ESG ratings in the context of health insurance and health topics in the European market

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Environmental, social and corporate governance (ESG) ratings describe the impact of environmental, social and governance factors on a company's financial stability. In the last years a very heterogeneous market on ESG ratings has developed and around 60 providers operating in the European market set their emphases on different aspects, such as the commitment of companies to sustainability issues that can be measured as well as the effectiveness of ESG risk management and the companies' adverse impacts on the environment or society. Common elements that impact the rating can be identified. An analysis of the main rating providers shows that health-related issues are growing more important for the rating process, and at the same time, the rating evaluation can also affect the financial stability of health insurers. This paper describes the main drivers of an ESG rating for health insurers as well as the effects of health components on the overall rating of companies in general, regardless of the industry they are operating in.

Introduction

In the context of increasing regulatory requirements and of growing awareness for sustainable development, companies are facing the challenge of integrating and formalising actions to manage ESG risks that impact their business.

The new regulations within the Insurance Distribution Directive (IDD) which came into force on 2 August 2022 bring new requirements regarding sustainability criteria for insurance products on the EU market. According to the new rules, insurers must quantify how far their products satisfy sustainability criteria. They must also be able to consider the sustainability preferences of their customers on the asset side.

A recent study of the German market (1) shows that individual investors with strong sustainability preferences represent a target group with higher incomes, as well as a better awareness of risks in the stock market. This 27% of the population, generally in the age range of 30 to 44, are simultaneously the ones who have better education and better access to diversified information sources. They tend to take into consideration various prevention benefits, as well as health insurance products. Thus, they represent a customer base that is willing to invest in more comprehensive health insurance products, and also in products that improve their quality of life. These customers are also characterised by a lower probability for preexisting medical disorders, potentially leading to a lower portfolio risk for the insurer. This result is confirmed by a separate study of the Robert Koch-Institut, Germany on social differences in mortality and life expectancy in Germany (2), which supports the conclusion that socioeconomic status is highly correlated with the exposure to chronic diseases as well as the general health status of a person.

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If health insurers are not able to meet the sustainability criteria that their customers are seeking, they may perform badly in terms of ESG ratings, which might result in reputational damage. This could hypothetically lead to lower customer confidence and, consequently, to an increased risk of losing healthier customers, resulting in a shift from "good" to "bad" risks.

In the long run this could lead to lower financial stability. Therefore, in this paper we also analyse the way that main credit rating providers incorporate ESG factors into their rating process.

Because ESG ratings provide comparability of companies with respect to sustainability issues, they can have an important impact on the reputation of insurers and serve as a selection tool for customers with a strong sustainability awareness. Because of this, companies may seek to improve their ESG ratings in order to avoid losing important customers and to attract new business.

Another aspect that we analyse in this paper is the connection among health benefits, health-related issues and the ESG ratings of companies regardless of their industry. The World Economic Forum suggests integrating health equity into the ESG framework, because the health of our society is connected to the economy (3). Research from the Erasmus University Medical Centre of Rotterdam has shown that inequality in health reduces labour productivity and reduces gross domestic product (GDP) by 1.4% each year (4). In addition, the recent pandemic has underlined that economic performance depends on the health of the population. Various health-related issues can be integrated into a company's products, employee benefits or healthcare strategy to be assessed by ESG rating providers. The impact of these issues can be derived from the rating methodologies of the biggest providers and give insight into how ESG ratings can be improved by investing in health-related areas. In this context, health benefits and company health insurance prove to be growing business areas, leading to a significant potential for reputation improvement.

This paper starts with a brief description of the rating methodologies of the main providers focussed on health-related elements. Next, we analyse which rating components have a significant impact on the rating process of health insurers and how far health issues generally impact a company's sustainability rating regardless of the industry in which it operates. We describe the impact of selected issues on the financial stability of health insurers and suggest ways to improve the ESG rating of a company. Finally, we suggest a criteria framework to select an ESG rating provider for companies operating in health insurance.

This paper focusses mainly on the Germany, Austria and Switzerland (DACH) region but, because the key players in the ESG market are mainly US-based, it also provides general insight about the rating process, as well as suggestions for how they can improve the rating evaluations regardless of the industry in which they operate.

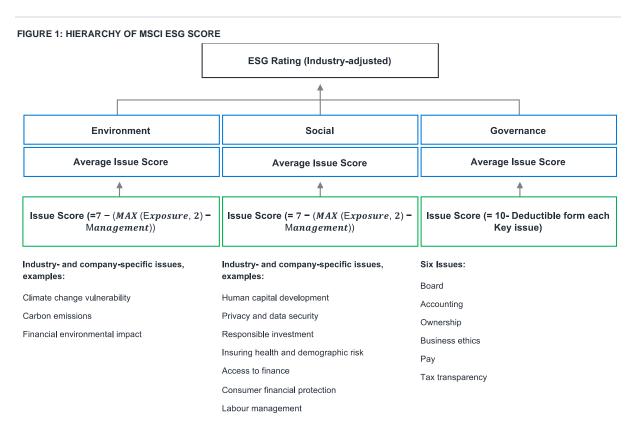
Methodologies of the key ESG rating providers

In the following section we will describe the methodologies of three main ESG rating providers, focussing on issues related to health insurance and general health topics.

MSCI

One of the most experienced ESG rating providers is MSCI, with 8.700 companies in scope. As with credit ratings, MSCI is using letters for the determination of an ESG rating, where AAA is the best and CCC is the worst. MSCI only relies on publicly available data such as specialised data sets (governments, nongovernmental organisations [NGOs], models), company disclosures (sustainability report, proxy report) or media sources (global and local news sources, governments, NGOs). Like most ESG rating providers, MSCI is using a peer approach, thus the ESG rating of a company is relative to the standards and performances of its industry peers. In the case of health insurance companies, the assessment is performed against the life and health insurance industry segment. The MSCI ESG rating score is determined by the weighted score of the "E," "S" and "G" pillars. For each subindustry the weights of each E, S or G pillar are different. Each pillar consists of key issues, and the pillar score is determined by the weighted score of each of these key issues. Key issues are individual for each subindustry, except for the governance pillar, and they are assessed at a company level. If there is no impact on the company, the key issue is taken out of the rating. For the governance pillar the key issues are the same for every industry.

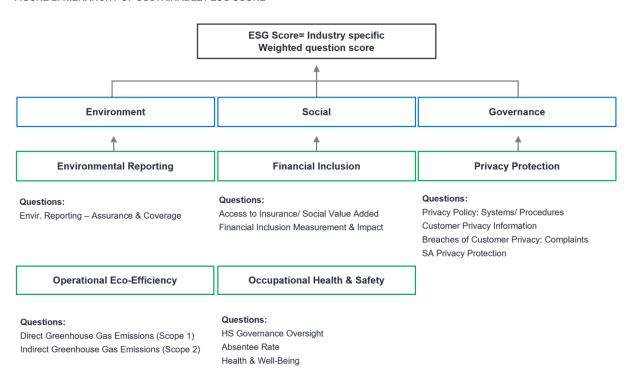
For health insurers, the relevant issues for the MSCI score can be seen in Figure 1. For other industries, key issues within the social pillar relating to health include "access to healthcare," "labour management" and "health and safety." A more detailed description of these issues is given in the Parallel Description of Health-Related Issues section below. The governance pillar has at least a 33% impact on the overall ESG score and each key issue of the E and S pillars has a correlation impact between 5% and 30%. The measurement of the key issues score is done by an assessment of exposure and risk management of each key issue. To score well on a key issue a company must compensate its exposure with proper risk management, thus high exposure must also have very strong management. The rating formula for the key issues can be seen in Figure 1. The explicit measure for exposure and management of each key issue is not transparently shown by the publicly available methodology.



SUSTAINABLE1

Sustainable1 is part of S&P Global and has around 11,000 companies in scope. Its ESG score ranges from 0 for the worst to 100 for the best. As with MSCI, it also follows a peer approach. This rating provider evaluated the ESG score by an annual questionnaire, where the companies answer ESG-related questions and provide nonpublic information. If the companies do not respond to the questions, Sustainable1 tries to answer the questions with public data. Criteria, weighting and questions are specific for each of the 61 subindustries, where 40% to 50% remain constant across all subindustries and the remaining are subindustry-specific. Health insurers are part of the insurance subindustry. The final ESG score is the weighted average of the attributed questionpoints, ranging from 0 to 100 points, divided into the three E, S and G pillars. The most influential weighting for insurers is the governance pillar, with 44%, followed by the social pillar with 36%. The environmental pillar has the lowest weighting with 20%. The evaluation of points is predefined in a scoring algorithm script and rulesbased framework. This leads to a more transparent rating process. Sustainable1 is highly reliant on disclosures because one-third of its questions concentrate on reported or published information. Companies with limited disclosures are penalised and transparent companies are rewarded with additional points in the disclosure metric. The hierarchy of the ESG rating can be seen in Figure 2. Figure 2 also provides selected health insurance or health-related questions. These issues will be described in the Parallel Description of Health-Related Issues section below.

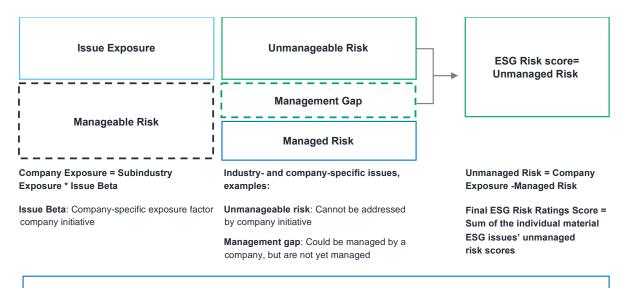
FIGURE 2: HIERARCHY OF SUSTAINABLE1 ESG SCORE



SUSTAINALYTICS

In contrast to the other rating providers described, Sustainalytics uses an absolute approach, an ESG rating of a company that can be compared not only with its peers, but also across industries. The rating process covers around 1,300 companies. Sustainalytics uses public data but also gives companies the opportunity to provide feedback. Sustainalytics's rating ranges from 0 to 40+, but here 0 is the best and 40+ is the worst. Although it is using an absolute approach, it defines material E and S issues on a subindustry level. If an issue is not relevant it is discarded. Health insurers are in the subindustry of insurance companies. The assessment of governance issues applies in the same way for all companies in all industries. Sustainalytics defines its ESG rating as the sum of the individual material ESG issues' unmanaged risk scores. Like MSCI, it assesses the capability of compensating an exposure through risk management. In Figure 3, the process for deriving the unmanaged risk can be seen. Sustainalytics does not have direct health insurance-related topics like MSCI or Sustainable1, but provides several health-related ones, described in the following section. Again, the determination of an individual company's exposure and risk management is not transparently described in publicly available methodologies.

FIGURE 3: CALCULATION OF UNMANAGED RISK BY SUSTAINALYTICS



Final ESG Risk Ratings score = sum of the ESG issues' unmanaged risk scores

PARALLEL DESCRIPTION OF HEALTH-RELATED ISSUES

Figure 4 provides an overview of health-related issues that are part of the rating process of the three rating providers.

FIGURE 4: OVERVIEW OF HEALTH-RELATED TOPICS					
TOPIC COMPANY	MSCI	SUSTAINABLE1	SUSTAINALYTICS		
Health-related topics:	Access to healthcare	Access to healthcare	Access to basic services		
	Health and safety	Occupational health and safety	Occupational health and safety		
	Labour management	Labour practice indicators	ESG integration – financials		
	Financing environmental impact	Health outcome contribution			
Health insurance-related topics:	Insuring health and demographic risk	Financial inclusion	n/a		

We can see that the three agencies set emphases on health-related topics. Hereafter, a short description of these issues is provided.

- 1. Access to healthcare and access to basic services
 - This topic is related to initiatives that expand accessibility of basic products or healthcare services to disadvantaged communities or to underserved markets. According to the Sustainable1 corporate sustainability assessment (CSA), "Companies that take innovative steps towards addressing these issues can in turn benefit from enhanced credibility, improved corporate and product brands, and increased market penetration of their products and services" (5). This topic is of high interest for US companies involved in different social projects or charity actions, because a significant part of the US population lacks affordable medical services. Nevertheless, it also finds application on the DACH markets.
- 2. Health and safety/occupational health and safety
 - This issue is related to the management of workplace health and safety risks. The rating process penalises companies that cannot provide the relevant programmes, policies and systems according to their regional and industry standards for managing these risks. At the same time, companies engaged in programmes for promoting health and wellness for their employees can get additional credit for this topic.
- 3. Labour management/labour practice indicators
 - Besides the application of standards on labour and human rights throughout all operations within the organisation, this issue deals with providing a safe and healthy work environment and ensuring an appropriate employee protection, being relevant especially for labour-intensive industries.

4. Health outcome contribution

This question in the Sustainable1 CSA is supposed to evaluate the company's contribution to the health outcomes mainly for products of pharmaceuticals, healthcare equipment and supplies, healthcare providers and services and biotechnology. Here, companies are asked to measure contributions to health outcomes and to show the accessibility and transparency of the outcome data of their products. For example, effective and affordable medicine or healthcare programmes would lead to a good question score. Of course, health insurers can prove an immediate added value to society by the nature of their business. Nevertheless, this contribution can be increased in combination with a sustainable asset management and an ESG-aware company strategy.

5. Financing environmental impact/ESG integration - financials

This topic is related to the consideration of ESG criteria in investments (asset management as well as green-building initiatives) and includes policies, programmes, sustainable asset management and product innovation. Activities not in line with ESG criteria that contribute to climate change and have a negative impact on people's health would lead to significant reputational harm in the long run.

Health insurance-related topics such as "Financial Inclusion," considered by Sustainable1, or "Insuring Health and Demographic Risk," evaluated by MSCI, deal with providing access to financial and insurance services for disadvantaged social groups and support for emerging needs arising from public health and demographic trends. This includes for example affordable insurance schemes for low-income people or for people considered uninsurable (i.e., with special diseases or disabilities) as well as providing microinsurance to societies of developing countries. The questionnaire also evaluates whether the insurance company provides products covering upcoming health and demographic trends.

PARALLEL DESCRIPTION OF RATING PROVIDERS (SUMMARY)

In Figure 5 we provide a high-level comparison of rating providers.

FIGURE 5: COMPARISON OF RATING PROVIDERS				
TOPIC COMPANY	MSCI	SUSTAINABLE1	SUSTAINALYTICS	
Data	Public	Public and questionnaire	Public and company feedback	
Approach for comparability	Industry- based peer approach	Industry-based peer approach	Comparability across industries	
Weighting	Industry-specific weightings for E, S	Industry-specific weightings for E, S and G	Industry- and company-specific weightings for E, S	
Disclosure reliance	High	Very high	High	
Innovations/opportunities	No	Yes	No	
Coverage	Up to 10.000 companies	61 subindustries (over 11.000 companies)	Over 1,300 companies	
General relevant topics for health insurances	Corporate governance	Risk and crisis management, talent attraction and retention, decarbonisation strategy, sustainable finance, climate strategy	Corporate governance, product governance, data privacy and security	
Transparency	Exposure and management not transparent	More transparent due to predefined automated script for evaluation	Exposure and management not transparent	

Although ESG ratings rely on common components (see the description of health-related issues above), the rating score depends very much on the methodology (6). This study reveals that the differences in ESG ratings mostly arise from the measurement approach. Because the metrics for quantifying the impact of an issue can vary from a precise measurement to binary metrics or a qualitative assessment, the resulting issue scores can be very different. This has of course an impact on the overall ESG ratings. The lack of standardised methodologies leads to a visible heterogeneity among the ESG ratings of health insurance companies in the DACH region, which is confirmed in Figure 6. In this figure, the publicly available ESG rating scores of MSCI (7) and Sustainable1 (8) are being illustrated for a number of selected companies. If the ESG ratings were homogenic among the ESG rating providers, then all ratings would align close to the blue identity line in Figure 6, which is not the case.

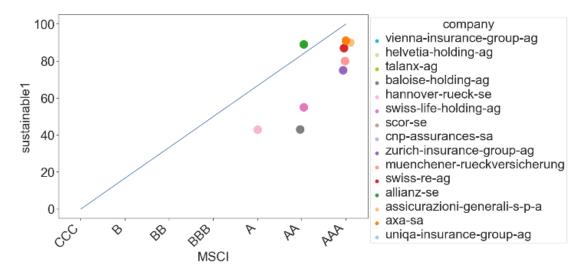


FIGURE 6: CORRELATION OF ESG RATING PROVIDER: MSCI VS. SUSTAINABLE1

A different picture can be observed for the credit scores of analysed companies, which show a high correlation for Fitch and S&P credit ratings. Other than for ESG ratings, measurement methods of the key players in the credit rating market are highly standardised, because the credit rating industry is exposed to a comprehensive regulatory framework, whereas ESG ratings still lack mandatory reporting requirements on underlying data.

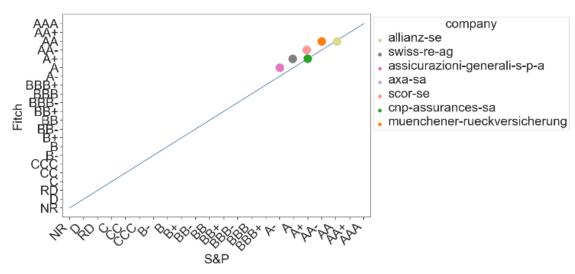


FIGURE 7: CORRELATION OF CREDIT RATING PROVIDER: S&P VS. FITCH

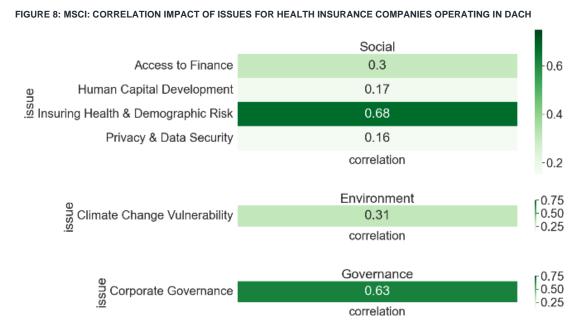
ESG rating analysis of health insurers and health-related topics DESCRIPTION OF DATA BASIS

For the analysis of ESG ratings we collected data from three different rating providers, MSCI (7), Sustainable1 (8) and Sustainalytics (9). This data comes from their publicly available websites on 7 December 2022. For all three providers we retrieved the ESG ratings and the issues which were relevant in the rating process of each company. For MSCI and Sustainable1, the issues' sub-ratings were also available. Sustainalytics only provides the four most influential issues for each company rating, without sub-ratings. Because we focus our analysis for health insurance on the DACH region, we have selected insurers that offer health insurance and reinsurance in this region, such as Allianz, Axa, Baloise, ERGO (Munich Re Group), Generali, Hannover Re, HDI (Talanxs), Helvetia, Scor, Swiss Re, UNIQA, Vienna Insurance Group and Zürich. We also included a list of general companies to investigate the influence of health-related issues on the ESG rating from different industries such as automobile, banks, energy, healthcare providers, logistics, pharmaceuticals, software, steel, textiles and further insurers. The total list of companies included is provided in the appendix.

ANALYSIS OF ESG RATING COMPONENTS FOR HEALTH AND LIFE INSURERS

A correlation analysis of issue scores with the final ESG scores has been performed to identify the most significant rating components. Figures 8 and 9 illustrate the correlation impact of issues included in the assessment on the resulting ESG rating of MSCI and Sustainable1. In the case of Sustainable1 the ratings were already numeric, in a range from 0 to 100, thus no further data preparation was necessary. For MSCI the final ESG rating and individual issue ratings are represented as letters. To achieve a numerical representation, we mapped the ratings from the worst rating CCC to the best AAA in the range from 0 to 100. In the case of Sustainalytics no issue scores are provided, but for every company rating assessment we have the information of the four issues with the highest impact on the rating. This data allows us to perform a frequency analysis of the issue occurrence in the companies' rating assessment processes. However, no issue selection has been performed before the analysis of insurers' rating processes. All the available issue data of companies in the data pool has been considered, with the purpose of identifying the main drivers of their ESG rating assessments.

MSCI



We can see that the social pillar generally has a higher impact on the ESG ratings of health insurers than the environmental pillar. Here we have a special focus on the product liability characteristic. The issue "insuring health and demographic risk" is highly correlated with the rating scores. Besides sustainable protection, this issue deals with adaptation to trends in the health sector, to medical inflation, to the development of diseases and to new treatments on the market. Because this is an important aspect for health insurers, which are constantly adapting their products to new developments in the health services industry, this issue is highly correlated with the final rating.

The issue "access to finance" is the second-most correlated issue within the social pillar, which also has a positive impact on the rating. Besides providing access to finance to underserved markets, this issue is also related for example to ensuring accessibility of services through digitalisation. This also considers data privacy and security, an important issue for health insurers, which must deal with large data sets containing personal information. In this sense, a high vulnerability to potential data breaches in combination with inappropriate systems for protecting personal data might lead to lower ESG ratings.

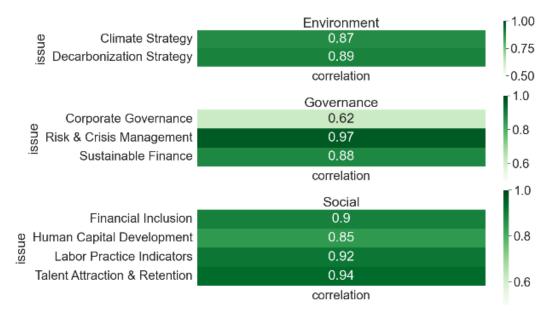
Human capital policy, i.e., the ability of companies to attract and develop highly skilled workforces, is an important component of the rating assessment process as well.

There is also an environmental component in the rating process because companies are being evaluated on their climate change vulnerabilities, defined as the exposure to physical risks of their insured assets or individuals. However, this pillar appears to have a lower impact on rating evaluations than the social pillar.

Regarding the issue of corporate governance, there is a high correlation impact regardless of the industry, given the structure of the rating process. MSCI evaluates every company on its corporate governance key indicators.

Sustainable1

FIGURE 9: SUSTAINABLE1: CORRELATION IMPACT OF ISSUES FOR HEALTH INSURANCE COMPANIES OPERATING IN DACH



Similar to MSCI, most of the issues relevant for the rating process are on the social level. The correlation with the resulting rating scores is very high for all the identified social issues. Initiatives on the product liability side like financial inclusion of disadvantaged social groups contribute to a better ESG rating (correlation of 90%). Furthermore, Sustainable1 sets a special emphasis on human capital—here we have three issues with significant correlation impacts ("human capital development," "labour practice indicators" and "talent attraction and retention").

The environment pillar is addressed by evaluating the company's climate and decarbonisation strategy, as well as its asset management with respect to sustainability criteria.

Corporate governance and risk management assessment are fixed components of the rating process, and therefore the high correlation impact is not surprising considering the methodology.

Sustainalytics

A frequency analysis of the most impactful rating issues for health insurers reveals common themes with the other two providers, including the importance of human capital, ESG integration in financials and corporate governance. However, Sustainalytics seems to have a greater focus on governance. In contrast to the other two providers, Sustainalytics sets a special emphasis on data privacy and security in the rating evaluation of health insurers. It is important to add that the issues illustrated below are among the four most impactful factors for the ESG rating for Sustainalytics, but not the only ones assessed on a company level.

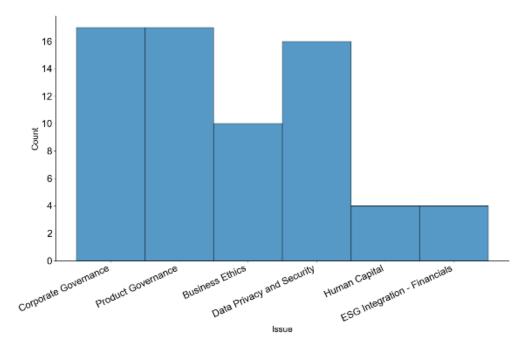


FIGURE 10: SUSTAINALYTICS: ISSUE OCCURENCE FOR HEALTH INSURANCE COMPANIES OPERATING IN DACH

ANALYSIS OF HEALTH-RELATED ESG RATING COMPONENTS FOR GENERAL COMPANIES

Figures 11 to 13 illustrate the impact of health issues on the ESG ratings of companies operating in various industries. For the purpose of this analysis we selected health-related issues within the following themes:

- 1. Human capital: Labour management, labour practice indicators, (occupational) health and safety.
- 2. Product liability: Insuring health and demographic risk, financial inclusion, ESG integration financials.
- 3. Social opportunities: Access to healthcare, access to basic services, health outcome contribution.

MSCI

As observed in the previous analysis of ESG rating components within the subindustry of health insurance, MSCI has a strong focus on the social liability theme. This is being confirmed also for companies operating in a random selection of industries, because the correlation impact of the issue "insuring health and demographic risk" lies at around 0,6. Furthermore, health issues related to human capital make significant impacts on the rating. This effect is higher for labour-intensive industries than for the insurance industry. Additionally, providing social opportunities such as extending access to healthcare has a positive impact on the ESG rating.

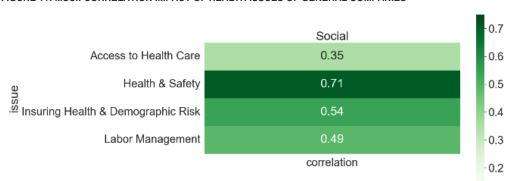
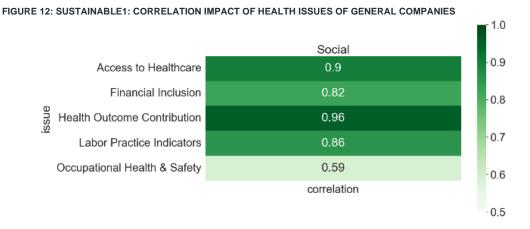


FIGURE 11: MSCI: CORRELATION IMPACT OF HEALTH ISSUES OF GENERAL COMPANIES

Sustainable1

In the case of Sustainable1 we have also observed a high correlation with the issue of financial inclusion and the overall ESG ratings, similar to MSCI. Health-related human capital issues (labour practice indicators, occupational health and safety) also have a high impact on the ESG ratings. The involvement in social programmes and product innovation for providing access to healthcare makes a general contribution to the improvement of health systems. It also has a positive impact on the ESG rating.



Sustainalytics

A frequency analysis of the four most impactful issues has been performed for the same companies operating in various industries. Although the metrics used are very different from the other two providers, the scope of the rating assessment process with respect to health-related issues seems to be the same. The most impactful issues are in the areas of human capital, product liability and social opportunities. The issue with the highest number of occurrences is the ESG integration for financials. Thus, the integration of ESG criteria in investments and the promotion of sustainable products and services have a highly positive influence on the ESG rating. Nevertheless, they are not the only issues used in the rating assessment of Sustainalytics. They are only among the four issues with the highest impact on the companies' ESG ratings.

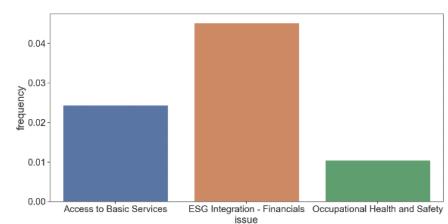


FIGURE 13: SUSTAINALYTICS: FREQUENCY OF HEALTH ISSUES FOR GENERAL COMPANIES

Summary of results

The rating assessments of the key market players rely on different metrics but on similar themes. Despite the differences in measurement, weights and methods for aggregating issue scores, the social pillar seems to be a main driver of the ESG ratings of health insurers for each of the providers analysed. Furthermore, health-related issues seem to play a significant role in the ESG rating of companies regardless of the industry in which they are operating.

Impact of ESG factors on long-term financial stability.

HOW CAN ESG FACTORS IMPACT THE FINANCIAL STABILITY OF A COMPANY IN THE LONG RUN?

Financial stability is mostly influenced by the underwriting practices of insurance companies and asset allocation. The UN Environment Programme's Principles for Sustainable Insurance Initiative has published a guide for global life and health insurances to manage underwriting of environmental, social and governance risks, "PSI ESG Underwriting Guide for Life & Health Insurance" (10) analysed which ESG factors influence the key risks of life and health underwriting business: mortality, longevity, morbidity and hospitalisation. For health insurance the most important underwriting risks are morbidity and hospitalisaton, which are highly negatively influenced by the following factors.

1. Environmental:

- Bacteria or viruses change over time and no longer respond to medicines
- Air pollution
- Physical risks that are event-driven, including increased severity of extreme weather events such
 as cyclones, hurricanes or floods, which could lead to shutdowns of medical institutions or to
 hospital overcrowding
- Rapid spread of viruses or bacteria that cause uncontrolled diseases (e.g., vector-borne disease)
- Mental health issues impacted by environmental and social factors (eco-anxiety)

Social:

- Customer characteristics knowledge: Genetic inheritance, hazardous occupation, long-term health impairment, physical disability, mental disability.
- Poor worker safety record.
- Changing lifestyle behaviour: Alcohol abuse, drug abuse, obesity, smoking.
- Data privacy and security breaches.
- 3. Governance risk should not have direct influence on the underwriting risks.

In addition, the asset side can be affected as well. Most of the private health insurance products in the DACH region have a lifetime-serving character, also known as "health insurance similar to life technique" under Solvency II, where an ageing liability provision is built. As in life insurance, DACH health insurers aim to match these liabilities with assets of a similar long duration. From an ESG perspective, investments in asset classes such as real estate, oil and gas, metals and mining or nonrenewable electricity production are at risk due to policy transition. In addition, a demographic trend such as longevity would also increase the duration of liabilities and the duration matching of assets and liabilities would require an adjustment of the asset portfolio.

CORRELATION ANALYSIS OF ESG AND CREDIT RATINGS

We performed an analysis of DACH insurance companies' ESG ratings from Sustainable1 provided by S&P, in comparison with the S&P credit rating. The results are illustrated in the graphic in Figure 14.

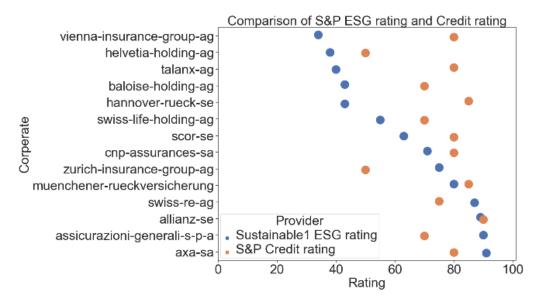


FIGURE 14: COMPARISON OF S&P ESG RATING AND CREDIT RATING

In general, the ESG rating and credit rating do not show a clear correlation. For example, Baloise, Talanx or Vienna Insurance Group have low ESG ratings, but high credit ratings. This shows that currently a low ESG rating does not necessarily imply a low credit rating. Nevertheless, ESG factors can have influence on the credit rating, as observed from the methodologies of the biggest credit rating providers.

ESG FACTORS IN CREDIT RATING ASSESSMENT

The main credit rating providers have clear procedures for including ESG factors in credit rating assessments. S&P defines for example the "ESG credit factors" as those ESG factors with material influences on creditworthiness that are sufficiently visible to be included in the credit rating analysis. In this context, visibility is provided by the ability to assess the likelihood or impact of an issue. S&P uses a five-point scale for each factor to indicate how far it affects credit ratings. For each pillar, S&P considers several possible impacts on insurance companies (11).

1. Environmental:

- Climate transition risk would have an influence on the investment portfolio and costs would arise from devaluation of carbon-reliant assets. A change in investors' appetite can also cause reputational damage.
- Physical risk: In case of material exposure to extreme weather events, implying a higher volatility in prospective capital adequacy, the risk exposure assessment must be revised down.

2. Social:

- Social capital: An inappropriate treatment of customers (for example, mis-selling policies, avoiding legitimate claims) leads to a weakened competitive position, as well as to reputation damage and, in the end, financial losses.
- Financial and reputational damage would arise in case of inappropriate health and safety regulations.

3. Governance:

- Risk management, culture and oversight: Material deficiencies in risk management can affect the financial risk profile of the insurer and lead to a revised capital and earnings assessment.
- Transparency and reporting: A lack of completeness or transparency of an insurer's policies can have a negative impact on the insurer's governance evaluation.

ESG CREDIT FACTORS FOR HEALTH INSURERS

In general health insurance companies are more exposed to social risks, because consumer behaviour, mortality, morbidity and hospitalisation trends have a direct impact on their product development and underwriting, and also

on their reserving. Significant medical improvements could lead to advancements faster than expected, which could result in a different behaviour of claims. In addition, it could also give rise to new product pricing and underwriting. Furthermore, the topic of privacy and data security is of enormous importance as well, because health insurers have significant exposure to evolving privacy regulations. Taking into account that companies deal with comprehensive data sets of personal information, gaps in their security systems would bring a significant loss of confidence and reputational harm.

In its current credit rating evaluation, S&P (12) analysed whether the risk management of demographic trends, relating to longevity or rising chronic diseases, is in line with the global insurance industry standards, because these trends could increase an insurer's liabilities. Companies could mitigate this risk though a diversified portfolio of insurance products. S&P also recognises the impact of the threat of data privacy and security breaches to internal systems and externally as cyber insurance products.

The environmental risks for health insurers have more isolated effects, like wildfires and heat waves, which led to high morbidity for asthma patients in recent events in 2018 and 2019, while behavioural healthcare needs to increase after significant environmental disasters and shutdowns of healthcare facilities during extreme events.

Even though S&P mentions these risks, currently most downgrades from environmental factors in credit rating are due to physical risk mainly from non-life topics. However, this can change over time and in extreme cases even lead to guestions of whether some risks are still insurable.

Indirectly health insurers in the DACH region are affected by their asset investments in real estate and generally in sectors with high environmental impact. S&P currently observes moderate exposure to this transition risk in investment portfolios, largely because most portfolios are well diversified and carry limited exposure to corporate assets. Nevertheless, an unsustainable investment strategy can lead to reputation damage and subsequently to high costs arising from lapses or less new business than expected, because the target group of clients with ESG awareness is the one leading to a lower portfolio risk.

We can conclude that, although ESG ratings are not necessarily in line with credit ratings, ESG factors can impact the companies' financial stability and profitability in the long run, being also part of the credit rating assessment. In the case of health insurers, the effects of an inadequate or insufficient management of ESG issues would not show an immediate impact, considering the nature of underlying risks. However, neglecting ESG factors can bring significant reputational damage and lead to consequences from reassessments of underwriting assumptions up to losses of important market share. This has of course an impact on financial stability and, implicitly, on the credit rating assessment. Additionally, it is expected that the gap between ESG and credit ratings will decrease once mandatory sustainability reporting regulations come into force, for instance the Corporate Sustainability Reporting Directive (CSRD), which will be enforced in 2025.

How to improve an ESG rating

Because the ESG rating can have an important impact on the reputation of companies, efforts related to the improvement of rating scores might be worthwhile. This section describes a few actions a company operating in health insurance, but not exclusively, can take in order to improve its sustainability rating.

GENERAL COMPANIES

An analysis of the methodologies showed that health-related issues, especially health benefits, are highly correlated with rating scores. We identified in our analysis three main areas with potential in improving ESG ratings.

1. Human capital:

Companies can improve their reputations and subsequently their ESG ratings by extending and constantly updating their occupational health and safety policies, respectively, by implementing programmes of health benefits in order to raise awareness of health risk prevention and health protection. For example, in the last years more and more companies in the DACH region offered workplace stress management initiatives. Various medium and large-sized enterprises have provided company health insurance coverage and prevention programmes in the form of regular health checks for many years. Hannover Re is engaged in the expansion of programmes to promote employee health and wellness (13). Nevertheless, this is still a growth field for European countries and can generally bring reputational benefits and increase a company's appeal to its desired target groups. A study conducted by Allianz US on relevant ESG issues for investors shows that aspects like health insurance

offered to employees or access to affordable healthcare can be criteria for socially conscious investors in their "selection process for companies they want to invest in or do business with" (14).

2. Product liability:

A reassessment of the company's investment strategy with respect to green assets, as well as the exclusion of carbon-reliant assets, would not only bring a substantial benefit for the company's reputation, but also in terms of ESG ratings. Additionally, improving data security and protection systems can avoid reputational harm caused by potential data breaches. A specific product liability theme consists in providing access to insurance services to underserved markets. There are several insurance companies on the DACH market which invest in special insurance initiatives for less advantaged customers. For example, Hannover Re is promoting an expansion programme on "insurance protection for previously inadequately insured population groups in the life & health sector" (13).

3. Social opportunities:

The involvement in social projects for expanding access to healthcare for disadvantaged groups is currently generally only reported by US-based companies, but represents a growth area also for European companies. Several companies operating in the DACH region already participate in charity projects providing access to healthcare, as well as in research projects for improving treatment in cases of rare disease. For instance, ERGO Austria participates in a social project providing assistance to children who suffer from incurable diseases and is cofinancing a support programme for children with trisomy 21 (15). Extending the activity in this area would not only reduce health inequality, but also bring a benefit for companies in terms of ESG ratings.

HEALTH INSURERS

More and more insurance companies are facing the challenge of quantifying their exposure to environmental risks, on the one hand because of increasing regulations, and on the other because of the rising awareness of sustainability risks. A better ESG rating leads to a better image and is also conditioned by satisfying regulatory requirements. There are steps that a health insurer can take in order to improve its scores on all three sustainability pillars.

In April 2022 and subsequently in August 2022, the European Insurance and Occupational Pensions Authority (EIOPA) published guidelines for the materiality assessment of climate risks and for the inclusion, in the Own Risk and Solvency Assesment (ORSA), of climate change scenarios (16). This required companies to understand their climate change exposures and carry out scenario analyses for mateiral exposures. Analyses of companies' diagnostic claim data in connection with climate change predictions can give insight about the way that morbidity, hospitalisation rates and even mortality rates could change over time. An assessment of the emissions impact of the company's operations and an evaluation of how far the company's asset management is in line with various climate scenarios should also be performed if material exposures exist. A refinement of the analyses performed for the ORSA should also bring a benefit for ESG ratings, with governance highlighted as an important factor for each of the rating providers, as outlined above.

Concerning the social pillar, we have already seen in the previous section that there is a lot of potential for companies regardless of the industry they are operating in. These ideas are applicable for health insurers as well. For instance, providing company health insurance, prevention programmes for employees and engaging in social projects will also bring reputational gains and customer satisfaction for health insurers. Involvement in different social projects can bring additional benefits. Policyholders with higher incomes and strong social awareness, for example, could be happy to invest part of their insurance product surplus in charitable projects. This would lead, on the one hand, to reputational added value for insurance companies and, on the other hand, to greater attractiveness for the target group of customers with a strong awareness for social risks, as already mentioned in the introduction of this paper. Another aspect is the outcome on social contribution. Every health insurer brings a social benefit by promoting a healthier society. A WifOR regional study from 2021, for example, states that German private health insurance brings a substantial social benefit and represents an important financing source for healthcare infrastructure (17). Health insurers can improve their contributions and differentiate from competitors by following sustainable investment strategies and new trending health topics.

Although environmental risks currently are less impactful on ESG ratings, this could change in the future. It is necessary for a company to assess the climate change vulnerability of insured assets and individuals, as well as

to reconsider underwriting assumptions where necessary. For this, the diagnostic claim analysis already mentioned in connection with the ORSA report, as well as a regular analysis of insurance benefits with respect to environmental changes and evolution of diseases, would bring a substantial benefit. Furthermore, a shift from carbon-reliant assets to a sustainable investment strategy would strengthen investor confidence and also possibly increase the market share with respect to "good risks" arising from policyholders with strong sustainability preferences. All these factors would lead to a better score on the environmental pillar and in the end to a better ESG rating.

Criteria to select an ESG rating provider for health insurers

GENERAL CRITERIA

As already mentioned, there is a heterogeneity in the market with respect to ESG rating definition and evaluation. Rating providers can focus on different aspects and each of them provides a different experience and view of the history of the market. The selection process of a rating provider can rely on factors from general criteria to the number and quality of data sources, transparency of methodology and number of metrics used, the history of the rating provider etc. These criteria are described in the table in Figure 15.

FIGURE 15: SELECTION CRITERIA FOR AN ESG RATING PROVIDER			
CRITERION	DESCRIPTION		
Methodology	Transparency and availability of metrics. Enough criteria to ensure comparability. Definition of material ESG risks. What is being measured? How are weights defined and ESG scores calculated?		
Number and type of metrics	Which topics are covered for each sustainability pillar? How is the risk exposure measured (binary metric, key indicators, e.g., total CO2 emission in tones, qualitative assessment via questionnaire)?		
Data sources	Number and credibility of data sources. Only company disclosures or also macroeconomic data used? Number of companies in the data pool. Enough coverage of the market and industry of interest.		
Measurement of ESG impact?	Is the impact on the environment assessed? Focus on ESG risk management? Product innovation to ensure transition to a climate-resilient system included?		
Background information	Is it a renowned rating agency? History with ESG rating assessments? Eventually experience with credit ratings?		
Accessibility	Are results publicly available? In which granularity are results available (own pillar, issue scores or only overall ESG scores)? What resources does the assessment process take?		

This selection process might be very time-consuming. In practice, the size of the company will be of very high importance. For example, a small local insurance company will probably select a local ESG rating provider, such as IVFP Sustainability Competency Rating (for the German market) and Morgen und Morgen (for the DACH market), not renowned at the international level but with good market overviews that can provide insight about the general company position related to its market benchmarks. Currently, most listed insurance companies are rated by renowned rating providers, whereas small and medium-sized enterprises are covered by local rating providers. It can also be worthwhile to assess the methodology of the rating provider in order to see whether the themes of interest are being addressed.

ISSUES OF INTEREST FOR HEALTH INSURERS

For health insurance the social pillar is more important than the other two pillars for the renowned rating providers included in our analysis. Consequently, when selecting a rating provider health insurers may choose one with a high weighting on the social pillar in order to achieve comparability with market standards. By participating in a rating assessment process, companies can make use of the industry and market knowledge of ESG rating providers and improve their competitive positions with respect to sustainability. In the context of the social pillar, themes like human capital and social capital as well as product liability are all of high impact on an insurer's

business. Furthermore, the environmental pillar should also be addressed, because climate change can impact the insured assets and individuals. Additionally, air pollution and contamination can lead to changes in claim costs and underwriting assumptions.

Conclusion

ESG ratings are a tool for assessment of companies' performances from a sustainability point of view. A good ESG rating can bring a substantial reputational benefit for companies independent of the industries they are operating in. For health insurers, the benefits of a high ESG rating could include reaching a target market with strong sustainability preferences.

Despite the differences in individual methodologies, the analyses performed reveal that all rating providers integrate health-related topics in their assessments. Two rating providers reviewed also include health insurance-related topics, while the respective issue score is highly correlated with the overall ESG rating. Consequently, working on health-related topics improves the ESG ratings of health insurance companies.

Generally, the social pillar is the most important pillar for health insurance companies. The providers evaluate whether the insurers take into account the current trends of health and demographic risks in their insurance products. They also assess the existence of products or engagements that aim to lower health inequalities in the world. The issue of data protection is of increasing concern and one rating provider highlighted this as one of the biggest topics for health insurers. Environmental influence such as climate change vulnerability currently has a lower influence on the ESG rating of health insurers. Nevertheless this issue is of growing importance as it implies a long-term impact on claim behaviour.

Our analysis also highlighted that enhancing health-related benefits can positively impact the ESG rating of a company no matter which industry it operates in. This can be achieved by offering company health insurance and prevention programmes for employees as well as participating in social projects for expanding access to healthcare and increasing health outcome contributions with appropriate product strategies and sustainable asset management.

To conclude, ESG ratings are a young, but growing market and investing in actions to improve achieved scores would bring a reputational benefit in the long run for health insurance companies. With increasing standardisation of regulations on ESG data, the effect of sustainability factors on financial stability will be easier to quantify, thus an improvement in terms of ESG ratings could also improve credit ratings in the future.



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Bibliography

- 1. business.yougov. business.yougov. Nachhaltiges Investieren in Deutschland. [Online] business.yougov.com/de.
- 2. Soziale Unterschiede in der Mortalität und Lebenserwartung in Deutschland Aktuelle Situation und Trends. Thomas Lampert, Jens Hoebel (RKI Berlin), Lars Eric Kroll (ehem. RKI Berlin). (1), Robert Koch-Institut, Berlin: Journal of Health Monitoring, 2019, Bd. 4.
- 3. **World economic forum.** Why ESG must include health equit. *Worl ecomic forum.* [Online] 28. April 2022. https://www.weforum.org/agenda/2022/04/why-esg-must-include-health-equity/.
- 4. Economic costs of health inequalities in the European Union. Mackenbach JP, Meerding WJ, Kunst AE. Number 5, s.l.: Journal of Epidemiology and Community Healt, 2011, Journal of Epidemiology & Community Health 65, Vol. Volume 65, pp. 412-419.
- 5. **S&P Global**. S&P Global. *Measuring Intangibles*. [Online] 2021. https://portal.csa.spglobal.com/survey/documents/DJSI_CSA_Measuring_Intangibles.pdf.
- 6. Aggregate Confusion: The Divergence of ESG Ratings. Florian Berg, Julian F. Kölbel, Roberto Rigobon. Zurich: Review of Finance, 2022, Vol. Volume 26.
- 7. **MSCI.** MSCI. ESG Ratings & Climate Search Tool. [Online] [Zitat vom: 07. December 2022.] https://www.msci.com/our-solutions/esg-investing/esg-ratings-climate-search-tool/issuer.
- 8. **S&P Global.** S&P Global. *ESG score*. [Online] [Zitat vom: 07. December 2022.] https://www.spglobal.com/esg/scores/results.
- 9. **Sustainalytics**. Sustainalytics. *Company ESG Risk Ratings*. [Online] [Zitat vom: 07. December 2022.] https://www.sustainalytics.com/esg-rating.
- 10. **United Nations Environment Programme Finance Initiative.** Managing environmental, social and governance risk in life & health insurance business. *unepfi.* [Online] Juni 2022. https://www.unepfi.org/wordpress/wp-content/uploads/2022/06/PSI-Life-Health-ESG-Guide.pdf.
- 11. **S&P Global.** S&P Global. General Criteria: Environmental, Social, And Governance Principles In Credit Ratings. [Online] December 2022. https://disclosure.spglobal.com/ratings/en/regulatory/article/-/view/sourceld/12085396.
- 12. S&P Global. ESG Credit Indicator Report Card: EMEA Insurance. [Online] https://www.spglobal.com/ratings/en/research/pdf-articles/211129-esg-credit-indicator-report-card-emea-insurance.
- 13. Hannover Re. hannover-re. Sustainability Report 2021. [Online] https://www.hannover-re.com/1890119/sustainability-report-2021.pdf.
- 14. **Allianz Life Insurance Company of North America.** Allianz Life. *ESG Investor sentiment study report.* [Online] 2018. https://www.allianzlife.com/-/media/files/allianz/pdfs/esg-white-paper.pdf.
- 15. **ERGO.** ergo-versicherung.at. *Laufende Projekte (Engagement)*. [Online] https://ergo-versicherung.at/engagement/laufende-projekte.
- 16. **EIOPA.** eiopa.europa.eu. *Application guidance on climate change materiality assessments and climate change scenarios in ORSA*. [Online] 02. August 2022. https://www.eiopa.europa.eu/document-library/other-documents/application-guidance-climate-change-materiality-assessments-and_en.
- 17. **WifOR.** www.pkv.de. *Gesundheitswirtschaft in Rheinland-Pfalz: PKV sichert 17.080 zusätzliche Arbeitsplätze.* [Online] Dezember 2022. https://www.pkv.de/verband/presse/pressemitteilungen/gesundheitswirtschaft-in-rheinland-pfalz-pkv-sichert-17080-zusaetzliche-arbeitsplaetze/.

Appendix

FIGURE 16: COMPANY LIST USED FOR CORRELATION ANALSIS

Allianz SE	Commerzbank Aktiengesellschaft	
The Cigna Group	Erste Group Bank AG	
Zurich Insurance Group Ltd	Poste Italiane S.p.A	
Swiss Re AG	Ageas Holding	
NN Group N.V.	Hannover Rück SE	
Assicurazioni Generali S.p.A.	admiral	
Axa S.A	Phoenix Group Holdings	
Berkshire Hathaway Inc.	Novartis AG	
Everest Re Group Ltd	Merck & Co. Inc.	
Universal Health Services, Inc	Pfizer Inc.	
UnitedHealth Group Incorporated	Sanofi	
Centene Corporation	AstraZeneca	
CVS Health Corporation	UniCredit S.p.A.	
Molina Healthcare	UBS Group AG	
Anthem, Inc.	Credit Suisse Group AG	
Chubb Limited	BASF SE	
Humana Inc.	voestalpine AG	
Aegon N.V.	Porsche Automobil Holding SE	
Swiss Life Holding AG	Deutsche Post AG	
Münchener Rückversicherungs-Gesellschaft Aktiengesellschaft in	Nestlé S.A.nestla-c-s-a	
München	Eni S.p.A	
SAP SE	Tesla,Inc	
OMV Aktiengesellschaft	MAPFRE SEmapfre-s-a	
Swisscom AG	SCOR SE	
Bayerische Motoren Werke Aktiengesellschaft	CNP Assurances S.A.	
Volkswagen Aktiengesellschaft	Vienna Insurance Group AG	
Continental AG	Talanx AG-ag	
Siemens Aktiengesellschaft	helvetia Holding AG	
Bayer Aktiengesellschaft[Raiffeisen Bank International AG	
Roche Holding AG	STRABAG SE	
Adidas AG	Achmea N.V	
Bâloise Holding AG	UNIQA Insurance Group AG	
Mondi plc	Storebrand ASA	
Deutsche Bank Aktiengesellschaft		