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The Drivers behind Human Rights Engagement: Responsible Innovation, International Presence, and Economic Development

Master Thesis

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Abstract

Human rights is a highly relevant concept with regards to the business-sector as companies could violate human rights but could also help with addressing human rights problems. However, the domain of human rights is scarcely explored in the international business field. Therefore, this study will try to add to this gap by investigating potential drivers behind a company's human rights engagement. The purpose of this study is to explore the relationship between a company's level of responsible innovativeness, the economy, if a company is internationally present and a company's engagement with human rights. The data is gathered from the Refinitiv database and the Orbis database. The data was processed and analysed using SPSS. This study found that all the three drivers, a company's level of responsible innovation, its' international presence, and a company's home country's economic development have a positive and direct effect on a company's human rights engagement. In addition, there is an indirect effect via the variables International Presence and the variable Economic Development as there is a partial mediation with responsible innovations as the mediator variable. This study helped companies gain an understanding of possible drivers behind its' human rights engagement which could help them with taking up responsibilities regarding human rights. Furthermore, this study provided governments and international organizations with the knowledge about where to target their Official Development Assistance, ODA, to help companies enlarge their engagement with human rights.

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Chapter 1: Introduction

Over the past few years, there has been an increasing call from scholars to address grand challenges in research. Grand challenges are pressing environmental and social issues that surpass national borders and negatively affect large populations, their well-being and well-fare (Ferraro, Etzion, & Gehman, 2015; Wettstein et al., 2019). A concept that embraces most of the present grand challenges is human rights (Wettstein et al., 2019). The concept of human rights is defined as “an especially urgent and morally justified claim that a person has, simply in virtue of being a human adult, and independently of membership in a particular nation, class, sex, or ethnic, religious, or sexual group” (Nussbaum, 2002, p. 153). Human rights continue to be highly relevant regarding businesses (Kolk, 2016), this can be both in a positive as in a negative manner. Positively as businesses could help address human rights problems, negatively through human rights violations (Wettstein et al., 2019). However, companies can differ in the extent to which they act on their human rights responsibilities, this means that their engagement with human rights can vary.

Although human rights is an extremely relevant concept with regards to the business-sector, the relation to legitimate corporate activities have hardly been investigated. An area of research that is not well understood yet is the role of responsible innovation and its relationship with human rights (Wettstein et al., 2019). According to Wettstein et al. (2019), a different level of responsible innovation could be a driver behind a company’s human rights engagement. According to Padgett and Galan (2010) innovation can be perceived as a form of investment which results in an increase in knowledge which may affect product and process innovation, it can result in CSR-related products and process. This is known as innovation-driven CSR (Yaghmaei & van de Poel, 2020). This same reasoning could be used to explain the responsible innovation effect on a company’s human rights engagement, as when a company invests in responsible innovation it could result in human rights related products and processes.

Furthermore, a company’s human rights engagement might be affected by the economic environment a company operates in. Guiliani (2006) found evidence of scenario’s where human’s rights were frequently violated in developing countries. In addition, researchers have shown concern about the capacity of developing countries to comply with western CSR policies and human right practices (Guiliani, 2006). Therefore, there may be a difference in a company’s human rights engagement due to its’ home country’s economic development. Moreover, the economic environment a company operates in could also indirectly affect the company’s human rights engagement through its’ level of responsible innovation, as it is assumed that innovations from emerging market significantly differ from innovations from developed markets and there may be barriers to innovate in developing countries, such as

resource and political constraints (Shankar & Narang, 2020; Zanello, Mohnen, & Ventresca, 2016).

In addition, another factor that could affect a company's human rights engagement directly and indirectly through its' level of responsible innovation is the international presence of a company. MNEs are expected to positively engage with human rights as their acknowledged economic and political power may match that of governments, whereas this expectation may not be the case for national organizations (Hart & Zingales, 2017). In addition, engagement with human rights could be a response to the increased stakeholder pressure which MNEs face to obtain legitimacy in new foreign markets (Lamin & Zaheer 2012). Therefore, a company's human rights engagement could be affected by whether the company is internationally present. Furthermore, Thakur-Wernz and Samant (2019) argue that if a company is internationally present, a MNE, their level of innovation in general and their level of responsible innovation may be higher. This is because being internationally present can stimulate responsible innovation (Thakur-Wernz & Samant, 2019). Therefore, the economy a company operates in and if a company is internationally present can affect a company's human rights engagement directly and indirectly as either the type of innovation differs or the level of responsible innovation.

Therefore, this study aims to explore the relationship between innovativeness, the economy, if a company is internationally present and the engagement with human rights. A company's human rights engagement refers to its' engagement in the promotion and protection of human rights (Mena et al., 2010), which is the dependent variable in this research. The independent variable is a company's level of responsible innovation, which is the ability to produce innovative output that takes care of the future through innovation in the present (Stillgoe, Owen, & Macnaghten, 2013; Neely & Hii, 1998). Another factor that is included in this research is by looking whether a company is internationally present or not, this will be investigated by looking at a company's organizational type whether an organization is considered to be a MNE or a national enterprise. Furthermore, another factor that could affect the relationship between responsible innovation and human rights engagement and could affect human rights engagement directly is the economy of the home state, this effect will be investigated by looking at a country's market classification, whether a country's market is classified as emerging or developed. (Saidi, Prasad & Naik, 2012). This study will also look at the combined effect, whether the relationship between the level of innovativeness and a company's human rights engagement differs if a company is either a developed-country multinational enterprises, DMNE, or an emerging-country multinational enterprise, EMNE. This study is based on the following two research questions:

Question 1: How can a company's responsible innovativeness, its' international presence and its' home country economic development affect a company's human rights engagement?

Question 2: How can a company's international presence and its' home country economic development affects its responsible innovativeness which in turn affects the company's human rights engagement?

This study will contribute to practice in several ways. Firstly, businesses can gain a better understanding of what may possibly drive the engagement with human rights, they could use this knowledge to better take responsibility with regards to human rights as by understanding what drives human rights engagement they could chose to focus on improving and enlarging these drivers. Secondly, this research could help governments and international organizations to focus on human rights engagement as they could learn how to help companies engage with human rights by learning where to focus their ODA flows, Official Development Assistant, to.

This study will contribute to theory through adding new knowledge to the domain of human rights in international business, as IB scholars have scarcely explored the concept of human rights. Furthermore, this research will be focused on responsible innovativeness and its link between the concept and the international business (IB) field and the business and human rights (BHR) field, as this link is currently not well understood. In addition, as there is absence of research on human rights and EMNEs, this study will also add to this gap as there will be a focus on different organizational types. It is important to understand and gain more knowledge about the domain of human rights in international business as research in this field could help address the grand challenges in the world (Wettstein et al., 2019).

The remainder of this study is structured as follows: the next section will provide a theoretical overview which will delve into the possible correlation between the different independent variables and the dependent variable a company's human rights engagement. Section three will discuss the research method that is used for this study. Section four provides an overview of the results. Afterwards, in section 5, the discussion is offered. The discussion will include theoretical and practical implications, limitations, and suggestions for future research. This study ends with a conclusion which is presented in section 6.

Chapter 2: The literature review

This section discusses the theoretical framework and the hypotheses. It will first start with focusing on the concept of human rights. Afterwards, it will discuss the possible relation between responsible innovation and human rights engagement. In addition, this section will investigate the effect of the international presence on a company's human rights engagement, including the partial mediation through a company's level of responsible innovation. Finally, this section will discuss the effect of economic development on human rights engagement and on responsible innovation as a partial mediation.

2.1 Human rights

Moral rights are held to exist independently of any institutional and legal rules. One of the most fundamental categories of moral rights is human rights (Wettstein, 2009; Wettstein, 2012). Human rights can be defined as "an especially urgent and morally justified claim that a person has, simply in virtue of being a human adult, and independently of membership in a particular nation, class, sex, or ethnic, religious, or sexual group" (Nussbaum, 2002, p. 153, as cited in Wettstein, 2012, p. 741). For moral rights to classify as human rights, the claims, or entitlements that these rights address need to be of a fundamental nature. To be more precise, these rights need to address claims that are related to the principal opportunity of being able to live a human life in dignity, which means that a person can live a life in freedom and autonomy (Wettstein, 2012). These rights are owed to and by every person in the world. Human rights are unconditional, indivisible, and inalienable in nature and they are universal and equal. These rights apply to each human to the same extent and in the same manner. (Wettstein, 2009; Wettstein, 2012).

Although human rights are considered to have a most fundamental ethical status, human rights have been lacking to be seen as a concern to businesses. This can partly be explained by how we think about human rights. There is this notion that only states can be exposed to human rights claims. This means that states have a responsibility towards human rights, while this responsibility is not present for organizations. For enterprises, responsibility towards human rights is voluntary as long as governments do not legally enforce it (Wettstein, 2009). However, human rights cannot be ensured by governments alone. In economies that allow free enterprises, human rights need to become the responsibility of organizations or needs to be addressed through government regulation for companies (Cassel, 2001). In addition, human rights engagement by organizations is increasingly expected by their stakeholders, which results in that as well as civil society and governments, organizations have a key role with regards to acting on their human rights responsibilities (Van Tulder et al., 2021).

Human rights have long played a small role in and for the conceptualization of corporate social responsibility, CSR. Although there has been a stream of research about CSR and human rights since the mid-1980s, the integration of human rights with the concept of CSR has been rare. This could be due to the reason that CSR scholars have felt incompetent to add to this debate. In addition, there are two other explanations related to absence of CSR in the business and human rights debate. The first explanation is the problem of voluntariness, as CSR is focused on what is desirable, and therefore optional, while human rights is focused on the indispensable. The second explanation is the problem of non-political responsibility, corporations are perceived as apolitical and private which clashes with the political nature of human rights responsibilities (Wettstein, 2012). These two explanations show that human rights did not fit under the umbrella term of CSR. However, as previously stated governments, civil society, and firms are all expected to engage with human rights. Therefore, the last reasoning is not applicable.

Hence, the main difference between the concept of human rights and CSR is the level of voluntariness. Firms are able to choose their CSR practices, they choose which social and environmental problems they focus on, whereas firms are not able to choose which human rights practices they want to focus on or contribute to. This is because a set of globally recognized human rights principles are binding in most countries across the world (Giuliani, 2016). The CSR framework is a top-down approach with the organization at the centre, whereas the human rights framework is a bottom-up approach, with the individual at the centre (Avery, 2006). Therefore, a different starting point is required to address business responsibilities with a human rights focus in comparison to addressing business responsibilities using the CSR framework, this would also lead to different implications (Wettstein, 2019).

As firms, governments, and civil society are expected to engage with human rights it is important to find out what drives human rights engagement. Previous research about the reasoning behind firms' engagement with CSR found that there are internal and external institutional factors. These internal factors are top management commitment and ethical corporate culture. The external factors are environmental accountability, globalisation, socio-political factors (Dartey-Baah & Amoako, 2021). Furthermore, current research about organizations and their human rights engagements have found that organizations increase their human rights engagement to increase their corporate legitimacy, this is due to an increasing stakeholder power (Mena et al., 2010). Although, the reasoning behind increasing a firm's human rights engagement is known, the explanation of how firms can increase their human rights engagement is missing. Therefore, this paper will focus on the drivers instead

of the motives and will consequently concentrate on business human rights engagement and looks for possible factors that could influence a company's human rights engagement.

2.2 Responsible Innovation

Mishra (2017) found that the more innovative an organization is, the higher it demonstrates corporate social responsibility. Furthermore, Padgett and Galan (2010) found that R&D intensity has a positive effect on CSR. They explained that R&D results in knowledge enhancements which in turn leads to product and process innovations. They further explained that these product and process improvements can result in CSR-related products and process. Padgett and Galan used the example that improved processes could make a firm more effective which could reduce the amount of energy a firm consumes, which in turn reduces the pollution. This argument shows that conducting innovations responsibly could address grand challenges.

According to Owen et al. (2013, p. 10) is responsible innovation a "collective commitment of care for the future through responsive stewardship of science and innovation in the present". There are three essential elements with regards to responsible innovation. Firstly, innovations should avoid further harm to the environment and the population. Secondly, the companies focused on responsible innovation should direct their attention to grand challenges and should provide solutions for the negative effects that may arise due to societal transformation processes. Thirdly, innovations should be focused on doing good and avoiding harm due to responsible governance at several levels (Voegtlin & Scherer, 2018). This indicates the more a company focuses on responsible innovation, the more the company can address grand challenges.

According to (Wettstein et al., 2019), besides being a driver of corporate financial growth and performance, responsible innovation could also be a driver behind sustainability, social development, and could help with addressing the human rights problems present in the world. Innovations should be pursued responsibly to be able to address grand challenges such as human rights (Voegtlin & Scherer, 2018). Increasing a company's level of responsible innovation could affect process and products within the organization that could lead to an increase in human rights engagement. A possible example for this is Sedex, this company invented the so-called Risk Assessment Tool. This tool analyses "hundreds of indices and factors including human rights violations, political risk, corruption risks, and child labour alongside management proficiency and ability to mitigate risk of the individual site" (Gurzawska, 2020b, P. 287). This tool could be helpful for large companies that have a complex supply chain because it could help them to find out where and what to prioritise (Gurzawska, 2020b). Therefore, if a company innovates responsibly, they could use their

own innovation to address and adjust their process and/or products which affects their human rights engagement. This provides the following hypothesis:

Hypothesis 1: A higher level of responsible innovation will result in a higher level of human rights engagement.

2.3 International presence

This research will delve deeper into the concept of international experience and its possible effect on the relationship between responsible innovation and human rights engagement by comparing local companies with multinational enterprises.

This study tries to make a distinction between multinational enterprises, businesses that are present in more than one country, or companies that are only present in one country, national enterprises. Due to being present in more than one country, it could be argued that multinational enterprises have more international experience than national enterprises.

International presence could have a direct effect on a company's human rights engagement. Zhang et al. (2021) investigated whether internationalization could affect a company's CSR. They found that multinational enterprises score higher on CSR than national enterprises, on average the CSR score of multinational enterprises is 7.1% higher in comparison with national enterprises. This difference could be explained by the need for legitimacy and good reputation by multinational organizations. This is because when organizations enter new countries, they will face an increase in stakeholders with increased legitimacy requirements and more diversified needs (Kang, 2013; Zhang et al., 2021). According to Lau, Lu, and Liang (2016), multinationals should adopt social responsibility practices which are accepted by the international community to obtain legitimacy. Furthermore, the adoption of social responsibility practices increases the reputation of the multinationals (Kang, 2013; Zhang et al., 2021). National organization do not face this new need for legitimacy and good reputation. Therefore, there may be a difference in the level of CSR in multinational firms compared to national organizations.

A similar argument could be made regarding human rights due the new expectations when firms enter new countries. Multinational organizations may have equal size or even bigger economic and political power than that of governments which results in expectations that multinational organizations should positively engage with human rights (Hart & Zingales, 2017). When multinational organizations do not meet these expectations, this may affect their reputation or legitimacy, which is related to their liability of foreignness. Liability of foreignness can be broadly defined as 'all additional costs a firm operating in a market overseas incurs that a local firm would not incur' (Zaheer, 1999, p 343). When organizations do not meet the expectations, this could increase their costs because their legitimacy may be

affected. Therefore, MNEs could engage in human rights to increase their legitimacy and decrease these costs. National organizations do not have this size of economic and political power, this could mean that the same expectations do not apply to national organizations. This could mean that national organizations do not experience these legitimacy costs, which means they may be less inclined to engage with human rights than MNEs. Therefore, it can be argued that being internationally present affects a company human rights engagement as it could be the case that multinational corporations have a higher human rights engagement in comparison with domestic firms. This provides the following hypothesis.

Hypothesis 2: Multinational enterprises are more likely to have a higher human rights engagement than national enterprises.

There could also be an indirect effect via a company's level of responsible innovation in addition to the direct effect discussed above. This would be a partial mediation. A higher level of international experience could influence the innovativeness of an enterprise. A result of international experience is organizational learning. This is because when an organization expands internationally, it can gain knowledge about the market, technology, and social learning. A requirement for the development of new innovations is the creation of new knowledge, this criterion is met due to organization learning that improves the knowledge base of the company. As organizations learn by expanding internationally and thereby improve the knowledge base of the company, international experience could therefore result in a higher level of innovativeness (Thakur-Wernz & Samant, 2019).

Furthermore, Quan et al. (2021) found that CEO foreign experience has a positive effect on the level of corporate green innovation. They argue that company with a CEOs that has foreign experience will have a higher level of green innovation. A possible explanation Quan et al. (2021) provide for this agreement is that these CEOs have a greater awareness of environmental protection. This explanation could result in the reasoning that if a company has more international experience, this company could have a greater awareness of environmental protection due to organizational learning. Furthermore, as green innovation is an aspect of the larger concept responsible innovation (Gurzawska, 2020a), the previously discussed argument that multinational firms could have a higher level of innovativeness in comparison to national firms is also applicable to the concept of responsible innovation.

There is also a negative aspect with regards to multinational enterprises and responsible innovation as multinational enterprises could contradict two important conditions of responsible innovation. The need for secrecy could affect the condition of transparency, as not providing all the information and keeping it secret could make the company less transparent, and the complexity of supply chains could affect the condition of

responsiveness, as having a complex supply chain could make it difficult to act quick and could make change difficult (Pellé & Reber, 2015). This indicates that the argument that multinational enterprises which are more responsible innovative could be seen as questionable. However, the resources and knowledge advantages that multinational enterprises gain due to their international experiences outweigh the disadvantage of being rigid and therefore less responsive (Robson, Haugh & Obeng, 2009). This means that multinational enterprises could have a higher level of responsible innovativeness in comparison to national enterprises.

Consequently, the following can be argued: Due to having more international experience, multinational enterprises will display a higher level of responsible innovation which in turn leads to more engagement with human rights than national enterprises. This would mean that a company's responsible innovation mediates the relationship between a company's international presence and a company's human rights engagement. This provides the following hypothesis.

Hypothesis 3: Multinational enterprises are more likely to have a higher level of responsible innovation which in turn results in a higher level of human rights engagement than national enterprises.

2.4 Economic development

This study will try to compare developed markets with emerging markets and will research if a country's economy could affect the relationship between a company's responsible innovation capabilities and human rights engagement.

Two well-known market classifications are developed markets and emerging markets. A country, and its market, is considered to be an emerging market as its GDP is below a certain level (Berrill & Mannella, 2013). This GDP level changes over time (Bekaert & Harvey, 2002). An emerging market is characterized by its high degree of volatility and its transitional character (Mody, 2003). According to Saidi, Prasad & Naik (2012), there are also other characteristics that separates the two market classifications, such as size, liquidity, and market accessibility. The developed markets can mostly be found in the global north and the emerging countries can mostly be found in the global south (Dirlik, 2007; Odeh, 2010).

Al-Mamun and Seamer (2022) found a country factor that could affect a company's CSR engagement for both developed and developing countries. They found that an economy's financial development could influence a company's CSR engagement. They argued that organizations will have a higher level of CSR engagement when the economy where the firm operates in is effective in capital allocation and at allowing diversification of risk. Furthermore,

financial development also depends on the openness of the capital market, and the extent and depth to which investors are secured in their ability to access their investments.

Čihák et al. (2013) found that countries that have a lower income are more likely to show a lower level of financial development. As countries are classified to be an emerging market when its' GDP level is below a certain benchmark (Berrill & Mannella, 2013), it can be argued that emerging markets have a lower financial development than developed markets.

Consequently, it can be reasoned that developed markets show a higher level of CSR engagement than emerging markets, which results to the argument that firms from developed countries are more likely to have a higher level of CSR engagement than firms of emerging countries.

Furthermore, according to Gong and Wei (2020), economic development determines to an extend the degree of social rights protection, which is an important concept within the system of human rights. In addition, Hafner-Burton, and Tsutsui (2005) state that due to more political stability, the likelihood of human rights violations is reduced. When these two findings are combined with the above argument about CSR it can be argued that firms from developed countries are more likely to display a higher level of human rights engagement than firms from emerging countries. This results in the following hypothesis:

Hypothesis 4: Companies of which the home country is categorised as developed are more likely to have a higher level of human rights engagement than companies of which the home country is categorised as emerging.

In addition, there could also be an indirect effect between economic development and human rights through a company's level of responsible innovation. This would be a partial mediation. Zanello, Mohnen, and Ventresca (2016) found several barriers to innovate for developing countries. They divided these barriers into external factors and internal factors. The external factors are economical, such as the economic development, political, such as corruption and a weak political system, and institutional, such as intellectual property rights. The internal factors are lack of resources, such as information, and a lack of human capital, such as education. These barriers can also be applicable to responsible innovation. This because De Hoop, Pols, and Romijn (2016) found for example that a barrier to responsibly innovate is lack of means available, the material barrier. This barrier is inline with the barrier lack of resources found by Zanello, Mohnen, and Ventresca (2016).

It can be the case that these barriers or at least some of these barriers are not applicable to developed countries. For example, developed countries have a various range of options to obtain information for a low cost (Ryan & Daly, 2019). Therefore, the barrier of lack of resource may not be applicable. Consequently, it can be argued that since developed

countries have less barriers to responsibly innovate it can be the case that firms from developed countries are more likely to display a higher level of responsible innovation than firms from emerging markets, which in turn positively affects their human rights engagement. This would mean that a company's responsible innovation mediates the relationship between a company's country's economic development and a company's human rights engagement. Accordingly, the following hypothesis can be argued:

Hypothesis 5: Companies of which the home country is categorised as developed are more likely to have a higher level of responsible innovation which in turn results in a higher level of human rights engagement than companies of which the home country is categorised as emerging.

2.5 The conceptual model

The conceptual model consists of four factors, Responsible Innovation, Human Rights Engagement, Economic Development, and International Presence. The conceptual model is depicted in figure 1.

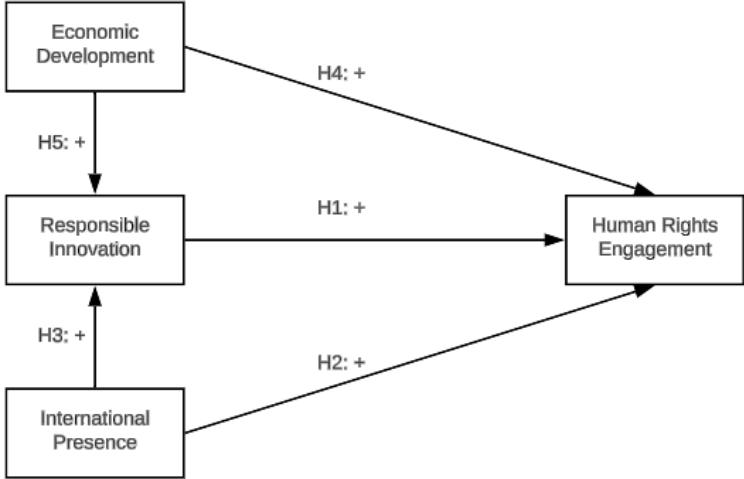


Figure 1: The conceptual model

Chapter 3: Methodology

This section of the paper will discuss the methodology of this research. Firstly, the research method will be explained, whereby the focus will be on explaining the reasoning behind using a quantitative method. Secondly, the database and sample that are used for this study will be discussed. Thirdly, the operationalization of the variables will be explained. This will start with the dependent variable, continues with the independent variables, and will end with the control variables. Fourthly, the analytical method will be discussed. Finally, this section ends with a discussion about the research ethics.

3.1 Research method

This research will be using a quantitative research method to check the hypotheses and to answer the research questions. Creswell (1994, as cited in Sukamolson, 2007) defined quantitative research as 'explaining phenomena by collecting numerical data that are analysed using mathematically based methods (in particular statistics)'. There are two main types of quantitative research, experimental research, researcher create specific conditions to test a theory, or nonexperimental research, research use existing situations to investigate phenomena. This research uses nonexperimental research. There are three forms of nonexperimental research, causal comparative research, correlational research, and descriptive research. Causal comparative research is applicable to this research as this form of nonexperimental research tries to infer causality by trying to explain the differences between variables of interest of subjects by discovering variables that explain this difference (Holton & Burnett, 2005). It was decided to use a quantitative research method as this method is effective in studying large groups, strong in making generalizations from the sample to groups beyond the sample, and this method allows for more assurance in the development of study findings (Hair Jr. et al., 2005 as cited in D'Agostin et al., 2020; Holton & Burnett, 2005).

3.2 Database and sample

There are two main databases that will be used for this research, the Refinitiv database and the Orbis database.

The Refinitiv database offers ESG, environmental, social, and governance, data, and analytics for the financial industry. It covers 80% of the global market cap and it has data from 2002 onwards. The ESG scores are designed to objectively and transparently measure a company's relative ESG performance. This score is based on company reported data. This data stems from publicly available information sources. The ESG scores are created based on 186 company-level ESG measures which are grouped in 10 categories, one of which is Human rights. The database is continuously updated (Refinitiv, 2021).

The Orbis database is a database that contains data from 450 million companies across the world. The Orbis database contains ratings and country reports, scanned reports, ownership and M&A data, news, company financials, and descriptive information. Orbis offers complete transparency by providing the sources (Bureau van Dijk, 2007; Bureau van Dijk, 2023; Busch, 2014).

3.3 The dependent variable

The dependent variable in this research is "Human rights engagement". This variable is measured using the Refinitiv ESG human rights score. This variable is measured in percentages. This score is created as follows. For each of the applicable company-level ESG measure, a company could either get a 1 or a 0. These measures are then combined to create numeric values for the percentile score calculation. The percentile rank score is calculated using the following formula (Refinitiv, 2021):

$$\frac{\text{no. of companies with a worse value} + \left(\frac{\text{no. of companies with the same value included the current one}}{2}\right)}{\text{no. of companies with a value}}$$

The formula shows that if a company has a high percentile rank score, they score higher on human rights engagement in comparison to other companies. The higher the percentage, the higher a company's human rights engagement. This makes the variable "Human rights engagement" a ratio variable, which makes it a continuous variable.

3.4 The independent variables

To measure the independent variable "Responsible innovation" a proxy is used. Responsible innovation will be measured using the method used by Van der Waal, Thijssens, & Maas (2021) related to patents as a base. They created a thesaurus of SDG innovation related keywords that made it possible to search for SDG related relevance, applications, and advantages in patent texts. Van der Waal, Thijssens, & Maas (2021) created a distinction between so-called blue SDG keywords and green SDG words. The green SDG keywords relate to environmental targets while the blue SDG keywords relate to non-environmental target. Both the blue and the green SDG keywords will be used in this research. The list of keywords can be found in Appendix 1. After critically reviewing the thesaurus of SDG innovation related keywords, it was decided to use a subset of the keywords. The Thesaurus by Van der Waal, Thijssens, & Maas (2021) was divided into 5 categories, nature of innovation, societal problem, context, target population, and general words. The keywords in the category nature of innovation will be used as a method to distinguish the patents related to responsible innovation. It was chosen to only use the category nature of innovation to ensure that all patents that are used are related to responsible innovation. This variable will be measured using the number of patents related to responsible innovation, the higher the

number of patents related to responsible innovation, the higher the company's level of responsible innovativeness. Therefore, this variable is a ratio variable. The variable "Responsible innovation" is therefore a continuous variable.

The independent variable "International Presence" is a nominal variable, as there are only two options. The organization could either be a multinational enterprise or a national enterprise, this means that the organization is either internationally present or not. An organization is considered a multinational if the organization is present in more than one country. An organization is a national enterprise if is present in a single country. It was chosen for this variable to be included as a nominal variable to make a clear distinction and comparison possible between EMNEs, DMNE's, national companies from developed countries, and national companies from emerging countries. The variable "International Presence" is a categorical variable.

The independent variable "Economic development" is a nominal variable. This is because this variable is consisted of two distinct categories, which are developed markets and emerging markets. The organization can either has a developed market as its home country or an emerging market as its home market. The classification of whether a country is either a developed country or an emerging country will be done by using the statistical annex used by the World Economic Situation and Prospects (WESP). The ISO country codes will be used to determine the country of each organization. This will be done using the Refinitiv database. Afterwards the market classification will be done. The decision to include this variable as a nominal variable was made as to make a clear distinction and comparison possible between EMNEs, DMNE's, national companies from developed countries, and national companies from emerging countries. The variable "Economic development" is a categorical variable.

3.5 Control variables

There are several firm characteristics that will be used in this study as a control variable. The first control variable is firm size which will be measured using the number of employees. Salcito, Wielga, and Singer (2015) found a significant positive relationship between firm size and corporate human rights commitments. In addition, Činčalová and Hedija (2020) found that firms size affects CSR engagement. Larger firms display a higher score on CSR than smaller firms, this can be because larger firms experience more stakeholder pressure due to their visibility, larger firms have more financial resources, and these firms have more knowledge about CSR (Arora & Soni, 2017; Činčalová & Hedija, 2020). They also found that firm financial performance also affects CSR engagement. Companies that have a lower financial performance display a higher score on CSR, a reason for this could be because organizations that focus on CSR could have alternative goals, such as social or

environmental, next to the financial performance goal. This could lead to a lower financial performance of that firm (Činčalová & Hedija, 2020). Furthermore, Pehlivanlı (2023) found a significant relationship between a company's financial performance and their corporate human rights performance. Therefore, firm financial performance is the second control variable which will be measured by looking at the return on assets of the company. The third control variable is firm age. Arora and Soni (2017) found that firm age negatively affects a firms' CSR engagement, younger firms show more social responsibly behaviour in comparison than older firms. In addition, they found that firm leverage is also negatively related to a firm's CSR engagement, organizations that have a lower debt financing often display a higher score on CSR. Therefore, the fourth control variable is firm leverage which will be measured by looking at the amount of dept in comparison to equity.

3.6 The analytical method

This research is based on two research questions. The first research question relates to the direct effect of the independent variables Responsible Innovation, International Presence, and Economic Development on the dependent variable Human Rights Engagement. The second research question relates to the indirect effect of the independent variables International Presence and Economic Development on the dependent variable Human Rights Engagement through the variable Responsible innovation. The second research question consists of two separate mediation models.

This research will start with checking the direct effects of the independent variables on the dependent variable. Hence, this research will start with checking hypotheses 1, 2, and 4. Afterwards, the indirect effects will be checked, which relates hypothesis 3 and 5.

To check the hypotheses a multiple regression analysis will be conducted. It was decided for a multiple regression analysis as the conceptual model consists of one continuous dependent variable and two independent variables, one of which is categorial variable while the other variable is of the continuous kind. The process procedure in SPSS will be used to measure the mediation effect.

3.7 Research ethics

This research will use the data that is made available by the Refinitiv database and the Orbis database. The Orbis database carefully collects the data from more than 170 provides and their own sources. They provide their data sources which results in full transparency (Bureau van Dijk, 2023; Busch 2014). The Refinitiv database uses more than 360 content analysts to retrieve the data, this data is publicly available (Refinitiv, 2021). Both databases try to be as transparent as possible. This research will become publicly available at Radboud thesis repository.

Chapter 4: Results

This section discusses the results of this research, these are based on the investigation of the direct and indirect effects of the independent variables, Responsible Innovation, International Presence, and Economic Development, on the dependent variable Human Rights Engagement. This section starts with examining the descriptive statistics and the correlation matrix. Afterwards, this paper reviews the assumptions of the multiple regression analysis. Finally, this section ends with stating the results of the multiple regression analysis.

4.1 The descriptive statistics

Table 1: The descriptive statistics

	N	Mean	Standard Deviation	Minimum	Maximum	Skewness	Kurtosis
Human Rights Engagement	17406	41.454	34.806	0.000	99.430	0.147	-1.478
Responsible Innovation*	17405	14.353	46.560	-8.820	263.760	1.798	2.088
International Presence	17406	0.720	0.451	0.000	1.000	-0.962	-1.075
Economic Development	17406	0.740	0.439	0.000	1.000	-1.091	-0.810
Firm Size*	17406	9.303	1.787	0.000	14.650	-0.885	2.201
Firm Age	17406	43.570	32.186	0.000	195.000	1.128	0.784
Firm Leverage*	17405	126.897	2498.514	-9524.110	9775.850	0.005	-0.020
Firm Financial Performance*	17405	5.552	11.095	-37.260	48.360	0.000	-0.013

*Variable data transformed to result in a normal distribution

Table 1 shows the descriptive statistics. This research makes use of the data of 1934 companies. After changing the data from a wide format to a long format, the sample size N is 17406, this is the number of companies times the number of years.

The dependent variable Human Rights Engagement scores between 0.00 and 99.43, with a mean of 41.45 and a standard deviation of 34.81.

The independent variable Responsible Innovation scores between -8.82 and 263.76, with a mean of 14.35 and a standard deviation of 46.56. The data of this variable is transformed to result in a normal distribution, this was done using the two-step approach by Templeton (2011). The first step is to transform the variable into a percentile rank, this will ensure uniformly distributed probabilities. The second step uses the inverse-normal transformation to result in a variable which is normally distributed. The transformation of the variable explains the possibility of having a negative value.

The independent variable International Presence is a dummy variable. The score of 0 means that the firm is a national firm, while the score of 1 means that the firm is a multinational firm. The mean is 0.72 and the standard deviation is 0.45. From the descriptive statistics it can be concluded that there are more multinational firms in the sample than national firms, around 72% are multinational firms.

The independent variable Economic Development is a dummy variable. The score of 0 means that the origin country of the firm is considered as developing, while the score of 1 means that the origin country of the firm is considered as developed. The mean is 0.74 and the standard deviation is 0.44. From the descriptive statistics it can be concluded that there are more firms from developed countries in the sample than from developing countries, around 74% are from developed countries.

Regarding the control variables, Firm size scores between 0.00 and 14.65, with a mean of 9.30 and a standard deviation of 1.79. Firm age scores between 0.00 and 195, with a mean of 43.57 and a standard deviation of 32.19. Firm leverage scores between -9524.11 and 9775.85, with a mean of 126.90 and a standard deviation of 2498.51. Firm financial performance scores between -37.26 and 48.36, with a mean of 5.55 and a standard deviation of 11.10. The data from the variables Firm size, Firm leverage, Firm financial performance are transformed to result in a normal distribution. The log transformation was used to transform the variable Firm size, while the two-step approach by Templeton (2011) was used for the variables Firm leverage and Firm financial performance.

Table 2: The correlation matrix

	1.	2.	3.	4.	5.	6.	7.	8.
1. Human Rights Engagement								
2. Responsible Innovation*	0.180**							
3. International Presence	0.257**	0.209**						
4. Economic Development	0.113**	0.134**	0.074**					
5. Firm Size*	0.318**	0.261**	0.226**	-0.061**				
6. Firm Age	0.161**	0.277**	0.098**	0.161**	0.148**			
7. Firm Leverage*	0.076**	-0.044**	-0.058**	-0.049**	0.186**	-0.009		
8. Firm Financial Performance*	0.050**	0.035**	0.047**	-0.018*	0.011	-0.030**	-0.256**	

N = 17405; **p < .01; *p < .05

Table 2 shows the correlation matrix. As can be seen from the table, the dependent variable has a significant relationship with all the independent variables, Responsible Innovation, International Presence, and Economic development. Additionally, the independent variable has a significant relationship with all the control variables, Firm Size, Firm Age, Firm Leverage, and Firm Financial Performance. Furthermore, the table shows a significant relationship between the variable Responsible Innovation and the variables International Presence and the variable Economic Development.

4.2 The assumptions

There are four assumptions to be checked, namely linearity, normality, homoscedasticity, and multicollinearity. To check these assumptions the normal P-P plot and the scatterplot will be reviewed. The normal P-P plot shows that the data follows the normality line, and the scatterplot shows a random spread. Therefore, the assumptions linearity, normality, and homoscedasticity are met. The fourth assumption, multicollinearity, will be checked by looking at the collinearity statistics. The VIF values are all below the threshold of 10 and the tolerance value are all above the threshold of 0.2. Therefore, the assumption of multicollinearity is met, which means that all four of the assumptions are met.

4.3 Hypotheses testing

The direct effect of the independent variables, Responsible Innovation, International Presence, and Economic Development, on the dependent variable, Human Rights Engagement, were tested first. Afterwards, the indirect effects of the independent variables International Presence and Economic Development on the dependent variable Human Rights engagement through the variable Responsible Innovation was measured.

4.3.1 Direct effect

Table 3: The direct effect of the independent variables on the dependent variable Human Rights Engagement.

	Direct effects		Including control variables	
	β	SE	β	SE
Responsible Innovation	.122**	.006	.043**	.006
International Presence	.226**	.571	.178**	.559
Economic Development	.080**	.578	.100**	.563
R ²	.089		0.165	
R ² (only including the control variables)			0.118	

N=17403; **p<.001; *p<.05

A regression analysis was performed to test the direct effect between the independent variables and the dependent variable. Table 3 shows that there is a significant positive effect between all three independent variables and the dependent variables. Even after controlling for firm size, firm age, firm leverage, and firm financial performance, the effects stay significant and positive.

Table 3 shows that there is a significant positive relationship between the level of responsible innovation of a company and its' human rights engagement ($\beta = .043$; $p < .0001$). This finding supports hypothesis 1. In addition, table 3 shows that there is a significant positive direct effect between a company's International Presence and its' human rights engagement ($\beta = .178$; $p < .0001$). Therefore, this finding is consistent with hypothesis 2. Finally, the results show a significant positive direct effect between a company's home country's economic development and the company's human rights engagement ($\beta = .100$; $p < .0001$). Therefore, the data supports hypothesis 4.

Out of the three effects, the effect of International Presence on a company's human rights engagement is the biggest, the effect of the variable economic development on the variable human rights engagement is the second biggest, while the effect of the level of Responsible innovation on a company's human rights engagement is the smallest. This means that whether a company is an MNE, or a national organization and a company's home country's economic development status has a bigger impact on a company's human rights engagements than the level of responsible innovation of the company.

Table 4: hypotheses 1, 2, and 4 testing results

Hypothesis	Path	Results
Hypothesis 1	Responsible innovation → Human Rights Engagement	Supported
Hypothesis 2	International Presence → Human Rights Engagement	Supported
Hypothesis 4	Economic Development → Human Rights Engagement	Supported

4.3.2 Indirect effect

Table 5: The mediation effects on the dependent variable Human Rights Engagement.

	Mediation effect		Including control variables	
	β	SE	β	SE
International Presence	.062**	.004	.016**	.002
R ²	.066		.153	
	Mediation effect		Including control variables	
	β	SE	β	SE

Economic development	.051**	.004	.017**	.002
R ²		.013		.132

*N=17403; **p<.001; *p<.05*

A regression analysis was performed in SPSS using the process procedure to test the mediation effect between the independent variables International Presence and Economic Development and the dependent variable Human Rights Engagement through the variable Responsible Innovation. Table 5 shows the results of this regression, which shows that both mediation effects are positive and significant. Even after adding the control factors to the regression, the mediation effects remain positive and significant. The table shows a significant positive mediation effect between the status of internationalization of a company and its' human rights engagement through a company's level of responsible innovation ($\beta = .016$; $p < .0001$). These results support hypothesis 3. Furthermore, the table shows a significant positive mediation effect between a company's home country's economic development and a company's human rights engagement through its' level of responsible of innovation ($\beta = .017$; $p < .0001$). Therefore, hypothesis 5 is supported.

Both mediation effects are positive and significant, the effect size of both is of similar size. This means that a company's International Presence, whether a company is considered as a MNE or a national organization, and a company's home country's economic development classification, whether a company's home country is considered as developed or developing, has a similar effect on a company's human rights engagement through its' level of responsible innovation.

Table 6: Hypothesis 3 and 5 testing result

Hypothesis	Path	Results
Hypothesis 3	International Presence → Responsible innovation → Human Rights Engagement	Supported
Hypothesis 5	Economic Development → Responsible Innovation → Human Rights Engagement	Supported

Chapter 5: Discussion

This chapter will start with discussing the results of this study. Afterwards, the practical and theoretical implications will be examined. This chapter ends with discussing the limitations of this research and will state several suggestions for future research.

5.1 Discussion of the results

This study investigated the direct and indirect effect of the independent variables Responsible Innovation, International Presence, and Economic Development on the dependent variable Human rights engagement. This was accomplished via testing five hypotheses.

Hypothesis 1 was related to the direct effect of the independent variable Responsible Innovation on the dependent variable Human Rights Engagement. This hypothesis argued that a company with a higher level of responsible innovation would have a higher level of human rights engagement in comparison to a company with a lower level of responsible innovation. The results showed that this hypothesis was supported. This means that when a company invests in responsible innovation, this investment could lead to more engagement in human rights by that company.

Hypothesis 2 was related to the direct effect of the independent variable International Presence on the dependent variable Human Rights Engagement. This hypothesis argued that multinational firms are more likely to have a higher level of human rights engagement than national enterprises. The results support this hypothesis. This means that international experience positively affects a company's human rights engagement, entering a foreign market for the first time will result in an increase in a company's engagement with human rights.

Hypothesis 3 was related to the indirect effect of the independent variable International Presence on the dependent variable Human Rights Engagement through the variable Responsible Innovation. This hypothesis argued that multinational firms are more likely to have a higher level of responsible innovation which in turn should result in a higher level of human rights engagement than national firms. Support was shown by the results for this hypothesis. This would indicate that having international experience would positively affect a company's level of responsible innovation which in turn results in an increase in a company's engagement with human rights.

Hypothesis 4 was related to the direct effect of the independent variable Economic Development on the dependent variable Human Rights Engagement. This hypothesis argued that organizations of which the home country is classified as developed are more likely to have a higher level of human rights engagement than organizations of which the home

country is classified as developing. The results support this hypothesis. This would mean that an influx in economic development, so much so that a country's classification is changed from developing to developed, would lead to more engagement with human rights by organizations within this country.

Hypothesis 5 was related to the indirect effect of the independent variable Economic Development on the dependent variable Human Rights Engagement through the variable Responsible innovation. This hypothesis argued that organizations of which the home country is classified as developed are more likely to have a higher level of responsible innovation and in turn a higher level of human rights engagement than organizations of which the home country is classified as developing. Support was shown for this hypothesis by the results. This would mean that when a country experiences so much economic development that it would change the categorization from developing to developed, the organizations within this country would see an increase in their level of responsible innovation and in turn an increase in their engagement with human rights.

When these results are combined, the following can be argued. Developed-country multinational enterprises are likely to experience a higher level of human rights engagement than emerging-country multinational enterprises, or national enterprises. Emerging country multinational enterprises or national enterprises from developed countries would experience a similar level of human rights engagement. The organizational type expected to have the lowest level of human rights engagement would be national enterprises from developing countries.

5.2 Practical and theoretical implications

There are several practical and theoretical implications that can be concluded from the results. The practical implications are discussed first and are focused on the actions business themselves can undertake and on the actions that governments and international organization can undertake. The theoretical implications are discussed afterwards.

This result of this study leads to several practical implications. This study found that one of the drivers behind a company's human rights engagement is its' level of responsible innovation. This would mean that if company's, no matter the type of organization, want to enlarge their human rights engagement, they should invest in responsible innovation. In addition to increased human rights engagement, this investment in responsible innovation could also result in more benefits such as openness to new business opportunities beyond the boundaries of the organization and more creativity (Schönherr, Martinuzzi, & Jarmai, 2020).

Another driver behind a company's human rights engagement is whether a company has international experience. As this study found that multinational organizations have a higher level of human rights engagement, a possible implication that could be made is that national organizations could consider expanding to a foreign market to gain international experience and in turn expand their engagement with human rights. This would mean that national organizations would turn into either DMNEs or EMNEs. However, this study argued that MNEs display a higher level of human rights engagement because they experience pressures from stakeholders and not because they actively try to engage with human rights. Therefore, an implication more fitting to argument made would be that this study showed that MNEs display more engagement with human rights which could mean that MNEs could enlarge their engagement with human rights to improve their legitimacy.

The third driver that this study found is economic development. As it would be difficult for a singular company to cause such an influx in economic development that a country changes from a developing country to developed country, they could decide to instead move from a developing country to a developed country. This is because this study found that companies from developed countries have a higher level of human rights engagement than companies from developing countries. An implication would be that EMNE could consider changing its' home country to a developed country, so to legally register and take up residence in a developed country instead of a developing country to increase their human rights engagement. However, this implication could have negative consequences for developing countries.

There are also implications for governments and international organizations. Governments could provide subsidies for responsible innovation to organizations in their country to expand their human rights engagement. Governments from developed countries and international organizations could also have an effect on company's human rights engagement in developing countries via bilateral and multilateral ODA, Official Development Assistance. Bilateral ODA are the transactions undertaken by developed countries directly with developing countries, whereas multilateral ODA are the transactions undertaken by international organization with developing countries (Gulrajani, 2016). These ODA flows could help with improving the economic development of the country or more specifically could help companies in developing countries to improve their level of responsible innovation, by for example information sharing, or could help companies to gain international experience by helping them to expand into foreign markets.

This study has contributed to theory by adding new knowledge to the domain of human rights in international business, IB, as researchers has scarcely explored this. This gap in the

domain of human rights in IB exists because IB literature focused most often on topics related more directly to firms' profit, economic survival, or performance (Kolk, 2016). This study added to this gap by finding out several drivers behind a company's human rights engagement. These drivers are level of responsible innovation, whether a company has international experience or not, and a home country's economic development. Furthermore, Wettstein (2019) suggested that responsible innovation could help with addressing human rights problems and the result of this study supports this suggestion. Furthermore, this study adds to the gap of EMNEs and human rights, as this has been largely neglected by IB scholars (Pisani et al., 2017). This study showed the difference in human rights engagement between different organizational types, as this study found that DMNEs are more likely to have a higher level of human rights engagement than EMNEs and national organization and that national organization from developing countries are more likely to display the lowest level of human rights engagement.

5.3 Limitations and suggestions for future research

This study has several limitations, which leads to some suggestions for future research. Firstly, this research has included the variables International Presence and Economic Development as nominal variables, a country or organization could either fit in one of the two categories. This to make a clear distinction between organizational types possible. This could be seen as a limitation as these variables could also have been included as continuous variables, which could have provided more information about smaller changes in the variables. The current measurement only provide evidence for substantial changes in economic development and international presence. Therefore, a suggestion for future research would be to investigate these two drivers again by including them as continuous variables. This would mean to measure the degree of internationalization and the level of economic development instead of singular changes in these variables.

The second limitation would be that this study is not able to provide an in-depth explanation about the mechanisms and processes underlying the relationship between responsible innovation and human rights engagement. This study argues that when an investment in responsible innovation by a company could result in human rights related products and processes. However, the exact process of this argument is lacking in study. Therefore, a suggestion for future research would be to research the underlying mechanism and processes behind this argument and investigate if these processes may be different for different organizational types, this can be done via qualitative research.

The third limitation of this research would be the scope of this research, as this study focused on only three different drivers of human rights engagement while there may be many other

drivers behind a company's human rights engagement. Therefore, a suggestion for future research may to focus on other drivers behind a company's human rights engagement. A suggestion of a possible driver which may be included in future research is how the government form an organization is present in affects its' human rights engagement. Research on human rights has regularly shown the importance of democracy (De Mesquita et al., 2005). It would be interesting to see if this importance of democracy also applies to a company's human rights engagements.

Chapter 6: Conclusion

To conclude, this study focused on exploring the possible drivers behind a company's human rights engagement. This is because the concept of human rights engagement has scarcely been explored by IB scholars, therefore this study tries to add new knowledge to this gap.

The first driver that was investigated was a company's level of responsible innovation, this was measured based on the number of patents a company has related to responsible innovation. The second driver that was explored is a company's International Presence, whether a company is present in more than one country. There was a distinction made between multinational organizations and national organizations. The third driver that was researched is a company's home country's economic development, whether a company's home country is considered as being developed or developing. This resulted in the following research question:

Question 1: How can a company's responsible innovativeness, its' internationalization and its' home country's economic development affect a company's human rights engagement?

The data was analysed using a regression model, this led to the following results. This study found that all three drivers have a positive and significant effect on a company's human rights engagement. The driver with the largest effect on a company's human rights engagement is the variable International Presence. This study found that multinational organizations are more likely to display a higher score in its' human rights engagement than national organizations. The second largest driver is a company's home country's economic development. According to the results, a company of which the home country is considered as developed is more likely to demonstrate a higher score for human rights engagement than a company of which the home country is considered as developing. The driver with the smallest effect on a company's human rights engagement is the company's level of responsible innovation. This means that organizations with a higher score on its' level of responsible innovation is more likely to exhibit a higher score on its' human rights engagement than organizations with a lower score on its' responsible innovativeness level.

Furthermore, this paper investigated the mediation effect whether a company's international presence and its' home country's economic development affect its' human rights engagement through the company's level of responsible innovation. This resulted in the second research question, which is:

Question 2: How can a company's international presence and its' home country economic development affects its' responsible innovativeness which in turn affects the company's human rights engagement?

The mediation effect was measured using a regression via the process procedure. This study found that both economic development of an organizations' home country and its' International Presence positively and significantly effect the company's human rights engagement through its' level of responsible innovation. Both the effect sizes are of the same size. However, the direct effect of both drivers on a company's human rights engagement are substantially larger.

Reference list

- Al-Mamun, A., & Seamer, M. (2022). The influence of institutional qualities on CSR engagement: a comparison of developed and developing economies. *Meditari Accountancy Research*, 30(1), 94-120.
- Arora, A., & Soni, T. K. (2017). Corporate social responsibility and firm characteristics: Evidence from BSE 500. *International Journal of Information, Business and Management*, 9(1), 119.
- Asongu, J. J. (2007). Innovation as an argument for corporate social responsibility. *Journal of business and Public Policy*, 1(3), 1-21.
- Avery, C. (2006). The difference between CSR and human rights. *corporate citizenship briefing*, 89(4).
- Bekaert, G., & Harvey, C. R. (2002). Research in emerging markets finance: looking to the future. *Emerging markets review*, 3(4), 429-448.
- Berrill, J., & Mannella, G. (2013). Are firms from developed markets more international than firms from emerging markets?. *Research in International Business and Finance*, 27(1), 147-161.
- Bureau van Dijk. (2007). *Orbis Internet User Guide*. <https://www2.bib.uni-mannheim.de/fileadmin/ub/pdf/Fachref/BWL/OrbisInternetUserGuide.pdf>
- Bureau van Dijk. (2023). *Orbis*. <https://www.bvdinfo.com/en-gb/our-products/data/international/orbis>
- Busch, Jason (20 March 2014). "Bureau van Dijk – A Provider to Watch". Spend Matters. Retrieved 15 June 2023.
- Cassel, D. (2001). Human rights and business responsibilities in the global marketplace. *Business ethics quarterly*, 261-274.
- Čihák, M., Demirgüç-Kunt, A., Feyen, E., & Levine, R. (2013). Financial development in 205 economies, 1960 to 2010 (No. w18946). National Bureau of Economic Research.
- Činčalová, S., & Hedija, V. (2020). Firm characteristics and corporate social responsibility: The case of Czech transportation and storage industry. *Sustainability*, 12(5), 1992.
- Dartey-Baah, K., & Amoako, G. K. (2021). Global CSR, drivers and consequences: a systematic review. *Journal of Global Responsibility*, 12(4), 416-434.

- De Hoop, E., Pols, A., & Romijn, H. (2016). Limits to responsible innovation. *Journal of Responsible Innovation*, 3(2), 110-134.
- De Mesquita, B. B., Downs, G. W., Smith, A., & Cherif, F. M. (2005). Thinking inside the box: A closer look at democracy and human rights. *International Studies Quarterly*, 49(3), 439-457.
- Dirlik, A. (2007). Global South: predicament and promise. *The Global South*, 1(1), 12-23.
- Ferraro, F., Etzion, D., & Gehman, J. (2015). Tackling grand challenges pragmatically: Robust action revisited. *Organization studies*, 36(3), 363-390.
- Gulrajani, N. (2016). Bilateral versus multilateral aid channels. *Strategic choices for donors*. London: Overseas Development Institute.
- Gurzawska, A. (2020a). 3 Strategic responsible innovation management (StRIM). Assessment of Responsible Innovation, 63. Forthcoming in Yaghmaei, E., & Poel, I. V. D. (2021). *Assessment of Responsible Innovation: methods and practices* (p. 376). Taylor & Francis
- Gurzawska, A. (2020b). Towards responsible and sustainable supply chains—innovation, multi-stakeholder approach and governance. *Philosophy of Management*, 19(3), 267-295.
- Hart, O., & Zingales, L. (2017). Companies should maximize shareholder welfare not Market value. *Journal of Law, Finance, and Accounting*, 2(2), 247–274.
- Holton, E. F., & Burnett, M. F. (2005). The basics of quantitative research. *Research in organizations: Foundations and methods of inquiry*, 29-44.
- Kang, J. (2013). The relationship between corporate diversification and corporate social performance. *Strategic Management Journal*, 34(1), 94-109.
- Kolk, A. (2016). The social responsibility of international business: From ethics and the environment to CSR and sustainable development. *Journal of World Business*, 51, 23-34.
- Lamin, A., & Zaheer, S. 2012. Wall street vs. main street: Firm strategies for defending legitimacy and their impact on different stakeholders. *Organization Science*, 23(1): 47–66.
- Lau, C., Lu, Y., & Liang, Q. (2016). Corporate social responsibility in China: A corporate governance approach. *Journal of Business Ethics*, 136, 73-87.
- Mena, S., de Leede, M., Baumann, D., Black, N., Lindeman, S., & McShane, L. (2010). Advancing the business and human rights agenda: Dialogue, empowerment, and constructive engagement. *Journal of business ethics*, 93, 161-188.

- Mishra, D. R. (2017). Post-innovation CSR performance and firm value. *Journal of Business Ethics*, 140, 285-306.
- Mody, A. (2003). What is an emerging market. *Geo. J. Int'l L.*, 35, 641.
- Neely, A., & Hii, J. (1998). Innovation and business performance: a literature review. *The Judge Institute of Management Studies, University of Cambridge*, 0-65.
- Odeh, L. E. (2010). A comparative analysis of global north and global south economies. *Journal of Sustainable Development in Africa*, 12, 338–348
- Owen, R., Stilgoe, J., Macnaghten, P., Gorman, M., Fisher, E., & Guston, D. (2013). A Framework for Responsible Innovation. In *Responsible Innovation: Managing the Responsible Emergence of Science and Innovation in Society* (pp. 27-50). John Wiley and Sons.
- Padgett, R. C., & Galan, J. I. (2010). The effect of R&D intensity on corporate social responsibility. *Journal of Business Ethics*, 93, 407-418.
- Pehlivanlı, E. A. (2023). Corporate Human Rights in the Context of Corporate Social Responsibility: Relationship with Firm Performance in Extractive Industry. *İşletme*, 4(1), 1-19.
- Pellé, S., & Reber, B. (2015). Responsible innovation in the light of moral responsibility. *Journal on Chain and Network Science*, 15(2), 107-117.
- Pisani, N., Kourula, A., Kolk, A., & Meijer, R. (2017). How global is international CSR research? Insights and recommendations from a systematic review. *Journal of World Business*, 52(5), 591-614.
- Quan, X., Ke, Y., Qian, Y., & Zhang, Y. (2021). CEO foreign experience and green innovation: evidence from China. *Journal of Business Ethics*, 1-23.
- Refinitiv. (2021). *Environmental, Social and Governance Score from Refinitiv*.
<https://www.refinitiv.com/>
- Robson, P. J., Haugh, H. M. & Obeng, B. A. (2009). Entrepreneurship and innovation in Ghana: Enterprising Africa. *Small Business Economics*, 32(3): 331- 350
- Ryan, J. C., & Daly, T. M. (2019). Barriers to innovation and knowledge generation: The challenges of conducting business and social research in an emerging country context. *Journal of Innovation & Knowledge*, 4(1), 47-54.
- Saidi, N., Prasad, A., & Naik, V. (2012). From Frontier to Emerging: Does Market Reclassification Matter?. Available at SSRN 1994623.

- Salcito, K., Wielga, C., & Singer, B. H. (2018). Corporate human rights commitments and the psychology of business acceptance of human rights duties: A multi-industry analysis. In *Corporate Power and Human Rights* (pp. 21-44). Routledge.
- Schönherr, N., Martinuzzi, A., & Jarmai, K. (2020). Towards a business case for responsible innovation. In Jarmai, K. (ed). *Responsible innovation: Business opportunities and strategies for implementation* (p. 85-97). Springer Nature.
- Shankar, V., & Narang, U. (2020). Emerging market innovations: Unique and differential drivers, practitioner implications, and research agenda. *Journal of the Academy of Marketing Science*, 48, 1030-1052.
- Stilgoe, J., Owen, R., & Macnaghten, P. (2013). Developing a framework for responsible innovation. *Research Policy*, 42(9), 1568-1580.
- Sukamolson, S. (2007). Fundamentals of quantitative research. *Language Institute Chulalongkorn University*, 1(3), 1-20.
- Templeton, G. F. (2011). A two-step approach for transforming continuous variables to normal: implications and recommendations for IS research. *Communications of the association for information systems*, 28(1), 4.
- Thakur-Wernz, P., & Samant, S. (2019). Relationship between international experience and innovation performance: The importance of organizational learning for EMNEs. *Global Strategy Journal*, 9(3), 378-404.
- Van der Waal, J. W., Thijssens, T., & Maas, K. (2021). The innovative contribution of multinational enterprises to the Sustainable Development Goals. *Journal of Cleaner Production*, 285, 125319.
- Van Tulder, R., Rodrigues, S. B., Mirza, H., & Sexsmith, K. (2021). The UN's sustainable development goals: Can multinational enterprises lead the decade of action?. *Journal of International Business Policy*, 4, 1-21.
- Voegtlin, C., & Scherer, A. G. (2018). New roles for business: Responsible innovators for a sustainable future. forthcoming In A. McWilliams, D. E. Rupp, D. S. Siegel, G. K. Stahl, & D. A. Waldman (Eds.). *The Oxford handbook of corporate social responsibility: Psychological and organizational perspectives* (2nd edition). Oxford: Oxford University Press.
- Wettstein, F. (2009). Beyond voluntariness, beyond CSR: Making a case for human rights and justice. *Business and Society Review*, 114(1), 125-152.

Wettstein, F. (2012). CSR and the debate on business and human rights: Bridging the great divide. *Business Ethics Quarterly*, 22(4), 739-770.

Wettstein, F., Giuliani, E., Santangelo, G. D., & Stahl, G. K. (2019). International business and human rights: A research agenda. *Journal of World Business*, 54(1), 54-65.

Yaghmaei, E., & van de Poel, I. (2020). *Assessment of Responsible Innovation: Methods and Practices*. Routledge.

Zaheer, S. (1995). Overcoming the liability of foreignness. *Academy of Management journal*, 38(2), 341-363.

Zanello, G., Fu, X., Mohnen, P., & Ventresca, M. (2016). The creation and diffusion of innovation in developing countries: A systematic literature review. *Journal of Economic Surveys*, 30(5), 884-912.

Zhang, G., Wang, L., Guo, F., & Yang, G. (2021). Does corporate internationalization affect corporate social responsibility? Evidence from China. *Emerging Markets Review*, 46, 100794.

Appendix 1: Keywords

1.1 Van der Waal, Thijssens, & Maas (2021): thesaurus of SDG innovation related keywords

1.1.1 Blue SDG keywords

(urban /5W waste) "green city" OR "green cities" "sustainable cities" "sustainable housing" "sustainable transport" sustainable /1W building* "public transport" "traffic accidents" OR "traffic safety" natural /1W disaster* "tsunami" "food loss" "food waste" "post-harvest" "fish stocks" "overfishing" (flora /5W fauna) "freshwater ecosystems" (soil /1W clean*) (invasive /3W species) "wetlands" "afforestation" "reforestation" "sustainable forestry" "degraded land" "desertification" "drought" "ecological" "ecology" "land degradation" "soil degradation" "biodiversity" "biodiversity" natural /1W habitat* "poaching" "natural ecosystem" "sustainable development" "terrestrial ecosystems" "sustainable development" "bribery" (political /10w vot*) "democracy" "vitamin A deficiency" "hunger" "developing countries" "bottom of the pyramid" "improved nutrition" "food security" "crop protection" "malnutrition" "stunting" "wasting" "obesity" "small farmers" "small producers" "agricultural productivity" "pest control" "plant protection" "post-harvest" "drought" "natural ecosystem" ((dairy OR meat OR horticulture) AND sustainable) (climate AND disaster) "climate change" "soil degradation" "soil quality" "sustainable agriculture" "organic agriculture" "maternal mortality" "neonatal mortality" "children under 5 years" "newborns" neonatal /10W care "Chikungunya" "malaria" "dengue" "communicable diseases" "acquired immune deficiency syndrome" "schistosomiasis" "stunting" "trypanosomiasis" "tropical diseases" "tsetse" "tuberculosis" "water-borne diseases" "hepatitis B" "ebola" "filariasis" "chronic respiratory disease" "cancer" "cardiovascular disease" "diabetes" "mental health" "well-being" "traffic accident" "traffic accidents" "traffic safety" "reproductive health" "adolescent girls" "family planning" "contraceptive" "birth control" "essential medicines" "developing countries" "access to medicines" (water /10W sanitation) "clean energy" "clean fuel" "poverty" "bottom of the pyramid" "least developed countries" "poverty" "south-east asia" "sub-saharan africa" "poverty" "microfinance" "poverty" "pro-poor" "bottom of the pyramid" "handicapped" "local materials" "life cycle analysis" "natural resources" "sustainable consumption" "sustainable production" "marine resources" "sustainable aquaculture" "access to market" "sustainable oceans" "rural" "access to market" "market access" "drug abuse" "alcohol abuse" "substance abuse" "adolescent girls" "gender equality" "birth control" "contraceptive" "family planning" "water harvesting" (desalination) /5W (water) "wastewater treatment" "sustainable transport" "bilharzia"

1.1.2 Green SDG keywords

natural /1W disaster* "refuse collection" "air quality" exhaust /20W ("particulate matter") "fine particulate" "natural resources" "life cycle analysis" "hazardous waste" "hazardous chemicals" "waste collection" "waste recycling" "waste recycling" ((recycling OR recycled)

/50W environment*) plastic /5W recycl* "chemical waste" sewer* "environmental impact" natural /1W disaster* "climate change" "GHG emissions" "global warming" "natural ecosystems" greenhouse /1W gas* "CO2 emission" "Carbon dioxide emission" (coast* OR marine OR aquatic) /5W ecosystem* (ocean /10W conservation) (coast* /5W (conservation OR protection OR ecosystem*)) (ocean /10W acidification) "eutrophication" (environmental OR soil OR air OR water) /1W pollution "hazardous chemicals" "safe drinking water" "wastewater treatment" "efficient water use" water /5W efficien* "irrigation" "water harvesting" "water resources" (efficient /10W (water resources)) desalination /5W water "freshwater ecosystems" "wetlands" "biofuel" "geothermal energy" "geothermal power" "hydropower" "ocean wave energy" "renewable resources" "tidal energy" wind /1W (power OR energy) (solar /1W (power OR energy)) (energy /1W efficien*) "clean energy" "renewable energy" "sustainable energy" "renewable resources" clean* /1W production "clean technology" "environmentally friendly" "carbon neutral" biodegradable /10W environment*

1.2 The used list of keywords

"Green city" "Green cities" "Sustainable cities" "Sustainable housing" "Sustainable transport" "Sustainable building" "Microfinance" "Sustainable development" "Plant protection" "Crop protection" "Sustainable forestry" "Sustainable agriculture" "Organic agriculture" "Clean energy" "Clean fuel" "Pro-poor" "Sustainable consumption" "Sustainable production" "Sustainable aquaculture" "Sustainable oceans" "Improved nutrition" "Food security" "Local materials" "Wastewater treatment" "Ecological" "Ecology" "Life cycle analysis"

"Waste collection" "Waste recycling" "Plastic recycling" "Renewable energy" "Sustainable energy" "Clean technology" "Environmental friendly" "Carbon neutral" "Biodegradable" "Geothermal energy" "Geothermal power" "Hydropower" "Ocean wave energy" "Tidal energy" "Renewable resources" "Biofuel" "Efficient water use" "Refuse collection" "Water harvesting"

Appendix 2: The syntax

```
DATASET ACTIVATE DataSet1.  
DESCRIPTIVES VARIABLES=HumanRights ResponsibleInnovation MNE_Dummyvariable  
Developed_DummyVariable Size Leverage Age FinancialPerformance  
/STATISTICS=MEAN STDDEV MIN MAX KURTOSIS SKEWNESS.
```

```
COMPUTE Log_Resplnno=ln(ResponsibleInnovation+1).  
EXECUTE.
```

```
COMPUTE Log_Size=ln(Size+1).  
EXECUTE.
```

```
COMPUTE Log_Leverage=ln(Leverage+77922.74).  
EXECUTE.
```

```
COMPUTE Log_Fin=ln(FinancialPerformance+228.92).  
EXECUTE.
```

```
DESCRIPTIVES VARIABLES=HumanRights Log_Resplnno MNE_Dummyvariable  
Developed_DummyVariable Log_Size Age Log_Leverage Log_Fin  
/STATISTICS=MEAN STDDEV MIN MAX KURTOSIS SKEWNESS.
```

```
RANK VARIABLES=ResponsibleInnovation Leverage FinancialPerformance (A)  
/RFRACTION  
/PRINT=YES  
/TIES=MEAN.
```

```
COMPUTE Norm_RI=IDF.NORMAL(RRespons,9.21,66.002).  
EXECUTE.
```

```
COMPUTE Norm_Lev=IDF.NORMAL(RLeverag,125.8698,2502.10021).  
EXECUTE.
```

```
COMPUTE Norm_FP=IDF.NORMAL(RFinanci,5.5524,11.09997).  
EXECUTE.
```

```
DESCRIPTIVES VARIABLES=HumanRights Norm_RI MNE_Dummyvariable  
Developed_DummyVariable Log_Size Age Norm_Lev Norm_FP  
/STATISTICS=MEAN STDDEV MIN MAX KURTOSIS SKEWNESS.
```

```
CORRELATIONS  
/VARIABLES=HumanRights Norm_RI MNE_Dummyvariable Developed_DummyVariable  
Log_Size Age Norm_Lev  
Norm_FP  
/PRINT=TWOTAIL NOSIG FULL  
/MISSING=PAIRWISE.
```

```
REGRESSION  
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT HumanRights  
/METHOD=ENTER Norm_RI MNE_Dummyvariable Developed_DummyVariable
```

```
/SCATTERPLOT=(*ZRESID ,*ZPRED)  
/RESIDUALS NORMPROB(ZRESID).
```

```
REGRESSION
```

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT HumanRights  
/METHOD=ENTER Norm_RI MNE_Dummyvariable Developed_DummyVariable Log_Size  
Age Norm_Lev Norm_FP  
/SCATTERPLOT=(*ZRESID ,*ZPRED)  
/RESIDUALS NORMPROB(ZRESID).
```

```
REGRESSION
```

```
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT HRE  
/METHOD=ENTER Log_Size Age Norm_Lev Norm_FP.
```

```
!PROCESS
```

```
y=HRE  
/x=MNE_D  
/m=Norm_RI  
/boot=10000  
/conf=95  
/model=4
```

```
!PROCESS
```

```
y=HRE  
/x=Devd_D  
/m=Norm_RI  
/boot=10000  
/conf=95  
/model=4
```

```
!PROCESS
```

```
y=HRE  
/x=MNE_D  
/m=Norm_RI  
/boot=10000  
/conf=95  
/model=4  
/cov= LogSize Age Norm_Lev Norm_FP
```

```
!PROCESS
```

```
y=HRE  
/x=Devd_D  
/m=Norm_RI  
/boot=10000  
/conf=95  
/model=4  
/cov= LogSize Age Norm_Lev Norm_FP
```

Process for SPSS can be downloaded via the following link:
<https://haskayne.ucalgary.ca/CCRAM/resource-hub>