

Radboud University



Environmental-oriented CSR practices of SMEs

*A quantitative study on the amount of different kinds of
environmental-oriented corporate social responsibility practices
implemented in SMEs*

Author:

Vicky Beck

Student number: s1011204

Supervisor:

Dr. N.S. (Niina) Erkama

Radboud University

Nijmegen

Second assessor:

Prof. dr. A. U. (Ayse) Saka-Helmhout

Radboud University

Nijmegen

12-06-2022

Abstract

Already concluded is that significant differences exist in the use of CSR practices of SMEs and that of larger firms, but still not a lot of research on SMEs regarding CSR practices exists. This research fills this theoretical gap by researching CSR practices of SMEs and adds novel insights on the amount of different kinds of environmental-oriented CSR practices implemented in SMEs. This was done by looking at whether the sector tangibility, country of origin, type of financial support, type of market served and the SME size influence the amount of different kinds of environmental-oriented CSR practices implemented in SMEs. The SME size was analyzed as a moderator, because the size of the firm may not be the determining factor for integrating CSR practices in the firm.

A quantitative research was carried out and the Flash Eurobarometer 456 of the European Commission was used. The results of the regression analyses showed that the sector tangibility, country of origin, type of financial support and the type of market served significantly influence the amount of different kinds of environmental-oriented CSR practices implemented in SMEs. Additionally, this research showed that the SME size only partly moderates the relationship between the type of market served and the amount of different kinds of environmental-oriented CSR practices implemented in SMEs. Next to this, concluded is that the SME size is not found to be a significant moderator for the relationship between the sector tangibility, country of origin and type of financial support and the amount of different kinds of environmental-oriented CSR practices implemented in SMEs.

Acknowledgements

I am happy to announce that my thesis is now finished. This thesis has been written to obtain my master's degree in International Business at the Radboud University. I have been writing this thesis in the months between December 2021 and June 2022.

This thesis has been written with the help of my supervisor, dr. Erkama. She helped me very well with all my questions and uncertainties regarding my thesis. I would like to thank dr. Erkama for all the help, for the helpful insights and for the time spent on giving me feedback.

Furthermore, I would like to thank my second assessor, professor dr. Saka-Helmhout for the helpful feedback on my research proposal and for being my second assessor. Moreover, I would like to thank Bas van Heerwaarden for providing me the option to research this subject and for providing me the necessary documents needed for this research. I would also like to thank dr. Ligthart for helping me with all my questions regarding SPSS. Next to this, I would like to thank my fellow students for the feedback they gave me on my thesis and for the possibility to discuss my ideas with them. Lastly, I would like to thank my friends and family for the patient they had to listen to my problems regarding my thesis and for supporting me. Without the help of all the previously mentioned people I would not have been able to write this thesis, so again, thank you all!

Vicky Beck

Nijmegen, June 2022

Content

1. Introduction	6
1.1 Problem statement	6
1.2 Research objective	7
1.3 Relevance	9
1.4 Thesis outline	10
2. Theoretical background	11
2.1 CSR	11
2.2 SMEs	12
2.3 Sector tangibility	12
2.4 Country of origin	13
2.5 Type of financial support	16
2.6 Type of market served	16
2.7 SME size	17
2.7.1 SME size and sector tangibility	18
2.7.2 SME size and country of origin	19
2.7.3 SME size and type of financial support	19
2.7.4 SME size and type of market served	20
2.8 Conceptual model	20
3. Methodology	22
3.1 Sample and data source	22
3.2 Variables	24
3.2.1 Operationalization of variables	24
3.2.2 Control variables	28
3.3 Method	28
3.4 Ethics	30
3.5 Validity and reliability	30
4. Results	32
4.1 Descriptive statistics	32
4.1.1 Missing data	32

4.1.2	Descriptive statistics of the final sample	33
4.2	Assumptions multiple regression	35
4.3	Hypotheses testing	35
4.3.1	Direct effects	35
4.3.2	Moderation effects	38
4.4	Control variables	40
5.	Discussion and conclusion	41
5.1	Discussion	41
5.2	Conclusion	42
5.2.1	Practical and theoretical implications	43
5.2.2	Limitations	44
5.2.3	Recommendations for further research	44
6.	References	47
7.	Appendices	51
Appendix 1:	Missing data patterns	51
Appendix 2:	Scatterplot	52
Appendix 3:	P-P plots and histogram	53
Appendix 4:	Multicollinearity	55
Appendix 5:	Control variables	56
Appendix 6:	Syntax	58

1. Introduction

Worldwide, a growing interest exists in corporate social responsibility (CSR) (Öberseder, Schlegelmilch, Murphy, & Gruber, 2014). Companies may choose to integrate CSR practices because those companies feel the need to act sustainable and want to make societal contribution (De Jong & van der Meer, 2017). Besides this, research suggests that CSR may be a good way for companies to gain legitimacy of stakeholders and to develop positive social responsibility images (Maignan & Ralston, 2002). However, companies face pressures to act socially responsible as well as create shared value (Stoian & Gilman, 2017).

CSR practices can be disaggregated into four categories. Those four categories are “employees-oriented CSR, environment-oriented CSR, society-oriented CSR and market-oriented CSR (Mandl and Dorr, 2007)” (Feng, Wang, & Kreuze, 2017, p. 107). This research has focused on the environmental-oriented CSR practices. Different kinds of environmental-oriented CSR practices are, for example, saving water, saving energy, recycling, minimizing waste and saving materials.

This research has looked at whether the sector tangibility, country of origin, type of financial support, type of market served and the SME size influence the amount of different kinds of environmental-oriented CSR practices of small and medium-sized enterprises (SMEs).

1.1 Problem statement

Until not that long ago, public attention and governments actions to promote CSR practices only focused on large companies, while now also attention is given to the SMEs (Murillo & Lozano, 2006). Concluded is that significant differences exist in the use of CSR practices and the amount of CSR practices of those SMEs and that of larger firms (Bruyaka, Zeitzmann, Chalamon, Wokutch, & Thakur, 2013). This difference may exist, among others, because smaller firms may be less aware of their CSR potential and because a smaller firm size imposes barriers on smaller firms that constrain their ability to engage in responsible actions (Perrini, Russo, & Tencati, 2007; Lepoutre & Heene, 2006). According to Hoogendoorn, Guerra and Van der Zwan (2015), smaller firms are more reluctant when it comes to greening processes, so in this case CSR practices.

This research has looked at the amount of different kinds of environmental-oriented CSR practices implemented in SMEs. For example, if SMEs are only saving water to be resource efficient or if those SMEs also implement more types of environmental-oriented CSR

practices. Previous research did not look at this amount of different kinds of environmental-oriented CSR practices of SMEs, which results in the theoretical gap, which this research fills. Furthermore, most of the current research on CSR practices is looking at a single industry or country (Perrini et al., 2007; Lepoutre & Heene, 2006; Buchanan & Marques, 2018), while this research has taken multiple countries and industries into account.

The study of Hoogendoorn et al. (2015) researched which factors drive the environmental practices of SMEs and concluded that the type of market served, the environmental legislation, the size of the SME, the type of financial support to be more resource efficient and the sector tangibility influence the amount of environmental practices of SMEs. Since already concluded is that those factors drive the environmental practices of SMEs, those factors have been taken into account for this research when looking at the amount of different kinds of environmental-oriented CSR practices of SMEs. However, the environmental legislation has not directly been taken into account, but this research has looked at the country of origin of the company, since little research is currently present about how the country of origin of a SME influences the amount of CSR practices of SMEs.

The sector tangibility of a firm determines its potential use of natural resources and its potential to pollute (Uhlener, Berent-Braun, Jeurissen, & de Wit, 2012) and because of this, some industries are more sensitive to public concern about CSR practices than other industries (Trencansky & Tsaparlidis, 2014). Furthermore, SMEs receiving financial support to be more resource efficient are more likely to involve in environmental practices than companies receiving no external support or non-financial support (Hoogendoorn et al., 2015). Next to this, selling to public administration rather than to consumers directly is negatively related to the engagement in environmental practices of SMEs (Hoogendoorn et al., 2015). In addition, the study of Buchanan and Marques (2018) already concluded that the home country may drive the choice to implement CSR practices for multinational enterprises (MNEs).

According to different studies, the size of the firm may not be the determining factor for integrating CSR practices in the firm, but just being an indicative of a more complex phenomenon (Etzion, 2007; Karyawati, Muliani, & Joshi, 2019), so the SME size has been analyzed as a moderator in this research.

1.2 Research objective

This research has focused on the country of origin, type of financial support, type of market served, sector tangibility and SME size in relation to the amount of different kinds of

environmental-oriented CSR practices.

With this research, the following research question has been addressed:

'How do the sector tangibility, country of origin, type of financial support and type of market served influence the amount of different kinds of environmental-oriented CSR practices implemented in SMEs?'

To research if the SME size moderates these relationships, the following sub-question has been addressed with this study:

'How does the SME size moderate the relationship between the sector tangibility, country of origin, type of financial support and type of market served and the amount of different kinds of environmental-oriented CSR practices implemented in SMEs?'

To study the sector tangibility, the manufacturing industry, retail industry, services industry and the so called 'industry industry' (such as mining and steam and water supply) have been taken into account. These industries were clustered into intangible service sectors, tangible service sectors and tangible product sectors. For this study, 28 countries were included to analyze whether the country of origin influences the amount of different kinds of environmental-oriented CSR practices implemented in SMEs. Companies with greens in the government in the country of origin for at least 50% of the time between 2013 and 2017 were compared with companies without greens in the government in the country of origin. Greens refer to a green party that is based on the principles of green politics and have highlighted the importance of a green transformation to combat climate change and pursue social justice (Greens in governments, n.d.). To look at the different types of financial support to be more resource efficient, the differences were analyzed between no external support, non-financial external support and financial external support. For the type of market served, a distinguish has been made for the company selling its products directly to the consumers, to other companies, to multiple markets or to public administration. For the SME size, the number of employees the SME consists of has been taken into account, by distinguishing micro-sized enterprises, small-sized enterprises and medium-sized enterprises.

To study the research question and sub-question, a quantitative research has been carried out. To do this, the Flash Eurobarometer 456 of the European Commission was used. This Flash Eurobarometer 456 is a survey done in 2017 and published in 2018, which, among others, looks at the current levels of resource efficiency of SMEs from Europe, some neighboring countries and the U.S. (European Commission, 2018).

This research was done using a multiple regression analysis. Since the size of the firm may not be the determining factor (Etzion, 2007), the SME size was analyzed as a moderator.

1.3 Relevance

This paper makes some contributions. First, currently, most of the research about CSR practices is done on large businesses, while little research exists on SMEs (Perrini et al., 2007). This study aims to fill this gap by researching the relationship between different variables and the amount of different kinds of environmental-oriented CSR practices implemented in SMEs. Secondly, most of the research currently existing on CSR practices is looking at a single industry or country (Perrini et al., 2007; Lepoutre & Heene, 2006), while this research takes several countries and industries into account. Third, this research adds novel insights on the amount of different kinds of environmental-oriented CSR practices implemented in SMEs. Current research is done on the amount of CSR practices, which is not only focused on environmental-oriented CSR practices and does not look at the relationship between variables and the amount of different kinds of environmental-oriented CSR practices. Since SMEs may not be aware of their CSR potential (Perrini et al., 2007), those firms can be made aware of the possibility to implement also other types of environmental-oriented CSR practices in their company.

The practical relevance of this research consists of the fact that SMEs account for about 90% of all the businesses worldwide and for more than 50% of the employment worldwide (The World Bank, n.d.). SMEs may not be aware of their CSR potential (Perrini et al., 2007), so when a certain industry or country scores low on different kinds of environmental-oriented CSR practices, those SMEs can be made aware of the options to include other types of CSR practices, to be more resource efficient. Because SMEs account for about 90% of all the business worldwide, it is important to also research those SMEs and raise awareness of other potential options to include environmental-oriented CSR practices in their SME. This is because firms are more and more expected to adopt CSR practices in their businesses to be environmentally responsible and to not just focus on achieving high economic performances (Cetindamar, 2007). Furthermore, “it is claimed that it can also be economically viable to become environment friendly” (Cetindamar, 2007, p.166).

1.4 Thesis outline

The remainder of this thesis is organized as follows. The next chapter presents the theoretical background, including the hypotheses and the conceptual model. The third chapter consists of the methodology, including the sample and data source, variables, method, validity and reliability and ethics. The fourth chapter includes the results and in the fifth chapter, the conclusion and discussion have been worked out, including the limitations, theoretical and managerial implications and the recommendations for further research.

2. Theoretical background

This section presents the theoretical background, which includes the eight hypotheses in relation to related research. In addition, the conceptual model has been created.

2.1 CSR

A growing interest exists worldwide in CSR practices (Öberseder et al., 2014). However, CSR is not an easy concept to define, since CSR does not mean the same for everybody (Van Marrewijk, 2003) and at least 37 definitions exist in literature on what CSR actually is (Dahlsrud, 2008). Nevertheless, this study adheres the definition of CSR as “a concept whereby companies integrate social, environmental and health concerns in their business strategy (policy) and operations and in their interactions with stakeholders on a voluntary basis” (Saxena, 2016, p. 21).

As stated in the introduction, CSR practices can be disaggregated into four categories. This research has looked at the environmental-oriented CSR practices, which are focused on protecting the environment, sustainable development, efficiently using natural resources and waste and pollution management (Feng et al., 2017). Different kinds of environmental-oriented CSR practices are, for example, saving water, saving energy, recycling, minimizing waste and saving materials.

Organizations may have three different types of motives for engaging in CSR practices. The first one is because the organization wants to make societal contribution and the second motive may be because the organization expects financial or other benefits from the CSR practices. The third motive may be because the organization faces stakeholder pressure to engage in CSR practices. (De Jong & van der Meer, 2017) This third motive can be explained by the stakeholder theory. The stakeholder theory defines a firm as a system of multiple stakeholders (Voinea & Van Kranenburg, 2017). Friedman and Miles (2006) describe organizations as groupings of stakeholders and that the purpose of these organizations should be to manage the interest, needs and viewpoints of those stakeholders. “Stakeholders have been defined as “any identifiable group or individual who can affect the achievement of an organization’s objective, or who is affected by the achievement of an organization’s objectives” (Freeman, 1984: 25)” (Voinea & Van Kranenburg, 2017, p. 52). Organizations mainly face pressure to engage in CSR practices from non-market stakeholders, which are

stakeholders that interact with a firm on a non-economic basis (Voinea & Van Kranenburg, 2017).

As mentioned in the introduction, firms are more and more expected to adopt CSR practices in their businesses, to be environmentally responsible and to not just focus on achieving high economic performances (Cetindamar, 2007).

2.2 SMEs

As discussed in the introduction, until not that long ago, research about CSR practices was mostly done on large companies, while little research existed on SMEs (Murillo & Lozano, 2006). However, concluded is that the CSR practices of large companies are different than those from SMEs (Bruyaka et al., 2013).

Micro-sized enterprises, small-sized enterprises and medium-sized enterprises are part of SMEs. The European Union characterizes a micro-sized enterprise as a company with less than 10 employees, a small-sized enterprise as a company with less than 50 employees and a medium-sized enterprise as a company with less than 250 employees (Liberto, 2020).

2.3 Sector tangibility

The type of industry may influence the amount of CSR practices implemented in a company, since some industries are more sensitive to public concern, such as CSR, than other industries (Trencansky & Tsaparlidis, 2014). Industries can be categorized according to their sector tangibility. The sector tangibility of a firm determines its potential use of natural resources and its potential to pollute (Uhlener et al., 2012). This research has looked at the following types of industries: the manufacturing industry, retail industry, services industry and the so called 'industry industry' (such as mining and steam and water supply), which were clustered into the following types of sector tangibility: tangible product sectors, tangible service sectors and intangible service sectors. The tangible product sectors have the highest potential to pollute and have the highest potential use of natural resources, while the intangible service sectors have the lowest potential to pollute and have the lowest potential use of natural resources.

Hoogendoorn et al. (2015) concluded that SMEs active in the tangible product and service sectors engage more in environmental practices, so in this case the CSR practices, than SMEs active in the intangible service sectors. Furthermore, SMEs in the tangible product sectors engage more in environmental practices than SMEs in the tangible service sectors

(Hoogendoorn et al., 2015). Tangible product sectors include manufacturing, construction, mining and quarrying, electricity, gas, steam and air conditioning supply and water supply, sewerage, waste management and remediation. The tangible service sectors include wholesale and retail, transportation and storage and accommodation and food service activities.

Since firms in the high impact sectors are more sensitive to public concern, the companies in these industries may feel a higher need to engage in CSR practices (Banerjee, Iyer, & Kashyap, 2003). Boutin-Dufresne and Sacaris (2004) argued that firms in particular industries may be more socially responsible by the nature of their activities. In the high environmental impact sectors, the public concern has the greatest impact on the CSR practices (Banerjee et al., 2003). In line with this, Sweeney and Coughlan (2008) concluded that the oil and gas industry, which are tangible product sectors, emphasize the most on the environmental performances, which is also in line with the outcome of the study of Hoogendoorn et al. (2015). Even though firms in the tangible sectors have a high potential to pollute, those firms are likely to be monitored closely and are more aware of the environmental issues (Uhlener et al., 2012). Because of this, firms in those industries engage the most in CSR practices (Hoogendoorn et al., 2015).

However, this previous research did not look at the amount of different kinds of environmental-oriented CSR practices implemented. But, expected is that when the amount of CSR practices differs between different sector tangibility, so will the amount of different kinds of environmental-oriented CSR practices. This results in the first hypothesis:

H1: The sector tangibility is positively related to the amount of different kinds of environmental-oriented CSR practices implemented in SMEs.

2.4 Country of origin

For the relationship between the country of origin of the SME and the amount of different kinds of environmental-oriented CSR practices, the institutional theory has been taken into account. This is because countries differ in their institutional environment and different institutional environments have different rules and laws about CSR practices (Voinea & Van Kranenburg, 2017) and put different pressures on companies to engage in CSR practices.

The institutional theory is concerned with the social context in which organizations operate (Voinea & Van Kranenburg, 2017). According to Campbell (2007), the institutional theory can be explained by the fact that organizations are embedded in a broad set of institutions, which affect their behavior. Institutions can be defined as the rules of the game in

society or as “the humanly devised constraints that shape human interaction” (North, 1993, p.10). A firm can also be defined as an institution. According to North (1993), two types of institutions can be distinguished, namely formal institutions and informal institutions. Scott (1995) divides institutions into three pillars, namely the regulative pillar of institutions, the normative pillar of institutions and the cognitive pillar institutions. Laws, regulations and rules can be identified as formal institutions and fall under the regulative pillar, norms are informal institutions, which are in the normative pillar of institutions and culture and religion are also informal institutions, but belong to the cognitive pillar of institutions (Voinea & Van Kranenburg, 2017). Institutions often create stability in social systems, since institutions only change a little bit over time (Voinea & Van Kranenburg, 2017). This is mostly due to the informal institutions, since norms and culture are not easy to be changed.

Countries differ in their institutional environments, since countries have different laws, rules, norms and cultures (Voinea & Van Kranenburg, 2017). Countries may have rules and norms about to what extent CSR practices should be included in companies. The CSR standards companies have can be seen as institutions, which emerge from social pressures to improve or restore legitimacy of the activities of companies (Ingenbleek & Immink, 2010). Those CSR standards represent the rules companies in these markets should comply with (Ingenbleek & Immink, 2010).

As can be stated because of the institutional theory, companies in different countries may have different amounts of CSR practices implemented in those companies.

For this research, the amount of different kinds of environmental-oriented CSR practices of companies with greens in the government in the country of origin have been compared with the amount of different kinds of environmental-oriented CSR practices of companies without greens in the government in the country of origin within the European Union. Greens refer to a green party that is based on the principles of green politics and have highlighted the importance of a green transformation to combat climate change and pursue social justice (Greens in governments, n.d.). For this research, a country needed to have had greens in the government for at least 50% of the time between 2013 and 2017 to be considered as a country with greens in the government. This is because the Flash Eurobarometer 456 survey has been used, which is a survey from 2017, and because green parties can have an on-off position in the government, countries should have at least had greens in the government for half of the time in the five years before the survey. Denmark, Latvia, Luxembourg and Sweden were

considered as countries with greens in the government for this research (Greens in governments, n.d.).

Previous researches have shown that countries indeed differ in the level of CSR practices implemented in their companies (Chapple & Moon, 2007; Maignan & Ralston, 2002; Gjølberg, 2009). However, previous research on different levels of CSR practices in different countries was not only done on SMEs, but also included large companies. Also, previous research was focused on all kinds of CSR practices and not only on environmental-oriented CSR practices, as this research is, and did not look at the amount of different kinds of environmental-oriented CSR practices. In addition, most of the current researches are done on firms operating in a certain country, but are not looking at the country of origin, like this research is. The study of Buchanan and Marques (2018) concluded that the institutional environment of the home country influences the choices regarding CSR practices of MNEs. This may be due to home country governments putting pressure on firms to engage in responsible investments abroad, such as in CSR (Meyer & Thein, 2014). The paper of Detomasi (2008) also concluded that the political conditions in a firms' home country influence the choice of a firm to pursue CSR practices. This again relates to the institutional theory. Since the government of the home country influences the investments in CSR practices abroad, expected is that companies with greens in the government in the country of origin engage more in CSR practices than companies without greens in the government in the country of origin. This is due to the fact that greens in the government think that the green transformation to combat climate change and pursue social justice is of importance (Greens in governments, n.d.), so expected is that those governments put pressure on companies to engage in CSR practices abroad.

Assumed is that the outcome of this research on SMEs is in line with the outcome of previous research on companies of all sizes or of MNEs and that the amount of different kinds of environmental-oriented CSR practices goes up when the amount of CSR practices does. Because of this, expected is that SMEs with greens in the government in the country of origin have a higher amount of different kinds of environmental-oriented CSR practices than companies without greens in the government in the country of origin. This results in the following hypothesis:

H2: Greens in the government in the country of origin is positively related to the amount of different kinds of environmental-oriented CSR practices implemented in SMEs.

2.5 Type of financial support

According to Hoogendoorn et al. (2015) SMEs receiving financial external support to be more resource efficient engage more in environmental practices than firms that do not receive this financial support. To look at the different types of financial support, the differences have been analyzed between no external support, non-financial external support and financial external support.

Small firms do often not have enough resources to support their activities and investments (Spithoven, Vanhaverbeke, & Roijackers, 2013; Hoogendoorn et al., 2015). Because of this, smaller firms often rely more on personal savings and retained profit, while larger firms are able to access more resources (Berger & Udell, 1998). Roberts, Lawson and Nicholls (2006) concluded that SMEs find it difficult to engage in corporate responsibility due to the costs involved. According to Pimenova and Van Der Vorst (2004), financial constraints are a big obstacle for SMEs to engage in environmental practices. Because of this, expected is that SMEs gaining external support have a higher amount of different kinds of environmental-oriented CSR practices than SMEs gaining no external support and expected is that this relationship is stronger for SMEs receiving financial external support than receiving non-financial external support. This results in the following hypothesis:

H3: Receiving external support is positively related to the amount of different kinds of environmental-oriented CSR practices implemented in SMEs. This positive relationship is stronger for receiving financial external support than for receiving non-financial external support.

2.6 Type of market served

The paper of Hoogendoorn et al. (2015) concluded that the type of market served influences the engagement in greening processes of SMEs.

This research has made a distinction between companies selling its products directly to the consumers, to other companies, to public administration or to multiple markets. Argued by Hoogendoorn et al. (2015) was that serving companies rather than selling directly to the consumers would be positively related to the engagement in greening processes. However, the outcome of that study was not able to support this. This may be due to the fact that by supporting CSR practices, it enables businesses to appeal to the values of their consumers (Ramasamy, Yeung, & Chen, 2013). When selling directly to the consumers, companies may be willing to appeal to the values regarding CSR practices of their consumers, so want to

engage more in CSR practices than when selling to other companies or to public administration. Hoogendoorn et al. (2015) was only able to conclude that SMEs selling their products to public administration are less likely to invest in greening processes than firms selling their products to consumers directly, which is also the expected outcome of this study.

For this study is expected that selling to consumers directly rather than to business markets, to public administration or to multiple markets is positively related to the amount of different kinds of environmental-oriented CSR practices, because businesses want to appeal to the values of their consumers regarding CSR practices. Since no other research exists on the type of market served, the following hypothesis is formulated:

H4: Selling products to consumers directly rather than to other companies, to public administration or to multiple markets is positively related to the amount of different kinds of environmental-oriented CSR practices implemented in SMEs.

2.7 SME size

According to previous research, the firms' size influences the amount of CSR practices of companies (De Abreu, De Castro, De Assis Soares, & Da Silva Filho, 2012). For this research, the size of the SMEs has been taken into account by looking at the number of employees the SME has. A distinguish has been made between micro-sized enterprises (less than 10 employees), small-sized enterprises (less than 50 employees) and medium-sized enterprises (less than 250 employees) (Liberto, 2020).

According to Akram, Tang and Tariq (2020), companies with a larger number of employees have better opportunities to let their employees focus on CSR practices. Other research suggests that larger firms are more visible than smaller firms, which make them more socially responsive (Karyawati et al., 2019). This can be explained by the stakeholder theory worked out above, since when the company is more visible, the company may want to enhance legitimacy in the eyes of the stakeholders (Karyawati et al., 2019). Furthermore, smaller firms may be less aware of their CSR potential (Perrini et al., 2007).

On the contrary, research also suggests that smaller firms have the incentive to engage in CSR practices to achieve higher legitimacy and that a U-shape relationship exists between the firms' size and the amount of CSR practices implemented (Karyawati et al., 2019). But, Bowen (2000) concluded that 9 out of 10 studies found a positive relationship between the firms' size and the CSR practices, which means that the bigger the firms' size, the more the firm engages in CSR practices.

The studies above did not only look at SMEs, since SMEs already have relatively small numbers of employees. Previous research looked only at the differences in firms' size for CSR practices between SMEs and large firms (Perrini et al., 2007), but did not look into the different sizes of SMEs.

Hoogendoorn et al. (2015), however, concluded that the difference in CSR practices is also visible within SMEs and this research concluded that larger SMEs engage more in CSR practices than smaller SMEs. This is because smaller firms are reluctant when it comes to socially responsive behavior. As discussed above, SMEs have limited resources, which hinders them to respond to stakeholder claims. (Hoogendoorn et al., 2015)

Although previous research concluded that the SME size influences the amount of CSR practices implemented in firms, Etzion (2007) came up with the idea that the size may not be the determining factor. Different studies concluded that the firms' size moderates the relationship between the CSR practices of a company and their business performances (Hou, Liu, Fan, & Wei, 2016; Hernández, Yañez-Araque, & Moreno-García, 2020; Youn, Hua, & Lee, 2015). Furthermore, the paper of Darnall, Henriques and Sadorsky (2010), for example, concluded that the relationship between the stakeholder pressure and their environmental strategy is influenced by the firms' size. This also indicates that the firms' size may be an indicative of a more complex phenomenon (Etzion, 2007). Because of this, the SME size has been analyzed as a moderator for this research. This was done by researching whether the SME size, divided into three groups, namely micro-sized, small-sized and medium-sized enterprises, interact with different variables to influence the amount of different kinds of environmental-oriented CSR practices implemented in SMEs.

2.7.1 SME size and sector tangibility

The SME size may play a role within different types of industries with a different sector tangibility. When a company feels a high pressure to engage in CSR practices, which is the case for firms in a high sector tangibility, larger SMEs may be able to implement those CSR practices better, because those firms are more visible and because those larger SMEs have greater resources (Etzion, 2007; Hoogendoorn et al., 2015; Trencansky & Tsaparlidis, 2014). Previous researches also made the distinction between micro-sized enterprises, small-sized enterprises and medium-sized enterprises. Expected is to find differences within a certain sector tangibility for the amount of different kinds of environmental-oriented CSR practices implemented in SMEs for different SME sizes. Assumed is that a positive moderation effect of the SME size on the sector tangibility exists, because larger SMEs are

more able to implement higher amounts of different kinds of environmental-oriented CSR practices when receiving the pressure to implement those environmental-oriented CSR practices, due to their greater resources. This results in the fifth hypothesis:

H5: The SME size positively moderates the relationship between the sector tangibility and the amount of different kinds of environmental-oriented CSR practices implemented in SMEs.

2.7.2 SME size and country of origin

The institutional environment of the home country may influence the CSR practices of companies abroad, because of the government putting pressure on companies to engage in CSR practices abroad (Buchanan & Marques, 2018; Meyer & Thein, 2014). Next to this, larger firms may be more visible, creating greater pressure on those larger firms to engage in CSR practices (Etzion, 2007). As stated above, expected is that companies with greens in the government in the country of origin have a higher amount of different kinds of environmental-oriented CSR practices than companies without greens in the government in the country of origin. When the SME size is higher, expected is that the pressure of the government is higher on the company to engage in CSR practices, due to the larger visibility. Because of this, expected is that the SME size positively moderates the relationship between the country of origin and the amount of different kinds of environmental-oriented CSR practices, which results in the following hypothesis:

H6: The SME size positively moderates the relationship between the country of origin and the amount of different kinds of environmental-oriented CSR practices implemented in SMEs.

2.7.3 SME size and type of financial support

As discussed above, small firms do often not have enough resources to support their activities and investments (Spithoven et al., 2013; Hoogendoorn et al., 2015). Due to this lack of resources, SMEs will possibly engage less in CSR practices than larger firms (Roberts et al., 2006). The financial constraints are a big obstacle for engaging in CSR practices for those SMEs (Pimenova & Van Der Vorst, 2004). As hypothesized above, expected is that due to this lack of resources and the financial constraints as obstacle for engaging in CSR practices, SMEs gaining financial external support implement the highest amount of different kinds of environmental-oriented CSR practices.

SMEs can be divided in micro-sized enterprises, small-sized enterprises and medium-sized enterprises. Expected is that since smaller firms have often less resources, micro-sized

enterprises will have the lowest amount of resources, so will rely the most on the financial external support. Due to this, expected is that the smaller the SME, the more important the external support, which results in a negative moderation effect of the SME size on the relationship between the type of financial support and the amount of different kinds of environmental-oriented CSR practices. This results in the following hypothesis:

H7: The SME size negatively moderates the relationship between the type of financial support and the amount of different kinds of environmental-oriented CSR practices implemented in SMEs.

2.7.4 SME size and type of market served

The type of market served is expected to influence the amount of different kinds of environmental-oriented CSR practices, as stated above. Furthermore, expected is that the SME size interacts with the type of market served to influence the amount of different kinds of environmental-oriented CSR practices. Hoogendoorn et al. (2015) concluded that selling to public administration rather than to consumers is negatively related to the engagement in environmental practices of SMEs. This may be due to the fact that by selling directly to the consumers, companies may be willing to appeal to the values regarding CSR of their consumers (Ramasamy et al., 2013), so want to engage more in CSR practices than when selling to other businesses or to public administration. The size of SMEs influences the amount of resources available (Spithoven et al., 2013), which makes it for larger SMEs more possible to engage in CSR practices. Due to this, expected is that the SME size influences the possibility to appeal to the values of their consumers regarding the amount of different kinds of environmental-oriented CSR practices implemented in the firm. So, expected is that the SME size positively moderates the relationship between the type of market served and the amount of different kinds of environmental-oriented CSR practices. This results in the following hypothesis:

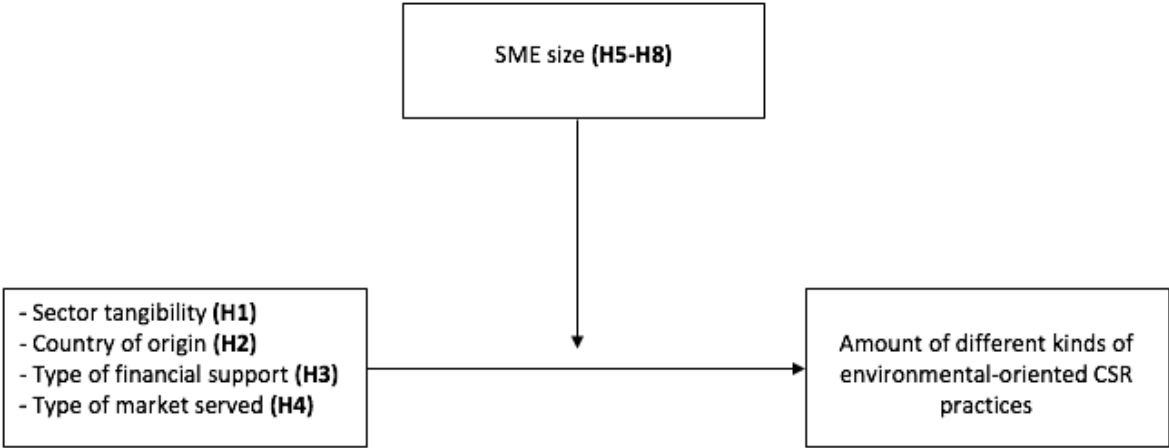
H8: The SME size positively moderates the relationship between the type of market served and the amount of different kinds of environmental-oriented CSR practices implemented in SMEs.

2.8 Conceptual model

Based on the eight hypotheses worked out above, the conceptual model for this research has been created (see Figure 1).

This conceptual model shows an interaction effect and is a formative conceptual model (Hair, Black, Babin, & Anderson, 2014). The dependent variable, which is also called the outcome, is ‘amount of different kinds of environmental-oriented CSR practices’ and the independent variables, which are also called the predictors, are ‘sector tangibility’, ‘country of origin’, ‘type of financial support’ and ‘type of market served’. The moderator is ‘SME size’.

Figure 1
Conceptual model



3. Methodology

This section presents the methodology, consisting of the sample and data source, the variables, including the operationalization of the variables, the method, ethics and the validity and reliability.

3.1 Sample and data source

This research on the relationship between different variables and the amount of different kinds of environmental-oriented CSR practices implemented in SMEs relies on a survey done on behalf of the European Commission in 2017. This survey is published in 2018 and is called ‘SMEs, resource efficiency and green markets’ from the Flash Eurobarometer number 456. This survey was conducted by TNS Political and Social at the request of Directorate-General for internal market, industry, entrepreneurship and SMEs. The survey has been held in 37 countries and the survey covers businesses employing one or more people that are active in one of 11 different sectors, which are categorized in the industries: manufacturing, retail, services and industry. Those firms were randomly selected from an international business database. The sampling method was quota, which is part of a non-probability sampling, and the survey has been carried out by telephone among 15,019 different companies. (European Commission, 2018)

The countries outside the European Union¹ were deleted for this research, which resulted in 28 countries which were taken into account with this research. Next to this, the companies with an employee size above 250 employees were deleted, since this research only takes SMEs into account. This resulted in a sample size of 11,775 (see Table 1).

¹ The survey was conducted in 2017, when the United Kingdom was still part of the European Union. So for this research, the United Kingdom has been included.

Table 1*Descriptive of sampled firms*

Country	Respondents	SME size (in employees)		
		1 to 9	10 to 49	50 to 249
Austria	456	195	161	100
Belgium	456	206	159	91
Bulgaria	425	193	132	100
Croatia	446	179	177	90
Cyprus	190	76	74	40
Czech Republic	439	180	159	100
Denmark	460	171	182	105
Estonia	465	201	161	103
Finland	455	221	142	92
France	461	207	161	93
Germany	447	183	166	98
Greece	459	178	188	93
Hungary	411	157	169	85
Ireland	441	195	137	109
Italy	469	212	161	96
Latvia	429	197	143	89
Lithuania	460	184	173	103
Luxembourg	185	73	76	36
Malta	185	98	60	27
Poland	434	216	152	66
Portugal	466	214	157	95
Romania	436	191	188	57
Slovakia	450	216	143	91
Slovenia	462	201	157	104
Spain	453	207	138	108
Sweden	450	198	156	96
The Netherlands	454	201	159	94
United Kingdom	431	223	123	85
Total	11775	5175	4154	2446

3.2 Variables

This research looked at a fixed effect, since all the variables interesting for this research were included in this research (Field, 2013). For this research, only the variables ‘amount of different kinds of environmental-oriented CSR practices’, ‘country of origin’, ‘type of financial support’, ‘type of market served’, ‘sector tangibility’ and ‘SME size’ were interesting. See also Table 2 for the variables, type of data and references.

3.2.1 Operationalization of variables

In the Flash Eurobarometer 456 survey (European Commission, 2018), the following question was asked to construct the dependent variable ‘amount of different kinds of environmental-oriented CSR practices’: *“What actions is your company undertaking to be more resource efficient?”*. The following options for answering were given: *“Save water”*, *“Save energy”*, *“Use predominantly renewable energy”*, *“Save materials”*, *“Minimize waste”*, *“Sell your scrap material to another company”*, *“Recycle, by reusing material or waste within the company”*, *“Design products that are easier to maintain or reuse”*, *“Other”*, *“None”* and *“DK/NA”*. The respondents could select the ones which, according to them, are adopted in their company. This dependent variable is organized using a metric scale, by regrouping it according to the amount of different actions undertaken to be more resource efficient, with the scale going from zero to eight. When ‘DK/NA’ was answered, those respondents were deleted for this research and the answer ‘none’ counted as zero.

In the Flash Eurobarometer 456 survey (European Commission, 2018), the following question was asked to construct the independent variable ‘sector tangibility’: *“Which sector does your company belong to?”*. The following options for answering were given: *“Mining and quarrying”*, *“Manufacturing”*, *“Electricity, gas, steam and air conditioning supply”*, *“Water supply, sewerage, waste management and remediation”*, *“Construction”*, *“Wholesale and retail trade; repair of motor vehicles and motorcycles”*, *“Transportation and storage”*, *“Accommodation and food service activities”*, *“Information and communication”*, *“Financial and insurance activities”*, *“Real estate activities”*, *“Professional, scientific and technical activities”* and *“Other”*. This variable was clustered into ‘tangible product sectors’, ‘tangible service sectors’ and ‘intangible service sectors’. Tangible product sectors include manufacturing, construction, mining and quarrying, electricity, gas, steam and air conditioning supply and water supply, sewerage, waste management and remediation.

Tangible service sectors include wholesale and retail, transportation and storage and accommodation and food service activities. The intangible service sectors include information and communication, financial and insurance activities, real estate activities and professional, scientific and technical activities. (Hoogendoorn et al., 2015) This variable is on a nominal scale and the group intangible service sectors was taken as a reference category in the multiple regression analysis.

To construct the independent variable ‘country of origin’, the country of origin of the SME of the respondent has been taken into account in the Flash Eurobarometer 456 survey (European Commission, 2018). The following countries were included: *Belgium, Bulgaria, Czech Republic, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, The Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, Croatia, United Kingdom, Albania, Iceland, North Macedonia, Montenegro, Turkey, Norway, Moldova, Serbia and the U.S.* The countries outside the European Union² were deleted. This resulted in 28 countries, which were taken into account with this research. Those countries were clustered into countries with greens in the government in the country of origin for at least 50% of the time between 2013 and 2017 and countries without greens in the government in the country of origin. Denmark, Latvia, Luxembourg and Sweden are countries with greens in the government in the country of origin and the other countries are countries without greens in the government. This variable is on a nominal scale and the group countries with greens in the government was used as the reference category for the multiple regression analysis.

In the Flash Eurobarometer 456 survey (European Commission, 2018), the following question was asked to construct the independent variable ‘type of financial support’: “*Which type of support does your company rely on in its efforts to be more resource efficient?*”. The answer options were: “*Its own financial resources*”, “*Its own technical expertise*”, “*External support*”, “*Other*” or “*DK/NA*”. The following up question was: “*More precisely, which type of external support is it?*”. The answer options were: “*Public funding such as grants, guarantees or loans*”, “*Private funding from a bank, investment company or venture capital fund*”, “*Private funding from friends and relatives*”, “*Advice or other non-financial*”

² The survey was conducted in 2017, when the United Kingdom was still part of the European Union. So for this research, the United Kingdom has been included.

assistance from public administration”, “*Advice or other non-financial assistance from private consulting and audit companies*”, “*Advice or other non-financial assistance from business associations*”, “*Other*” and “*DK/NA*”. After this, this variable was clustered into ‘no external support’, ‘non-financial external support only’ and ‘financial external support’. No external support was the reference category for the multiple regression and this variable is nominal scaled.

In the Flash Eurobarometer 456 survey (European Commission, 2018), the following question was asked to construct the independent variable ‘type of market served’: “*Is your company selling its products or services ...?*” with the answer options: “*Directly to consumers*”, “*To other companies*”, “*To public administration*”, “*Multiple markets*” or “*DK/NA*”. This variable is nominal scaled and selling directly to consumers was the reference category for the multiple regression analysis.

In the Flash Eurobarometer 456 survey (European Commission, 2018), the following question was asked to construct the moderating variable ‘SME size’: “*How many employees does your company have?*”. The answer options were: “*1 to 9 employees*”, “*10 to 49 employees*”, “*50 to 249 employees*”, “*250 employees or more*” and “*DK/NA*”. The companies with 250 employees or more or when DK/NA was answered were excluded for this research, since only the SMEs were relevant for this research. This variable is ordinal scaled and the group micro-sized enterprises was taken as the reference category for the multiple regression analysis.

Table 2*Variables, categories, type of data and references*

Type of variable	Variable	Categories	Type of data	Reference
Dependent variable	Amount of different kinds of environmental-oriented CSR practices	Scale from zero to eight different kinds of environmental-oriented CSR practices	Ratio	
Independent variable	Sector tangibility	Tangible product sectors Tangible service sectors Intangible service sectors ^a	Nominal	Hoogendoorn et al., 2015
	Country of origin	With greens in government ^a Without greens in government	Nominal	Greens in governments, n.d.
	Type of financial support	No external support ^a Non-financial external support only Financial external support	Nominal	Hoogendoorn et al., 2015
	Type of market served	Directly to consumers ^a To other companies To public administration Multiple markets	Nominal	Hoogendoorn et al., 2015
Moderating variable	SME size	0 - 9 employees ^a 10 - 49 employees 50 - 249 employees	Ordinal	Hoogendoorn et al., 2015
Control variable	Age of the firm	< 2 years ^a 3 - 5 years 6 - 10 years > 10 years	Ordinal	Hoogendoorn et al., 2015
	Annual turnover	< 100.000 euros ^a 100.000 - 500.000 euros 500.000 - 2 million euros 2 - 10 million euros 10 - 50 million euros > 50 million euros	Ordinal	Dyduch and Krasodomska, 2017

Note. Since currently no research exists on the amount of different kinds of environmental-oriented CSR practices, no reference is included here.

Note. For the country of origin, the 28 countries available in the database were included.

^a Reference category

3.2.2 Control variables

Control variables were included in this research, to make sure that those variables did not influence the outcome of this research.

The age of the firm was the first control variable. This is because Godos-Díez, Fernández-Gago and Martínez-Campillo (2011) for example, found a positive relationship between the age of the firm and the amount of CSR practices. The study of Withisuphakorn and Jiraporn (2016) concluded that more mature firms significantly invest more in CSR practices. This is because an older firm becomes more responsible in terms of environmental awareness (Withisuphakorn & Jiraporn, 2016). This makes it possible that the age of the firm also influences the amount of different kinds of environmental-oriented CSR practices, since older firms may want to invest more in different kinds of environmental-oriented CSR practices. This control variable is ordinal scaled and the options were: ‘firms that have been in existence for 2 years at most’, ‘firms that have been in existence between 3 and 5 years’, ‘firms that have been in existence between 6 and 10 years’ and ‘firms that have been in existence for more than 10 years’. The reference category was firms that have been in existence for 2 years at most.

The annual turnover was also a control variable. This is because firms with a higher turnover may be able to invest more in CSR practices. The paper of Dyduch and Krasodomska (2017) indeed found a relationship between the annual turnover and the amount of CSR practices. When a company is able to invest more in CSR practices, this company may also be able to invest more in different kinds of environmental-oriented CSR practices. This variable is ordinal scaled and consists of the categories: ‘100.000 euros or less’, ‘more than 100.000 to 500.000 euros’, ‘more than 500.000 to 2 million euros’, ‘more than 2 to 10 million euros’, ‘more than 10 to 50 million euros’ and ‘more than 50 million euros’. The reference category was 100.000 euros or less.

3.3 Method

To test the eight hypotheses, a quantitative research has been carried out. This research

is a deductive research, since the hypotheses were based on earlier research (Field, 2013). The data is primary data, gathered from the Flash Eurobarometer 456 of the European Commission and this data was analyzed using SPSS ('Statistical Package for the Social Sciences'). The data is cross-sectional, since the survey was conducted at one point of time (Field, 2013).

The eight hypotheses were analyzed using a multiple regression analysis. This was done because a multiple regression analysis is a method to analyze the relationship between several independent variables and a dependent variable (Hair et al., 2014).

In this research, the relationship between the sector tangibility, country of origin, type of market served and type of financial support and the amount of different kinds of environmental-oriented CSR practices has been analyzed. Furthermore, the effect of a moderator can be included in a multiple regression analysis (Hair et al., 2014), which in this research was the SME size.

The first step when using SPSS was to check the missing data. The next step was to check whether the assumptions for a multiple regression were met. For a multiple regression, the rule of the thumb is that a minimum sample of 50 observations for most research situations should be present and 20 observations per variable is the preferred ratio. Furthermore, the following four assumptions needed to be fulfilled. The first assumption is the linearity of the phenomenon measured, which was analyzed by looking at the scatterplot. The second assumption is the normality of the residuals distribution, which was analyzed by looking at the P-P plot (probability-probability plot) and the skewness and kurtosis. The third assumption is the independence of residuals, which was analyzed by looking at the value of the Durbin-Watson test. The fourth assumption is the constant variance of the residuals, also called the homoscedasticity, which was analyzed by looking at the scatterplot. Furthermore, checked was whether no multicollinearity exists and whether no influential observations were present. This was done by analyzing the VIF and by looking at the outliers with the Cook's Distance. (Hair et al., 2014)

To test the eight hypotheses, the outcomes of the multiple regression analysis were analyzed. First, the four direct effects, namely the sector tangibility, country of origin, type of financial support and type of market served on the amount of different kinds of environmental-oriented CSR practices, were analyzed. This was done by analyzing the R squared, the F-values and their significance and the regression-coefficient and its significance

(Hair et al., 2014). To do this, the independent variables were dummy coded. Next, the moderation effect of the SME size on the sector tangibility, country of origin, type of financial support and type of market served was analyzed. This was done by making interaction variables and by dummy coding the moderator. (Field, 2013) At the end, checked whether the control variables have influenced the outcome of this study. And again, these variables were dummy coded.

3.4 Ethics

To make sure that the research ethics were taken into account while doing this research, the Netherlands Code of Conduct for Research Integrity (2018) has been used. This code of conduct consists of some principles (honesty, scrupulousness, transparency, independence and responsibility), which set guidelines towards the right choices while doing a research (Netherlands Code of Conduct for Research Integrity, 2018). The principles ‘honesty’ and ‘transparency’ have been taken into account by describing every step taken while writing this thesis as detailed and honest as possible. Furthermore, the opinions of my supervisor and second assessor have been taken as serious as possible. The principle ‘scrupulousness’ has been taken into account by using the knowledge gained from the courses of the master International Business, to meet the standards expected of a master’s thesis and to use methods that are scientific. The principle ‘independence’ has been taken into account by writing the research myself, making my own choices about my thesis and not making the choices guided by non-scientific or non-scholarly considerations. The last principle, ‘responsibility’, has been taken into account by conducting a research that is scientifically relevant and by acknowledging that this research is not done in isolation. (Netherlands Code of Conduct for Research Integrity, 2018)

The European commission has also taken the research ethics into account by, among others, conducting the survey on the phone in the language of the respondent. This was done to make sure that the respondents would understand the questions. In addition, the respondent was able to not answer any question when the respondent did not know the answer. Furthermore, the respondent could stop the survey whenever the respondent wanted to stop. In addition, the survey was completely anonymous. (European Commission, 2018)

3.5 Validity and reliability

Attention has been paid to the validity and reliability of this research.

To make sure that this research is reliable, the sample size assumption of 50 observations for most research situations has been met.

To make sure that this research is valid, the assumptions of a multiple regression have been taken into account. Also, a valid sampling method was used with the Flash Eurobarometer 456, namely quota, which is part of a non-probability sampling.

4. Results

This section includes the results, which have been analyzed with SPSS from the Flash Eurobarometer 456. First, the descriptive statistics are presented, including the missing data. Second, the assumptions of a multiple regression are discussed and third, the hypotheses are tested. Fourth, this chapter analyses whether the control variables have influenced the outcome of this study. The complete syntax can be found in Appendix 6.

4.1 Descriptive statistics

When looking at the statistics, a high number of missing values for some variables was detected (see Table 3). To continue with the analysis, first, the missing data needed to be analyzed.

Table 3

Missing data

Variable	Valid	Missing	Percent Missing (in %)
Amount of different kinds of environmental-oriented CSR practices	11775	0	0
Sector tangibility	11775	0	0
Country of origin	11775	0	0
Type of financial support	11102	673	5.72
Type of market served	11589	186	1.58
SME size	11775	0	0
Age of the firm	11722	53	0.45
Annual turnover	10175	1600	13.59

Note. When DK/NA was answered for the amount of different kinds of environmental-oriented CSR practices, those respondents were already deleted for this research.

Note. When DK/NA was answered for the SME size or when the firm consisted of more than 250 employees, those respondents were already deleted for this research.

4.1.1 Missing data

As can be seen in Table 3, the missing data is over 5% for the variable type of financial support and for the control variable annual turnover. For the other variables, the missing data is below 5%, which means that this can be ignored (Hair et al., 2014). However, for the variables external support and annual turnover, the missing data cannot be ignored, since the missing data is over 5%.

The first thing to check was whether the missing data is completely at random (MCAR) (Hair et al., 2014). Figure A1.1 (Appendix 1) shows no pattern in the missing data in the dataset. A non-random pattern is present when clusters of missing values are present in the upper left and the upper right of this figure (Rubin, 1987), which is not the case here. Furthermore, Figure A1.2 (Appendix 1) shows that over 80% had no missing values and that the remaining groups show no patterns. Because of those findings, concluded can be that the missing data is completely at random (MCAR).

The next step was to select the imputation method. To deal with the missing data, the complete case approach has been used (also known as the listwise method). This method has a downside, namely that the sample size is reduced, because the missing data is deleted. However, the method of replacing missing values, for example, has the downside of creating a bias. (Hair et al., 2014) Since our database has a large sample size of 11,775, deleting missing data with the listwise method was the best option, even though it reduced the sample size. Because of this, the complete case approach for the missing data was used for the variables type of financial support and for the annual turnover.

4.1.2 Descriptive statistics of the final sample

The descriptive statistics can be found in Table 4. After deleting the missing data (including the data for the countries which are not interesting for this research, when DK/NA was answered for the amount of different kinds of environmental-oriented CSR practices and when the SME size was bigger than 250 or when DK/NA for this question was answered), a sample size of 9,656 remained. When looking at the skewness and kurtosis to check unusual patterns, the value of the kurtosis for the age of the company stands out. The value of the kurtosis is 4.30, which is far above the critical value of 3 (Hair et al., 2014). Taking a look at the frequency of the age of the company, concluded was that the group < 2 years only consists of 12 cases. Because of this, this category was merged with the category 3 – 5 years into the category < 5 years, which is also the reference category. Next to this, the kurtosis for the type of financial support is 3.74, which is also above the critical value of 3. However, the frequency of all the groups are at least 747 cases, so the categories are still valid. This is also because the variable financial support is a categorical variable. Because of this, no groups were merged for this variable. All the other values of the kurtosis and skewness fall within the critical range of -3 and 3. (Hair et al., 2014)

As can be seen in Table 5, 13.26% of the SMEs did not engage in any type of environmental-oriented CSR practices. Furthermore, only 1.57% of the SMEs engaged in all the eight different types of environmental-oriented CSR practices.

Table 4

Descriptive statistics

Variable	Mean	Median	Mode	Std. Deviation	Skewness	Kurtosis
Amount of different kinds of environmental-oriented CSR practices	3.37	3.00	4	2.197	.036	-1.033
Sector tangibility	1.76	2.00	1	.729	.400	-1.048
Country of origin	1.87	2.00	2	.340	-2.158	2.658
Type of financial support	1.24	1.00	1	.582	2.272	3.744
Type of market served	2.74	2.00	4	1.254	-.161	-1.675
SME size	1.76	2.00	1	.767	.435	-1.185
Age of the firm	1.28	1.00	1	.647	2.246	4.298
Annual turnover	2.80	3.00	2	1.344	0.310	-.796

Note. N=9,656.

Table 5

Sample descriptive

Amount of different kinds of environmental-oriented CSR practices	SME size			Total	Percent (in %)
	1-9 employees	10-49 employees	50-249 employees		
0	755	375	150	1280	13.26
1	581	396	180	1157	11.98
2	518	424	221	1163	12.04
3	602	455	226	1283	13.29
4	636	549	278	1463	15.15
5	597	529	329	1455	15.07
6	368	404	333	1105	11.44
7	172	237	189	598	6.19
8	41	53	58	152	1.57
Total	4270	3422	1964	9656	100

4.2 Assumptions multiple regression

The assumptions for a multiple regression needed to be fulfilled. First, the sample size should be large enough. The rule of the thumb is that a minimum sample of 50 observations for most research situations should be present and that 20 observations per variable is the preferred ratio (Hair et al., 2014). Since this research consists of six variables and two control variables, the preferred sample size was at least 160. This requirement was met, since the sample size is 9,656 and almost all research observations have a minimum sample of 50.

Next to this, the four assumptions needed be fulfilled for the data with a sample size of 9,656. Those four assumptions are the linearity of the phenomenon measured, the normality of the residuals distribution, the independence of the residuals and the constant variance of the residuals (Hair et al., 2014). The first assumption is the linearity of the phenomenon measured, which is fulfilled, as can be seen in the scatterplot (see Appendix 2) based on ZRESID (the standardized residuals) and ZPRED (the standardized predicted values of the dependent variable based on the model). Looking at the skewness, kurtosis and the P-P plots (see Table 4 and Appendix 3) the second assumption, the normality of the residuals distribution, is fulfilled. The third assumption is the independence of residuals, which was first not fulfilled when looking at the value of the Durbin-Watson test, because this value should be around 2 and the outcome of our Durbin-Watson test was .214. However, by arranging the data according to their sector, the outcome of the Durbin-Watson test was 1.69, which is acceptable. By looking at the scatterplot based on ZRESID and ZPRED, concluded can be that homoscedasticity is present in this research, so the fourth assumption is fulfilled. (Hair et al., 2014)

Next, the multicollinearity was analyzed. The VIF should be below 10, which is the case for all the variables (see Appendix 4). At the end, the outliers have been detected with the Cook's Distance and were deleted when the outcome was higher than $0.00041 (4 / (N - k - 1))$, with N being the sample size and k being the amount of independent variables) (Hair et al., 2014). This resulted in a sample size of 9,246.

4.3 Hypotheses testing

4.3.1 Direct effects

Hypotheses one, two, three and four were tested using a multiple regression. To do so, all

the four independent variables were dummy coded. For every variable, the amount of dummies is equal to the amount of categories that variable has minus one, with the category without a dummy being the reference category (Field, 2013). The confirmatory method for specifying the regression model was used, so all the independent variables were included simultaneously (Hair et al., 2014). See Table 6 and Table 7 for the coefficients of the regression analysis and the model summary of the regression analysis.

The multiple regression with the amount of different kinds of environmental-oriented CSR practices as dependent variable and the sector tangibility, country of origin, type of financial support and type of market served as independent variables is significant ($F(4.9241) = 161.34; p < .05$).

For the sector tangibility with as dummy the tangible product sectors, the regression coefficient, $\beta_1 = .997$ and this coefficient is significant ($t(4.9241) = 16.61; p < .05$). Furthermore, with the tangible service sectors as dummy, the regression coefficient, $\beta_1 = .589$ and this coefficient is significant ($t(4.9241) = 9.76; p < .05$). This means that compared to the intangible product sectors, the amount of different kinds of environmental-oriented CSR practices is higher when being part of the tangible service sectors or the tangible product sectors, which is stronger for being part of the tangible product sectors than for being part of the tangible service sectors. This provides support for hypothesis 1.

For the country of origin with as dummy no greens in the government in the country of origin, the regression coefficient, $\beta_1 = -.302$ and this coefficient is significant ($t(4.9241) = -4.75; p < .05$). This means that compared to having greens in the government in the country of origin, the amount of different kinds of environmental-oriented CSR practices is lower when having no greens in the country of origin, which provides support for hypothesis 2.

For the type of financial support with as dummy non-financial external support, the regression coefficient, $\beta_1 = 1.433$ and this coefficient is significant ($t(4.9241) = 18.46; p < .05$). For the type of financial support with as dummy financial external support, the regression coefficient, $\beta_1 = 1.763$ and this coefficient is significant ($t(4.9241) = 21.86; p < .05$). This means that compared to receiving no external support, the amount of different kinds of environmental-oriented CSR practices is higher when receiving non-financial external support and financial external support, which is stronger for receiving financial external support than for receiving non-financial external support. Because of this, hypothesis 3 is supported.

For the type of market served with as dummy selling to companies, the regression

coefficient, $\beta_1 = .137$ and this coefficient is significant ($t(4.9241) = 2.32; p < .05$). For the type of market served with as dummy selling to public administration, the regression coefficient, $\beta_1 = -.004$ and this coefficient is not significant ($t(4.9241) = -.01; p > .05$). For the type of market served with as dummy selling to multiple markets, the regression coefficient, $\beta_1 = .542$ and this coefficient is significant ($t(4.9241) = 10.07; p < .05$). This means that compared to selling to consumers directly, the amount of different kinds of environmental-oriented CSR practices is higher when selling to other companies or to multiple markets. Therefore, hypothesis 4 is rejected.

The value of the adjusted R^2 ($Adjusted R^2 = .122$) shows that those four variables can only account for 12.2% of the variation in the amount of different kinds of environmental-oriented CSR practices. This means that 12.2% of the variation in the amount of different kinds of environmental-oriented CSR practices can be explained by the sector tangibility, country of origin, type of financial support and type of market served. Therefore, other variables must be present, which also have an influence on the amount of different kinds of environmental-oriented CSR practices implemented in SMEs (Field, 2013).

Table 6
Coefficients of regression analysis

Model	β	Std. Error	t	Sig.
(Constant)	2.406	.086	28.14	.000
DummyTangProduct	.997	.060	16.61	.000
DummyTangService	.589	.060	9.76	.000
DummyNoGreens	-.302	.064	-4.75	.000
DummyNonFinancialSupp	1.433	.078	18.46	.000
DummyFinancialSupp	1.763	.081	21.86	.000
DummyToCompanies	.137	.059	2.32	.020
DummyToPublicAdmin	-.004	.279	-.01	.989
DummyToMultipleMarkets	.542	.054	10.07	.000

Note. N=9,246.

Table 7*Model summary of regression analysis*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
Model summary	.350	.123	.122	2.004	161.34	.000

Note. N=9,246

4.3.2 Moderation effects

To test hypotheses five, six, seven and eight, the moderation effect was analyzed by creating interaction variables. To do this, the SME size was also dummy coded. See Table 8 and Table 9 for the coefficients of the moderation effect and the model summary of the moderation effect.

The moderation effect of the SME size on the relationship between the amount of different kinds of environmental-oriented CSR practices and the four independent variables is significant ($F(4.9241) = 59.10; p < .05$).

Looking at the outcome of the moderation effect of the SME size on the relationship between the amount of different kinds of environmental-oriented CSR practices and the sector tangibility, only the interaction effect with as dummies the tangible product sectors and medium-sized enterprises is significant ($t(4.9241) = 2.96; p < .05$). Because of this, hypothesis 5 is rejected.

Looking at the outcome of the moderation effect of the SME size on the relationship between the amount of different kinds of environmental-oriented CSR practices and the country of origin, all effects are insignificant. Therefore, hypothesis 6 is rejected.

Looking at the outcome of the moderation effect of the SME size on the relationship between the amount of different kinds of environmental-oriented CSR practices and the type of financial support, all effects are insignificant. Because of this, hypothesis 7 is rejected.

Looking at the outcome of the moderation effect of the SME size on the relationship between the amount of different kinds of environmental-oriented CSR practices and the type of market served, with as dummies selling to companies and small-sized enterprises, the regression coefficient, $\beta_1 = .697$ and this coefficient is significant ($t(4.9241) = 5.24; p < .05$). Furthermore, with as dummies selling to companies and medium-sized enterprises, the regression coefficient, $\beta_1 = .863$ and this coefficient is also significant ($t(4.9241) = 4.94; p < .05$). However, all the outcomes for the dummies selling to public administration and selling to multiple markets are insignificant. Therefore, hypothesis 8 is only partly supported.

Table 8*Coefficients of moderation effect*

Model	β	Std. Error	t	Sig.
(Constant)	2.405	.117	20.47	.000
DummyTangProduct	.808	.087	9.32	.000
DummyTangService	.567	.083	6.82	.000
DummyNoGreens	-.247	.094	-2.64	.008
DummyNonFinancialSupp	1.311	.139	9.41	.000
DummyFinancialSupp	1.573	.158	9.93	.000
DummyToCompanies	-.376	.085	-4.43	.000
DummyToPublicAdmin	-.276	.448	-.62	.538
DummyToMultipleMarkets	.424	.073	5.79	.000
DummySmallSize	.105	.191	.55	.582
DummyMediumsize	.314	.252	1.25	.213
DummyTangProduct *	-.075	.136	-.55	.580
DummySmallSize				
DummyTangProduct *	.491	.166	2.96	.003
DummyMediumsize				
DummyTangService *	-.094	.134	-.70	.485
DummySmallSize				
DummyTangService *	.038	.172	.22	.824
DummyMediumSize				
DummyNogreens *	-.001	.141	-.01	.993
DummySmallSize				
DummyNogreens *	-.332	.173	-1.91	.056
DummyMediumSize				
DummyNonFinancialSupp	-.075	.185	-.41	.685
* DummySmallSize				
DummyNonFinancialSupp	.168	.200	.84	.402
* DummyMediumSize				
DummyFinancialSupp *	.177	.203	.87	.383
DummySmallSize				
DummyFinancialSupp *	-.051	.212	-.24	.808
DummyMediumSize				
DummyToCompanies *	.697	.133	5.24	.000
DummySmallSize				
DummyToCompanies *	.863	.175	4.94	.000
DummyMediumSize				

DummyToPublicAdmin *	.583	.645	.90	.366
DummySmallSize				
DummyToPublicAdmin *	.290	.707	.41	.681
DummyMediumSize				
DummyToMultipleMarkets	.179	.119	1.50	.134
* DummySmallSize				
DummyToMultipleMarkets	.239	.166	1.44	.151
* DummyMediumSize				

Note. N=9,246.

Table 9

Model summary of moderation effect

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
Model summary	.378	.143	.140	1.983	59.10	.000

Note. N=9,246.

4.4 Control variables

After running the multiple regression analyses, checked was whether the two control variables have influenced the outcome of this research (see Appendix 5). When the control variables were included in the multiple regression analysis and in the moderator analysis, both analyses were still significant.

The first control variable, the age of the firm, is positive and significant for the dummy variable of the age over 10 years for both analyses. Expected was that the older the firm, the higher the amount of different kinds of environmental-oriented CSR practices. With a positive and significant regression coefficient for the age over 10 years, concluded can be that firms with the age over 10 years had a higher amount of different kinds of environmental-oriented CSR practices than firms below the age of 5 years.

The second control variable, the annual turnover, is significant for all the dummy variables and for both analyses. Expected was that the higher the annual turnover, the higher the amount of different kinds of environmental-oriented CSR practices implemented in SMEs. With a positive and significant regression coefficient, which is higher when the annual turnover is higher, concluded can be that the higher the annual turnover, the higher the amount of different kinds of environmental-oriented CSR practices implemented in SMEs.

5. Discussion and conclusion

This section presents the discussion and conclusion of this research, including the practical and theoretical implications, the limitations of this research and the recommendations for further research.

5.1 Discussion

The current study supported hypotheses one, two and three, which is in line with previous research. However, hypothesis four has been rejected. This study found that compared to selling to customers directly, selling to companies or to multiple markets is positively related to the amount of different kinds of environmental-oriented CSR practices implemented in SMEs, while a negative relationship was expected. This may be due to the fact that when serving business markets, it is harder to differentiate their products (Hoogendoorn et al., 2015) or when selling to multiple markets, so SMEs selling to businesses or to multiple markets may be willing to include higher amounts of different kinds of environmental-oriented CSR practices to differentiate themselves from other SMEs.

Moreover, this study did not find significant effects of the moderator, SME size, on the relationship between the sector tangibility, country of origin and type of financial support and the amount of different kinds of environmental-oriented CSR practices implemented in SMEs. Furthermore, only a partly significant effect of the moderator, SME size, on the relationship between the type of market served and the amount of different kinds of environmental-oriented CSR practices implemented in SMEs was found. Those results did not provide support for hypothesis five, six and seven and only partly supported hypothesis eight. This is in contrast with studies that concluded that the firms' size may be an indicative of a more complex phenomenon (Etzion, 2007). This may be due to the fact that, as other studies concluded, the SME size directly influences the amount of CSR practices (De Abreu et al., 2012; Akram et al., 2020), which may also be the case for the amount of different kinds of environmental-oriented CSR practices.

Additionally, the results of this study showed that the sector tangibility, country of origin, type of financial support and type of market served only account for 12.2% in the variation in the amount of different kinds of environmental-oriented CSR practices implemented in SMEs, and after including the moderator 'SME size', 14.0% in the variation in the amount of different kinds of environmental-oriented CSR practices implemented in SMEs is accounted for. This means that other variables must be present which also influence the amount of

different kinds of environmental-oriented CSR practices implemented in SMEs. A variable which could be researched is for example the environmental legislation, since Hoogendoorn et al. (2015) already concluded that the environmental legislation drives the environmental practices of SMEs. In addition, another variable which could be researched is the knowledge of the owner or managers of SMEs about CSR, since Eua-anant, Ayuwat and Promphakping (2011) concluded that this knowledge influences the amount of CSR practices of SMEs.

5.2 Conclusion

This quantitative study answered the following research question: *'How do the sector tangibility, country of origin, type of financial support and type of market served influence the amount of different kinds of environmental-oriented CSR practices implemented in SMEs?'* and the following sub-question: *'How does the SME size moderate the relationship between the sector tangibility, country of origin, type of financial support and type of market served and the amount of different kinds of environmental-oriented CSR practices implemented in SMEs?'*

The results showed a positive and significant effect of the sector tangibility on the amount of different kinds of environmental-oriented CSR practices, which supports the first hypothesis. In addition, a negative and significant effect was found for the group 'no greens in the government' on the amount of different kinds of environmental-oriented CSR practices, which supports the second hypothesis. Furthermore, a positive and significant effect was found for receiving external support on the amount of different kinds of environmental-oriented CSR practices, which was stronger for receiving financial external support than for receiving non-financial external support. Therefore, hypothesis three is supported. However, only a partly positive and significant effect was found for the type of market served on the amount of different kinds of environmental-oriented CSR practices, while a negative effect was expected. This rejects hypothesis four.

Insignificant effects of the moderator, SME size, on the relationships between the amount of different kinds of environmental-oriented CSR practices and the sector tangibility, the country of origin and the type of financial support were found. This means that the fifth, sixth and seventh hypotheses are rejected. Next to this, only a partly significant and positive effect of the moderator, SME size, on the relationship between the amount of different kinds of environmental-oriented CSR practices and the type of market served was found. This effect was only found for the group 'selling to companies'. This partly supports hypothesis eight.

This research has therefore shown that the sector tangibility positively influences the amount of different kinds of environmental-oriented CSR practices implemented in SMEs and that greens in the government in the country of origin positively influences the amount of different kinds of environmental-oriented CSR practices implemented in SMEs. Moreover, this research has shown that receiving external support positively influences the amount of different kinds of environmental-oriented CSR practices implemented in SMEs and that selling to consumers rather than to businesses or to multiple markets negatively influences the amount of different kinds of environmental-oriented CSR practices implemented in SMEs. Furthermore, this research has shown that the SME size only partly positively moderates the relationship between the type of market served and the amount of different kinds of environmental-oriented CSR practices implemented in SMEs. Next to this, concluded is that the SME size is not found to be a significant moderator for the relationship between the sector tangibility, country of origin and type of financial support and the amount of different kinds of environmental-oriented CSR practices implemented in SMEs.

5.2.1 Practical and theoretical implications

As pointed out in the introduction, SMEs account for about 90% of all the businesses worldwide (The World Bank, n.d.). Moreover, already concluded was that the amount of CSR practices differs between SMEs and MNEs, while current research is mostly focused on MNEs. This research contributes to the current literature by researching SMEs instead of MNEs and adds novel insights on the amount of different kinds of environmental-oriented CSR practices implemented in SMEs influenced by the sector tangibility, country of origin, type of market served, type of financial support and the SME size.

The findings are, among others, useful for governments wanting SMEs to include higher amounts of CSR practices in their businesses, since it is now clear which sectors, for example, engage in less different kinds of environmental-oriented CSR practices. The governments can make those SMEs aware of their potential to include more different kinds of environmental-oriented CSR practices, since SMEs are often not aware of their CSR potential (Perrini et al., 2007). Next to this, since firms are more and more expected to adopt CSR practices in their businesses to be environmentally responsible and to not just focus on achieving high economic performances (Cetindamar, 2007), the outcome of this research is relevant for managers who want to be more environmentally responsible. Because those managers now know that, for example, receiving financial external support for CSR practices

may lead to a higher amount of different kinds of environmental-oriented CSR practices, those managers can respond to this information.

5.2.2 Limitations

This research contains some limitations.

The first limitation is that the survey was carried out in 2017, which is already five years ago. The results of older data are always less relevant, because things may have changed in the meanwhile. Furthermore, things may have changed regarding CSR practices for SMEs due to the COVID-19 situation, “because COVID-19 questions the core purpose of what a firm is about and what role it should play in society” (Crane & Matten, 2020, p. 283).

The second limitation is the fact that the data is gathered by a survey conducted on behalf of the European Union, so the data was not gathered by myself. Due to this, it was not possible to formulate the questions myself in a way that I could work the best with the data.

The third limitation is that a social bias might exist. This bias occurs when respondents report unrealistic behavior, while acting differently in reality. This may have happened, for example, when the respondent filled in that the firm implements more different kinds of environmental-oriented CSR practices in their business than is actually the truth. The bias is tried to be kept down as much as possible by ensuring anonymity for the respondents.

The fourth limitation of this study is that for clustering the countries, countries with greens in the government are the countries that had greens in the government in the country of origin for at least 50% of the time between 2013 and 2017. However, this may be a too short period of time for some companies to feel the pressure of greens in the government to include different kinds of environmental-oriented CSR practices in their business. Since the amount of greens in the government is growing and before 2013 not that much greens were present in governments (Greens in governments, n.d.), looked was at greens in the government in the time between 2013 and 2017.

5.2.3 Recommendations for further research

To get a better insight on the amount of different kinds of environmental-oriented CSR practices implemented in SMEs, further research should be carried out. Below, some suggestions are presented.

The first suggestion is to research other variables which may influence the amount of

different kinds of environmental-oriented CSR practices implemented in SMEs. This is because the sector tangibility, country of origin, type of financial support and type of market served only account for 12.2% in the variation in the amount of different kinds of environmental-oriented CSR practices implemented in SMEs. And after including the moderator 'SME size', the variables account for 14.0% in the variation in the amount of different kinds of environmental-oriented CSR practices implemented in SMEs. As discussed above, variables which may be researched are for example the environmental legislation and the knowledge of the owner or managers of SMEs about CSR.

The second suggestion is to research whether the amount of different kinds of environmental-oriented CSR practices of SMEs influences the economic performances of SMEs. Already concluded is that the amount of CSR practices positively influences the economic performances of businesses (Helmig, Spraul, & Ingenhoff, 2016; Wang & Chen, 2017). When being able to conclude that, for example, a higher amount of different kinds of environmental-oriented CSR practices is related to higher economic performances, SMEs may be willing to implement higher amounts of different kinds of environmental-oriented CSR practices.

The third suggestion is to also research the amount of different kinds of environmental-oriented CSR practices implemented in SMEs for countries outside the European Union. This is because this research only took the countries within the European Union into account, while concluded is that the amount of CSR practices differs between countries within the European Union and outside the European Union (Gjølberg, 2009).

The fourth suggestion is to also research the amount of different kinds of environmental-oriented CSR practices for MNEs. This research only took SMEs into account and already concluded is that the amount of CSR practices differs between SMEs and that of larger firms (Bruyaka et al., 2013). Currently, no research exists on the amount of different kinds of environmental-oriented CSR practices for MNEs.

The fifth suggestion is to research the effect of the SME size on the amount of different kinds of environmental-oriented CSR practices as a direct effect and not as a moderator effect. This is because this research was only able to conclude that the SME size moderates the relationship between SMEs selling to companies and the amount of different kinds of environmental-oriented CSR practices and all the other moderating effects of the SME size were insignificant. Since some studies concluded that the size of a firm directly influences the amount of CSR practices (De Abreu et al., 2012; Akram et al., 2020), the SME size may also

be researched as a direct effect on the amount of different kinds of environmental-oriented CSR practices.

The sixth and last suggestion is to carry out the survey again and to do the same research with this new data, since the survey used for this research has been carried out in 2017, which is already five years ago. As discussed in the limitations, things may have changed regarding CSR practices for SMEs due to the COVID-19 situation.

6. References

- Akram, A., Tang, Y., & Tariq, J. (2020). Unveiling the Effectiveness of Agency Cost and Firms' Size as Moderators Between CSR Disclosure and Firms' Growth. *Frontiers in Psychology, 11*, 1624.
- Banerjee, S. B., Iyer, E. S. & Kashyap, R. K. (2003). Corporate Environmentalism: Antecedents and Influence of Industry Type. *Journal of Marketing, 67*, pp. 106-122
- Berger, A. N., & Udell, G. F. (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. *Journal of banking & finance, 22*(6-8), 613-673.
- Boutin-Dufresne, F. & Savaria, P. (2004). Corporate Social Responsibility and financial risk. *The Journal of Investing 13*: 57–66.
- Bowen, F.E. (2000). Environmental visibility: a trigger of green organizational response? *Business Strategy and the Environment, 92–107*.
- Bruyaka, O., Zeitzmann, H. K., Chalamon, I., Wokutch, R. E., & Thakur, P. (2013). Strategic corporate social responsibility and orphan drug development: Insights from the US and the EU biopharmaceutical industry. *Journal of Business Ethics, 117*(1), 45-65.
- Buchanan, S., & Marques, J. C. (2018). How home country industry associations influence MNE international CSR practices: Evidence from the Canadian mining industry. *Journal of World Business, 53*(1), 63-74.
- Campbell, J. L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of management Review, 32*(3), 946-967.
- Cetindamar, D. (2007). Corporate social responsibility practices and environmentally responsible behavior: The case of the United Nations Global Compact. *Journal of business Ethics, 76*(2), 163-176.
- Chapple, W., & Moon, J. (2007). CSR agendas for Asia. *Corporate Social Responsibility and Environmental Management, 14*(4), 183-188.
- Crane, A., & Matten, D. (2020). COVID-19 and the future of CSR research. *Journal of Management Studies*.
- Dahlsrud, A. (2008). How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management, 15*(1), 1–13.
- Darnall, N., Henriques, I., & Sadorsky, P. (2010). Adopting proactive environmental strategy: The influence of stakeholders and firm size. *Journal of management studies, 47*(6), 1072-1094.
- De Abreu, M. C. S., De Castro, F., De Assis Soares, F., & Da Silva Filho, J. C. L. (2012). A comparative understanding of corporate social responsibility of textile firms in Brazil and China. *Journal of Cleaner Production, 20*(1), 119-126.
- De Jong, M. D., & van der Meer, M. (2017). How does it fit? Exploring the congruence between

- organizations and their corporate social responsibility (CSR) activities. *Journal of business ethics*, 143(1), 71-83.
- Detomasi, D. A. (2008). The political roots of corporate social responsibility. *Journal of Business Ethics*, 82(4), 807-819
- Dyduch, J., & Krasodomska, J. (2017). Determinants of corporate social responsibility disclosure: An empirical study of Polish listed companies. *Sustainability*, 9(11), 1934.
- Etzion, D. (2007). Research on organizations and the natural environment, 1992-present: A review. *Journal of Management*, 33(4), 637-664.
- Eua-anant, P., Ayuwat, D., & Promphakping, B. (2011). Relations between positive impacts of CSR, external support, CSR knowledge and the degree of CSR practices in Thai small and medium enterprises. *International Business & Economics Research Journal (IBER)*, 10(11), 17-26.
- European Commission, Brussels. (2018). Flash Eurobarometer 456 (Small and Medium Enterprises, Resource Efficiency and Green Markets, wave 4). *GESIS Data Archive, Cologne. ZA6917 Data file Version 1.0.0*, <https://doi.org/10.4232/1.12966>.
- Feng, M., Wang, X., & Kreuze, J. G. (2017). Corporate social responsibility and firm financial performance: Comparison analyses across industries and CSR categories. *American Journal of Business*.
- Field, A. (2013). *Discovering statistics using IBM SPSS Statistics* (4th ed.). London, England: Sage.
- Friedman, A. L., & Miles, S. (2006). *Stakeholders: Theory and practice*. OUP Oxford.
- Gjørberg, M. (2009). Measuring the immeasurable?: Constructing an index of CSR practices and CSR performance in 20 countries. *Scandinavian journal of management*, 25(1), 10-22.
- Godos-Díez, J. L., Fernández-Gago, R., & Martínez-Campillo, A. (2011). How important are CEOs to CSR practices? An analysis of the mediating effect of the perceived role of ethics and social responsibility. *Journal of Business Ethics*, 98(4), 531-548.
- Greens in governments. (n.d.). The Greens/EFA in the European Parliament. Retrieved April 19, 2022, from <https://www.greens-efa.eu/en/fighting-for-you/greens-in-governments>
- Hair (Jr.), J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis*. Harlow, England: Pearson Education Limited.
- Helmig, B., Spraul, K., & Ingenhoff, D. (2016). Under positive pressure: How stakeholder pressure affects corporate social responsibility implementation. *Business & Society*, 55(2), 151-187
- Hernández, J. P. S. I., Yañez-Araque, B., & Moreno-García, J. (2020). Moderating effect of firm size on the influence of corporate social responsibility in the economic performance of micro-, small-and medium-sized enterprises. *Technological Forecasting and Social Change*, 151, 119774.
- Hoogendoorn, B., Guerra, D., & van der Zwan, P. (2015). What drives environmental practices of

- SMEs? *Small Business Economics*, 44(4), 759–781.
- Hou, M., Liu, H., Fan, P., & Wei, Z. (2016). Does CSR practice pay off in East Asian firms? A meta analytic investigation. *Asia Pacific Journal of Management*, 33(1), 195-228.
- Ingenbleek, P. T., & Immink, V. M. (2010). Managing conflicting stakeholder interests: An exploratory case analysis of the formulation of corporate social responsibility standards in the Netherlands. *Journal of Public Policy & Marketing*, 29(1), 52-65.
- Karyawati, G., Muliani, M., & Joshi, P. L. (2019). Re-examining firm size and corporate social responsibility: The visibility approach. *EMAJ: Emerging Markets Journal*, 9(1), 1-15.
- Lepoutre, J., & Heene, A. (2006). Investigating the impact of firm size on small business social responsibility: A critical review. *Journal of business ethics*, 67(3), 257-273.
- Liberto, D. (2020, November 14). *Small and Mid-size Enterprise (SME)*. Investopedia. Retrieved February 8, 2022, from <https://www.investopedia.com/terms/s/smallandmidsizeenterprises.asp>
- Maignan, I., & Ralston, D. A. (2002). Corporate social responsibility in Europe and the US: Insights from businesses' self-presentations. *Journal of International Business Studies*, 33(3), 497-514.
- Meyer, K. E., & Thein, H. H. (2014). Business under adverse home country institutions: The case of international sanctions against Myanmar. *Journal of World Business*, 49(1), 156-171.
- Murillo, D., & Lozano, J. M. (2006). SMEs and CSR: An approach to CSR in their own words. *Journal of business ethics*, 67(3), 227-240.
- Netherlands Code of Conduct for Research Integrity (2018). <https://www.vsnu.nl/files/documents/Netherlands%20Code%20of%20Conduct%20for%20Research%20Integrity%202018.pdf>
- North, D. C. (1993). Institutions and credible commitment. *Journal of Institutional and Theoretical Economics (JITE)/Zeitschrift für die gesamte Staatswissenschaft*, 11-23.
- Öberseder, M., Schlegelmilch, B. B., Murphy, P. E., & Gruber, V. (2014). Consumers' perceptions of corporate social responsibility: Scale development and validation. *Journal of Business Ethics*, 124(1), 101-115.
- Perrini, F., Russo, A., & Tencati, A. (2007). CSR strategies of SMEs and large firms. Evidence from Italy. *Journal of business ethics*, 74(3), 285-300.
- Pimenova, P., & Van Der Vorst, R. (2004). The role of support programmes and policies in improving SMEs environmental performance in developed and transition economies. *Journal of Cleaner Production*, 12(6), 549-559.
- Ramasamy, B., Yeung, M. C., & Chen, J. (2013). Selling to the urban Chinese in East Asia: Do CSR and value orientation matter?. *Journal of Business Research*, 66(12), 2485-2491
- Roberts, S., Lawson, R., & Nicholls, J. (2006). Generating regional-scale improvements in SME corporate responsibility performance: Lessons from responsibility Northwest. *Journal of business ethics*, 67(3), 275-286.

- Rubin, D. B. (1987). *Multiple Imputation for Nonresponse in Surveys*. New York, NY: John Wiley & Sons.
- Saxena, S. (2016). A comparative study of corporate social responsibility (CSR) of private and public sector banks. *World Wide Journal of Multidisciplinary Research and Development*, 2(1), 21-23.
- Scott, W. R. (1995). *Institutions and organizations* (Vol. 2). Thousand Oaks, CA: Sage.
- Spithoven, A., Vanhaverbeke, W., & Roijakkers, N. (2013). Open innovation practices in SMEs and large enterprises. *Small business economics*, 41(3), 537-562.
- Stoian, C., & Gilman, M. (2017). Corporate social responsibility that “pays”: A strategic approach to CSR for SMEs. *Journal of Small Business Management*, 55(1), 5-31.
- Sweeney, L., & Coughlan, J. (2008). Do different industries report corporate social responsibility differently? An investigation through the lens of stakeholder theory. *Journal of Marketing Communications*, 14(2), 113-124.
- The World Bank. (n.d.). *Small and Medium Enterprises (SMEs) Finance*. Retrieved April 6, 2022, from <https://www.worldbank.org/en/topic/smefinance>
- Trencansky, D., & Tsaparlidis, D. (2014). The effects of company s age, size and type of industry on the level of CSR: The development of a new scale for measurement of the level of CSR.
- Uhlener, L. M., Berent-Braun, M. M., Jeurissen, R. J., & de Wit, G. (2012). Beyond size: Predicting engagement in environmental management practices of Dutch SMEs. *Journal of Business Ethics*, 109(4), 411-429.
- Van Marrewijk, M. (2003). Concepts and definitions of CSR and corporate sustainability: Between agency and communion. *Journal of business ethics*, 44(2), 95-105.
- Voinea, C., & Van Kranenburg, H. (2017). *Nonmarket Strategic Management*. Routledge.
- Wang, Y. S., & Chen, Y. J. (2017). Corporate social responsibility and financial performance: Event study cases. *Journal of Economic Interaction and Coordination*, 12(2), 193-219.
- Withisuphakorn, P., & Jiraporn, P. (2016). The effect of firm maturity on corporate social responsibility (CSR): do older firms invest more in CSR?. *Applied Economics Letters*, 23(4), 298-301.
- Youn, H., Hua, N., & Lee, S. (2015). Does size matter? Corporate social responsibility and firm performance in the restaurant industry. *International Journal of Hospitality Management*, 51, 127-134.

7. Appendices

Appendix 1: Missing data patterns

Figure A1.1
Missing value patterns 1

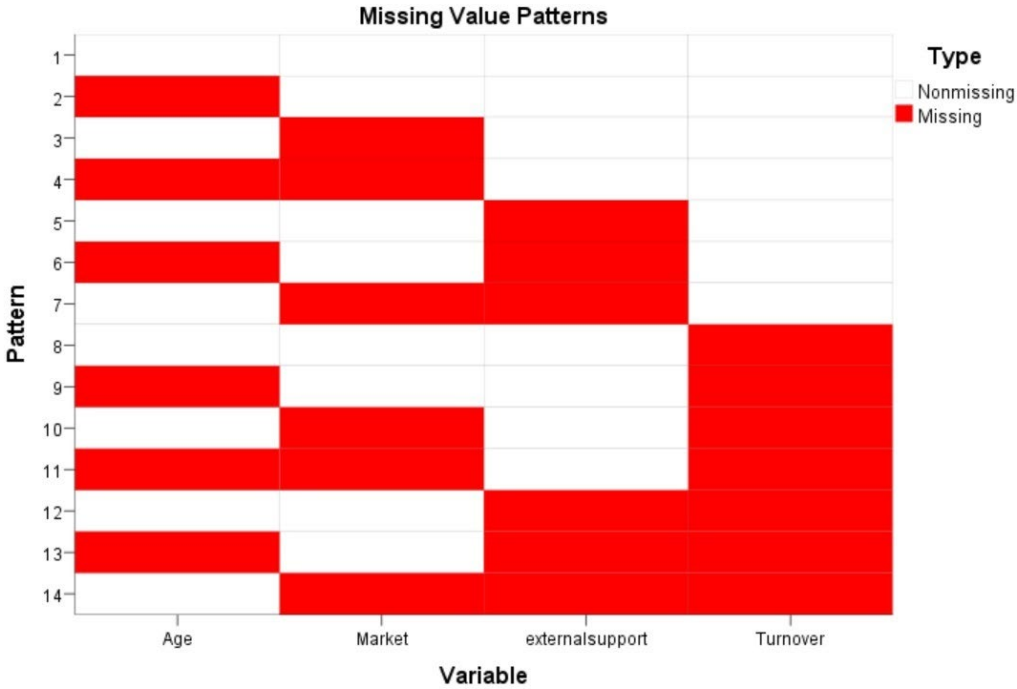
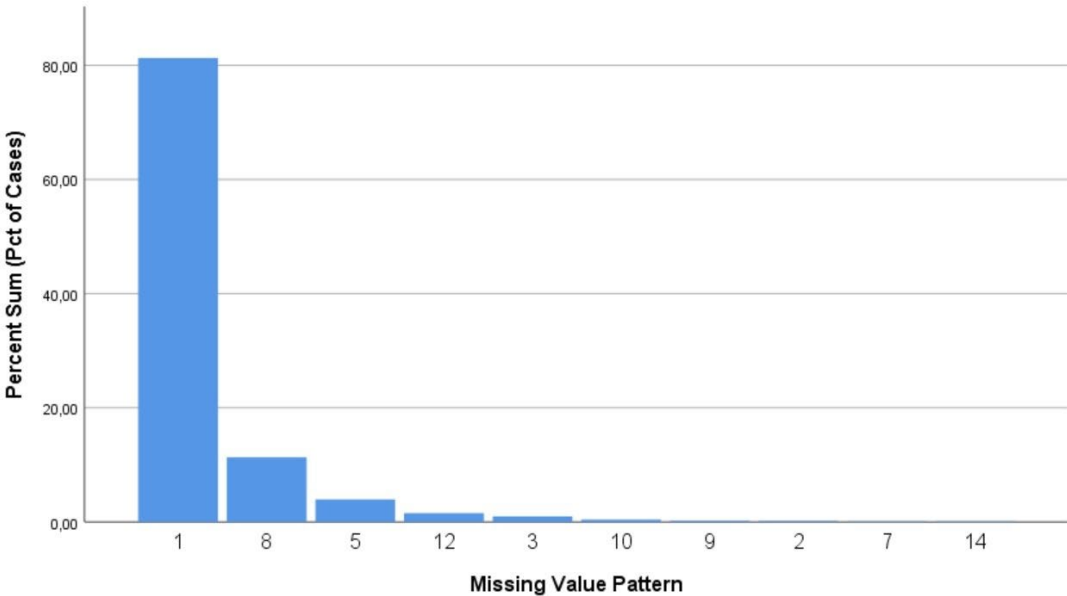


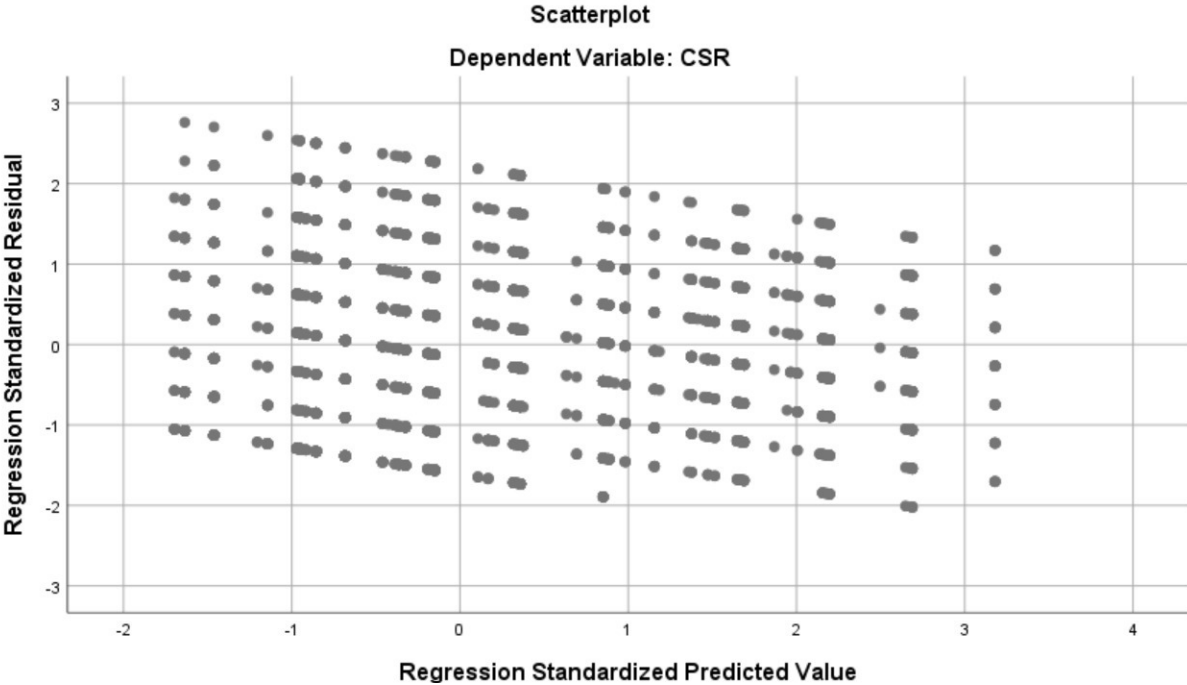
Figure A1.2
Missing value patterns 2



The 10 most frequently occurring patterns are shown in the chart.

Appendix 2: Scatterplot

Figure A2.1
Scatterplot



Appendix 3: P-P plots and histogram

Figure A3.1
P-P plot regression standardized residual

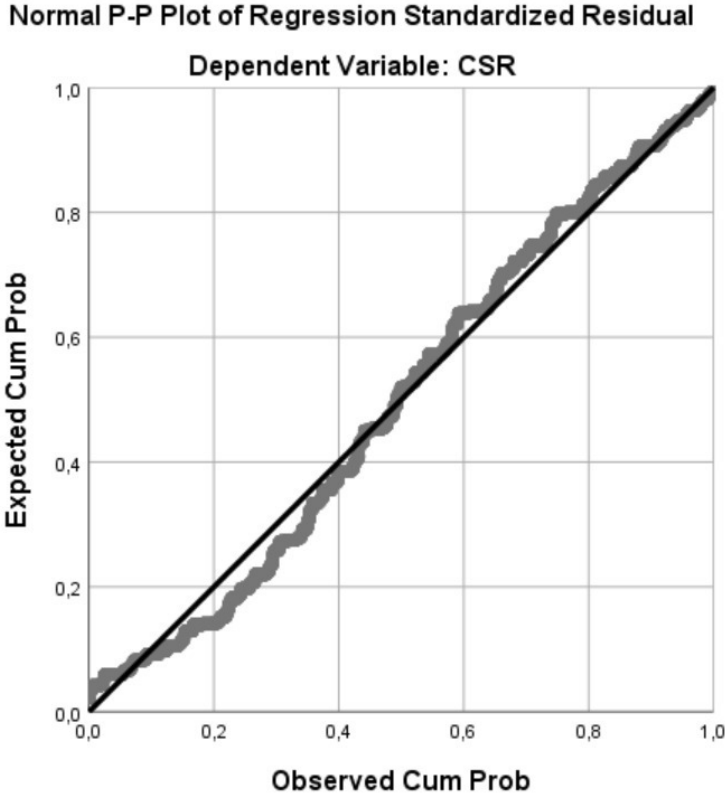


Figure A3.2
Histogram regression standardized residual

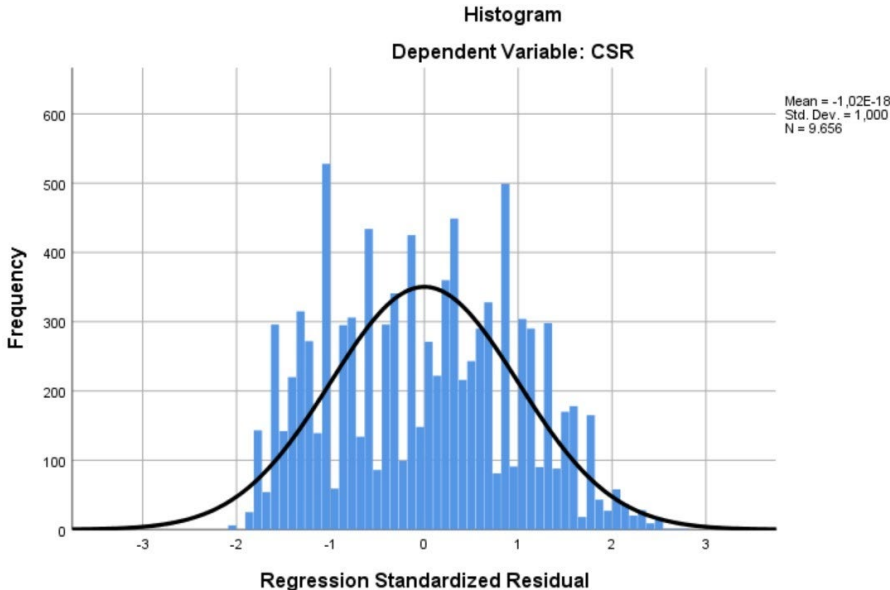
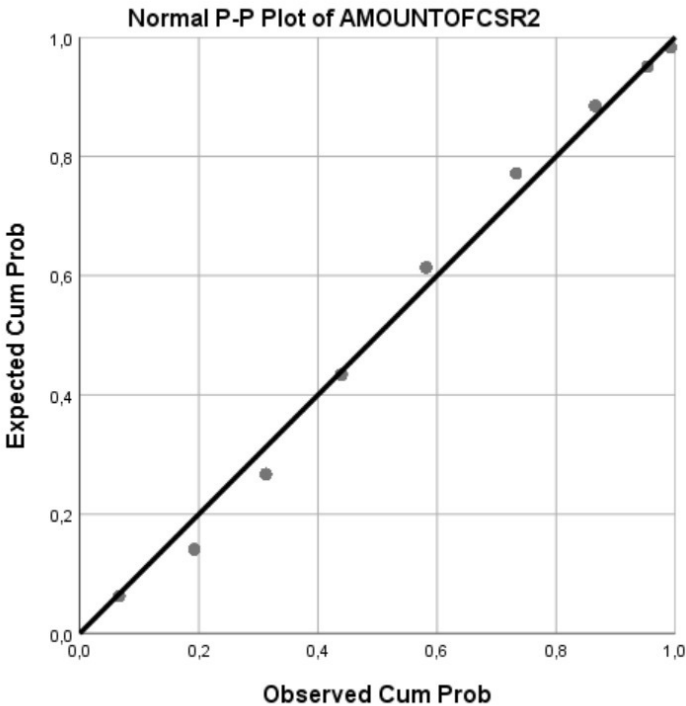


Figure A3.3

P-P plot amount of different kinds of environmental-oriented CSR practices



Appendix 4: Multicollinearity

Table A4.1
Collinearity statistics

Variable	Tolerance	VIF
Sector tangibility: intangible product sectors ^a		
Sector tangibility: tangible product sectors	.498	2.009
Sector tangibility: tangible service sectors	.491	2.035
Country of origin: greens in the government ^a		
Country of origin: no greens in the government	.981	1.019
Type of financial support: no external support ^a		
Type of financial support: non-financial support	.961	1.040
Type of financial support: financial support	.959	1.042
Type of market served: directly to consumers ^a		
Type of market served: to other companies	.572	1.748
Type of market served: to public administration	.941	1.063
Type of market served: to multiple markets	.575	1.738
SME size: micro-sized enterprises ^a		
SME size: small-sized enterprises	.616	1.624
SME size: medium-sized enterprises	.447	2.235
Age of the firm: < 5 years ^a		
Age of the firm: 6 – 10 years	.575	1.740
Age of the firm: > 10 years	.554	1.804
Annual turnover: < 100.000 euros ^a		
Annual turnover: 100.00 – 500.000 euros	.578	1.730
Annual turnover: 500.000 – 2 million euros	.491	2.035
Annual turnover: 2 – 10 million euros	.416	2.405
Annual turnover: 10 – 50 million euros	.462	2.164
Annual turnover: > 50 million euros	.783	1.278

Dependent variable: amount of different kinds of environmental-oriented CSR practices

^a Reference category

Appendix 5: Control variables

Table A5.1

Coefficients of control variables direct effect

Model	β	Std. Error	t	Sig.
(Constant)	1.960	.107	18.30	.000
DummyAge6to10years	-.095	.096	-.99	.324
DummyAge>10years	.194	.071	2.73	.006
DummyTurnover100to500	.410	.062	6.66	.000
DummyTurnover500to2mil	.551	.064	8.61	.000
DummyTurnover2to10mil	.790	.068	11.63	.000
DummyTurnover10to50mil	1.073	.085	12.67	.000
DummyTurnover>50mil	1.193	.152	7.82	.000

Note. N=9,246.

Table A5.2

Model summary of control variables direct effect

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
Model summary	.385	.149	.147	1.975	107.39	.000

Note. N=9,246.

Table A5.3

Coefficients of control variables moderation analysis

Model	β	Std. Error	t	Sig.
(Constant)	2.070	.133	15.59	.000
DummyAge6to10years	-.087	.096	-.91	.365
DummyAge>10years	.192	.071	2.70	.007
DummyTurnover100to500	.417	.062	6.68	.000
DummyTurnover500to2mil	.552	.070	7.93	.000
DummyTurnover2to10mil	.740	.080	9.22	.000
DummyTurnover10to50mil	.918	.103	8.94	.000
DummyTurnover>50mil	1.052	.163	6.45	.000

Note. N=9,246.

Table A5.4*Model summary of control variables moderation analysis*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
Model summary	.395	.156	.153	1.968	51.69	.000

Note. N=9,246.

Appendix 6: Syntax

* Clustering variables

```
COMPUTE CSR=q1.1 + q1.2 + q1.3 + q1.4 + q1.5 + q1.6 + q1.7 + q1.8.  
EXECUTE.
```

```
COMPUTE markettype= 0.  
IF (scr15.1=1 and scr15.2=0 and scr15.3=0) markettype = 1.  
IF (scr15.1=0 and scr15.2=1 and scr15.3=0) markettype = 2.  
IF (scr15.1=0 and scr15.2=0 and scr15.3=1) markettype = 3.  
IF (scr15.1=1 and scr15.2=1 and scr15.3=0) markettype = 4.  
IF (scr15.1=1 and scr15.2=0 and scr15.3=1) markettype = 4.  
IF (scr15.1=0 and scr15.2=1 and scr15.3=1) markettype = 4.  
IF (scr15.1=1 and scr15.2=1 and scr15.3=1) markettype = 4.  
IF (scr15.4=1) markettype = 9.  
EXECUTE.
```

```
COMPUTE externalsupport = 1.  
IF (externalsupport_yesno=9) externalsupport = 9.  
IF (externalsupport_yesno=0) externalsupport = 1.  
IF (q6.1=1 OR q6.2=1 OR q6.3=1) AND (q6.4=1 OR q6.5=1 OR q6.6=1) externalsupport =  
4.  
IF (q6.1=1 OR q6.2=1 OR q6.3=1) AND (q6.4=0 AND q6.5=1 AND q6.6=1) externalsupport  
= 3.  
IF (q6.1=0 AND q6.2=0 AND q6.3=0) AND (q6.4=1 OR q6.5=1 OR q6.6=1) externalsupport  
= 2.  
IF (q6.1=0 AND q6.2=0 AND q6.3=0 AND q6.4=0 AND q6.5=0 AND q6.6=0 AND q6.7=1)  
externalsupport = 9.  
IF (q6.8=1) externalsupport = 9.  
EXECUTE.
```

```
RECODE externalsupport (1=1) (2=2) (3=3) (4=3) (9=9).  
EXECUTE.
```

```
RECODE nace_a (1=1) (2=1) (5=1) (3=1) (4=1) (6=2) (7=2) (8=2) (9=3) (10=3) (11=3)  
(12=3) INTO  
SectorTangibility.  
VARIABLE LABELS SectorTangibility 'SectorTangibility'.  
EXECUTE.
```

```
RECODE isocntry ('DE'=1) ('LV'=1) ('LU'=1) ('SE'=1) (ELSE=2) INTO CountryGreens.  
VARIABLE LABELS CountryGreens 'CountryGreens'.  
EXECUTE.
```

```
COMPUTE externalsupport_yesno = 0.  
IF (q5.3=1) externalsupport_yesno = 1.
```

```
IF (q5.3=0) externalsupport_yesno = 0.  
IF (q5.5=1) externalsupport_yesno = 9.  
EXECUTE.
```

```
COMPUTE externalsupport = 1.  
IF (externalsupport_yesno=9) externalsupport = 9.  
IF (externalsupport_yesno=0) externalsupport = 1.  
IF (q6.1=1 OR q6.2=1 OR q6.3=1) AND (q6.4=1 OR q6.5=1 OR q6.6=1) externalsupport =  
4.  
IF (q6.1=1 OR q6.2=1 OR q6.3=1) AND (q6.4=0 AND q6.5=1 AND q6.6=1) externalsupport  
= 3.  
IF (q6.1=0 AND q6.2=0 AND q6.3=0) AND (q6.4=1 OR q6.5=1 OR q6.6=1) externalsupport  
= 2.  
IF (q6.1=0 AND q6.2=0 AND q6.3=0 AND q6.4=0 AND q6.5=0 AND q6.6=0 AND q6.7=1)  
externalsupport = 9.  
IF (q6.8=1) externalsupport = 9.  
EXECUTE.
```

*** Analyzing missing data**

```
FREQUENCIES VARIABLES=scr10at AGE turnover markettype CSR SectorTangibility  
CountryGreens  
externalsupport  
/ORDER=ANALYSIS.
```

***Analyzing Patterns of Missing Values**

```
MULTIPLE IMPUTATION AGE Turnover markettype externalsupport  
/IMPUTE METHOD=NONE  
/MISSINGSUMMARIES OVERALL VARIABLES (MAXVARS=25  
MINPCTMISSING=10) PATTERNS.
```

*** Analyzing descriptive statistics**

```
DESCRIPTIVES VARIABLES=CountryGreens markettype CSR SectorTangibility  
externalsupport AGE Turnover  
scr10at  
/STATISTICS=MEAN STDDEV MIN MAX KURTOSIS SKEWNESS.
```

```
CROSSTABS  
/TABLES=CSR BY scr10at  
/FORMAT=AVALUE TABLES  
/CELLS=COUNT  
/COUNT ROUND CELL.
```

```
PLOT  
/VARIABLES=CSR  
/NOLOG  
/NOSTANDARDIZE  
/TYPE=P-P
```

/FRACTION=BLOM
/TIES=MEAN
/DIST=NORMAL.

* Encoding: UTF-8.

*** Merging < 2 years and 3 – 5 years**

RECODE AGE (1=1) (2=2) (3=3) (4=3) (5=5) INTO RegroupAge.
VARIABLE LABELS RegroupAge 'RegroupAge'.
EXECUTE.

***Creating dummy variables of the nominal variables**

RECODE externalsupport (2=1) (ELSE=0) INTO DumNonfinancial.
VARIABLE LABELS DumNonfinancial 'DumNonfinancial'.
EXECUTE.

RECODE externalsupport (3=1) (ELSE=0) INTO DumFinancialSupp.
VARIABLE LABELS DumFinancialSupp 'DumFinancialSupp'.
EXECUTE.

RECODE CountryGreens (2=1) (ELSE=0) INTO DumNoGreens.
VARIABLE LABELS DumNoGreens 'DumNoGreens'.
EXECUTE.

RECODE markettype (2=1) (ELSE=0) INTO DumCompanies.
VARIABLE LABELS DumCompanies 'DumCompanies'.
EXECUTE.

RECODE markettype (3=1) (ELSE=0) INTO DumPublic.
VARIABLE LABELS DumPublic 'DumPublic'.
EXECUTE.

RECODE markettype (4=1) (ELSE=0) INTO DumMultiple.
VARIABLE LABELS DumMultiple 'DumMultiple'.
EXECUTE.

RECODE SectorTangibility (1=1) (ELSE=0) INTO DumTangProd.
VARIABLE LABELS DumTangProd 'DumTangProd'.
EXECUTE.

RECODE SectorTangibility (2=1) (ELSE=0) INTO DumTangServ.
VARIABLE LABELS DumTangServ 'DumTangServ'.
EXECUTE.

RECODE scr10at (2=1) (ELSE=0) INTO DumSmall.
VARIABLE LABELS DumSmall 'DumSmall'.
EXECUTE.

RECODE scr10at (3=1) (ELSE=0) INTO DumMed.
VARIABLE LABELS DumMed 'DumMed'.
EXECUTE.

RECODE AGE (1=1) (ELSE=0) INTO Dummorethan10.
VARIABLE LABELS Dummorethan10 'Dummorethan10'.
EXECUTE.

RECODE AGE (2=1) (ELSE=0) INTO Dum6to10.
VARIABLE LABELS Dum6to10 'Dum6to10'.
EXECUTE.

RECODE turnover (2=1) (ELSE=0) INTO Dum100to500.
VARIABLE LABELS Dum100to500 'Dum100to500'.
EXECUTE.

RECODE turnover (3=1) (ELSE=0) INTO Dum500to2mil.
VARIABLE LABELS Dum500to2mil 'Dum500to2mil'.
EXECUTE.

RECODE turnover (4=1) (ELSE=0) INTO Dum2to10mil.
VARIABLE LABELS Dum2to10mil 'Dum2to10mil'.
EXECUTE.

RECODE turnover (5=1) (ELSE=0) INTO Dum10to50mil.
VARIABLE LABELS Dum10to50mil 'Dum10to50mil'.
EXECUTE.

RECODE turnover (6=1) (ELSE=0) INTO DumMoreThan50mil.
VARIABLE LABELS DumMoreThan50mil 'DumMoreThan50mil'.
EXECUTE.

***Creating interaction variables for the moderation analysis**

COMPUTE TangServiceMediumSize=DumTangServ * DumMed.
EXECUTE.

COMPUTE TangProductMediumSize=DumTangProd * DumMed.
EXECUTE.

COMPUTE TangProductSmallSize=DumTangProd * DumSmall.
EXECUTE.

COMPUTE NoGreensSmallSize=DumNoGreens * DumSmall.
EXECUTE.

COMPUTE NoGreensMediumSize=DumNoGreens * DumMed.

EXECUTE.

COMPUTE NonFinancialSuppMediumSize=DumNonfinancial * DumMed.
EXECUTE.

COMPUTE NonFinancialSuppSmallSize=DumNonfinancial * DumSmall.
EXECUTE.

COMPUTE FinancialSuppSmallSize=DumFinancialSupp * DumSmall.
EXECUTE.

COMPUTE FinancialSuppMediumSize=DumFinancialSupp *DumMed.
EXECUTE.

COMPUTE ToComaniesMediumSize=DumCompanies *DumMed.
EXECUTE.

COMPUTE ToComaniesSmallSize=DumCompanies *DumSmall.
EXECUTE.

COMPUTE ToPubAdminSmallSize=DumPublic *DumSmall.
EXECUTE.

COMPUTE ToPubAdminMediumSize=DumPublic *DumMed.
EXECUTE.

COMPUTE ToMultipleMarketsMediumSize=DumMultiple *DumMed.
EXECUTE.

COMPUTE ToMultipleMarketsSmallSize=DumMultiple *DumSmall.
EXECUTE.

*** Checking assumptions**

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT CSR

/METHOD=ENTER DumNonfinancial DumFinancialSupp DumNoGreens DumCompanies

DumPublic DumMultiple

DumTangProd DumTangServ

/SCATTERPLOT=(*ZRESID ,*ZPRED)

/RESIDUALS DURBIN HISTOGRAM(ZRESID) NORMPROB(ZRESID)

/SAVE COOK.

REGRESSION

```
/DESCRIPTIVES MEAN STDDEV CORR SIG N
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT CSR
/METHOD=ENTER DumNonfinancial DumFinancialSupp DumNoGreens DumCompanies
DumPublic DumMultiple
DumTangProd DumTangServ DumSmall DumMed TangServiceSmallSize
TangServiceMediumSize
TangProductMediumSize TangProductSmallSize NoGreensSmallSize
NoGreensMediumSize
NonFinancialSuppMediumSize NonFinancialSuppSmallSize FinancialSuppSmallSize
FinancialSuppMediumSize
ToComaniesMediumSize ToComaniesSmallSize ToPubAdminSmallSize
ToPubAdminMediumSize
ToMultipleMarketsMediumSize ToMultipleMarketsSmallSize
/SCATTERPLOT=(*ZRESID,*ZPRED)
/RESIDUALS DURBIN HISTOGRAM(ZRESID) NORMPROB(ZRESID)
/SAVE COOK.
```

*** Regression analysis H1 - H4**

REGRESSION

```
/DESCRIPTIVES MEAN STDDEV CORR SIG N
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT CSR
/METHOD=ENTER DumNonfinancial DumFinancialSupp DumNoGreens DumCompanies
DumPublic DumMultiple
DumTangProd DumTangServ
```

*** Moderation analysis H5 – H8**

REGRESSION

```
/DESCRIPTIVES MEAN STDDEV CORR SIG N
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT CSR
/METHOD=ENTER DumNonfinancial DumFinancialSupp DumNoGreens DumCompanies
DumPublic DumMultiple
DumTangProd DumTangServ DumSmall DumMed TangServiceSmallSize
TangServiceMediumSize
```

TangProductMediumSize TangProductSmallSize NoGreensSmallSize
 NoGreensMediumSize
 NonFinancialSuppMediumSize NonFinancialSuppSmallSize FinancialSuppSmallSize
 FinancialSuppMediumSize
 ToComaniesMediumSize ToComaniesSmallSize ToPubAdminSmallSize
 ToPubAdminMediumSize
 ToMultipleMarketsMediumSize ToMultipleMarketsSmallSize

*** Control variables**

REGRESSION

/MISSING LISTWISE
 /STATISTICS COEFF OUTS R ANOVA
 /CRITERIA=PIN(.05) POUT(.10)
 /NOORIGIN
 /DEPENDENT CSR
 /METHOD=ENTER DumNonfinancial DumFinancialSupp DumNoGreens DumCompanies
 DumPublic DumMultiple
 DumTangProd DumTangServ
 /METHOD=ENTER Dum6to10 DumMoreThan10 Dum100to500 Dum500to2mil
 Dum2to10mil
 Dum10to50mil DumMoreThan50mil.

REGRESSION

/DESCRIPTIVES MEAN STDDEV CORR SIG N
 /MISSING LISTWISE
 /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE
 /CRITERIA=PIN(.05) POUT(.10)
 /NOORIGIN
 /DEPENDENT CSR
 /METHOD=ENTER DumNonfinancial DumFinancialSupp DumNoGreens DumCompanies
 DumPublic DumMultiple
 DumTangProd DumTangServ DumSmall DumMed TangServiceSmallSize
 TangServiceMediumSize
 TangProductMediumSize TangProductSmallSize NoGreensSmallSize
 NoGreensMediumSize
 NonFinancialSuppMediumSize NonFinancialSuppSmallSize FinancialSuppSmallSize
 FinancialSuppMediumSize
 ToComaniesMediumSize ToComaniesSmallSize ToPubAdminSmallSize
 ToPubAdminMediumSize
 ToMultipleMarketsMediumSize ToMultipleMarketsSmallSize
 /METHOD=ENTER Dum100to500 Dum500to2mil Dum2to10mil Dum10to50mil
 DumMoreThan50mil Dum6to10
 Dummorethan10