business ethics?
23	Global contact	Data used in construction of CSR decoupling variable	Has the company signed the UN Global Compact?
24	OECD guidelines for multinational enterprises	Data used in construction of CSR decoupling variable	Does the company follow the OECD guidelines?
25	CSR sustainability external audit	Deleted due to too much missing values	N.A.
26	Flexible working hours	Data used in construction of CSR decoupling variable	Does the company claim to provide flexible working hours or working hours that promote a work-life balance?
27	Regular staff and business management training	Data used in construction of CSR decoupling variable	Does the company claim to provide regular staff and business management training for its managers?

7.4 Variance inflation factors

Table 11: Variance inflation factors

	VIF	1/VIF
GAAP_ETR	1.16	. 873607
Cash_ETR	1.92	.520639

Current_ETR	1.87	.533461
CL_Gover	1.13	.881552
FL_Gover	1.06	. 942715
LEV	1.08	. 929461
MTB	1.26	. 791944
AN_COV	1.24	. 802964
B_Size	1.27	. 792715
ROA	1.32	. 757591
Mean VIF	1.33	n/a

7.5 Breusch and Pagan Lagrange multiplier test

TABLE 12 : BREUSCH-PAGAN LAGRANGE MULTIPLIER TEST

	CSRD
Chibar2	1676.94
Probability	0.0000

7.6 Hausman test

TABLE 13 : HAUSMAN TEST

	CSRD
Chibar2	94.44
Probability	0.0000

7.7 Wooldridge test

TABLE 14 : WOOLDRIDGE TEST

	CSRD
Chibar2	30.150
Probability	0.0000

7.8 Modified Wald test

TABLE 15 : MODIFIED WALD TEST

	CSRD
Chibar2	34179.04
Probability	0.0000