

CSR within Insurance Companies in Europe

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ABSTRACT,

Nowadays, sustainability is seen as a main goal of the modern society, hence assessing the sustainable performance is becoming more important. Insurance companies have the ability to develop guarantees in order to minimize the risks for their customers, while also improving society and investing in its long-term growth. Adopting sustainable practices will help firms to gain competitive advantage over their competitors in the industry, while lowering systemic risk exposure and enhancing production and intensity. The purpose of this paper is to analyze the state-of-the-art of the corporate social responsibility (CSR) of insurance companies in Europe. This is done through a literature review and a case study, where the companies are assessed on their CSR performance. The case study resulted in the following ranking: AXA S.A.; Allianz Group; Zurich Insurance Group; Generali and Aegon. The performance of the insurance industry as a whole showed a steady increase over the five-year period, where the measure 'diversity ratio' caused most of this improvement. In addition, the results show that the state-of-the-art of insurance companies in Europe is quite good.

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Keywords

Corporate Social Responsibility (CSR); Insurance companies; Assessment framework; CSR performance; Europe; Sustainability

1. INTRODUCTION

Nowadays, sustainability is seen as a main goal of the modern society, hence assessing the sustainable performance is becoming more important (Angelakoglou & Gaidajis, 2015). Therefore, I want to evaluate the state of the art of sustainability of insurance companies in Europe.

Insurance companies have the ability to develop guarantees in order to minimize the risks for their customers, while also improving society and investing in its long-term growth. (Khovrak, 2020). Since insurance companies serve as financial mediators in the society, they have an impact on it. They do this through performing function such as managing financial risks, pricing, and valuing financial assets, monitoring borrowers, etc. (Rahi et al., 2021). The insurance companies are in a unique position to promote economic, social, and environmental sustainability because of its roles as risk management, risk taker, and large investor (Zimmer, 2020).

Adopting sustainable practices will help firms to gain competitive advantage over their competitors in the industry, while lowering systemic risk exposure and enhancing production and intensity (Rahi et al., 2021). Furthermore, insurance firms must engage in sustainable operations since, as underwriters of property risk and investors in real assets, they may be more harmed by natural disasters than any other financial institution. (Yong, 2021).

As I mentioned, financial institutions such as insurance companies act as an intermediary. They do this, for example, between companies and people with excess and shortages of capital, research and development projects, insurance demand and supply, and risk and project management for their partners. Likewise, the financial institution's activities and operations do have a significant impact on the environment, and they take a positive role in economic development (Scholtens, 2011; Tarkhanova, 2018). Tarkhanova (2018) proposes that the financial institutions' environmental impacts may be classified into external and internal issues. Internal actions have a modest environmental impact when compared to other economic sectors. However, given the financial industry's scale, it is clear that the usage of paper, electricity, water, and the amount of trash they create throughout their operations cannot be overlooked. In general, the external actions of financial organizations are not damaging to the environment. However, their lending, investing, and risk management activities result in an indirect pollution of the environment. In addition, and as mentioned, financial establishments also impact the economy through their positive role in economic development (Scholtens, 2011). These are reasons why it is important that insurance companies act in a sustainable way, and why we wanted to do research on insurance companies specifically. Considering that economic development is directly associated with social, environmental, and human development, it is very probable that insurance companies can impact sustainable development. For the reason that financial establishments enable development and growth for other organizations and householders, their impact on sustainable development is mainly indirect (Suwinto, 2020). Furthermore, the goods and facilities of these insurers, banks, private equity, and venture capital organizations, as well as asset management firms, all have direct harmful effects on the environment. (Tarkhanova, 2018).

In this paper, I will compare the state of the art of the corporate social responsibility (CSR) of five insurance companies in Europe. To assess the CSR, I will be using frameworks based on two previously developed frameworks. The insurance companies we have chosen are from different countries in Europe, this in order to do an inclusive research. These insurance companies are:

Allianz Group (Germany), AXA S.A. (France), Aegon (the Netherlands), Generali (Italy), and Zurich Insurance Group (Switzerland). Next to the fact that the insurance companies are located in different countries, these companies are also selected because of the fact that they belong to the biggest insurance companies in Europe. Also, because they provide their financial statements, CSR reports, etc. in English.

The motivation to do research on insurance companies in Europe is the Directive 2014/95/EU. This Directive establishes guidelines for the disclosure of non-financial and diversity data by large corporations. According to the Directive 2014/95/EU large firms, such as listed banks, insurance companies and other companies recognized as public-interest institutions by state authorities, with more than 500 employees are required to provide information on environmental issues, social issues, such as human rights, anti-corruption and bribery, and diversity on their corporate boards. Since this Directive 2014/95/EU ensures that the information I need for my research is available, I was motivated to research insurance companies in Europe.

Firstly, I will start with a literature review of theories around CSR and CSR in the insurance industry. During the methodology part I will discuss the two frameworks and eventually develop my own framework I will use in our case study. Next, I will conduct a case study where we compare the five different insurance companies on their CSR with the use of my framework. After that, I will discuss the results of the case study and link these to findings from the literature review. Lastly, I will end my paper with a conclusion, where I will provide the answer to my research question.

2. LITERATURE REVIEW

In this section, important concepts of this paper will be explained, such as social corporate sustainability, etc. In addition, I will elaborate on the benefits of CSR and discuss relevant theories.

2.1 Corporate Social Responsibility

CSR is a concept that links a company's activities to several aspects of sustainable development (Waddock & Graves, 1997). MacNeil and Esser (2022) give the following definition for CSR: "The social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time.". Companies must include societal, environmental, and ethical concerns, as well as customer interest and human rights, into their core business strategy. Doing this will ensure that companies build internal procedures which satisfy their CSR obligations. CSR efforts aim to maximize the shared interests of businesses, shareholders, other stakeholders, and the general public while avoiding or minimizing possible and negative consequences (Ho et al., 2018). We can thus say that a company's sustainable development is based on a plan that serves society's best interest by boosting its wealth and interests (Giacalone & Thompson, 2006)

On one hand, a company's expensive corporate social responsibility programs might be viewed as a diversion from its purpose of increasing shareholder value (Oncioiu et al., 2020). However, corporate social responsibility is important, not only because it is the responsibilities of all participants, but also because CSR activities can provide benefits to firms (Suwinto, 2021; Wuttichindanon, 2017). For example, by being more transparent in CSR reporting yields a positive visibility for the firm. Another example would be from Suwinto's (2021) paper, where he states that "a bank's CSR spending increases not only the current profitability, but also its future profitability.". This due to the group pressure that is on CSR spending and value. So,

it is believed that CSR not only allow for short-term effects, but also for long-term effects (Suwinto, 2021). Corporate sustainability, on the other hand, can also help to mitigate risk by avoiding the consequences of a firm's irresponsible actions from being passed on to it in the form of explicit charges. Furthermore, corporate social responsibility can serve as a signal to outsiders about a company's operations (Oncioiu et al., 2020).

2.1.1 CSR within insurance companies

Since CSR is now an established concept in the corporate world and seen as a critical management concern, it is important that insurance companies integrate CSR in their organizations. They do this for example through CSR programs. CSR projects often vary from community development to educational, environmental, and healthcare development, etc. A purpose for CSR engagement might be the ability to make a big difference in society and increase the quality of life (Kavitha & Anuradha, 2016). Another example of how businesses integrate CSR is through CSR teams. Businesses have dedicated CSR teams that design CSR policies, objectives, and goals, as well as funds to support them. These initiatives are frequently determined by social philosophy, which has well-defined aims and should be connected with mainstream business (Kavitha & Anuradha, 2016).

When implementing CSR policies, insurance businesses should take into account customers, employees, shareholders, intermediaries, suppliers, regulators, and the larger society, so that everyone benefits from these policies. These stakeholders' interests are diverse, and insurers should concentrate on those who are impacted by or align with their business activities in order to improve their market image. They can improve employee engagement and loyalty while lowering turnover rates. By influencing society at large and the market's competitive environment, CSR may also boost long-term sustainability and profitability. In the end, it will make insurers more appealing to investors, who are growing increasingly concerned about CSR and corporate governance (Kavitha & Anuradha, 2016). According to Kavitha and Anuradha (2016), insurance companies can take several steps towards CSR. For example, paying genuine claims quickly and effectively; minimize risk both internally in their operations and externally for their clients; ensuring that their clients are prepared to deal with natural catastrophes and consequences of climate change; engaging in strategic philanthropy, such as collaborating with local charities or organizations towards a mutually beneficial goal; implementing human right policies; and lastly engage in socially responsible investing (Kavitha & Anuradha, 2016).

When it comes to having an influence on sustainable development, insurance businesses have an inherent shortcoming in that their operations are indirect and intermediate. Even though the fact that insurance companies help to realize a broad variety of activities and projects by offering insurance, in the end the entrepreneur is ultimately responsible for the success or failure of the project. Insurance firms have extra difficulties in terms of how the entrepreneur develops and runs the business by taking into consideration social, ethical, and environmental circumstances in the supply of insurance along with their investments (Scholtens, 2011).

In addition, insurance companies also rely heavily on their customers' trust and loyalty. As a result, building client connections and managing reputational risks are essential for insurance firms' long-term success, as well as their CSR. Nevertheless, as investors, the insurance companies face considerable financial risk if the value of the businesses in which they invest lowers owing to environmental, social, and governance problems (Khovrak, 2020). According to

Okhrimenko and Manaenko (2019) in order to reduce these reputational risks strengthening the role of corporate social responsibility and taking into consideration consumer and staff perceptions of insurance companies is required. Consequently, if the companies are socially responsible and give high-quality information through financial reports, they may gain major competitive advantages, long-term sustainability, and profitability. Hence why the corporate social responsibility of an insurance companies should be viewed as a strategy for achieving market leadership (Khovrak, 2020). Economic objectives, combined with the financial institutions' reputation, are also motivating factors that drive them to go a step further and contribute to sustainability, since new green products and services might open up new markets and a larger share of the market while reducing liability risks (Tarkhanova, 2018).

A lot of literature discusses the positive effects of CSR. According to Bobrova (2012), CSR in the insurance industry takes the form of offering financial aid to society in case of natural disasters and sharing expertise in order to combat environmental problems, promote human rights and protect the safety of the society. Ali et al. (2017) state in their paper that "... among other factors, the sustainable social and financial growth of the developed countries is an upshot of the CSR activities espoused by their corporations". Also, banking organizations which have adopted CSR benefit from certain advantages, including enhanced organizational commitment, higher economic efficiency, enhanced reputation, more loyal employees, improved contact with society, and better potential to attract new prospects (Mocan et al., 2015). In his paper, Khalaf (2022) argues that a rise in corporate social responsibility is a sign of the insurance industry's advanced and sustainable growth. Corporate social responsibility is important for increasing the insurance company's entrepreneurial performance, which leads to sustainable economic development (Khalaf, 2022).

2.2 Stakeholder Theory and Sustainability

Another aspect I would like to touch up on is the stakeholder theory, which can give another reason why insurance companies need to act in a sustainable way. Stakeholders are "the individuals and groups who are depending on the firm in order to achieve their personal goals and on whom the firm is depending for its existence" (Carroll & Näsi, 1997). The stakeholder theory is beneficial for descriptive, normative, and instrumental reasons. Stakeholder thinking's power is therefore expanded beyond its use in defining organization-environment interactions. Managers may use stakeholder thinking to make normative and instrumental decisions. Which means that it assists managers in more successfully "doing ethics," as well as providing a valuable framework for strategic commercial decision-making (Carroll & Näsi, 1997).

In the 1980s the Stakeholder theory gained popularity by R. Edward Freeman's work. The theory has switched study attention to many stakeholders' responsibilities and endorsed social performance as an essential component to boost organizational business legitimacy. The need of implementing corporate social responsibility initiatives that address the interests of numerous stakeholder groups while also maximizing shareholder profit has been highlighted by stakeholder theory. As a result, businesses can benefit financially by implementing socially responsible activities that improve the corporate atmosphere, boost creativity, and increase employee productivity. To put it another way, corporate social responsibility is a need for maintaining profitability (Mints et al., 2021).

It is important that companies act in the best interest of their stakeholders and acting in a sustainable manner is important to everyone living on this planet. Also, stakeholders can make

companies accountable for acting sustainably (Hörisch & Schaltegger, 2014). Companies must actively publish sustainable development reports that demonstrate their efforts to safeguard the economy, the environment, and society, as well as seek the greatest possible common interest of stakeholders and the general public (Ho et al., 2018). According to Hörisch and Schaltegger (2014), the stakeholder theory "... larges the scope to a broader societal embeddedness of organizations and its interdependencies with the societal environment. It postulates that the purpose of business is to create value for all stakeholders.". Likewise, "corporate sustainability scholars emphasize the societal and ecological environment and the interdependencies between the organization and its societal and natural environment" (Hörisch & Schaltegger, 2014). As a result, both concepts focus on a broader view of a company's embeddedness, relationships, commitments, capacities, and potential; instead of focusing on optimizing short-term shareholder value or accounting-based profits. Furthermore, both ideologies think that ethics and business are inextricably interconnected. Social and environmental challenges, as well as social development, should be intertwined with the firm's primary operation (Hörisch & Schaltegger, 2014).

2.3 CSR and Performance of Insurance Companies

According to a literature review, there are two main theoretical ideologies that help to explain how corporate social responsibility (CSR) and a company's financial success are related. According to the stakeholder theory, a company must meet the expectations of all its stakeholders, including shareholders, creditors, personnel, business partners, and the general public. The success of management depends on how these opposing interests are balanced (Ogden & Watson, 1999). Moreover, if the firm's managements fulfill the rights of its stakeholders, then it helps to achieve the corporation's objectives set by its governing body (Donaldson & Preston, 1995). Neoclassical theory, on the other hand, promotes the idea that there is no connection between corporate social responsibility and business success. The business allocates more resources to CSR than it costs, which lowers shareholder wealth and puts it at a competitive disadvantage (Waddock & Graves, 1997). However, corporate citizenship became a thing in the 1990s. According to the corporate citizenship principle, businesses should act as good citizens of society since they are an integral component of society. According to citizenship philosophy, companies should uphold the law, support their community, and preserve the environment in order to be good citizens. The corporate citizenship theory accentuate that corporations must play the role of a good citizen irrespective of their financial performance (Hörisch & Schaltegger, 2014).

3. METHODOLOGY

3.1 Data description

In this paper I will conduct a case study on the following insurance companies: Allianz Group (Germany), AXA S.A. (France), Aegon (the Netherlands), Generali (Italy), and Zurich Insurance Group (Switzerland). I have chosen these five insurance companies since they are the largest insurance companies in Europe, according to ADV Ratings. However, I only chose the insurance companies which provide sustainability reports or include sustainability in their annual reports. As I mentioned in the introduction, I have chosen several insurance companies from different parts of Europe. For the reason that I am curious whether there is a difference between the CSR performance of insurance companies more in the North of Europe and more in the South of Europe for example.

I will conduct our research over a time period of five years, namely from 2017 until 2021. Since sustainability and CSR has become an important topic in recent years, I expect that these five years are very valuable for our research.

Lastly, most of the data needed for my research I will obtain from non-financial statements. According to the Directive 2014/95/EU (2014) a non-financial statement should include information related to environmental, social, and employee issues, as well as anti-corruption, bribery issues, and respect for human rights, that is necessary to understand the development, performance, position, and the impact of the activities of the company. However, I will also use sustainability reports, annual reports, and other non-financial information disclosed by the insurance companies themselves if needed. If any financial data is missing, I will use Yahoo Finance to obtain this data. It is possible for me to evaluate, collect data on, and monitor the performance and social impact of the businesses due to the disclosure of non-financial information. This in order to account for the complexity of corporate social responsibility (CSR) and the diversity of CSR policies implemented by businesses, as well as the need to provide consumers with easy access to information. (Directive 2014/95/EU, 2014)

3.2 Review of frameworks

In this section I will discuss two different frameworks in order to develop my own framework. These frameworks are developed by Scholtens (2011) and by Park and Jang (2021). These two frameworks will allow me to develop my own framework in order to assess the CSR of the insurance companies.

I start off with a framework developed by Scholtens (2011). In the paper, in order to evaluate insurance companies on their CSR 23 different indicators were used. An overview of these indicators can be found in the appendix. They looked at whether a certain insurance company performed well or poorly in regards of these indicators. The 23 indicators are divided into four categories, namely: "(1) CSR reporting, behavioral codes, and environmental care systems; (2) environmental responsibility in practice; (3) social-economical activities; and (4) governance codes." (Scholtens, 2011). Additionally, five sustainability indicators were used to see how the assessment of the insurance companies compares to those of rating agencies that employ less transparent approaches to arrive at a CSR assessment. The latter is used to determine whether a firm should be included in a sustainability index (Scholtens, 2011). To assess the insurance companies Scholtens (2011) used CSR reports, and when these were not available environmental or social reports were used.

The first category includes the indicators which focus on reporting, codes, and systems. A corporation indicates its commitment to CSR and willingness to consider social, ethical, and environmental concerns by publishing a CSR report, adopting behavioral norms, or putting in place environmental care systems. Stakeholders are also interested in actions connected to the environment, ethics, and society, and not only in the financial performance of organizations. Companies can express their socially responsible efforts to their stakeholders through CSR reports. An organization demonstrates its desire to include CSR into its operations by establishing environmental statements and behavioral norms.

Environmental responsibility in practice is included in the second category of indicators. CSR reports typically contain information on environmental performance and goals. The degree to which insurance firms are involved in environmental responsibility is determined by the transparency of their environmental performance and goals. Scholtens (2011) explains that a firm might be transparent in one of two ways: quantitatively or qualitatively. The first indicates that reductions or targets are

expressed in numbers or percentages, whilst the latter just provides a generic statement. Environmental responsibility is also demonstrated by insurance firms' environmental risk analyses, industry exclusions, and if they adhere to particular rules. When insurers want their business activities to be environmentally friendly, they create an environmental policy which represents how these businesses aim to decrease their environmental effect and manage environmental risk.

The third set of indicators developed by Scholtens (2011) concerns social-economic activities. The company's interest with and desire to encourage the (local) community is communicated through community involvement. Several insurance firms have formed a foundation to select which projects will be sponsored and how much money will be donated. These foundations might be focused on the local community or the world at large. Volunteering demonstrates community participation as well.

Governance is related the last of the four categories. Scholtens (2011) examined how insurance firms handle relationships between their supervisory board, management board, and shareholders. The indicators in this category assess how serious companies are about creating long-term value for their stakeholders. Business ethics are spelled out in a corporation's Code of Conduct or Code of Ethics, which describes how a company handles ethical concerns. A firm with a Code of Conduct agrees to a number of socially responsible business practices. Different corporate governance regulations exist in each nation.

The second framework developed by Park and Jang (2021), has the purpose to determine how ESG factors are regarded and how relevant they are to investors when making investments decisions. Park and Jang (2021) develop a ESG model specifically for South Korea, which aims to reach an agreement among institutional investors. This framework and appropriate tables again can be found in the appendix.

In order to offer a country-specific ESG model, Park and Jang (2021) used environmental (E), social (S), and governance (G) as the primary categories, with chosen components serving as subcategories of the E, S, G. Resource Depletion, GHG Emissions, Pollution and Waste, Eco-Products/Process Strategies, and Natural Loss are among the sub-criteria under E; Human Rights, Community Relations, Human Resource Management, Customer Satisfaction, and Social and Political Contributions are among the sub-criteria under S; and Ethical Behavior, Risks and Opportunity Management, Shareholder Rights, and Corporate Governance are among the sub-criteria under G.

Park and Jang (2021) chose five exemplary ESG frameworks for their study. All five ESG data sources were selected based on their ESG leadership, standardization, and industry recognition. In the paper it is explained that usually three corporate social performance frameworks are used to analyze and assign weights to the factors. These are: "(1) equal weight for all, (2) weights driven by expert opinion, and (3) weight derived from survey" (Park & Jang, 2021). Weights for ESG categories and subcategories are regularly assigned via surveys of ESG experts and pertinent stakeholders. The AHP technique gives a fraction of each choice to indicate importance and is primarily reliant on expert opinion.

The Analytical Hierarchy Process (AHP), presented by Saaty et al. (1980), was used in this research. The AHP is a hierarchical multi-criteria decision-making methodology that determines the relative weights of criterion and alternatives using eigenvalue and eigenvectors techniques. This approach is excellent for hierarchically arranging issues with various criteria and making decisions focused on quantitative as well as qualitative analyses.

(Saaty, 2003). AHP is typically applied in complicated settings where people make decisions together and the outcomes of human perceptions, judgements, and consequences have long-term consequences. Bias influences decisions without the decision maker's knowledge. By listening to all conceivable perspectives and formulating choices in a way that actively creates consensus among stakeholders, AHP can eliminate decision bias. Validated outcomes can lead to improved decisions that are backed up by stakeholders. The following are some of AHP's advantages: "(i) usability, (ii) easy and rational approach, (iii) breaking the problem into smaller steps, (iv) not requiring analysis of secondary data to have research results with implications." (Park & Jang, 2021).

In the study, Park and Jang (2021) use a five-step process to conduct the analysis. Firstly, they identify ESG elements utilized in existing literature and significant ESG information suppliers, as well as existing models' limits and difficulties. Next, the variables are analyzed, and a decision-making factor hierarchy is created. Thirdly, Park and Jang (2021) created paired comparison questionnaires, which they delivered to experts and gathered responses to. For the fourth step, they double-checked their work for consistency. Lastly, Park and Jang (2021) prioritized and assessed the situation.

During the analysis of the two frameworks, I have noticed that both frameworks are quite different. Which led me to believe that a combination of these two frameworks, would be even more beneficial. The biggest difference between the two frameworks is the fact that Scholtens (2011) discusses CSR and Park and Jang (2021) discuss ESG. Because of this difference in focus, the perspective of their frameworks differs as well. Scholtens' (2011) framework mainly focuses on the perspective of insurance companies, whereas Park and Jang (2021) also consider the perspective of investors. In a sense that they researched how investors perceive the ESG factors and how relevant these are to them. Another difference that I noticed is that Park and Jang (2021) focuses on insurance companies only located in South Korea, while Scholtens (2011) researched different types of insurers on regional and global scale. In his research Scholtens (2011) does a regional analysis on insurance companies in Europe, Japan, and North America, but also researchers insurance companies on a global level. The types of insurers he focuses on are: life insurance companies, general insurance companies, financial conglomerates, and mixed insurance companies. Lastly, in Scholtens (2011) paper the framework gets developed and directly implemented to measure the CSR performance, however in the paper from Park and Jang (2021) they only develop the framework and do research on the relevance of the factors.

3.3 Analytical Framework

After I have done a content analysis on other frameworks, I developed my own framework to assess the CSR of insurance companies. I developed my framework according to three levels, namely 'willingness and commitment': 'in practice' and lastly 'efforts beyond themselves'. This because I believe that the CSR of the insurance companies can be at different levels. Firstly, an insurance company might be willing to practice CSR, but that is not enough without appropriate actions.

The first level of my framework will assess the willingness and commitment of the insurance companies through CSR and sustainability reports. This level might also be relevant to stakeholders, since it can assist them determine which firm to invest in. As I said, a willingness without actions is not enough, hence for the second level I will assess the CSR in practice. At this level I will take a look at the active actions the insurance companies take to practice CSR, such as environmental policies

and reductions of Green House gas emissions. As seen in the literature review, insurance

companies also deal with transparency risk, so it is also important that these companies incorporate for example, transparency goals. The last level is 'efforts beyond themselves', at this level we will assess whether the insurance companies make efforts to improve and encourage CSR and sustainability in their (local) community. At this level you could think of things such as community involvement and customer satisfaction.

I firstly examined all the indicators from the framework of Scholtens (2011) and Park and Jang (2021) and organized these under the three levels in Table. In order to organize all the indicators correctly, I used the three pillars of ESG, environmental (E), social (S), and governance (G). I believe that the first level belongs to the environmental pillar; the second level is a mixture of the environmental pillar and the governance pillar; lastly the third level is linked to the social pillar. I believe that the first two categories of Scholtens (2011), CSR reporting, behavioral codes, and environmental care systems and environmental responsibility in practice, belong to the environmental criteria of Park and Jang (2021). I have linked the third category of Scholtens (2021), social-economical activities, to the social criteria. Lastly, the governance code category of Scholtens (2021) belongs to the governance criteria of Park and Jang (2021). For the reason that, concerns about the risk and return implications of its three parts drove the development of ESG, as CSR is more focused on ethical responsibility and accountability (MacNeil and Esser, 2022). As we have seen in the literature review, insurance companies must deal with risks and return a lot. So, utilizing the ESG as the three pillars instead of the CSR pillars, seems more applicable in our case. However, in recent years the terms sustainability, CSR, and ESG have coexisted and are frequently viewed as synonyms (MacNeil and Esser, 2022).

Hence why I will incorporate both concepts in my framework because insurance companies also must be responsible and accountable as well.

Park and Jang (2021) provide the following definitions of the three criteria. The environmental criteria is defined as: "measure the company's environmental reporting and environment risks and pursue innovation opportunities for sustainable growth.". Next, the social criteria: "understand the impact of corporate activities on stakeholders and pursue social values as a member of the local community.". Lastly, Park and Jang (2021) describe the governance factor as: "corporate management aligns the interests of shareholders, management, and workers and pursues sustainable growth strategies."

In Table 1 I have organized the indicators according to the three levels, with the help of the three definitions mentioned above. In the paper from Park and Jang (2021) they name the criteria on which you can measure ESG, and they give additional measurements for these criteria. In Table 1 I have added these measurements in breakages after the criteria. In the third column of Table 1 I have written down the indicators I have selected for the development of my own framework. In the process of choosing the indicators I have looked which indicators seemed most relevant by using the knowledge obtained during the literature review.

In Table 2 I have developed my framework. For the layout of the framework, I was inspired by Scholtens (2011), due to the well-organized and clear layout it has. In the framework you will find the three layers with the relevant indicators and their appropriate measurement. I also include the source from which I will obtain the information for the measure. In the source column you will find 'company's website and/or reports. With reports I mean the

sustainability reports, annual reports, and other sustainability publications of the insurance companies. In order to be able to use the framework to assess the insurance companies, I have specified the indicators. For indicators such as 'code of conduct (yes/no), yes would equal 1 and no would equal 0. The indicator 'case of child/forced/compulsory labor' is the other way around, yes would equal 0 and no equals 1. However, in the framework there are also some indicators which cannot be answered with a simple yes or no. These indicators are: investment return, information disclosure, transparency goals, transparency performance, gender ratio and diversity ratio. Next, for information disclosure we will check whether the companies provide 'basic information' or also specifically CSR information. For basic information, I consider annual reports, financial statements, etc., which equals to 0. If the company provides environmental reports, it equals to 1. Lastly, if there are CSR reports available it equals to 2. According to Scholtens (2011), the transparency goals and performance can either be given in quantitative or qualitative matter. Quantitative means that the goals, etc. are given in number and for qualitative it is more a general statement. Hence why I decided that quantitative equals 1 and qualitative equals 0. The gender ratio speaks for itself, the goal is 50/50. Which means that if 0 – 16% of the board equals women, the company gets a score 0 on this indicator. If 17 – 32% of the board are women, it equals to a score of 1. The score equals 2 if 33 – 50% of the board are women. A note I would like to make is that even though for this indicator I focus on the percentage of women, I make sure to check whether the ratio is equal. This means that the men should not be in a minority as well. For the diversity ratio I conducted Fortune 500, to see which company had the best diversity ratio. According to Fortune 500, this is Microsoft whose workforce consists of 49,8% ethnic and racial minorities. I have used this percentage as a benchmark for the diversity ratio. The score was rounded to 50% and treated the same as the gender ratio. Which means that a diversity ratio of 0 – 16% equals zero, from 17% to 32% equals 1 and from 33 – 50% equals 2.

4. CASE STUDY AND DISCUSSION

The case study was conducted using the framework developed paragraph 3.3. During the case study some adaptations have been made to the framework. The indicators 'investment return'; 'transparency goals'; and 'freedom of association' have been removed from the framework. These indicators have been crossed out in the framework in Appendix A. For the 'investment return' indicator, no data could be found. The indicator about freedom of association did not add a lot of value to the framework, since these issues are often covered in the code of conduct. The indicator 'transparency goals' was a bit too broad, hence why I have removed the indicator and specified the 'transparency performance' indicator. This made the indicator more concrete to measure. The measures 'SDGs described in Communication on Progress (COP)'; 'acceptance of PSI guidelines'; 'implementation of SDG's'; and 'implementation of GRI standards' have been added to the framework. The 'SDGs described in COP' has been added as a sub-criteria of the global compact indicator in order to specify the indicator. During the case study and the literature, the term Principles of Sustainable Insurance (PSI) came forward a lot. I believe this showed that this measure adds value to the framework, hence why this measure was added to the final framework. The same goes for the 'implementation of GRI standards'. This measure was also added to specify the 'transparency performance' indicator. The final framework can be found in the Appendix A. The maximum score the companies can get from this framework is 33 points. The performance of the companies on the three individual levels

will also be discussed. For level 1 a maximum of 13 can be achieved, the maximum for level 2 is 11 and for level 3 it is 9.

In the graph below the performance of all five companies over the time period of five year can be seen. The assessment of each individual company can be found in appendix B. In the framework the score 'n/a' is used, in the footnotes of the different frameworks the explanation for this score can be found. As it can be seen in the graph, Allianz Group and Generali make the most improvement in their performance over the 5 years. Whereas Zurich Insurance Group scores the same for each year.

When comparing the scores of the companies each year in Figure 1, we can see that for 2017 AXA S.A. scored the best, followed by Zurich Insurance Group, Allianz Group and Aegon respectively. Generali scored the lowest. The next year AXA S.A. has the highest score again, followed by Zurich Insurance Group and Allianz Group which have the same score in 2018. Aegon is next and Generali scores the lowest again. Allianz Group and AXA S.A. score the same for 2019 with 29 points. Next are Zurich Insurance Group and Generali, and lastly is Aegon. For the year 2020, again AXA S.A. has the highest score followed by Allianz Group. Third are Zurich Insurance Group and Generali who both score 27. Lastly is again Aegon. For the last year, Allianz Group and AXA S.A. both have the highest score of 30. Generali comes next with a score of 29. Zurich Insurance Group and Aegon score the lowest with a score of 27.

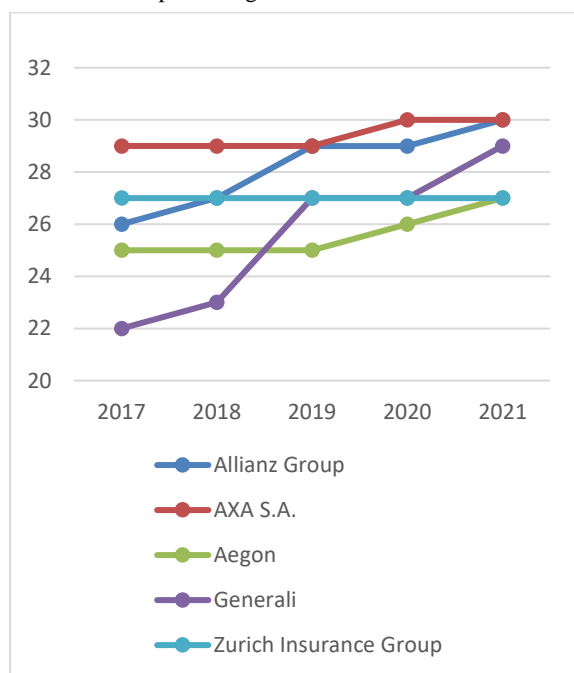


Figure 1 Overview of the CSR scores of the five companies

Allianz Group has a steady increase over the five-year period. The increase from 2017 to 2018 is caused by the fact that information about the diversity ratio in 2017 could not be found, but for 2018 it was available. So, for 2017 Allianz Group got a 'n/a' for the diversity measure, which equals a score of 0. The increase in 2019 is due to the ISO 14001 certification in July 2019 and the availability of health and safety training. The increase in 2021 is caused by the increased diversity ratio. Compared to the maximum score of 33, Allianz Group scores good and above average. The average performance of the whole industry will be discussed later in this section. Also, when looking at Figure 1 Allianz Group scores high, compared to the other companies. Only AXA S.A. scores higher.

In the graph below the performance of Allianz Group on each level of the framework is shown. The performance of level 3 is improved the most over the time period, compared to level 2 which stays the same each year. The increases of level 2 are caused by the presences of health and safety opportunities which started in 2019 and the increase in the diversity ratio in 2018 and 2021.

The Allianz Group had a wide variety of information available on sustainability. They have published different reports and presentations which provided almost all the necessary information for the assessment.

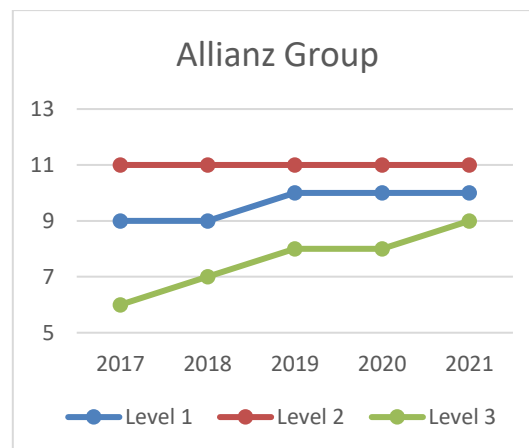


Figure 2 CSR performance of Allianz Group on the three individual levels

The score of AXA S.A. stayed the same over almost the whole time period. The increase in 2020 was caused by the increased availability of information disclosure on sustainability. AXA S.A. performs the best when compared to the maximum score of 33. In addition, in Figure 1 it can also be seen that AXA S.A. scores the highest out of all five companies.

When looking at the performance on the three levels separately, the previously mentioned increase in 2020 can be seen. For the other two levels, the performance stays equal over the 5-year time period, as can be seen in the graph below.

AXA S.A. also had an extensive amount of information available about sustainability, responsible investment, etc. The different reports made the information needed for the framework easily accessible.

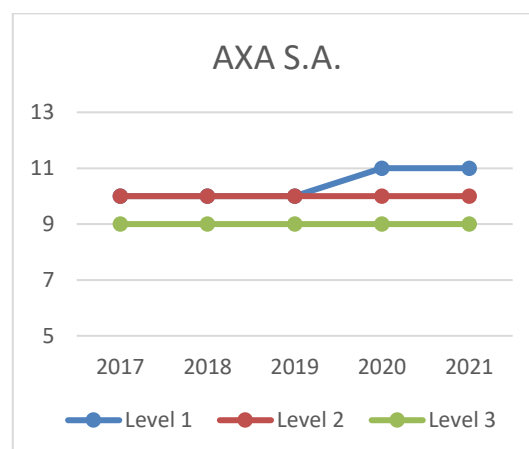


Figure 3 CSR performance of AXA S.A. on the three individual levels

Aegon scored noticeably lower compared to those of Allianz Group and AXA S.A. However, there is a slight increase in the

last two years. The increase in 2020 is caused by the fact that information was available which stated that Aegon made efforts towards equal opportunities. The increase in the last year is caused by the acceptance of the Global Compact guidelines in November 2021. Compared to the maximum score of 33, Aegon scores below-average over the time period of five years. The same goes for when Aegon is compared to the other four companies. As shown in Figure 1, Aegon preforms the worst out of the five companies.

Aegon does not make a lot of improvement in their performance, which also can be seen when looking at the graph which shows the performance of the three levels separately.

The information needed for the assessment was more than enough available. The amount was not as extensive as those of Allianz Group and AXA S.A., but it was still easily accessible.

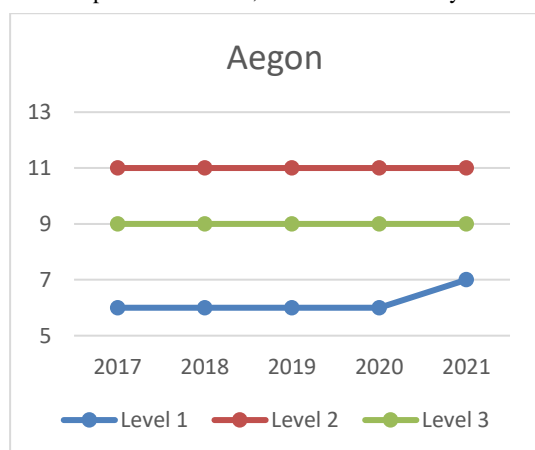


Figure 4 CSR performance of Aegon on the three individual levels

Generali scored lower on the first two years, compared to the other three years. This is due to the fact that there was no information available about the diversity ratio for the years 2017 and 2018, which resulted in a score of 0. The increase in 2018 was due to the Sustainability Group policy that was implemented in 2018. Due to SDG's described in the COP and the increase in the diversity ratio the score increased in 2019. As it can be seen in Figure 1, Generali makes the most improvement out of all the companies over the five-year period. Generali scored below-average on the first two years, compared to the maximum score of 33 and the performance of the other companies in Figure 1. However, starting from 2019 Generali scored average compared to the average of the whole industry.

Generali makes the most improvement in the first and third level, as it can be seen in the graph below. The second level stays the same after the increase caused by 'insurer created policy' in 2018. The improvements of level 1 are caused by 'SDGs described in COP' in 2019 and the certification of the EMAS standards in 2021. In 2019 the performance of level 3 was improved caused by the fact that information was available about the diversity ratio. In 2017 and 2018 no information about the diversity ratio could be found, which resulted in a score of 0. The measure 'case of child/forced/compulsory labor' caused the increase in 2021. Again, no information for this measure was available for previous years.

The information available about sustainability, etc. of Generali was the most limited. A lot of effort was needed to find all the information needed to assess the companies. This resulted in some 'n/a' scores in the framework.

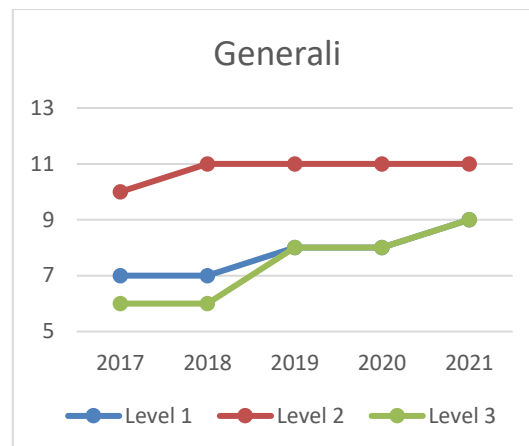


Figure 5 CSR performance of Generali on the three individual levels

The performance of Zurich Insurance Group stayed the same throughout the whole period. Compared to the maximum score of 33, Zurich Insurance Group scored quite good. Also, when compared to the performance of the other four companies in Figure 1, Zurich insurance group scores around the average of the whole industry.

Since Zurich Insurance Group scored the same throughout the five years, the performance on the three levels also stays the same over these five years. This can be seen in the graph below.

Zurich Insurance Group had a decent amount of information available about the sustainability, comparable to the amount of Aegon. The information needed for the assessment could easily be found on the company's website.

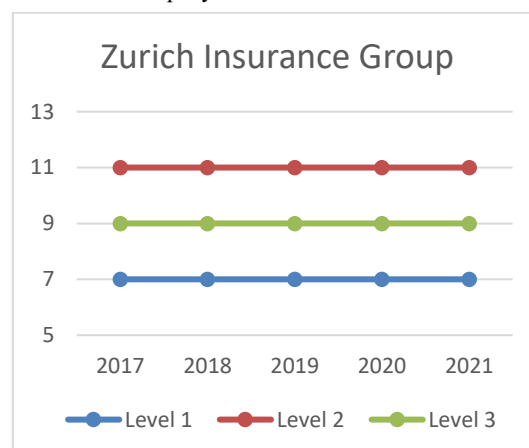


Figure 6 CSR performance of Zurich Insurance Group on the three individual levels

In order to look at the performance of the whole insurance industry, the average performance of all the five companies for each year was taken. As it can be seen in Figure 7 the performance of the whole industry slightly increases over the five-year period. In the graph below, you can see the average score of the five companies for each year. The indicator which improved or influenced the performance the most during the whole time period is diversity ratio. Most of the time the companies scored the highest score on the diversity ratio (2), in the other cases information about the diversity ratio was not available, which resulted in a score of 0. Just in a few cases a company scored a 1 on the diversity ratio.

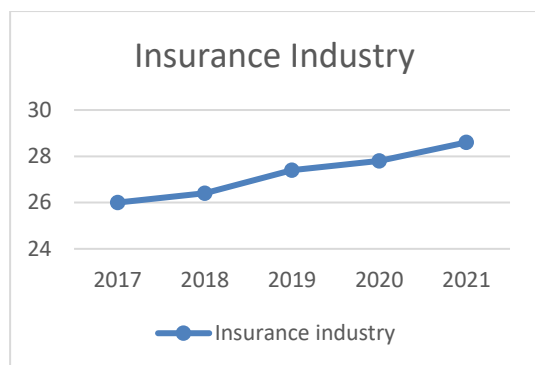


Figure 7 CSR performance of the insurance industry as a whole

When comparing the three levels separately, most improvement is made in level 1 and 3. Level 3 stays almost the same throughout the whole time period. The measures which caused the most improvement in level 1 are 'ISO 14001 certification'; 'SDGs described in COP'; 'information disclosure' and 'acceptance of global compact guidelines'. The measures 'diversity ratio' and 'efforts towards equal opportunities' were the most influential in level 3.

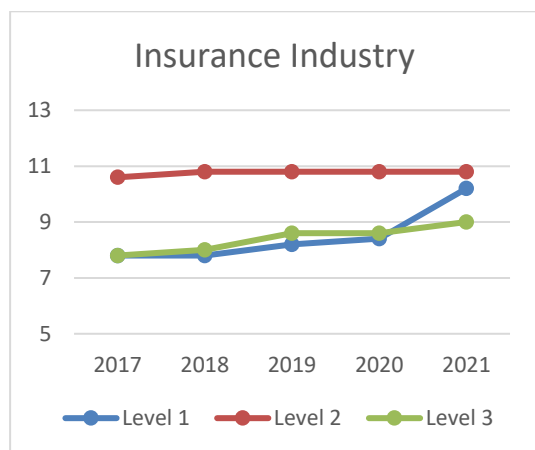


Figure 8 CSR performance of insurance industry on the three individual levels

5. CONCLUSION

Based on the case study and discussion, the final ranking of the five companies based on their score can be concluded. The ranking resulted in the following:

1. AXA S.A.
2. Allianz Group
3. Zurich Insurance Group
4. Generali
5. Aegon

For AXA S.A. and Allianz Group it was obvious that they would be ranked first and second place, since they scored the highest over the whole time period. For the other three companies it was a less obvious. In order to rank these three companies, I looked at their score compared to each other each year and I looked at their total score of the whole time period.

As mentioned before, AXA S.A. performed the best out of all the companies. However, throughout the time period its performance did not improve a lot. Allianz Group performed above average and made some improvement in its CSR performance throughout the five years. Aegon scored unexpectedly lower compared to the other four companies. The company also did not make a lot of improvement in its performance, only in the last two years the

score increases with one point respectively. Where Aegon performed unexpectedly low, Generali scored unexpectedly higher. Due to the fact that the sustainability information was not easily accessible, I did not expect Generali to score well. Generali is also one of the companies who made the most improvement in its CSR performance throughout the five-year period. Lastly, the performance of Zurich Insurance Group stayed the same through the whole time period.

For the industry as a whole, it can be seen that the CSR performance slightly increase over the five-year period. The measure 'diversity ratio' has caused most of this improvement in the performance of the insurance industry. In addition, compared to the maximum of 33 points, I believe that the state-of-the-art of the sustainability of insurance companies in Europe is quite good, especially in 2021.

My research unfortunately does have some limitations. The biggest flaw being the fact that sometimes data is not available, which results in a score of 0 or needing to make reasonable and subjective assumptions. In addition, in case an assumption about the performance of the whole insurance industry needs to be made, it is better to have a bigger sample group. In this aspect my research is lacking. However, this could be a suggestion for future research.

Due to the fact that sustainability is still evolving these days, a lot of research can and needs to be done on this topic, especially in the financial industry. Suggestions for future research would also be, why the CSR performance is less developed countries is less and what the causes of this is. Also, research can be done on what influences the CSR performance of companies in the financial sector.

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7. REFERENCES

- ADV Ratings. Top Insurance Companies in Europe. Retrieved from <https://www.advratings.com/insurance/top-insurance-companies-in-europe>
- Aegon N.V. (2018). *2017 Responsible Investment Report*. Retrieved from <https://www.aegon.com/investors/annual-reports/documents/2017/2017-responsible-investment-report/>
- Aegon N.V. (2018). *Aegon 2017 Annual Report*. Retrieved from <https://www.aegon.com/investors/annual-reports/documents/2017/annual-report-2017/>
- Aegon N.V. (2019). *2018 Responsible Investment Report*. Retrieved from <https://www.aegon.com/investors/annual-reports/documents/2018/2018-responsible-investment-report/>
- Aegon N.V. (2019). *Aegon Annual Report 2018 on Form 20-F*. Retrieved from <https://www.aegon.com/investors/annual-reports/documents/2018/aegon-2018-integrated-annual-report-on-form-20-f/>
- Aegon N.V. (2019). *Aegon Integrated Annual Report 2018*. Retrieved from <https://www.aegon.com/investors/annual-reports/documents/2018/aegon-2018-integrated-annual-report/>
- Aegon N.V. (2020). *2019 Responsible Investment Report*. Retrieved from <https://www.aegon.com/investors/annual-reports/documents/2019/responsible-investment-report-2019/>
- Aegon N.V. (2020). *Aegon Annual Report 2019 on Form 20-F*. Retrieved from <https://www.aegon.com/investors/annual-reports/documents/2019/aegon-iar-2019-on-form-20-f/>
- Aegon N.V. (2020). *Aegon Integrated Annual Report 2019*. Retrieved from <https://www.aegon.com/investors/annual-reports/documents/2019/aegon-iar-2019/>
- Aegon N.V. (2021). *2020 Responsible Investment Report*. Retrieved from <https://www.aegon.com/investors/annual-reports/documents/2020/responsible-investment-report-2020/>
- Aegon N.V. (2021). *Aegon Annual Report 2020 on Form 20-F*. Retrieved from <https://www.aegon.com/investors/annual-reports/documents/2020/aegon-annual-report-2020-on-form-20-f/>
- Aegon N.V. (2021). *Aegon Integrated Annual Report 2020*. Retrieved from <https://www.aegon.com/investors/annual-reports/documents/2020/aegon-integrated-annual-report-2020/>
- Aegon N.V. (2022). *2021 Responsible Investment Report*. Retrieved from <https://www.aegon.com/investors/annual-reports/documents/2021/2021-responsible-investment-report/>
- Aegon N.V. (2022). *Aegon Annual Report 2021 on Form 20-F*. Retrieved from <https://www.aegon.com/investors/annual-reports/documents/2021/aegon-annual-report-2021-on-form-20-f/>
- Aegon N.V. (2022). *Integrated Annual Report 2021*. Retrieved from <https://www.aegon.com/investors/annual-reports/documents/2021/aegon-integrated-annual-report-2021/>
- Ali, W., Frynas, J. G., & Mahmood, Z. (2017). Determinants of Corporate Social Responsibility (CSR) Disclosure in Developed and Developing Countries: A Literature Review. *Corporate Social Responsibility and Environmental Management*, 24(4), 273-294. doi:10.1002/csr.1410
- Allianz Group & Allianz SE. (2018). *COMBINED SEPARATE NON-FINANCIAL REPORT 2017*. Retrieved from https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/responsibility/documents/NFReport_EN_2017_Allianz.pdf
- Allianz Group. (2018). *Allianz HR Fact Book 2017*. Retrieved from https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/about-us/hr-fact-book/2017_Factbook_2017_ext_en_screen.pdf
- Allianz Group. (2018). *Sustainability Report 2017*. Retrieved from https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/responsibility/documents/Allianz_Group_Sustainability_Report_2017-web.pdf
- Allianz Group. (2019). *Allianz People Fact Book 2018*. Retrieved from https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/about-us/hr-fact-book/PEOPLE_FACT_BOOK_2018_EN.pdf
- Allianz Group. (2019). *ANNUAL REPORT 2018*. Retrieved from https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/investor-relations/en/results-reports/annual-report/ar-2018/en-AR-Group-2018.pdf
- Allianz Group. (2019). *Sustainability Report 2018*. Retrieved from https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/sustainability/documents/Allianz_Group_Sustainability_Report_2018-web.pdf
- Allianz Group. (2020). *Allianz People Fact Book 2019*. Retrieved from

- https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/about-us/hr-fact-book/PEOPLE-FACT-BOOK-2019-EN.pdf
- Allianz Group. (2020). *ANNUAL REPORT 2019*. Retrieved from https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/investor-relations/en/results-reports/annual-report/ar-2019/en-AR-Group-Annual-Report-Allianz-2019.pdf#page=43
- Allianz Group. (2020). *Sustainability Report 2019*. Retrieved from https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/sustainability/documents/Allianz_Group_Sustainability_Report_2019-web.pdf
- Allianz Group. (2020). *ALLIANZ GROUP CODE OF CONDUCT*. Retrieved from https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/about-us/strategy-values/compliance/code-of-conduct/en-Code-of-Conduct-AllianzGroup-2020.pdf
- Allianz Group. (2021). *Allianz People Fact Book 2020*. Retrieved from https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/about-us/hr-fact-book/HRFactbook_E_210325.pdf
- Allianz Group. (2021). *ANNUAL REPORT 2020*. Retrieved from https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/investor-relations/en/results-reports/annual-report/ar-2020/en-Allianz-Group-Annual-Report-2020.pdf#page=48
- Allianz Group. (2021). *Sustainability Report 2020*. Retrieved from https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/sustainability/documents/Allianz_Group_Sustainability_Report_2020-web.pdf
- Allianz Group. (2022). *Allianz People Fact Book 2021*. Retrieved from https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/about-us/hr-fact-book/People_Fact_Book_2021_EN.pdf
- Allianz Group. (2022). *ANNUAL REPORT 2021*. Retrieved from https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/investor-relations/en/results-reports/annual-report/ar-2021/en-Allianz-Group-Annual-Report-2021.pdf#page=59
- Allianz Group. (2022). *Sustainability Report 2021*. Retrieved from https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/sustainability/documents/Allianz_Group_Sustainability_Report_2021-web.pdf
- Allianz SE. (2021). *Global Anti-Harassment and Anti-Discrimination Functional Guideline* Retrieved from https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/sustainability/Global_Anti-Harassment_Anti-Discrimination_Functional_Guideline.pdf
- Angelakoglou, K., & Gaidajis, G. (2015). A review of methods contributing to the assessment of the environmental sustainability of industrial systems. *Journal of Cleaner Production*, 108, 725-747. doi:10.1016/j.jclepro.2015.06.094
- AXA. (2018). *2017 Annual Report* Retrieved from <https://www.axa.com/en/press/publications/2017-annual-report>
- AXA. (2018). *2017 Integrated Report*. Retrieved from <https://www.axa.com/en/press/publications/2017-integrated-report>
- AXA. (2018). *AXA Group Human Capital - 2017 Social Data Report*. Retrieved from <https://www.axa.com/en/press/publications/social-data-report-2017>
- AXA. (2019). *2018 Annual Report* Retrieved from https://www-axa-com.cdn.axa-contento-118412.eu/www-axa-com%2F913d1869-3d11-4eb2-b013-4caedb747fab_axa-ddr2018b-en.pdf
- AXA. (2019). *2019 Climate Report* Retrieved from <https://www.axa.com/en/press/publications/2019-climate-report>
- AXA. (2019). *AXA Group Human Capital - 2018 Social Data Report*. Retrieved from <https://www.axa.com/en/press/publications/social-data-report-2018>
- AXA. (2019). *Integrated Report 2018*. Retrieved from <https://www.axa.com/en/press/publications/2018-integrated-report>
- AXA. (2020). *2019 Annual Report* Retrieved from https://www-axa-com.cdn.axa-contento-118412.eu/www-axa-com%2F90abd6c7-80c4-48ef-84bf-1d038670d9b7_axa-urd2019-en.pdf
- AXA. (2020). *2019 Integrated Report*. Retrieved from <https://www.axa.com/en/press/publications/2019-integrated-report-publication>
- AXA. (2020). *2020 Climate Report* Retrieved from <https://www.axa.com/en/press/publications/2020-climate-report>
- AXA. (2020). *AXA Group Human Capital - 2019 Social Data Report*. Retrieved from <https://www.axa.com/en/press/publications/social-data-report-2019>
- AXA. (2021). *2020 Annual Report* Retrieved from https://www-axa-com.cdn.axa-contento-118412.eu/www-axa-com/d6aef906-e41f-40c7-ac9c-29044e98939d_AXA_URD_2020_EN_accessible_b.pdf
- AXA. (2021). *2020 Integrated Report*. Retrieved from <https://www.axa.com/en/press/publications/2020-integrated-report-publication>

- AXA. (2021). *2021 Climate Report* Retrieved from <https://www.axa.com/en/press/publications/2021-climate-report>
- AXA. (2021). *2021 Integrated Report*. Retrieved from <https://www.axa.com/en/press/publications/2021-integrated-report>
- AXA. (2021). *AXA Group Human Capital - 2020 Social Data Report*. Retrieved from <https://www.axa.com/en/press/publications/social-data-report-2020>
- AXA. (2022). *2021 Annual Report* Retrieved from https://www-axa-com.cdn.axa-contento-118412.eu/www-axa-com/e3f52b5e-d4aa-4fc8-8bcd-f432df86e804_axa_urd_2021_en_accessible.pdf
- AXA. (2022). *AXA Group Human Capital - 2021 Social Data Report*. Retrieved from <https://www.axa.com/en/press/publications/social-data-report-2021>
- Bobrava, O. (2021). *Corporate Social Responsibility in Insurance Industry as a Contribution to Financial Sustainability - Cases of Japan and Russia*. Paper presented at the III International Scientific Conference on Financial Markets At St. Petersburg,
- Carroll, A. B., & Näsi, J. (1997). Understanding Stakeholder Thinking: Themes from a Finnish Conference. *Business Ethics: A European Review*, 6(1), 46-51. doi:10.1111/1467-8608.00047
- CDP. (2017). *Aegon - Climate Change 2017*. Retrieved from <https://www.aegon.com/contentassets/8e030e22a1e44c4bb31547b25a42f87f/cdp-disclosure-2017-2016-reporting-year.pdf>
- CDP. (2018). *Aegon - Climate Change 2018*. Retrieved from <https://www.aegon.com/contentassets/8e030e22a1e44c4bb31547b25a42f87f/cdp-disclosure-2018-2017-reporting-year.pdf>
- CDP. (2019). *Aegon - Climate Change 2019*. Retrieved from <https://www.aegon.com/contentassets/8e030e22a1e44c4bb31547b25a42f87f/cdp-disclosure-2019-2018-reporting-year.pdf>
- CDP. (2020). *Aegon - Climate Change 2020*. Retrieved from <https://www.aegon.com/contentassets/8e030e22a1e44c4bb31547b25a42f87f/cdp-disclosure-2020-2019-reporting-year.pdf>
- DIRECTIVE 2014/95/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL. (2014). *Official Journal of the European Union*(330). Retrieved from <http://data.europa.eu/eli/dir/2014/95/oj>
- Donaldson, T. P., L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and
- Generali Group (2019). *SUSTAINABILITY GROUP POLICY*. Retrieved from https://www.generali.com/doc/jcr:3761c796-e150-4837-85bc-c7f710d9f565/lang:en/Sustainability_Group_Policy_ENG.pdf
- Generali. (2017). *Charter of sustainability commitments* Retrieved from https://www.generali.com/our-responsibilities/responsible-business/charter_sustainability_commitments-#:~:text=Generali's%20Charter%20of%20Sustainability%20Commitments,term%20value%20for%20our%20stakeholders.
- Generali. (2018). *2017 Annual Integrated Report*. Retrieved from <https://www.generali.com/our-responsibilities/performance/how-we-report-vista#2018>
- Generali. (2019). *Annual Integrated Report and Consolidated Financial Statements 2018*. Retrieved from <https://www.generali.com/our-responsibilities/performance/how-we-report-vista#2019>
- Generali. (2020). *Annual Integrated Report and Consolidated Financial Statements 2019*. Retrieved from <https://www.generali.com/our-responsibilities/performance/how-we-report-vista#2020>
- Generali. (2020). *Climate-related Financial Disclosure 2019*. Retrieved from <https://www.generali.com/our-responsibilities/performance/how-we-report-vista#2020>
- Generali. (2020). *Code of Conduct* Retrieved from <https://www.generali.com/our-responsibilities/responsible-business/code-of-conduct#:~:text=Employees%20must%20treat%20one%20another,and%20inclusion%20are%20effectively%20pursued.>
- Generali. (2020). *ESG Presentation 2020 [Slides]*. Retrieved from <https://www.generali.com/info/download-center/sustainability/documents>
- Generali. (2020). *GRI Content Index 2019 in accordance core option* Retrieved from <https://www.generali.com/info/download-center/sustainability/documents>
- Generali. (2021). *Annual Integrated Report and Consolidated Financial Statements 2020*. Retrieved from <https://www.generali.com/our-responsibilities/performance/how-we-report-vista#2021>
- Generali. (2021). *Climate-related Financial Disclosure 2020*. Retrieved from <https://www.generali.com/our-responsibilities/performance/how-we-report-vista#2021>
- Generali. (2021). *ENVIRONMENTAL MANAGEMENT SYSTEM*. Retrieved from <https://www.generali.com/our-responsibilities/our-commitment-to-the-environment-and-climate/environmental-management>

- Generali. (2021). *ESG Presentation 2021* [Slides]. Retrieved from <https://www.generali.com/info/download-center/sustainability/documents>
- Generali. (2021). *Generali in Figures 2021*. Retrieved from <https://www.generali.com/our-responsibilities/performance/data-and-performance>
- Generali. (2021). *GRI Content Index 2020 in accordance core option* Retrieved from <https://www.generali.com/info/download-center/sustainability/documents>
- Generali. (2022). *Annual Integrated Report and Consolidated Financial Statements 2021*. Retrieved from <https://www.generali.com/our-responsibilities/performance/how-we-report-vista#2022>
- Generali. (2022). *GRI Content Index 2021 in accordance core option* Retrieved from <https://www.generali.com/info/download-center/sustainability/documents>
- Giacalone, R. A., & Thompson, K. R. (2006). Business ethics and social responsibility education: Shifting the worldview. *Academy of Management Learning and Education*, 5(3), 266-277. doi:10.5465/AMLE.2006.22697016
- Ho, C. C., Huang, C., & Ou, C. Y. (2018). Analysis of the factors influencing sustainable development in the insurance industry. *Corporate Social Responsibility and Environmental Management*, 25(4), 391-410. doi:10.1002/csr.1467
- Hörisch, J. F., E.; Schaltegger S. (2014). Applying Stakeholder Theory in Sustainability Management: Links, Similarities, Dissimilarities, and a Conceptual Framework. 27(4). implications. *Academy of Management Review*, 20(1), 65-91.
- Kavitha, N. V. A., T. . (2016). Corporate Social Responsibility in Insurance Sector in India. *International Journal of Innovative Research & Development* 5(2), 137-143.
- Khalaf, K., & Nobanee, H. (2022). Sustainability and Performance in Insurance Companies.
- Khovrak, I. (2020). ESG-driven approach to managing insurance companies' sustainable development. *Insur. Mark. Co*, 11, 42-52.
- MacNeil, I., & Esser, I. M. (2022). From a Financial to an Entity Model of ESG. *European Business Organization Law Review*, 23(1), 9-45. doi:10.1007/s40804-021-00234-y
- Mints, A., Kamyshnykova, E., Zherlitsyn, D., Bukrina, K., & Bessonova, A. (2021). Corporate social responsibility impact on financial performance: A case for the metallurgical industry. *WSEAS Transactions on Environment and Development*, 17, 398-409. doi:10.37394/232015.2021.17.39
- Mocan, M., Rus, S., Draghici, A., Ivascu, L., & Turi, A. (2015). Impact of corporate social responsibility practices on the banking industry in Romania. *Procedia Economics and Finance*, 23(1), 712-716.
- Ogden, S. & Watson, R. (1999). Corporate performance and stakeholder management: Balancing shareholder and customer interests in the UK privatized water industry. *Academy of Management Journal*, 42(5), 526-538.
- Okhrimenko, O., & Manaienko, I. (2019). Forming the life insurance companies' reputation in Ukrainian realities. *Insurance Markets and Companies*, 10(1), 49-60.
- Oncioiu, I., Petrescu, A. G., Bilcan, F. R., Petrescu, M., Popescu, D. M., & Anghel, E. (2020). Corporate sustainability reporting and financial performance. *Sustainability (Switzerland)*, 12(10). doi:10.3390/su12104297
- Park, S. R., & Jang, J. Y. (2021). The impact of ESG management on investment decision: Institutional investors' perceptions of country-specific ESG criteria. *International Journal of Financial Studies*, 9(3). doi:10.3390/ijfs9030048
- Rahi, A. B. M. F., Akter, R., & Johansson, J. (2022). Do sustainability practices influence financial performance? Evidence from the Nordic financial industry. *Accounting Research Journal*, 35(2), 292-314. doi:10.1108/ARJ-12-2020-0373
- Russia.
- Saaty, T. L. (2003). Decision-making with the AHP: Why is the principal eigenvector necessary. *European Journal of Operational Research*, 145(1), 85-91. doi:10.1016/S0377-2217(02)00227-8
- Scholtens, B. (2011). Corporate social responsibility in the international insurance industry. *Sustainable Development*, 19(2), 143-156. doi:10.1002/sd.513
- Suwinto, J. (2021). Determinants of Corporate Social Responsibility Provision. *Journal of Asian Finance, Economics and Business*, 8(1), 891-899. doi:10.13106/jafeb.2021.vol8.no1.891
- Tarkhanova, E. A. (2018). Innovations and sustainability in the financial and banking sectors. *Terra Economicus*, 16(2), 75-82. doi:10.23683/2073-6606-2018-16-2-75-82
- Waddock, S. A., & Graves, S. B. (1997). The corporate social performance-financial performance link. *Strategic Management Journal*, 18(4), 303-319. doi:10.1002/(SICI)1097-0266(199704)18:4<303::AID-SMJ869>3.0.CO;2-G
- Wuttichindanon, S. (2017). Corporate social responsibility disclosure—choices of report and its determinants: Empirical evidence from firms listed on the Stock Exchange of Thailand. *Kasetsart Journal of Social Sciences*, 38(2), 156-162. doi:10.1016/j.kjss.2016.07.002

- Yong, X. S. O. (2021). How can the insurance industry be more sustainable? Retrieved from <https://investors-corner.bnpparibas-am.com/investing/how-can-the-insurance-industry-be-more-sustainable/>
- Zimmer, M. (2020). Impact Underwriting: Sustainable Insurance as an Opportunity for Society and Business Retrieved from https://www.allianz-trade.com/content/dam/onemarketing/aztrade/allianz-trade_com/en_gl/erd/publications/pdf/20_07_29_ImpactUnderwriting.pdf
- Zurich Insurance Group. (2018). *Annual Report 2017*. Retrieved from <https://www.zurich.com/en/investor-relations/results-and-reports>
- Zurich Insurance Group. (2018). *Corporate responsibility highlights 2017*. Retrieved from <https://www.zurich.com/en/sustainability/reporting-and-news/reports-publications>
- Zurich Insurance Group. (2019). *Annual Report 2018*. Retrieved from <https://www.zurich.com/en/investor-relations/results-and-reports>
- Zurich Insurance Group. (2019). *Corporate responsibility highlights 2018*. Retrieved from <https://www.zurich.com/en/sustainability/reporting-and-news/reports-publications>
- Zurich Insurance Group. (2019). *This is Zurich - HR factbook 2018 - together we can do extraordinary things*. Retrieved from <https://www.zurich.com/en/sustainability/reporting-and-news/reports-publications>
- Zurich Insurance Group. (2020). *Annual Report 2019*. Retrieved from <https://www.zurich.com/en/investor-relations/results-and-reports>
- Zurich Insurance Group. (2020). *Corporate responsibility highlights 2019*. Retrieved from <https://www.zurich.com/en/sustainability/reporting-and-news/reports-publications>
- Zurich Insurance Group. (2020). *This is Zurich - HR factbook 2019 - #ZurichNeverStops*. Retrieved from <https://www.zurich.com/en/sustainability/reporting-and-news/reports-publications>
- Zurich Insurance Group. (2021). *Annual Report 2020*. Retrieved from <https://www.zurich.com/en/investor-relations/results-and-reports>
- Zurich Insurance Group. (2021). *Corporate responsibility highlights 2020*. Retrieved from <https://www.zurich.com/en/sustainability/reporting-and-news/reports-publications>
- Zurich Insurance Group. (2021). *This is Zurich - HR factbook 2020 – create a brighter future together*. Retrieved from <https://www.zurich.com/en/careers/our-people/facts-and-strategy>
- Zurich Insurance Group. (2022). *Annual Report 2021*. Retrieved from <https://www.zurich.com/en/investor-relations/results-and-reports>
- Zurich Insurance Group. (2022). *Corporate responsibility highlights 2021*. Retrieved from <https://www.zurich.com/en/sustainability/reporting-and-news/reports-publications>

8. APENDIX A

	<i>Scholtens (2011)</i>	<i>Park and Jang (2021)</i>	<i>Chosen Indicators</i>
Level 1: Willingness and Commitment	Sustainability reporting ICC Business Charter UNEP FI Equator Principles Global compact Who cares wins ISO 14001 EMAS Company ethics Compliance	Ethical behavior (Anti-competitive practices, anti-corruption, and bribery policy) Risks and opportunities management (Systemic risk management, critical incident risk management, business model resilience) Shareholders' rights (Investment return, voting rights, information disclosure) CEO Reputation (CEO image, management controversy) Corporate governance (gender ratio, experiences of the board members)	Sustainability reporting Ethical behavior & company ethics Equator Principles UNEP FI ISO 14001 EMAS Global compact Who cares wins Shareholder rights (investment return, voting rights, information disclosure) Corporate governance (experiences of the board members)
Level 2: In practice	Environmental policy Supply chain management Transparency performance Transparency goals Environmental risk analysis Sector exclusion World Bank guidelines Sustainable financial products	Resource depletions (Energy/water consumption) GHG (Greenhouse Gas) emissions (GHG emission and climate risk targets and assessments, product carbon footprint) Pollution and Waste (Waste disposal, water/air/land pollution, single-use plastic) Eco-Product/Process Strategy (R&D expenditure) Nature Loss (Land use and ecological sensitivity, biodiversity) Corporate governance (Gender ratio, experiences of the board members)	Environmental policy Transparency performance Transparency goals Environmental risk analysis Sector exclusion GHG (Greenhouse Gas) emissions (climate risk targets and assessment) Resource deletions (energy consumption) Corporate governance (gender ratio)
Level 3: Efforts beyond themselves	Community involvement Sponsoring Education and training Equal career opportunities	Human rights (Discrimination, harassment, diversity ratio, freedom of association, child/forced/compulsory labor) Community relations (Local investment, community investment) Human Resource Management (Talent attraction and retention Providing health, safety, and training opportunities) Customer satisfaction (Privacy, data security, product safety and quality, financial product safety) Partnership with Subcontractor (Contract satisfaction, trusting relationship) Social and Political contribution (Contributions, philanthropy, infrastructure investment, employment, total tax paid)	Community involvement & community relations (local investment, community investment) Education and training Equal career opportunities Human rights (discrimination, harassment, diversity ratio, freedom of association, child/forced/compulsory labor) Human Resource Management (providing health, safety, and training opportunities) Customer satisfaction (privacy, data security) Social and political contribution (employment, total tax pay)

Table 1 Overview of Indicators

	<i>Indicator</i>	<i>Measure</i>	<i>Source</i>
Level 1: Willingness and Commitment	Sustainability reporting	Year of first published report	Company's website
	Ethical behavior & company ethics	Code of Conduct; Code of Ethics (yes/no) Anti-corruption and bribery policy (yes/no)	Company's website and/or reports
	Equator Principles	Acceptance of guidelines (yes/no)	www.equator-principles.com
	UNEP FI	Acceptance of guidelines (yes/no)	www.unepfi.org, and www.unpri.org
	ISO 14001	ISO 14001 certification (yes/no)	Company's website and/or reports
	EMAS	EMAS standard certification (yes/no)	Company's website and/or reports
	Global compact	Acceptance of guidelines (yes/no) <i>SDGs described in COP (0/1/2)</i>	www.unglobalcompact.org
	Who cares wins	Participation in publication (yes/no)	Who care wins statement, www.unglobalcompact.org
	Shareholder rights (investment return, voting rights, information disclosure)	Investment return (0/1/2) Information disclosure (0/1/2)	Company's website and/or reports
	<i>PSI (Principles for Sustainable Insurance)</i>	<i>Acceptance of guidelines (yes/no)</i>	<i>Company's website and/or reports</i>
Level 2: In practice	Environmental policy	Insurer-designed policy (yes/no) <i>Implementation of SDG's (yes/no)</i>	Company's website and/or reports
	Transparency performance	<i>Efforts towards transparency (yes/no)</i> <i>Implementation of GRI standards (yes/no)</i>	Company's website and/or reports
	Transparency goals	Quantitative/qualitative (1/0)	Company's website and/or reports
	Environmental risk analysis	Utilization of risk analysis (yes/no)	Company's website and/or reports
	Sector exclusion	Utilization of sector exclusion (yes/no)	Company's website and/or reports
	GHG (Greenhouse Gas) emissions (climate risk targets and assessment)	Implementation and usage of climate risk targets (yes/no) Implementation of climate risk assessment methods (yes/no)	Company's website and/or reports
	Resource deletions (energy consumption)	Implementation of energy reduction targets (yes/no)	Company's website and/or reports
	Corporate governance (gender ratio)	Gender ratio (0/1/2)	Company's website and/or reports
Level 3: Efforts beyond themselves	Community involvement & community relations (local investment, community investment)	Providing volunteer work, participating in a foundation, making donations (yes/no)	Company's website and/or reports
	Education and training	Training and education facilities available (yes/no)	Company's website and/or reports
	Equal career opportunities	Presence of/efforts towards equal opportunities (yes/no)	Company's website and/or reports
	Human rights (discrimination, harassment, diversity ratio, freedom of association, child/forced/compulsory labor)	Measures implemented against discrimination and harassment (yes/no) Diversity ratio (1/2/3) Freedom of association (yes/no) Case of child/forced/compulsory labor (yes/no)	Company's website and/or reports
	Human Resource Management (providing health, safety, and training opportunities)	Presence of health, safety, and training opportunities (yes/no)	Company's website and/or reports
	Customer satisfaction (privacy, data security)	Presence of data security measures (yes/no)	Company's website and/or reports

Table 2 Framework for assessment of CSR, inspired by Scholtens (2011) and Park and Jang (2021)

9. APPENDIX B

Company: Allianz Group	Country: Germany						
Levels	Indicator	Measure	2017	2018	2019	2020	2021
Level 1: Willingness and Commitment	Ethical behavior & company ethics	Code of Conduct; Code of Ethics (yes/no)	1	1	1	1	1
		Anti-corruption and bribery policy (yes/no)	1	1	1	1	1
	Equator Principles	Acceptance of guidelines (yes/no)	0	0	0	0	0
	UNEP FI	Acceptance of guidelines (yes/no)	1	1	1	1	1
	ISO 14001	ISO 14001 certification (yes/no)	0	0	1	1	1
	EMAS	EMAS standard certification (yes/no)	0	0	0	0	0
	Global compact	Acceptance of guidelines (yes/no)	1	1	1	1	1
		SDGs describes in COP (0/1/2)	2	2	2	2	n/a*
	Who cares wins	Participation in publication (yes/no)	0	0	0	0	0
	PSI (Principles for Sustainable Insurance)	Acceptance of guidelines (yes/no)	1	1	1	1	1
	Shareholder rights (investment return, voting rights, information disclosure)	Information disclosure (0/1)	2	2	2	2	2
Level 2: In practice	Environmental policy	Insurer-designed policy (yes/no)	1	1	1	1	1
		Implementation of SDG's (yes/no)	1	1	1	1	1
	Transparency performance	Efforts towards transparency	1	1	1	1	1
		Implementation of GRI standards (yes/no)	1	1	1	1	1
	Environmental risk analysis	Utilization of risk analysis (yes/no)	1	1	1	1	1
	Sector exclusion	Utilization of sector exclusion (yes/no)	1	1	1	1	1
	GHG (Greenhouse Gas) emissions (climate risk targets and assessment)	Implementation and usage of climate risk/change targets (yes/no)	1	1	1	1	1
		Implementation of climate risk/change assessment methods (yes/no)	1	1	1	1	1
	Resource deletions (energy consumption)	Implementation of energy reduction targets (yes/no)	1	1	1	1	1
	Corporate governance (gender ratio)	Gender ratio (0/1/2)	2	2	2	2	2
Level 3: Efforts beyond themselves	Community involvement & community relations (local investment, community investment)	Providing volunteer work, participating in a foundation, making donations (yes/no)	1	1	1	1	1
	Education and training	Training and education facilities available (yes/no)	1	1	1	1	1
	Equal career opportunities	Presence of/efforts towards equal opportunities (yes/no)	1	1	1	1	1
	Human rights (discrimination, harassment, diversity ratio, freedom of association, child/forced/compulsory labor)	Measures implemented against discrimination and harassment (yes/no)	1	1	1	1	1
		Diversity ratio (0/1/2)	n/a**	1	1	1	2
		Case of child/forced/compulsory labor (yes/no)	1	1	1	1	1
	Human Resource Management (providing health, safety, and training opportunities)	Presence of health, safety, and training opportunities (yes/no)	0	0	1	1	1
	Customer satisfaction (privacy, data security)	Presence of data security measures (yes/no)	1	1	1	1	1
Total		26	27	29	29	30	

* Since the COP report was not available for 2021 yet, the assumption was made that Allianz Group would have the same score as the previous four years (2)

** Since there was no information available about the diversity ratio, the n/a is considered a score of 0

Company: AXA S.A.		Country: France						
Levels	Indicator	Measure	2017	2018	2019	2020	2021	
Level 1: Willingness and Commitment	Ethical behavior & company ethics	Code of Conduct; Code of Ethics (yes/no)	1	1	1	1		
		Anti-corruption and bribery policy (yes/no)	1	1	1	1	1	
	Equator Principles	Acceptance of guidelines (yes/no)	0	0	0	0	0	
	UNEP FI	Acceptance of guidelines (yes/no)	1	1	1	1	1	
	ISO 14001	ISO 14001 certification (yes/no)	1	1	1	1	1	
	EMAS	EMAS standard certification (yes/no)	0	0	0	0	0	
	Global compact	Acceptance of guidelines (yes/no)	1	1	1	1	1	
		SDGs describes in COP (0/1/2)	2	2	2	2	n/a*	
	Who cares wins	Participation in publication (yes/no)	1	1	1	1	1	
	PSI (Principles for Sustainable Insurance)	Acceptance of guidelines (yes/no)	1	1	1	1	1	
	Shareholder rights (investment return, voting rights, information disclosure)	Information disclosure (0/1/2)	1	1	1	2	2	
	Level 2: In practice	Environmental policy	Insurer created policy (yes/no)	1	1	1	1	1
			Implementation of SDG's (yes/no)	1	1	1	1	1
Transparency performance		Value/stress transparency	1	1	1	1	1	
		Implementation of GRI standards (yes/no)	n/a**	n/a	n/a	n/a	n/a	
Environmental risk analysis		Utilization of risk analysis (yes/no)	1	1	1	1	1	
Sector exclusion		Utilization of sector exclusion (yes/no)	1	1	1	1	1	
GHG (Greenhouse Gas) emissions (climate risk targets and assessment)		Implementation and usage of climate risk targets (yes/no)	1	1	1	1	1	
		Implementation of climate risk assessment methods (yes/no)	1	1	1	1		
Resource deletions (energy consumption)		Implementation of energy reduction targets (yes/no)	1	1	1	1	1	
Corporate governance (gender ratio)		Gender ratio (0/1/2)	2	2	2	2	2	
Level 3: Efforts beyond themselves		Community involvement & community relations (local investment, community investment)	Providing volunteer work, participating in a foundation, making donations (yes/no)	1	1	1	1	
		Education and training	Training and education facilities available (yes/no)	1	1	1	1	1
		Equal career opportunities	Presence of/efforts towards equal opportunities (yes/no)	1	1	1	1	1
	Human rights (discrimination, harassment, diversity ratio, freedom of association, child/forced/compulsory labor)	Measures implemented against discrimination and harassment (yes/no)	1	1	1	1		
		Diversity ratio (0/1/2)	2	2	2	2	2	
		Case of child/forced/compulsory labor (yes/no)	1	1	1	1	1	
	Human Resource Management (providing health, safety, and training opportunities)	Presence of health, safety, and training opportunities (yes/no)	1	1	1	1		
	Customer satisfaction (privacy, data security)	Presence of data security measures (yes/no)	1	1	1	1	1	
	Total		29	29	29	30	30	

* Since the COP report was not available for 2021 yet, the assumption was made that AXA S.A. would have the same score as the previous four years (2)

** Since there was no information available about the implementation of GRI standards, the n/a answer is considered a score of 0 for all the five years

Company: Aegon	Country: the Netherlands						
Levels	Indicator	Measure	2017	2018	2019	2020	2021
Level 1: Willingness and Commitment	Ethical behavior & company ethics	Code of Conduct; Code of Ethics (yes/no)	1	1	1	1	
		Anti-corruption and bribery policy (yes/no)	1	1	1	1	1
	Equator Principles	Acceptance of guidelines (yes/no)	0	0	0	0	0
	UNEP FI	Acceptance of guidelines (yes/no)	1	1	1	1	1
	ISO 14001	ISO 14001 certification (yes/no)	1	1	1	1	1
	EMAS	EMAS standard certification (yes/no)	0	0	0	0	0
	Global compact	Acceptance of guidelines (yes/no)	0	0	0	0	1
		SDGs described in COP (0/1/2)	0	0	0	0	n/a*
	Who cares wins	Participation in publication (yes/no)	0	0	0	0	0
	PSI (Principles for Sustainable Insurance)	Acceptance of guidelines (yes/no)	1	1	1	1	1
	Shareholder rights (investment return, voting rights, information disclosure)	Information disclosure (0/1/2)	1	1	1	1	1
Level 2: In practice	Environmental policy	Insurer created policy (yes/no)	1	1	1	1	1
		Implementation of SDG's (yes/no)	1	1	1	1	1
	Transparency performance	Efforts towards transparency (yes/no)	1	1	1	1	1
		Implementation of GRI standards (yes/no)	1	1	1	1	1
	Environmental risk analysis	Utilization of risk analysis (yes/no)	1	1	1	1	1
	Sector exclusion	Utilization of sector exclusion (yes/no)	1	1	1	1	1
	GHG (Greenhouse Gas) emissions (climate risk targets and assessment)	Implementation and usage of climate risk targets (yes/no)	1	1	1	1	1
		Implementation of climate risk assessment methods (yes/no)	1	1	1	1	
	Resource deletions (energy consumption)	Implementation of energy reduction targets (yes/no)	1	1	1	1	1
	Corporate governance (gender ratio)	Gender ratio (0/1/2)	2	2	2	2	2
	Level 3: Efforts beyond themselves	Community involvement & community relations (local investment, community investment)	Providing volunteer work, participating in a foundation, making donations (yes/no)	1	1	1	1
Education and training		Training and education facilities available (yes/no)	1	1	1	1	1
Equal career opportunities		Presence of/effort towards equal opportunities (yes/no)	n/a**	n/a	n/a	1	1
Human rights (discrimination, harassment, diversity ratio, freedom of association, child/forced/compulsory labor)		Measures implemented against discrimination and harassment (yes/no)	1	1	1	1	
		Diversity ratio (1/2/3)	2	2	2	2	2
		Case of child/forced/compulsory labor (yes/no)	1	1	1	1	1
Human Resource Management (providing health, safety, and training opportunities)		Presence of health, safety, and training opportunities (yes/no)	1	1	1	1	
Customer satisfaction (privacy, data security)		Presence of data security measures (yes/no)	1	1	1	1	1
Total			25	25	25	26	27

* Since the COP report was not available for 2021 yet, the assumption was made that Aegon would have the same score as the previous four years (0)

** Since there was no information available about efforts towards equal opportunities, the n/a answer is considered a score of 0 for the years 2017, 2018 and 2019

<i>Company: Generali</i>	<i>Country: Italy</i>						
<i>Levels</i>	<i>Indicator</i>	<i>Measure</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>
Level 1: Willingness and Commitment	Ethical behavior & company ethics	Code of Conduct; Code of Ethics (yes/no)	1	1	1	1	
		Anti-corruption and bribery policy (yes/no)	1	1	1	1	1
	Equator Principles	Acceptance of guidelines (yes/no)	0	0	0	0	0
	UNEP FI	Acceptance of guidelines (yes/no)	1	1	1	1	1
	ISO 14001	ISO 14001 certification (yes/no)	1	1	1	1	1
	EMAS	EMAS standard certification (yes/no)	n/a*	n/a	n/a	n/a	1
	Global compact	Acceptance of guidelines (yes/no)	1	1	1	1	1
		SDGs described in COP (0/1/2)	0	0	1	1	n/a**
	Who cares wins	Participation in publication (yes/no)	0	0	0	0	0
	PSI (Principles for Sustainable Insurance)	Acceptance of guidelines (yes/no)	1	1	1	1	1
	Shareholder rights (investment return, voting rights, information disclosure)	Information disclosure (0/1/2)	1	1	1	1	1
Level 2: In practice	Environmental policy	Insurer created policy (yes/no)	0	1	1	1	1
		Implementation of SDG's (yes/no)	1	1	1	1	1
	Transparency performance	Efforts towards transparency (yes/no)	1	1	1	1	1
		Implementation of GRI standards (yes/no)	1	1	1	1	1
	Environmental risk analysis	Utilization of risk analysis (yes/no)	1	1	1	1	1
	Sector exclusion	Utilization of sector exclusion (yes/no)	1	1	1	1	1
	GHG (Greenhouse Gas) emissions (climate risk targets and assessment)	Implementation and usage of climate risk targets (yes/no)	1	1	1	1	1
		Implementation of climate risk assessment methods (yes/no)	1	1	1	1	
							1
	Resource deletions (energy consumption)	Implementation of energy reduction targets (yes/no)	1	1	1	1	1
Corporate governance (gender ratio)	Gender ratio (0/1/2)	2	2	2	2	2	
Level 3: Efforts beyond themselves	Community involvement & community relations (local investment, community investment)	Providing volunteer work, participating in a foundation, making donations (yes/no)	1	1	1	1	
							1
	Education and training	Training and education facilities available (yes/no)	1	1	1	1	1
	Equal career opportunities	Presence of/efforts towards equal opportunities (yes/no)	1	1	1	1	1
	Human rights (discrimination, harassment, diversity ratio, freedom of association, child/forced/compulsory labor)	Measures implemented against discrimination and harassment (yes/no)	1	1	1	1	
							1
		Diversity ratio (1/2/3)	n/a***	n/a	2	2	2
		Case of child/forced/compulsory labor (yes/no)	n/a****	n/a	n/a	n/a	1
	Human Resource Management (providing health, safety, and training opportunities)	Presence of health, safety, and training opportunities (yes/no)	1	1	1	1	
							1
Customer satisfaction (privacy, data security)	Presence of data security measures (yes/no)	1	1	1	1	1	
Total			23	24	27	27	29

* Since there was no information available about the EMAS standards certification, the n/a score is considered a score of 0 for the years 2017, 2018, 2019 and 2020

** Since the COP report was not available for 2021 yet, the assumption was made that Generali would have the same score as the previous two years (1)

*** Since there was no information available about the diversity ratio, the n/a score is considered a score of 0 for the years 2017 and 2018

**** Since there was no information available about the case of child/forced/compulsory labor, the n/a score is considered a score of 0 for the years 2017, 2018, 2019 and 2020

Company: Zurich Insurance Group		Country: Switzerland					
Levels	Indicator	Measure	2017	2018	2019	2020	2021
Level 1: Willingness and Commitment	Ethical behavior & company ethics	Code of Conduct; Code of Ethics (yes/no)	1	1	1	1	1
		Anti-corruption and bribery policy (yes/no)	1	1	1	1	1
	Equator Principles	Acceptance of guidelines (yes/no)	0	0	0	0	0
	UNEP FI	Acceptance of guidelines (yes/no)	1	1	1	1	1
	ISO 14001	ISO 14001 certification (yes/no)	1	1	1	1	1
	EMAS	EMAS standard certification (yes/no)	n/a*	n/a	n/a	n/a	n/a
	Global compact	Acceptance of guidelines (yes/no)	1	1	1	1	1
		SDGs described in COP (0/1/2)	0	0	0	0	n/a**
	Who cares wins	Participation in publication (yes/no)	0	0	0	0	0
	PSI (Principles for Sustainable Insurance)	Acceptance of guidelines (yes/no)	1	1	1	1	1
	Shareholder rights (investment return, voting rights, information disclosure)	Information disclosure (0/1/2)	1	1	1	1	1
Level 2: In practice	Environmental policy	Insurer created policy (yes/no)	1	1	1	1	1
		Implementation of SDG's (yes/no)	1	1	1	1	1
	Transparency performance	Efforts towards transparency (yes/no)	1	1	1	1	1
		Implementation of GRI standards (yes/no)	1	1	1	1	n/a***
	Environmental risk analysis	Utilization of risk analysis (yes/no)	1	1	1	1	1
	Sector exclusion	Utilization of sector exclusion (yes/no)	1	1	1	1	1
	GHG (Greenhouse Gas) emissions (climate risk targets and assessment)	Implementation and usage of climate risk targets (yes/no)	1	1	1	1	1
		Implementation of climate risk assessment methods (yes/no)	1	1	1	1	1
	Resource deletions (energy consumption)	Implementation of energy reduction targets (yes/no)	1	1	1	1	1
	Corporate governance (gender ratio)	Gender ratio (0/1/2)	2	2	2	2	2
Level 3: Efforts beyond themselves	Community involvement & community relations (local investment, community investment)	Providing volunteer work, participating in a foundation, making donations (yes/no)	1	1	1	1	1
	Education and training	Training and education facilities available (yes/no)	1	1	1	1	1
	Equal career opportunities	Presence of/efforts towards equal opportunities (yes/no)	1	1	1	1	1
	Human rights (discrimination, harassment, diversity ratio, freedom of association, child/forced/compulsory labor)	Measures implemented against discrimination and harassment (yes/no)	1	1	1	1	1
		Diversity ratio (1/2/3)	2	2	2	n/a****	2
		Case of child/forced/compulsory labor (yes/no)	1	1	1	1	1
	Human Resource Management (providing health, safety, and training opportunities)	Presence of health, safety, and training opportunities (yes/no)	1	1	1	1	1
	Customer satisfaction (privacy, data security)	Presence of data security measures (yes/no)	1	1	1	1	1
Total			27	27	27	25	26

* Since there was no information available about the EMAS standards certification, the n/a score is considered a score of 0 for all five years

** Since the COP report was not available for 2021 yet, the assumption was made that Zurich Insurance Group would have the same score as the previous four years (0)

*** Since no information was available about the implementation of GRI standards, the assumption is made that Zurich Insurance Group would have the same score as previous years (1)

**** Since no information was available about the implementation of diversity ratio and in 2019 and 2021 the company scored a 2 on this measure, the assumption is made that Zurich Insurance Group would have the same score as previous years (2)