ABSTRACT
This paper looks into Corporate Social Responsibility (CSR) coalitions, contributing to an almost unexplored field of CSR research. This paper is the first to empirically compare CSR performance of coalition members to non-coalition members, examining coalition effectiveness. A signalling approach is used to hypothesize that due to information asymmetry and self-regulation within coalitions, coalition members score worse on CSR than non-members. It is expected that this negative relationship is weaker in more tangible industries. Using OLS regression, controlled for size, industry and financial performance, opposite results are found. Coalition members show higher CSR performance than non-members. Within the coalition, the product sector scores significantly better on CSR than the service sector. These results open a debate about what factors make coalitions effective and how coalition members differ from non-coalition members.
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1. Introduction

CSR has received an increasing amount of attention during the past decade (Lindgreen & Swaen, 2010). 95% of the 250 biggest companies in the United States publish reports on their Corporate Social Responsibility (CSR) programs (Mahoney et al., 2013). Companies are finding ways to improve their socially responsible behavior in different ways. One of these ways is joining a CSR coalition. Examples of CSR coalitions are the Dutch Sustainable Growth Coalition, World Business Council for Sustainable Development (WBCSD) and MVO Nederland. Grayson and Nelson (2013) define a coalition as follows:

"Independent, non-profit, membership organisations that are composed mainly or exclusively of for-profit businesses; that have a board of directors composed predominantly or only of business people; that are core-funded primarily or totally from business; and whose dedicated purpose is to promote responsible business practice."

(Grayson & Nelson, 2013, p. 21)

Even though CSR coalitions occur in at least 70 countries (Grayson et al., 2014), they do not receive scientific attention. There have been some case studies looking into specific coalitions only (Grayson & Nelson, 2013). Furthermore, there has been some research on the reasons companies join such a coalition. Like the research conducted by Dentoni and Peterson (2011), which shows that companies participate in a coalition to signal to their competitors that they are willing to commit to a sustainable strategy (Dentoni & Peterson, 2011). Other forms of coalitions in which governments or NGO's are involved, have been researched (Seitanidi & Crane, 2009; Selsky & Parker, 2005; Brockmyer & Fox, 2015; Grayson & Nelson, 2013).

This paper adds to the current research framework by looking at the effectiveness of coalition membership. Also, the classification of the different types of coalitions to be found in the literature framework and the overview of CSR coalitions (appendix: Table 9) contributes to the currently existing literature.

The question this paper will answer is as follows:

*Do corporate responsibility coalition partners score differently on sustainability indicators than non-coalition partners?*

It is hypothesized coalition members score worse on CSR. This is explained in the theoretical framework using stakeholder theory, information asymmetry following from Akerlof’s "Market for Lemons" and self-regulation empirics from industry specific trade associations.

As past empirical research shows that CSR behavior of companies is influenced by the circumstances within the industry, the paper zooms in on CSR score differences per industry (Waddock & Graves, 1997; Sweeney & Coughlan, 2008). Industries are differentiated based on tangibility as suggested by Hoogendoorn et al.
The question is answered as to whether the negative relationship between coalition membership and CSR is mitigated by the tangibility of the product the sector produces.

The data used is derived from the MSCI Kinder Lydenberg Domini 400 Social Index (KLD) database and Compustat database. This paper looks into one specific coalition, which is the Coalition for Corporate Philanthropy (CECP). To answer the research question, ordinary least squared regression method is used to regress coalition membership and tangibility on CSR performance. The regression is controlled for firm size, financial performance and industry.

The results show a positive relationship between coalition membership and CSR, which contradicts the formulated hypothesis. A relationship between tangibility and CSR performance does not show from the data used. However, within coalition members, it is observed that a coalition member from the tangible product sector scores significantly better on CSR than the intangible service sector. These results give room for further research into e.g. the drivers of coalition effectiveness.

This paper is structured as follows: first, the most important terms are defined in the literature background. Secondly, the hypotheses are developed in the theoretical framework. After this, the methodology is explained followed by a presentation of the results. Then the results are interpreted and further explained in the discussion which also touches upon limitations and opportunities for further research. Lastly, the findings are concluded in the conclusion.

2. Literature Background

Literature on CSR issues is numerous, so are definitions used. Therefore, the terms Corporate Social Responsibility, Corporate Social Performance and Corporate Social Coalitions will be defined in this chapter.

2.1 Corporate Social Responsibility (CSR)

As CSR is a concept that is hard to quantify, the definition of CSR is often broad and unclear. Across literature, the definition that is used differs and might be biased towards specific interests or adapted to the context of the specific business (Van Marrewijk, 2003). Dahlsrud (2008) looked at 37 definitions of CSR and found that although there are many different definitions of CSR, they boil down to covering at least three of five dimensions, namely: (1) the stakeholder dimension, (2) the social dimension, (3) the economics dimension, (4) the voluntariness dimension and (5) the environmental dimension (Dahlsrud, A. 2008).
The definition that is used frequently (Albareda et al., 2007; Steurer, 2010; Nielsen & Thomsen, 2007) and covers all five Dahlsrud’s dimensions (Dahlsrud, 2008), is the definition stated by the European Commission:

“A concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis”

(European Commission, 2011, p. 3)

This integration of concerns can manifest itself in the corporate strategy by many different means, ranging for example from a yearly corporate donation to charity to voluntarily cutting down pollution in the production process.

In this paper, the European Commission’s definition will be used because even though it is a broad definition, it covers all necessary aspects. Furthermore, the social responsibility coalitions do not always define their vision on what they consider to be CSR so a narrow definition might be compromising.

2.2 Corporate Social Performance

Corporate Social Performance (CSP) is a term also often referred to in the CSR literature (Bakker et al, 2005; Maas & Liket, 2011; Ruf et al, 2001; Wood 1991; Carroll, 2000; Ioannou & Serafeim, 2010). Some consider CSP as the same concept as CSR, namely meeting the demand of multiple stakeholders (Ruf et al, 2001; Carroll 2000; Ioannou & Serafeim, 2010). While others aim with the term CSP at the actual social performance, so the assessment of impact of the CSR strategy (Bakker et al, 2005; Waddock, 2004). In this paper, CSP is referred to as CSR Score. CSR Score is assessed based on KLD indicators (please see data chapter).

2.3 Corporate Responsibility Coalition

The practice of CSR is relevant to many different stakeholders, being government, NGO’s and businesses themselves. Therefore, it is common practice that these stakeholders combine forces in inter-institutional partnerships to address the mitigation of the negative effects of business practices. Stakeholders are numerous, and so are types of partnerships (Seitanidi & Crane, 2009; Selsky & Parker, 2005; Brockmyer & Fox, 2015; Grayson & Nelson, 2013). A broad distinction could be made between two different types of partnerships:

1. **Cross-Sector Social Partnership (CSSP)** – a partnership in which at least two forces from business, government and civil society are combining forces. According to Selsky and Parker (2005) one could distinguish between four types of CSPP’s.
a. **Business non-profit partnership** – a partnership in which firms work together with NGO’s to address social issues (Seitanidi & Crane, 2009; Selsky & Parker, 2005)

b. **Government-business partnerships** – a partnership between a firm and a business to address social issues (Selsky & Parker, 2005).

c. **Government non-profit partnerships** – a partnership between a non-profit and the government (Selsky & Parker, 2005).

d. **Tri-sector partnerships** (Selsky & Parker, 2005) also known as **multi-stakeholder networks** (Brockmyer & Fox, 2015) – in which businesses, NGO’s and government join forces to address social issues.

2. **Corporate Social Responsibility Coalitions** – This partnership type consists of only companies to address social issues (Grayson & Nelson, 2013).

This paper will focus on CSR coalitions. Grayson and Nelson (2013) define Corporate Responsibility Coalitions as:

“Independent, non-profit, membership organisations that are composed mainly or exclusively of for-profit businesses; that have a board of directors composed predominantly or only of business people; that are core-funded primarily or totally from business; and whose dedicated purpose is to promote responsible business practice.”

(Grayson & Nelson, 2013, p. 21)

As a general study into CSR coalitions’ characteristics and activities is non-existent, so one can find a review of several coalitions and their characteristics in the appendix, table 9. CSR minded companies join a CSRC through paying a membership fee. This membership fee is often based on the size of the firm, determined by the yearly revenue. The coalitions aim to empower CSR strategies through sharing knowledge and expertise. Grayson and Nelson (2013) summarize a CSRC’s activities as follows:

1. “Raising awareness and making the ‘business case’
2. Identifying and disseminating good practices
3. Advising and building the capacity of companies
4. Brokering partnerships
5. Delivering on-the-ground programmes
6. Setting standards and spreading norms
7. Promoting a public agenda”

(Grayson & Nelson, 2013, p. 7)

3. **Literature Review**

This literature review describes several motives for a company to pursue a CSR strategy. One of these reasons is the stakeholder motive, which means companies try to answer multiple stakeholder needs at the
same time. However, for stakeholders it hard to assess whether a company is sincere about meeting stakeholders' needs due to information asymmetries. Companies can thus be sending insincere signals about their CSR strategy. This thesis proposes to consider joining a coalition as a signal to its stakeholders. As a coalition is subject to self-regulation and evaluation, a negative relation is hypothesized between being a coalition member and CSR performance. This effect is expected to be mediated if a sector produces more tangible products. These ideas are further explored and developed in this literature review.

3.1 CSR motives

As CSR means investing in non-economic returns, it is hard to explain from a truly economic perspective why corporations engage in CSR. Moon (2001) even argues that the motives for CSR should always be found in self-interest. However, the fact that CSR might be beneficial for the company does not exclude it from being altruistic. According to York and Venkataraman (2010) four main reasons for CSR can be distinguished, namely: Legislation, Business, Ethical, and Stakeholder.

Legislation Motive

The public sector carries the ultimate responsibility for social welfare. Through rules and regulation, the government can regulate the social and environmental effects of companies (Ambec & Lanoie, 2008). However, the establishment and implementation of rules and regulation takes time. Therefore, companies anticipate legislature by already implementing social measures voluntarily (Triebswetter & Wackerbauer, 2008; Williamson et al, 2006).

Business Motive

Corporations are able to use CSR to cut down costs and to increase revenue. Also, being a green company might appeal to a new group of customers. This way, a company can thus increase its market and thus revenue (Ambec & Lanoie, 2008; Weber, 2008; York & Venkataraman, 2010). On the other hand, companies are able to cut costs in production processes by CSR. CSR strategies have shown to be related to lower employee costs and lower production costs (Albinger & Freeman, 2000; Weber, 2008; Ambec & Lanoie, 2008).

Ethical Motive

As York and Venkataraman (2010) argue, society feels that companies are responsible for the problems they cause and that companies should thus the ones to solve these problems. Companies are embedded in society, so this belief might also be supported within companies. Manager's personal beliefs of social values often influence corporate social strategies (Hemingway & Maclagan, 2004; Hemingway, 2005; Van de Ven
& Graafland, 2006). Therefore, a company’s motive to conform to a CSR strategy, might not only have to be of economic descend, but it could also be the moral compass speaking of the people within the firm.

**Stakeholder motive**

Academic literature proposes three views upon the role of a company regarding responsibility towards society (Nielsen & Thomsen, 2007; Van Marrewijk, 2003). The first approach is the shareholder theory. This approach represents the idea that “the social responsibility of business is to increase its profits” (Friedman, 1970). This is also known as the “separation theory” in which economics and ethics are, and should be, kept strictly apart (Freeman, Wicks & Parmar, 2004). Following this idea, McWilliams and Siegels argue that the goal of CSR is not within the interest of a firm and therefore is incompatible with the firm’s interests (2001). CSR might even work against a welfare increase, as money is spend on social projects and thus on people that do not have a rightful claim to it, such as a company’s shareholders do (Barnett, 2007). This money spend on social projects will be passed on in the price as costs to consumers (Friedman, 1970; Margolis & Walsh, 2003).

The second approach to a company’s responsibility is the broadest one, which is known as the “societal approach”. In this approach, companies are seen as part of society and have a responsibility to the society as a whole (Marrewijk, 2001). To operate, they have to achieve a “license to operate” (Committee for Economic Development, 1971; Nielsen & Thomsen, 2007; Van Marrewijk, 2003).

The third approach is known as the “stakeholder theory”, which is widely researched and applied (Fassin, 2008). This theory assumes company’s responsibility towards the company’s shareholders, but also towards other stakeholders. Freeman (1984) defines stakeholders as “any group or individual who can affect or is affected by the achievement of the organization’s objectives”. By taking into account the stakes of all stakeholders, the company takes responsibility for not only profit, but also for non-monetary social goals. In accordance to literature, this paper considers the stakeholder theory as the main reason companies pursue a CSR strategy.

Answering stakeholders can be beneficial for the firm (Berman et al, 1999). However, the extent of this benefit does depend on which stakeholder is prioritized (Hillman & Keim, 2001). CSR strategies are a way of answering the demands of NGO’s representing civil society. Companies that pursue a CSR strategy maintain a better reputation (Bertels & Peloza, 2008; Lii & Lee, 2012) and their reputation is harmed less after a scandal (Minor & Morgan, 2011; Kim, 2014). Naturally, a good reputation is beneficial to a company in numerous ways. Companies that are known to be socially responsible are more attractive to consumers (Brown and Dacin, 1997; Cone, 2007). Furthermore, it is easier to attract better employees which leads to higher productivity (Johnson & Greening, 1994; Greening & Turban, 1997; Ali et al, 2010).
3.2 A market for “green” lemons

All companies communicating their “green behaviour” to their stakeholders, makes it hard to distinguish between the sincere companies and the less sincere companies. The less sincere companies are just complying with the law while companies that are sincere about their CSR do more than just complying with the law. One could actually state that there are two types of companies, “just complying” companies and “more-than-complying” companies.

The foggy definition of CSR, the lack of standardization and the lack of performance reporting make it hard for stakeholders to observe a company’s type (Mahoney et al, 2008). In response to stakeholder pressure, some of these “just complying” companies will be communicating about pursuing CSR strategies, without actually aiming to do more than the law demands. Empirical research of Strike et al. (2006) confirms this lack of behavioural change. Also, the lack of external monitoring and verification makes it hard to control CSR reporting (Laufer, 2003). Furthermore, a clear relationship between CSR reporting and the actual results of the CSR strategy seem to be absent (Clarkson et al., 2008). Research has even proven that CSR can be used to compensate for irresponsible behaviour (Chen et al, 2008; Prior et al, 2008). All taken together, it is hard to distinguish between “just-complying” companies and “more-than-complying” companies.

This situation is very comparable to Akerlof’s “Market for ‘Lemons’”, describing the effects of asymmetric information on the second-hand car market (Akerlof, 1970). In this market, it is impossible for buyers to tell the difference between a good quality car and a bad quality car. As result of this, good quality cars become under-priced, and thus sellers of good cars leave the market. In the end, only the bad cars remain in the market.

Luckily, in our CSR case, not only the “bad” companies remain. This is because companies use signalling to overcome the asymmetry in information. Companies have different ways of signalling their CSR strategy that all incur different costs. One should assume that for “more-than-complying” companies it is cheaper (not only in monetary terms) to send a signal than for bad companies (Spence, 1973). This is because “just-complying” companies risk getting debunked. This could harm their reputation and their financial position (Sinclair-Desgagné & Gozlan, 2003; Bebbington et al, 2008). Jones (1995) confirms this in his research (1995). He argues that only companies that manage their stakes sincerely have lower agency costs. Being seen as insincere raises your agency costs.

As it is more expensive for “just-complying” companies to invest in CSR signals than it is for “more-than-complying” companies, “just-complying” companies will invest less in CSR signals than the sincere companies. Signals that incur high costs, will therefore lead to a separating equilibrium, distinguishing between the two types of companies. E.g. disclosing CSR reports is associated positively with CSR performance in empirical studies and thus can be seen as a signal with high enough costs to be separating “just-complying” from “more-than-complying” companies (Clarkson et al., 2008; Mahoney et al, 2013).
Contrarily, there are actions that show CSR intentions, but they are so low cost that they cannot be considered as a revealing signal. An example of this is signing the U.N. Global Compact, which is free of true obligations¹ (Doane, 2007).

Stakeholders do not know costs of all CSR actions. This makes it hard to interpret whether they can be considered as a truthful signal or not. This is the case with membership of a CSR coalition. Conditions for joining coalitions are not always public for outsiders as well as information about company performance (please see appendix, table 9). Also, things such as the yearly survey and attending conferences are all on voluntary basis and do not have to lead to any cost increase of membership. This makes it almost impossible for stakeholders to value being coalition member and thus to see whether members are “just-complying” or “more-than-complying” companies.

3.3 Coalition effectiveness & self-regulation

The effectiveness of a coalition lies within the idea that they are self-regulatory and thus counting on peer pressure and naming-and-shaming to do its work. In coalition conferences, progress can be discussed and well performing companies are praised publicly.

With the lack of evidence from research on coalitions, one could argue that industry specific trade associations can be considered similar on this aspect as they are defined as:

“Companies [joining] together to regulate their collective action to avoid a common threat or provide a common good by establishing a standard code of conduct.”

(King & Lenox, 2000, p. 698)

Coalitions are actually also self-regulatory, and maybe even go beyond self-regulatory as there are no coalition wide standards to be met.

Empirical research on industry specific trade coalitions show that as long as there is no sanctioning for badly performing companies, corporate self-regulation does not seem to be effective and might even have adverse effects (King & Lenox, 2000; Lenox & Nash, 2003). Self-regulatory standard systems are subject to adverse selection. Joining such a system gives a signal to the companies’ stakeholders, for which the stakeholders will reward the company. Companies that join benefit from the status that is conveyed by being a member, without actually putting in any real effort (Lenox & Nash, 2000). As there is no punishment for not sticking to the standards, “symbolic adoption” arises (King & Lenox, 2000). The symbolic adoption

reflects on the fact that companies might communicate their commitment, and as there is no form of
punishment, actually failing to change their behaviour. These self-regulatory systems tend to attract more
of the “just complying” companies than of the “more-than-complying” companies (King & Lenox, 2000;

**Hypothesis 1**

One could state that the joining of a coalition can be considered as a CSR signal to a companies’
stakeholders. Empirical research into other CSR signals has shown that some signals are less sincere than
others. It is hard to assess the sincerity of a coalition membership signal from the outside. However,
considering the empirical evidence on the negative relationship between self-regulation and effectiveness
of trade associations, the following hypothesis can be constructed:

\[ H1: \text{Being a member of a coalition is negatively related to a firm's total CSR performance} \]

### 3.4 Industry Differences

When looking on an industry level, CSR performance and communication differ per industry (Waddock &
Graves, 1997; Sweeney & Coughlan, 2008). This is seen in research conducted by Ndemanga and Koffi
(2009) in which the manufacturing and industrial sector are significantly more active on the CSR field
compared to other sectors. While on the other hand, the service sector almost ignores the idea of CSR.
Therefore, one must differentiate in industries when looking at CSR performance. In this part of the
theoretical framework, the link between industry level isomorphic forces and CSR performance is
examined within a coalition.

Industries or sectors often face the same rules and regulations as well as the same set of stakeholders
(Delmas & Toffel, 2004; Jackson & Apostolakou, 2010). As a consequence, circumstances are similar to all
companies which results in similar behaviour. This is called isomorphism (DiMaggio & Powell, 1983).
Three reasons of York and Venkataramn (2010) can also be applied on industry level which results in the
same coercive, mimetic and normative pressures across industries (Young & Marias, 2012). The societal
motive is not included as it addresses the entire society and thus is likely to influence all industries to the
same extent.

**Legislation Motive**

Industries that have higher social and environmental effects deal with tighter regulation in forms of
legislation or industry-wide set standards. These coercive, industry wide, powers appear to show a positive
relationship to CSR (Clemens & Douglas, 2006). Therefore, one can say that because of the similar
regulation, isomorphic behaviour is stimulated.
**Business Motive**

Another reason for mimicking a competitor’s behaviour is search costs (Haveman, 1993). By mimicking a successful social practice from a competitor, a company can save the costs of finding a new successful social practice. This mimetic pressure corresponds with the business motivation of a company. Companies within the same industry have an incentive to copy a successful strategy of a competitor, which results in industry-wide copying behaviour.

**Stakeholder Motive**

Furthermore, stakeholders are similar within industries. This results in similar reactive behaviour on stakeholder pressures within an industry and thus similar ways of pursuing a CSR strategy (Sweeney & Coughlan, 2008). Misani (2010) argues that due to stakeholder pressures within an industry certain firms wishing to pursue a more innovative strategy might be forced by their stakeholders to adopt an imitative strategy instead.

**Hypothesis 2**

Across industries, the above mentioned circumstances are similar as the production processes are similar. Therefore, industries can be classified on these characteristics. Brand and Van Dam (2009) were the first to classify industries based on the tangibility of the product. As production processes of more tangible products are more resource intensive, there are bigger chances for cost reduction and more opportunities to differentiate on producing more sustainable (Uhlamer et al., 2012; Hoogendoorn et al., 2015). Furthermore, the legislative motive also applies here as more resource intense production processes also have to comply with more regulation. Furthermore, tangible sectors are more closely monitored by their stakeholders (Williamson et al., 2006). Hoogendoorn et al. (2015) use this classification in research on SME’s and their CSR performance and find that if a sector produces a product that is more tangible, the industry shows higher CSR involvement. This paper does not look at SME’s but on American listed companies. However, there are no reasons to assume that classification of tangibility and the reasons to pursue a CSR strategy do not also hold true for listed companies. Therefore, the hypothesis is as follows:

*H2: Tangibility of the industry and CSR score are positively related*

**Hypothesis 3**

As the more tangible sectors show better CSR results, the relationship between coalition membership and CSR performance could also differ across the different sectors. As said, companies in the more tangible sectors have stronger motives to pursue a CSR strategy. The increased monitoring on more tangible sectors
might have a mitigating effect on the information asymmetry between stakeholders and companies. Therefore, coalition members from a more tangible sector, could show a less negative performance on CSR than coalition members from other sectors.

**H3: A coalition member from a tangible sector shows a less negative relationship to CSR performance than other coalition members.**

## 4. Data

To investigate the relationship between coalition membership and CSR score, data from Compustat and KLD were obtained. To score companies on their CSR performance, the MSCI Kinder Lydenberg Domini 400 Social Index (KLD) database was used. Data for the control variables were obtained from the Compustat Database.

### 4.1 CSR Data

The KLD database is commonly accepted and applied within CSR research to rate companies on their CSR performance (Waddock & Graves 1997; Tsoutsoura, 2004; Chatterji et al., 2009). The KLD database rates 3,000 companies on their Corporate Social Performance. They distinguish between bad performance, “concerns”, and good performance, “strengths” within different dimensions. These dimensions are community, corporate governance, diversity, employee relations, environment, human rights and product. The companies obtain a 0, 1 or 2 for each strength and concern in a subdivision of a dimension. If a company is scoring badly on governance and ethics, it will result in a “1” on the governance and ethics concern and a “2” if it is severely bad.

### 4.2 Coalition

The KLD database only reports on listed companies in the United States, so only coalitions from the United States were available for research. Therefore, this thesis had to look into an American coalition, which is the Committee Encouraging Corporate Philanthropy. This coalition was founded in 1998 and has 205 corporate members. CECP was selected through CSR360, a worldwide network on CSR coalitions and partnerships. In the United States, only four institutions were part of CSR360, of which CECP fit best with the definition as proposed by Grayson and Nelson (Grayson & Nelson, 2013).

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4.3 Sample

142 companies that were member of a coalition were present in both KLD and Compustat databases. Provided that a company was present in both databases, 800 other companies that were not part of a coalition were selected randomly from the KLD database. After correcting for missing values 490 companies remained of which 84 coalition members were available for examination (table 2). The KLD database latest observations were available from 2013, so this data was used.

For the third hypothesis, the sample was reduced to coalition members only. This resulted in a database of 84 observations (table 3).

4.4 Dependent variable: CSR score

As KLD assesses a company's CSR score on the seven dimensions which are scored on strengths and concerns, there are many ways to calculate the total CSR score. Current literature knows three general ways of assessing a company’s CSR performance using the KLD database: Simple Multiattribute Rating Technique (Graves & Waddock, 1997; Ruf et al, 1998; Nelling & Webb, 2009), Data Envelopment Analysis (DEA) (Chen & Delmas, 2011; Chatterij et al, 2009, Lee & Sean, 2012) and the Aggregated Technique (Siegel & Vitaliano, 2007; Deckop et al, 2006; Fernández-Kranz & Santaló, 2010).

Simple multi-attribute rating technique weighs these seven dimensions based on their relative importance. This importance is addressed by CSR experts. To come up with an overall CSR score, concerns are subtracted from strengths for every dimension and then weighed relative to the other dimensions. An advantage of this method is that the dimensions are not all seen as equally important, which they are not. However, this method is very susceptible to changes of public opinion over time and selection sample of “experts”. Furthermore, these relative importance of dimensions might differ across industries. As it is suggested that e.g. environmental issues are more relevant to certain industries than to other (Capelle-Blancard & Petit, 2014). Unfortunately, industry specific weighing schemes are unavailable (Schreck, 2011).

The aggregated method solves this problem by not weighing the dimensions at all, and thus considering all dimensions equally important. This method subtracts concerns from strengths for every dimension and then adds all dimensions equally.

The Data Envelopment Analysis (DEA) deals with the weighing issue by not assigning any weights in advance. It assigns a relative efficiency score to a company based on the amount of weaknesses and strengths that occur. However, this method is complicated. Furthermore, a regular DEA cannot be used due as this analysis assumes an interval scale. Therefore, one has to use an Imperfect DEA (IDEA) which is not supported by the statistical programmes available (STATA, Eviews, SPSS). Therefore using this approach is beyond the scope of this bachelor thesis.
So as weighing is arbitrary as it is sensitive to changes and sample selection, simple multi-attribute rating technique is not very suitable. Unfortunately, DEA is beyond the scope of this thesis. So the technique is most suitable and will thus be used in this thesis, is the aggregated technique. CSR score is the aggregation of the net score on all seven KLD dimensions. CSR score is only able to take on whole numbers.

4.5 Independent variable: Coalition membership

Coalition members were obtained from the website of the CECP. Unfortunately, only current member were available on the website while latest KLD data is from 2013. CECP is not willing to disclose when which company joined. However, one press release was found which states which companies have joined in 2014\(^3\). Of these companies, 10 were present in the database and thus excluded from coalition membership.

4.6 Independent variable: Tangibility

For the second and third hypothesis, the industries are divided based on their tangibility. This distinction was based on the paper of Brand and Dam (2009) as used by Hoogendoorn et al. (2015). There are three tangibility classes: tangible product sector, tangible service sector and intangible service sector. These three sectors are all assigned a factor of tangibility following the division of Brand and Dam (2009) based on SIC codes (table 10, appendix). This resulted in three categorical variables. In the classification of Brand and Dam (2009), Agriculture, Forestry and Fishing industry was not assigned a class of tangibility. However, as this sector produces tangible products, it is classified as being part of the tangible product sector. In the analysis, intangible service sector is used as reference category.

4.7 Control variables

In this analysis, control variables for size and financial performance are used.

Size

Firm size has proved to be of relevance when studying CSR performance (Surroca et al, 2010; Strike et al, 2006, McWilliams & Siegel, 2001; Mahoney et al, 2013; Ruf et al, 2001; Waddock & Graves, 1997). Bigger firms are more visible for its stakeholders (Brammer & Milington, 2006; Udayasankar, 2008) and thus may be more willing to join a coalition to send signal. There might be a bias caused by the size of a company.

Therefore, size defined by total assets is included in the analyses. As the distribution of total assets is much skewed, total assets was transformed by a natural logarithm.

**Financial Performance**

Literature suggests a relationship between financial performance and CSR (Waddock & Graves, 1997; Nelling & Webb, 2009; Surroca et al. 2010; Mahoney et al, 2013). Financial performance influences decision-making within firms and are thus of importance to the CSR score but also on the decision on whether to join a coalition.

Two ways of assessing financial performance are through leverage and through Return on Assets (ROA). The first one says something about the financial health of a company and the second one says something about its profitability. Both measures are an appropriate measure of financial performance as they account for size, making the indicators relative. Leverage is calculated by dividing total debt by equity (Surroca et al, 2010). Return on assets is calculated by dividing net income by total assets (Nelling & Webb, 2009; Mahoney et al, 2013). To improve the distribution of ROA, a natural logarithm is taken of the observations of ROA.

**Industry**

As discussed, industries affect CSR performance of companies. Industries are thus added to the analysis as a categorical variable. Industries are differentiated based on their Standard Industrial Classification (SIC) codes. This results in the following industries: Forestry, Agriculture and Fishing (SIC: 0100-0999); Mining (SIC: 1000-1499); Construction (SIC: 1500-1799); Manufacturing (SIC: 2000-3999); Transportation, Communication, Electric, Gas and Sanitary Service (SIC: 4000-4999); Wholesale Trade (SIC: 5000-5199); Retail Trade (SIC: 5200-5999); Finance, Insurance and Real Estate (SIC: 6000-6799) and Services (SIC: 7000-8999). Forestry, Agriculture and Fishing is used as reference variable. Construction and mining are not considered in the analysis as they do not have enough observations (<1% of the sample).
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Definition</th>
<th>Variable Type</th>
<th>% of sample n=490 (n=84)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR score</td>
<td>Aggregated net KLD dimension score</td>
<td>Ordinal</td>
<td></td>
</tr>
<tr>
<td>Coalition membership</td>
<td>Member = 1</td>
<td>Dummy</td>
<td>17.14%</td>
</tr>
<tr>
<td>Total assets</td>
<td>Size (\ln(Total\ Assets))</td>
<td>Scale</td>
<td></td>
</tr>
<tr>
<td>Leverage</td>
<td>Financial performance (\frac{Long\ term\ debt\ equity}{equity})</td>
<td>Scale</td>
<td></td>
</tr>
<tr>
<td>Return on assets (ROA)</td>
<td>Financial performance (\ln\left(\frac{Net\ income}{Total\ assets}\right))</td>
<td>Scale</td>
<td></td>
</tr>
<tr>
<td>Mining</td>
<td>Industry (1000 \leq SIC \leq 1499)</td>
<td>Dummy</td>
<td>3.36</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>Industry (2000 \leq SIC \leq 3999)</td>
<td>Dummy</td>
<td>45.68</td>
</tr>
<tr>
<td>Transportation, communication, electric, gas and sanitary service</td>
<td>Industry (4000 \leq SIC \leq 4999)</td>
<td>Dummy</td>
<td>17.27</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>Industry (5000 \leq SIC \leq 5199)</td>
<td>Dummy</td>
<td>3.64</td>
</tr>
<tr>
<td>Retail trade</td>
<td>Industry (5200 \leq SIC \leq 5999)</td>
<td>Dummy</td>
<td>8.51</td>
</tr>
<tr>
<td>Finance, insurance and real estate</td>
<td>Industry (6000 \leq SIC \leq 6799)</td>
<td>Dummy</td>
<td>5.22</td>
</tr>
<tr>
<td>Services</td>
<td>Industry (7000 \leq SIC \leq 8999)</td>
<td>Dummy</td>
<td>17.05</td>
</tr>
<tr>
<td>Intangible service sector</td>
<td>Tangibility</td>
<td>Dummy</td>
<td>22.45 (23.81)</td>
</tr>
<tr>
<td>Tangible service sector</td>
<td>Tangibility</td>
<td>Dummy</td>
<td>51.84 (22.62)</td>
</tr>
<tr>
<td>Tangible product sector</td>
<td>Tangibility</td>
<td>Dummy</td>
<td>15.71 (53.57)</td>
</tr>
</tbody>
</table>

* N=84 is the sample used for hypothesis 3
4.8 Multicollinearity

Table 3 shows an overview of Pearson correlation of the variables used in the analyses. Based on the correlation overviews, one can state that multicollinearity does not play a dangerous role in the analysis. There is a high significant correlation between total assets and coalition membership and total assets and CSR score, however this is still not too high. Furthermore, high correlation is present between intangible service sector and Transportation sector and the Services sector; tangible service sector and manufacturing and intangible services sector. Fortunately, these variables will not be used simultaneously in the analysis. Furthermore, in the analysis none of the Variation Inflation Factors (VIF) appeared to be higher than 1.584, which is safely far away from the recommended maximum of 10.
Table 2 – Spearman Correlation matrix* (N=490)

<table>
<thead>
<tr>
<th></th>
<th>CSR Score</th>
<th>Coalition membership</th>
<th>LN Total Assets</th>
<th>Leverage</th>
<th>LN ROA</th>
<th>Mining</th>
<th>Manufacturing</th>
<th>Transportation, communication, electric, gas and sanitary service</th>
<th>Wholesale trade and real estate</th>
<th>Finance, insurance and real estate</th>
<th>Services</th>
<th>Intangible service sector</th>
<th>Tangible product sector</th>
<th>Tangible service</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR Score</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coalition membership</td>
<td>0.498*</td>
<td>(0.000)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LN Total Assets</td>
<td>0.644*</td>
<td>(0.000)</td>
<td>0.517**</td>
<td>(0.000)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leverage</td>
<td>0.238**</td>
<td>(0.000)</td>
<td>0.207**</td>
<td>(0.000)</td>
<td>0.320**</td>
<td>(0.000)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LN ROA</td>
<td>0.115*</td>
<td>(0.011)</td>
<td>0.159**</td>
<td>(0.000)</td>
<td>0.013</td>
<td>(0.702)</td>
<td>0.068</td>
<td>(0.136)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mining</td>
<td>0.031</td>
<td>(0.480)</td>
<td>0.008</td>
<td>(0.860)</td>
<td>0.074</td>
<td>(0.105)</td>
<td>0.029</td>
<td>(0.517)</td>
<td>0.127**</td>
<td>(0.005)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.039</td>
<td>(0.387)</td>
<td>-0.015</td>
<td>(0.912)</td>
<td>0.058</td>
<td>(0.202)</td>
<td>-0.124**</td>
<td>(0.006)</td>
<td>-0.086</td>
<td>(0.057)</td>
<td>-0.153**</td>
<td>(0.001)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Transportation, communication, electric, gas and sanitary service</td>
<td>0.084</td>
<td>(0.062)</td>
<td>0.071</td>
<td>(0.116)</td>
<td>0.030</td>
<td>(0.506)</td>
<td>0.268**</td>
<td>(0.000)</td>
<td>0.152**</td>
<td>(0.001)</td>
<td>0.073</td>
<td>(0.160)</td>
<td>0.332**</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Wholesale</td>
<td>-0.015</td>
<td>(0.740)</td>
<td>0.023</td>
<td>(0.617)</td>
<td>0.030</td>
<td>(0.275)</td>
<td>0.013</td>
<td>(0.770)</td>
<td>-0.185*</td>
<td>(0.020)</td>
<td>-0.034</td>
<td>(0.456)</td>
<td>-0.153**</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Retail trade</td>
<td>-0.022</td>
<td>(0.623)</td>
<td>0.095*</td>
<td>(0.035)</td>
<td>0.046</td>
<td>(0.311)</td>
<td>0.019</td>
<td>(0.678)</td>
<td>-0.029</td>
<td>(0.524)</td>
<td>-0.053</td>
<td>(0.246)</td>
<td>-0.238**</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Finance, insurance and real estate</td>
<td>0.006</td>
<td>(144)</td>
<td>0.013</td>
<td>(0.776)</td>
<td>-0.095*</td>
<td>(0.036)</td>
<td>0.099*</td>
<td>(0.029)</td>
<td>-0.007</td>
<td>(0.877)</td>
<td>0.078</td>
<td>(0.084)</td>
<td>-0.355**</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Services</td>
<td>0.150</td>
<td>(0.550)</td>
<td>0.010</td>
<td>(0.745)</td>
<td>-0.018</td>
<td>(0.493)</td>
<td>-0.086</td>
<td>(0.902)</td>
<td>0.020</td>
<td>(0.665)</td>
<td>-0.099*</td>
<td>(0.029)</td>
<td>-0.449**</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Intangible service sector</td>
<td>0.008</td>
<td>(0.076)</td>
<td>0.016</td>
<td>(0.727)</td>
<td>0.104*</td>
<td>(0.021)</td>
<td>0.014</td>
<td>(0.750)</td>
<td>0.011</td>
<td>(0.803)</td>
<td>0.177**</td>
<td>(0.000)</td>
<td>0.804**</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Tangible product sector</td>
<td>0.003</td>
<td>(0.939)</td>
<td>0.086</td>
<td>(0.056)</td>
<td>0.044</td>
<td>(0.335)</td>
<td>0.058</td>
<td>(0.267)</td>
<td>0.028</td>
<td>(0.524)</td>
<td>-0.079</td>
<td>(0.079)</td>
<td>0.360**</td>
<td>(0.000)</td>
</tr>
</tbody>
</table>

** Correlation is significant at the .01 level (2-tailed)
* Correlation is significant at the .05 level (2-tailed)
* P-values are presented between parentheses
### Table 3 – Spearman Correlation Matrix, members only (N=84)

<table>
<thead>
<tr>
<th></th>
<th>CSR score</th>
<th>Intangible services sector</th>
<th>Tangible service sector</th>
<th>Tangible product sector</th>
<th>Total assets</th>
<th>Leverage</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR score</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intangible</td>
<td>-.126</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(.254)</td>
<td>(.254)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>services sector</td>
<td>-.271*</td>
<td>-.302**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(.013)</td>
<td>(.005)</td>
<td></td>
<td>(.001)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tangible service</td>
<td>.335**</td>
<td>-.600**</td>
<td>-.581**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(.002)</td>
<td>(.000)</td>
<td>(.000)</td>
<td>(.000)</td>
<td>(.001)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sector</td>
<td>.236*</td>
<td>.038</td>
<td>-.107</td>
<td>.058</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(.030)</td>
<td>(.731)</td>
<td>(.331)</td>
<td>(.603)</td>
<td>(.603)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total assets</td>
<td>.025</td>
<td>-.159</td>
<td>.057</td>
<td>.088</td>
<td>-.228*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>(.823)</td>
<td>(.148)</td>
<td>(.607)</td>
<td>(.425)</td>
<td>(.037)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leverage</td>
<td>.035</td>
<td>.085</td>
<td>-.045</td>
<td>.111</td>
<td>-.109</td>
<td>.189</td>
<td>1</td>
</tr>
<tr>
<td>(.749)</td>
<td>(.440)</td>
<td>(.683)</td>
<td>(.316)</td>
<td>(.323)</td>
<td>(.085)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>-.035</td>
<td>.085</td>
<td>-.045</td>
<td>.111</td>
<td>-.109</td>
<td>.189</td>
<td>1</td>
</tr>
<tr>
<td>(.729)</td>
<td>(.440)</td>
<td>(.683)</td>
<td>(.316)</td>
<td>(.323)</td>
<td>(.085)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at the .01 level (2-tailed)
* Correlation is significant at the .05 level (2-tailed)

*P-value is presented between parentheses

### 4.9 Variable descriptives

#### Table 4 – Variable descriptives (N=490)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Median</th>
<th>Min.</th>
<th>Max.</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR score</td>
<td>1.64</td>
<td>.00</td>
<td>-5.00</td>
<td>17.00</td>
<td>3.35</td>
</tr>
<tr>
<td>Coalition membership</td>
<td>0.17</td>
<td>.00</td>
<td>0.00</td>
<td>1.00</td>
<td>0.38</td>
</tr>
<tr>
<td>Total Assets</td>
<td>7.05</td>
<td>6.94</td>
<td>2.91</td>
<td>10.62</td>
<td>1.51</td>
</tr>
<tr>
<td>Leverage</td>
<td>0.69</td>
<td>0.40</td>
<td>-16.95</td>
<td>19.68</td>
<td>1.97</td>
</tr>
<tr>
<td>Return on Assets</td>
<td>-1.82</td>
<td>-1.71</td>
<td>-7.13</td>
<td>.90</td>
<td>0.85</td>
</tr>
</tbody>
</table>
### Table 5 – Variable descriptives, coalition members only (N=84)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Min.</th>
<th>Max.</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR score</td>
<td>5.81</td>
<td>6.00</td>
<td>-1.00</td>
<td>17.00</td>
<td>3.40</td>
</tr>
<tr>
<td>Total assets</td>
<td>8.83</td>
<td>8.77</td>
<td>6.00</td>
<td>10.62</td>
<td>1.00</td>
</tr>
<tr>
<td>Leverage</td>
<td>0.94</td>
<td>.57</td>
<td>-3.34</td>
<td>17.76</td>
<td>2.07</td>
</tr>
<tr>
<td>Return on assets</td>
<td>-1.53</td>
<td>-1.53</td>
<td>-3.41</td>
<td>.10</td>
<td>0.68</td>
</tr>
</tbody>
</table>

5. **Methodology**

To test the hypotheses, the variables are regressed through ordinary least squared regression. In all regressions, first the independent variables are added before control variables to be able see whether there is a bias.

5.1 **Coalition membership effect**

First, the effect of coalition membership will be examined without any control variables. This way, it will be possible to compare the influence of coalition membership with and without control variables. A relationship exists if the variable shows to have a significant relationship to CSR performance.

\( CSR \ Score = c + \beta_1 \times Coalition\ Member + \varepsilon \)

As discussed, literature shows that there might be other factors that influence CSR performance. Therefore, control variables are added to the equation which results in equation (2). If the influence of coalition membership changes significantly once the control variables are added, the relationship between CSR performance and membership as described in the first equation is biased.

\( CSR \ Score = c + \beta_1 \times Coalition\ Member + \beta_2 \times Size + \beta_3 \times Leverage + \beta_4 \times ROA + \varepsilon \)

To also control for the industry effects on CSR score, the industries are included in the equation (3). The industries are dummy variables.

\( CSR \ Score = c + \beta_1 \times Coalition\ Member + \beta_2 \times Size + \beta_3 \times Leverage + \beta_4 \times ROA + \beta_5 \times Mining + \beta_6 \times Manufacturing + \beta_7 \times Transport,\ Communication\ &\ Utilities + \beta_8 \times Wholesale\ Trade + \beta_9 \times Retail\ Trade + \beta_{10} \times Financial\ Services + \varepsilon \)
5.2 Industry effect

In the last hypothesis, a brief look was taken at the relationship between CSR performance, coalition membership and industry effect. However, industries were only considered as control variables. First, a closer look is taken into the relationship between CSR Performance and the tangibility. Hereafter, in hypothesis 3, it is examined whether this relationship has an effect on the relationship between coalition membership and CSR performance.

Hypothesis 2

To examine the relationship between CSR Performance and the tangibility of sector’s product, an OLS regression is used (4). The tangibility of a sector is a dummy variable and the reference used in this regression is the intangible service sector.

\[ CSR \text{ Score} = c + \beta_1 \times \text{Tangible Product Sector} + \beta_2 \times \text{Tangible Service Sector} + \epsilon \]

Also, to this equation, the control variables are added (5). These control variables are the same as for hypothesis one, as literature describes them to influence CSR performance.

\[ CSR \text{ Score} = c + \beta_1 \times \text{Tangible Product Sector} + \beta_2 \times \text{Tangible Service Sector} + \beta_3 \times \text{Size} + \beta_4 \times \text{Leverage} + \beta_5 \times \text{ROA} + \epsilon \]

Hypothesis 3

To test the relationship between tangibility of the product and the CSR score within the coalition, tangibility of the service sector is regressed on CSR score of coalition members only. The sample is reduced to only companies that are coalition members (N=84). As done in hypothesis 1 and 2, the regression is first ran with only the independent variables. Intangible service sector is used as a reference variable.

\[ CSR \text{ Score} = c + \beta_1 \times \text{Tangible Product Sector} + \beta_2 \times \text{Tangible Service Sector} + \epsilon \]

Because the sample is smaller, less control variables can be used. Only one parameter is allowed per twenty observation (Harrel, 2015). All three control variables (size, leverage and ROA) are relevant according to literature. However, one of the three has to be dropped. Leverage is dropped as this variable shows to be insignificant in the regressions for hypothesis 1 and 2. The regression looks as follows:

\[ CSR \text{ Score} = c + \beta_1 \times \text{Tangible Product Sector} + \beta_2 \times \text{Tangible Service Sector} + \beta_3 \times \text{Size} + \epsilon \]
The results of this regression are compared to the results of hypothesis 2. If the results of hypothesis 2 show a different relationship between CSR performance and tangibility than the results of hypothesis 3, it might be the case that coalition membership influences CSR performance in different industries differently.

6. Results

6.1 Coalition membership

As can be observed from Table 6, a positive relation is observed between coalition membership and CSR score (model 1). Coalition membership is subject to an upward bias. After the addition of the control variables, the influence of coalition membership is reduced (from .566 to .290), however still significant (model 2). By adding the industries to the model, only three variables remain of significant influence. The effect of coalition membership remains positively significant. However, the difference in this effect between equation 2 and equation 3 is only slight (from .290 to .297).

<table>
<thead>
<tr>
<th>Table 6 – OLS regression results, dependent variable: Total CSR Score*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td><strong>Independent variable</strong></td>
</tr>
<tr>
<td>Coalition member</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
</tr>
<tr>
<td>Size (total assets)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Leverage</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>ROA</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Industry control variables</strong></td>
</tr>
<tr>
<td>Services sector <em>(reference category)</em></td>
</tr>
<tr>
<td>Mining</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Transport, communication and utilities</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Wholesale trade</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Retail trade</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Financial services</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

* Estimated coefficients are presented with p value in parentheses

* P > .05

** P > .025
### 6.2 Industry effects

#### Table 7 – OLS regression results, dependent variable: Total CSR Score*

<table>
<thead>
<tr>
<th>Model</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intangible service sector (reference category)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tangible product sector</td>
<td>.143**</td>
<td>.052</td>
</tr>
<tr>
<td></td>
<td>(.005)</td>
<td>(179)</td>
</tr>
<tr>
<td>Tangible service sector</td>
<td>.022</td>
<td>-0.038</td>
</tr>
<tr>
<td></td>
<td>(.668)</td>
<td>(321)</td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size (total assets)</td>
<td></td>
<td>.639**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.000)</td>
</tr>
<tr>
<td>Leverage</td>
<td></td>
<td>.056</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.105)</td>
</tr>
<tr>
<td>ROA</td>
<td></td>
<td>.118**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.001)</td>
</tr>
<tr>
<td>N</td>
<td>490</td>
<td>490</td>
</tr>
<tr>
<td>R² (adjusted)</td>
<td>.014</td>
<td>.434</td>
</tr>
</tbody>
</table>

*Estimated coefficients are presented with p value in parentheses

** P < .05

As the results show in Table 7, the tangible product sector has a bigger positive effect on CSR score than the intangible services sector. A company from the tangible product sector will score .143 points higher on CSR score than a company from the intangible service sector (Table 7). There is no significant difference between the tangible service sector and the intangible service sector. However, once the control variables are added, the effect of the sector tangibility becomes insignificant. The control variables size and ROA do show a positive relationship to CSR score.

#### Table 8 – Regression results, dependent variable: CSR Score*

<table>
<thead>
<tr>
<th>Model</th>
<th>(6)</th>
<th>(7)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intangible service sector (reference category)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tangible product Sector</td>
<td>.261*</td>
<td>.268*</td>
</tr>
<tr>
<td></td>
<td>(.046)</td>
<td>(.036)</td>
</tr>
<tr>
<td>Tangible service Sector</td>
<td>-.104</td>
<td>-.071</td>
</tr>
<tr>
<td></td>
<td>(.422)</td>
<td>(.576)</td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size (total assets)</td>
<td></td>
<td>.250**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.017)</td>
</tr>
<tr>
<td>ROA</td>
<td></td>
<td>-.068</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.509)</td>
</tr>
<tr>
<td>N</td>
<td>84</td>
<td>84</td>
</tr>
<tr>
<td>R² (adjusted)</td>
<td>.089</td>
<td>.138</td>
</tr>
</tbody>
</table>

*Estimated coefficients are presented with p value in parentheses

* P < .025

** P < .05
When looking at the coalition members only, differences between the industries actually show slightly (Table 8). Companies from the tangible product sector score higher (.268) on CSR performance than companies from the intangible service sector. This effect remains once control variables are added. However, there is no difference between companies from the tangible service sector and the intangible service sector. Only the control variable of size shows a significant relationship to CSR Score.

7. Discussion

This paper looks into the effect of joining a CSR coalition on CSR performance. First, the general effect was examined. Hereafter, these effects were examined on industry level. It was expected that there would be a negative relationship between joining a coalition and CSR performance mainly because of information asymmetry and ineffective self-regulation. In this chapter, the results found will be further interpreted, limitations will be addressed and ideas for further research will be presented.

7.1 Hypothesis 1

H1: Being a member of a coalition is negatively related to a firm's total CSR performance

To reflect upon the first hypothesis, a closer look is taken at the results of table 6. It is observed that the addition of the control variables for size and financial performance makes the model stronger. However, the addition of the industries appears to be irrelevant as it does not increase significance of the results. Also, the effect of being a coalition member does not increase a lot when controlled for industry differences. Therefore, for interpretation, the second equation is used. CSR score ranges from -5.00 to 17. If a company is member of the coalition, the CSR score increases with .290. This result contradicts the hypothesis.

The opposing results could mean that the asymmetric information problem is not as strongly present as expected, which means joining a coalition might be a sincere signal which separates the just-complying companies from the more-than-complying companies. It could be suggested that companies that join a coalition are truly motivated to change, which they signal through CSR coalition membership. Unlike in industry specific trade associations, CSR coalitions do thus show not to be subject to adverse selection.

The cause of the better CSR score for coalition members cannot be deducted from this research. The CSR coalition might increase the CSR score, but it could be the case that the companies already join with a higher level of CSR behaviour. This leaves an interesting question for further research.
7.2 Hypothesis 2

*H2: Tangibility of the industry and CSR score are positively related*

The second hypothesis is not reflected in the results. There is no significant relationship between tangibility of the sector and CSR score after addition of the control variables. This is odd, as it contradicts the results found by Hoogendoorn (2014). Reason for non-existing relationship might the fact that listed companies behave differently from SME's, differences within the research design or by limitations of the methodology (this will be discussed in chapter 7.4).

These differences can be found within the sample. In this paper, the sample only includes American companies, while the sample used by Hoogendoorn et al. is mainly European companies (11,000 out of 13,100 companies). Furthermore, the sample used by Hoogendoorn et al. is almost twenty times bigger than in the sample used in this research.

Also, the measurement of CSR engagement is approached differently. In this paper, the KLD database is used, while the paper of Hoogendoorn et al. uses data from the Flash Eurobarometer. This resulted in a different way of measuring CSR performance. Hoogendoorn et al. use the percentage of the annual turnover that is invested in resource efficiency (in their paper this is called “greening processes”) and the percentage of the annual turnover that is spend on greening products and services (in their paper called “Greening product and service offerings”) as measures of CSR performance.

7.3 Hypothesis 3

*H3: A coalition member from a tangible sector shows a less negative relationship to CSR performance than other coalition members*

There is a relationship found between the tangibility of a sector and CSR relationship within the coalition. Amongst members, companies producing tangible products score significantly higher than the companies in the intangible service sector. The difference is .268. This result does not show for the tangible service sector, as there is no significant difference reported on CSR score between the intangible service sector and the tangible service sector. Companies producing products instead of services score better on CSR performance. Although the effect found is positive instead of negative, it does not fully contradict the formulated hypothesis as a positive relationship is, in the end, a less negative relationship. So one can observe different behaviour for coalition members that produce tangible products.

Even though the distinction between the tangible product sector, the tangible service sector and the intangible service sector is made to answer this hypothesis, it seems like the emphasis should be put on a distinction between the product and service sector. Based on the results, one can argue that a member company from the product sector is more likely to score better on CSR than a member company from the
services sector. This might be caused by the fact that as their product is more tangible, it has a bigger impact on the environment in the production process and thus faces more stakeholder pressure. These findings are in line with Ndemanga and Koffi (2009) who also found that the manufacturing and the industrial sector is significantly more active on the CSR field.

We know that within a coalition, the most tangible sector, the tangible product sector, scores significantly better than the least tangible sector, the intangible service sector. However, it is impossible to say whether this result is something coalition member specific or that can be observed throughout the economy as there are no significant results found for hypothesis 2. So we cannot say that industry affects the effectiveness of coalition membership.

What we can say, is that the majority of the total difference between the coalition members and non-coalition members is caused by the product sector and not by the service sector. The aggregated effect of joining the coalition is .290. A major part of this difference can be contributed to the coalition members that are part of the product sector, as the product sector companies score on average .269 higher on CSR performance than the intangible services sector.

7.4 Limitations

Sample

There is the risk of having a non-representative sample. The sample existed of 84 member companies and 406 non-members. These non-members were selected randomly from the KLD dataset which consists of a total of 3,000 listed US companies. Overall, the sample size is representative enough.

However, when looking at the industries, the representation of different industries is not distributed evenly (table 1). The manufacturing sector is highly overrepresented (45.68%). This problem also works through in the subdivision of the tangibility of sectors. The tangible service sector makes up 51.84% of the sample. This might have influenced the results of hypothesis 2 and 3.

The sample size did not pose any problems for the first two hypothesis (n=490). However, for hypothesis 3, the sample size did become problematic (n=84). The small sample made it impossible to add all the desired control variables.

Also, the companies that were assumed to be coalition members might not have been a member at the time of the data observation (2013). However, it was impossible to obtain the members in 2013 as CECP is not open about when a company joined. Therefore, the data might not represent reality completely.
Measurement of CSR

The first problem that arises with measurement of CSR is the foggy definition of CSR. Companies, stakeholders and third parties (such as KLD database) might all have a perception of the definition of CSR. Even the European Commissions’ definition can be applied to many different forms of CSR, ranging from a yearly donation to charity to minimalizing a companies’ ecological footprint.

Also the problem of simultaneous causality cannot be ruled out with certainty. Joining a coalition might be considered by the KLD database as a sign of positive CSR behaviour resulting in a better score on a CSR strength. This way, joining a coalition might be already represented within the CSR performance, which results in an automatic higher CSR score for coalition members.

Another problem with the usage of the KLD way of reporting is the binary scoring method. Reasons why a company obtained a specific score are impossible to find out. A zero for one company is hard to compare to another company obtaining a zero. A company's score actually seems to come out of a “black box”.

Also the aggregation method is not without flaws, even though this method was the most suitable for this research. By subtracting concerns from strengths, implicitly assume that a company can compensate for bad behaviour with good behaviour. This way, a company can behave socially responsible and socially irresponsible at the same time. Does that than mean that the company is socially responsible? Furthermore, by using the net CSR score, inter-company differences are ignored. A company could have high strengths and high concerns and in the end still score the same as a company that has only a very few strengths and zero concerns. A solution to this, would be to divide CSR performance into two parts, one looking into the relationship between coalition membership and responsible behaviour (using strengths) and the other part looking into the relationship between coalition membership and irresponsible behaviour (using concerns).

Control variables

Control variables used in the regression for hypothesis 1 and 2 where size (total assets), financial performance (return on assets) and industry. Literature suggested that differentiation could influence CSR performance as well as CSR can be seen as a way to distinguish a product from others (McWilliams & Siegel, 2001; Williams & Siegel, 2000; Strike et al., 2006). Differentiation is proxied in literature by using advertising costs or R&D expenditure. Unfortunately, due to lacking data on this, this control variable could not be used in the regression. Furthermore, it would have been interesting to use regulatory pressure or stakeholder pressure in the regression as this is often considered of influence on CSR.

In the regression for hypothesis 3, the sample size compromised the usage of control variables. Only size and financial performance where used in the analysis.
**External validity**

Because this paper only looks into one specific coalition, the external validity of the results could be compromised. First of all, this coalition might face very specific circumstances (that are lacking in other coalitions) which lead to the results presented. One example of this is that in the CECP, only listed companies are allowed to join. This condition is not used in other coalitions. Secondly, this coalition only consists of American companies which means results can probably not be extrapolated to other parts of the world.

### 7.5 Recommendations for further research

From this research, some clear questions arise that deserve an answer. First of all, the methodology gives room to further research. Such as, would the way CSR is measured change the results? CSR could for example not be measured in an aggregated way, but subdivided into social responsible behaviour and socially irresponsible behaviour. Furthermore, CSR score could also be subdivided by using the different dimensions, not only on total level. This might show where emphasis lies within the coalitions.

Also, the industry differences are calling for further research. Maybe it is more likely that companies from a specific industry join a coalition? Also, to what extend does industry specific behaviour influence coalition effectiveness?

Another thing that is of interest is changing the sample size. First of all, it would be interesting to also look at other coalitions and see whether the results found hold for other coalitions as well. Also, as this research has been done in the United States, it is of interest to look at European coalitions as well as business circumstances differ across continents.

Other ideas for research could be looking deeper into the different kinds of coalitions and the circumstances within the coalitions that influence coalition effectiveness. Furthermore, one could research the reasons for joining a coalition in a more qualitative way, through e.g. surveys. Also, coalitions know different ways of joining. Often, a coalition could be joined on company level but also on executive level. Rightful question to ask is whether this influences the effectiveness of a coalition.

As the field of CSR coalition research could still be considered unexplored many recommendations could be done for further research. Therefore, it is important to prioritize. In my opinion, the factors that influence the effectiveness of a coalition would be a good continuation of research. This would enable coalitions to increase their effectiveness.
8. Conclusion

As CSR is receiving a lot of information, it is striking that a common phenomenon such as CSR coalitions is not. Therefore, this research paper looked into this unexplored field of research. As it there is almost no literature on CSR coalitions, this paper defined and classified coalition types. After this, the effect of CSR coalitions were examined, answering the question whether the coalition members score better than non-coalition members.

Using the stakeholder theory in combination with the asymmetric information problem as proposed in Akerlof’s “Market for Lemons” and empirical results from self-regulatory trade associations, it was hypothesized that coalition members would score worse than non-members. The opposite results were found. Coalition members score better than non-coalition members.

Within the coalition, difference in CSR score were found on industry level. These differences corresponded with the tangibility of the product produced by the sector. Companies that produce tangible products score significantly higher than the service sector on CSR score. Unfortunately, it is impossible to say whether this is a coalition specific phenomenon or occurs economy wide as there was no evidence found for a significant relationship between the tangibility of a sector and CSR performance on an aggregated level.

To come back to the research question answered in this paper:

*Do corporate responsibility coalition partners score different on sustainability indicators than non-coalition partners?*

The research question can be answered positively. Companies that are coalition members score differently than companies that are not a member of a CSR coalition. Results have shown that coalition members score higher than non-coalition members. Proof is found that this relationship is influenced by the tangibility of a company’s product.

This paper opens many doors for further research. As there appears to be a difference between coalition members and non-coalition members, it would be interesting to examine the cause of this difference. On what field do these companies differ? Does the coalition cause this difference or does the coalition just attract more CSR minded companies? Put shortly, this topic of research deserves more attention.
9. References


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10. Appendices

Table 9 – Overview of 20 different coalitions

<table>
<thead>
<tr>
<th>Name</th>
<th>Country</th>
<th># Members</th>
<th>Way of Joining</th>
<th>membership fee</th>
<th>Performance</th>
<th>Sharing</th>
<th>Know-how</th>
<th>Training/Advise</th>
<th>Networking</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CentraRSE-BCSD</strong></td>
<td>Guatemala</td>
<td>100</td>
<td>letter of request</td>
<td>dependent on firm revenue</td>
<td>Not public</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td><strong>Boston College Centre for Corporate Citizenship</strong></td>
<td>USA</td>
<td>440</td>
<td>letter of request</td>
<td>dependent on firm revenue</td>
<td>Not monitored</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Canadian Business for Social responsibility</strong></td>
<td>Canada</td>
<td>20</td>
<td>not public</td>
<td>not public</td>
<td>Not monitored</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td></td>
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</tr>
<tr>
<td><strong>CECP</strong></td>
<td>USA</td>
<td>170</td>
<td>by invitation</td>
<td>not public</td>
<td>Not public</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bulgarian Business Leaders Forum</strong></td>
<td>Bulgaria</td>
<td>120</td>
<td>letter of request, 2 recommendations of members</td>
<td>free</td>
<td>Not monitored</td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Business for Society</strong></td>
<td>Czech Republic</td>
<td>50</td>
<td>not public</td>
<td>dependent on firm revenue and size (#employees)</td>
<td>Not public</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Business in the Community Ireland</strong></td>
<td>Ireland</td>
<td>80</td>
<td>letter of request</td>
<td>dependent on willingness to pay</td>
<td>Partly public</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<td></td>
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<tr>
<td><strong>Club de Excelencia en Sostenibilidad</strong></td>
<td>Spain</td>
<td>19</td>
<td>not public</td>
<td>not public</td>
<td>Public</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CSR Hellas &amp; Global compact network Hellas</strong></td>
<td>Greece</td>
<td>138</td>
<td>letter of request, 2 recommendations of members</td>
<td>public</td>
<td>Public</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CSR Sweden</strong></td>
<td>Sweden</td>
<td>20</td>
<td>not public</td>
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<td>Not public</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>De Groene Zaak</strong></td>
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<td>162</td>
<td>letter of request</td>
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<td>yes</td>
<td>yes</td>
<td>yes</td>
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</tr>
<tr>
<td><strong>UK BSCD</strong></td>
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<td>public, dependent on membership type</td>
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<td>yes</td>
<td>yes</td>
<td>yes</td>
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<tr>
<td><strong>Oebu Swiss Sustainable Business Network</strong></td>
<td>Switzerland</td>
<td>400</td>
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<td>Not monitored</td>
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<td>yes</td>
<td>yes</td>
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</tr>
<tr>
<td><strong>Econsense</strong></td>
<td>Germany</td>
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<td>Not monitored</td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td><strong>Entreprises pour l’environnement</strong></td>
<td>France</td>
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<td>Not monitored</td>
<td>yes</td>
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<td></td>
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<tr>
<td><strong>USBCSD</strong></td>
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<td>23</td>
<td>letter of request</td>
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<td>Not monitored</td>
<td>yes</td>
<td></td>
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</tr>
</tbody>
</table>

Source: coalition’s website
<table>
<thead>
<tr>
<th>SIC code</th>
<th>Industry</th>
<th>Sub-industry</th>
<th>Brand and Dam Classification (2009) as used by Hoogendoorn et al. (2015)</th>
<th>Tangibility</th>
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<tbody>
<tr>
<td>200 – 999</td>
<td>Agriculture, Forestry and Fishing</td>
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<td>Tangible Product</td>
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<td>Mining and quarrying (B)</td>
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<tr>
<td>1500 – 1799</td>
<td>Construction</td>
<td>Construction (F)</td>
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<td>Tangible Product</td>
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<td>2000 – 3999</td>
<td>Manufacturing</td>
<td>Manufacturing (NACE C)</td>
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<td>Tangible Product</td>
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<td></td>
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<td>4000 - 4811 Transportation and Storage (H)</td>
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<td>Tangible Service</td>
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<td>4000 – 4999</td>
<td>Transportation, Communication, Electric, Gas and Sanitary Service</td>
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</tr>
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<td></td>
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<td>4900 – 4999 Water supply, sewerage and waste management</td>
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<td>5000 – 5199</td>
<td>Wholesale Trade</td>
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<td>5200 – 5999</td>
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<td>Wholesale and Retail (NACE G)</td>
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<td>Tangible Service</td>
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<td>6000 – 6799</td>
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<td>Intangible Service</td>
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<tr>
<td></td>
<td></td>
<td>7000 – 7199 Accommodation and Food services (I)</td>
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<td>Tangible Service</td>
</tr>
<tr>
<td>7000 – 8999</td>
<td>Services</td>
<td>7200 – 8999 Professional, scientific and technical activities (M) and Information and communication services (J)</td>
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<td>Intangible Service</td>
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