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Insurance sector challenges in the light of ESG. The case of Poland

Abstract

Recent scientific research confirms that climate change is a strategic topic, with environmental, social, and corporate governance (ESG) aspects becoming a decisive factor in business analysis and investment strategies. Additionally, regulatory and legislative changes put pressure on insurance companies to address climate risks. New European Union regulations give investors and consumers an opportunity to consciously decide whether to include ESG factors in their portfolios and contribute to their popularization. While the experience of investors with ESG is still limited, climate risk is now a top concern for insurance companies, with some managers seeing ESG as a growth opportunity. Compliance with sustainability requirements and incorporating ESG into insurance and investment products can help insurers attract a growing number of green-minded consumers and achieve a positive financial return on investment. By incorporating ESG factors into risk assessment and underwriting processes, insurers can limit their losses from the growing number and scope of climate risks. Pension funds and insurance companies, as investors with a long investment horizon, pay more attention to shareholder rights, risk, and their reputation.

The importance of this issue prompted the authors to undertake research aimed at determining the importance of ESG regulations and green transformation for the insurance sector, and identifying the challenges insurance companies are facing in this regard. The article is based on quantitative research, supplemented with individual in-depth interviews, and fills the research gap for Poland in terms of the insurance sector's perception of the challenges of green transformation. The aim of this article is to present the concept of ESG, regulations and activities of the European Union in this area, indicating their impact on the insurance sector and identifying challenges. The research question formulated for the purposes of this study are the challenges of the insurance sector in the field of ESG. To analyze this issue, the research questions were asked whether the introduced ESG regulations have a positive impact on the local and European markets, whether the local insurance market is less prepared for green transformation than the European one, which customers are most interested in green insurance products, whether climate risk is a significant threat to the insurance market. The results of the research presented in this article indicate that the impact of climate risk on the activities of insurance companies is particularly important and provide answers to the research questions. The conducted research has confirmed, among others, that the interest of customers of Polish insurance companies in ESG aspects is at a medium level, with the highest one in the aspect related to sustainable development. The most important risk, according to brokers on the Polish market, are interruptions in electricity supplies and the liability of company authorities for management errors. The results also show that participants of the insurance sector in Central and Eastern Europe believe that the impact of the new ESG regulations on local markets will be rather low, but they estimate that the workload in implementing them will be disproportionate to the impact. They assess the market itself as somewhat prepared in terms of the offer of green investment products, with the demand for such products being low. However, according to them, climate risk is insurable to a low or medium degree.

EU regulations shape the Polish financial market, and the coming years will be crucial for ESG investments. Sustainable development can strengthen the position of the Polish financial market in the international arena. The need for dialogue between investors and business will grow, and the quality of reported ESG information will increasingly determine access to capital. Therefore, it will also indirectly support the transition of the entire economy to one based on the principles of sustainable development and increase the business attractiveness of the entire region.

Keywords: ESG, insurance, green transformation, sustainable development, challenges, Poland, Central-East Europe

JEL Classification: G, G2, G22

Introduction

The global challenges of sustainable development are becoming more and more important. ESG refers to activities and impacts on three main aspects: environmental (E), social (S), and corporate governance (G). Sustainable business activity means an activity that takes into account its impact on the environment and its surroundings, i.e. it takes into account ESG aspects. The development of ESG is intensified by growing environmental pressure, including changing expectations of the financial sector, as well as legislative changes and growing social awareness. New business opportunities, the desire to improve one's attractiveness on the labour market and the response to changing consumer behaviour are also strong motivators. From the perspective of economic stability, it is extremely important that the insurance sector adapts.

Interest in sustainable development issues is also growing in Poland. The European regulations in the field of sustainable development and green transformation published in recent years (implemented into Polish law) aim to standardize the disclosure of information regarding financial products promoting ESG aspects and the disclosure of non-financial information regarding enterprise strategies in the field of sustainable development. The importance of these issues prompted the authors to take up the topic of ESG: green economic transformation, ESG risks identified by the market, and European ESG regulations and their impact on the insurance sector. The article is the result of two quantitative studies, supplemented with individual in-depth interviews, which fill the research gap for Poland in terms of the insurance sector's perception of the challenges of green transformation. The aim of the article is to present the concept of ESG, regulations and activities of the European Union in this area, indicating their impact on the insurance sector and identifying challenges. The research problem formulated for the purposes of the study are the challenges of the insurance sector in the field of ESG.

Theoretical background

The economic importance of European Union sustainability regulations

ESG is particularly important for the insurance sector. Investors want to know how the insurance companies build long-term value, how they manage climate risk and how they adapt to the green transformation. The quality of ESG management determines a company's operational excellence, and the quality of ESG reporting is key to building a competitive sector based on the principles of sustainable development.

The actions of European and national regulators remain closely linked to international obligations under the UN Agenda for Sustainable Development and the Paris Climate Agreement. Countries have committed to taking action to limit the increase in global average temperature and strengthen their ability to adapt to climate change. These activities include adoption in 2018 by the European Commission of the Plan for financing sustainable economic growth and the so-called Climate Target Plan. The plan assumes that by 2030 the level of carbon dioxide emissions in the European Union will decrease by 50%–55% compared to the 1990 level, and by 2050 a zero-emission economy should be achieved. Additionally, in 2020, the European Commission presented the European Green Deal Investment Plan, which aims to support the financing of sustainable investments, thus ensuring a just transition in Europe.

Disclosure of non-financial information in Poland is regulated by the amended Accounting Act implementing the NFRD Directive of 2014. The areas listed in the Directive concern environmental and social issues. The NFRD introduced an obligation to disclose the policies and procedures applied in relation to the above issues, identified risks and monitored indicators. The part of the directive that relates to diversity was amended by the Regulation on current and periodic information provided by issuers of securities in 2016. According to its content, institutions are obliged to provide information on their diversity policy to administrative, management, and supervisory bodies.

While continuing work on ESG regulations, the European Union also planned to revise the NFRD Directive, adopt the EU Taxonomy in 2020 and the SFDR Regulation of 2019. The first two documents have a direct impact on the reporting obligations of all entities, while the SFDR regulation only applies to the financial market. The revision of the NFRD improves the quality of disclosed ESG data and supports the financing of sustainable economic growth. In April 2021, the European Commission published a draft of the revised directive called CSRD, applied since 1 January 2023. The revised version expands the scope of enterprises subject to the reporting obligation and specifies what information is to be disclosed, adapting it to other regulations.

The EU Taxonomy is a uniform classification system, which came into force in 2023, and the intention of which is to support investors in taking investment decisions. It requires large companies to disclose whether and to what extent their business activities are consistent with the assumptions of the Taxonomy. The Taxonomy, in turn, requires financial market participants offering 'green' or 'sustainable' financial products and services in the EU to disclose the extent to which their activities contribute to achieving its objectives. Technical qualification criteria will determine whether a given activity makes a significant contribution to achieving a given goal or is harmful to it. On this basis, companies will be able to disclose the extent to which their activities can be considered sustainable.

The SFDR Regulation increases market transparency and prevents greenwashing. It covers two groups of entities: financial market participants offering financial products and financial advisors providing insurance or investment advisory services. It requires financial market participants to present how ESG risks are integrated in the investment process. In practice, this means that stakeholders receive access to information on the volumes of investments involved in non-renewable energy, deforestation, mismanagement of water and energy, lack of respect for human rights, corruption, and arms trade.

Market expectations regarding ESG may encourage companies to analyze their business through the prism of these aspects. Then they will be forced to revise their existing business models to be able to respond better to new challenges. As we gradually move away from coal-based energy, institutions will have new opportunities to create products or services that are less energy- or resource-intensive. Investors are looking for information that would help them find companies that manage ESG issues effectively.

Separating three ESG factors allows for more precise setting of strategic and investment goals. ESG investing can be divided into three types of investments that are consistent with:

- environmental aspects (e.g. assets invested in shares/bonds of companies focusing on renewable energy);
- social aspects (e.g. investments only in companies that respect human rights at every stage of production and create good working conditions);
- aspects of corporate governance (e.g. pursuing a transparent information policy regarding their activities or promoting gender equality on management boards/supervisory boards).

ESG investing is very unique and cannot be compared to other investing styles. Usually, the main motivation of investors when implementing a specific investment strategy is the financial aspect, but in the case of ESG there is also a non-financial element [Anderson et al., 2016]. For this reason, ESG investing cannot be compared to low volatility, value, or trend following investing styles [Bennani et al., 2018]. A recent global survey conducted in 2021 [Park, Jang, 2021] found that investors with a strong propensity for long-term investing, such as pension funds and insurance companies, paid more attention to shareholder rights, risk management, and reputation. On the other hand, it was noted that investors with a greater propensity for short-term investments, such as securities and asset companies, place a greater emphasis on customer satisfaction and environmentally-friendly processes, products, and strategies.

Board members are now expected to explain how the decisions they make reflect the needs of stakeholders and the environment, as well as their organization's long-term sustainability strategy. It is worth considering how ESG issues may affect the company's value creation process and which of them may have a significant impact on its operations or image. In this context, climate change risks, both those related to the transition to a low-carbon economy, as well as physical risks related to specific weather phenomena, are becoming increasingly important. Investors need consistent and reliable information on companies' ESG efforts to obtain high-quality, comparable data.

According to the 2021 report [Davidson, Schuwerk, 2022], there is a visible lack of consistency in the reporting of audited companies. Some 72% of companies have not detailed information on climate risks or emissions targets in their financial statements, despite the significant financial risks associated with the climate crisis and the net zero promises made by many. Few companies or their auditors included climate-related considerations in their 2020 financial reports. In contrast, oil and gas companies provided the most evidence and transparency regarding the inclusion of climate-related considerations in their reporting. Therefore, it is necessary to define global sustainability standards and greater interest in mandatory ESG reporting from regulators.

Sustainable development is also a strong trend among consumers, which can contribute to an increase in revenues in both companies serving business and individual customers. Additionally, the COVID-19 pandemic raised consumer awareness of issues related to sustainable development [Maciejewski, 2023]. They increasingly declare changes in consumption habits and pay more attention to such issues. Some companies even claim that their more sustainable brands are growing faster than others.

Implementing ESG aspects requires directing capital flows towards sustainable investments. It is crucial to remove obstacles that hinder the effective flow of capital, such as greenwashing. The lack of transparency and legal regulation of ESG aspects stand in the way of full implementation of the goals of the 2030 Agenda.

Polish enterprises are increasing the volumes of sustainable investments, but the main reason for this is pressure from regulators, shareholders, and parent companies (mainly from Western Europe) in capital groups. An additional barrier is the high dependence of the energy sector on coal. An agreement[1] was signed to stop coal mining by 2049, but due to the strong dependence on coal, it can be expected that many entities in Poland will be at risk of 'stranded assets'. These are defined as assets that are prematurely written off, devalued or converted into liabilities [Caldecott et al., 2013], in other words, they include all natural resources, investments in infrastructure and means of production and distribution, as well as other tangible and intangible assets that may become obsolete as a result of the transition to a greener economy or as a result of climate catastrophes [Parker, Krustins, 2021]. Therefore, to achieve the goals of transformation and sustainable development, actions must be taken that favour carbon neutrality and environmental protection, but do not threaten economic growth. Additionally, the implementation of this policy will require high investment outlays in the energy sector [Karpa, Grginović, 2021].

In Poland, the largest institutions dealing with sustainable investing are publicly owned. The most famous are BOŚ Bank[2] and NFOŚ,[3] which focus on environmental issues. In the private sphere, there are several initiatives focused mainly on the Warsaw Stock Exchange, under which ESG-related indices are created. However, available research shows that currently there are only 4 funds in Poland that consider ESG criteria for investment purposes (0.6% of managed assets). Mainly products based on American or Western European ESG indices are available, but they do not take into account local assets. Poland has a chance to benefit economically from the green transformation, as it is expected to be one of the main beneficiaries of EU funds from the European Green Deal. Poland is among the top ten countries in the world with the most skilled workforce for green technologies and is also facing a huge energy transformation programme that can be seen as an excellent investment opportunity [Dmuchowski, 2021].

Impact on the insurance sector

When talking about activities aimed at limiting the effects of climate change, we cannot ignore the role of insurance. This insurance protects assets against accidents or damage caused by the weather, protects managers from liability, or issues guarantees for the performance of contracts. This is why the insurance business is particularly vulnerable to climate change, and there is now no doubt that climate change will impact the financial sector.

Taking into account the definitions of climate risk that appeared in studies [EIOPA 2019b; Reisinger et al. 2020; World Economic Forum 2021] for the purposes of this article, the authors created a consistent definition. Climate risk is the probability of events resulting from climate

[1] After negotiations, the Polish government and representatives of trade unions signed an agreement on May 28, 2021, regarding the transformation of the so-called stone mining sector. Social Agreement regarding the transformation of the hard coal mining sector and selected transformation processes of the Silesian Voivodeship.

[2] BOŚ stands for Bank Ochrony Środowiska [Environmental Protection Bank].

[3] NFOŚ stands for Narodowy Fundusz Ochrony Środowiska i Gospodarki Wodnej [National Fund for Environmental Protection and Water Management].

change affecting financial institutions. Due to the characteristics of the sources of these events, two types of climate risk are distinguished:

- physical risk – related to the direct impact of extreme weather events such as storms, floods, fires or heat waves, which may damage production plants and disrupt supply chains and reduce soil productivity and water availability [EIOPA, 2021a];
- transition (transformation) risk – results from the need to adapt the economy to climate change and take actions, including changes in policies and regulations, development of new technologies or business models, changes in social preferences [EIOPA, 2019b].

Physical risk in the insurance business is generated by a higher probability of damage caused by nature catastrophes. Areas of insurance activity exposed to physical risk will be primarily distribution, claims settlement, and underwriting. Insurance companies already face higher costs for handling weather claims, although, as EIOPA showed in its 2019 report, only 35% of claims caused by extreme weather events were insured across Europe.

In the face of a higher frequency of extreme weather events, the solution seems to be to increase insurance premiums to maintain the profitability of the business, which would make it necessary to update risk valuation models. An alternative solution that reduces the risk level assumed by the company could be to increase the share of reinsurance for these risky policies. However, this could result in an increase in reinsurance commissions or even a reduction in the availability of reinsurance, as the sector remains particularly exposed to fossil fuel-dependent industries. The recent years have confirmed the retreat of coal insurers. According to the *Insure Our Future 2021* report, presented during the COP26 climate summit in Glasgow in 2021 [Sirociuk, 2021], 35 global insurance and reinsurance companies restricted coal insurance. To compare, four years earlier the number was only 3. The analysis shows that the share of premiums from insurance companies limiting coal insurance in the global non-life insurance market is 14%, and reinsurance companies 55%.

Higher levels of physical risk may put further pressure on insurance, threatening the business continuity of companies and, in the worst case, their solvency, which consequently may negatively impact the stability of the entire sector. Therefore, insurance companies face a strategic challenge and opportunity to increase affordability and coverage, as well as mitigate the effects of climate change [EIOPA, 2021a].

The problem of price adjustment may affect the insurance sector even more than other financial entities. On the one hand, we can expect the valuation of climate risk to be taken into account indirectly through updated market data in insurance policies (not only insurance against extreme weather phenomena), and, on the other hand, through additional running costs for environmental protection. Physical risk will increase insurance risk, so for this sector correct calculation of the carbon footprint of insurance portfolios is very important [CRO Forum, 2020]. In its 2021 report, EIOPA provided guidance on how insurers can improve insurance coverage and contribute to climate change mitigation and adaptation.

Adapting the economy to climate change generates a second type of risk, namely transition risk. The main areas of insurance activity that generate them are investments, supervision and sector regulations, and customer relations. Transition risk is related to five other risks identified by companies. Risks arising from energy efficiency requirements, carbon pricing mechanisms, or policies that encourage sustainable land use are regulatory risks. Any new climate regulations will generate legal risks and, consequently, court disputes. The transformation of the economy will be linked to technological development, new ones will displace those with a harmful impact on the climate, and delays in adaptation constitute a technological risk. The final risk is related to customers. It will be important for companies to study market sentiment and whether consumer choices are oriented towards products and services that are less harmful to the climate, and additionally, there may be a risk of loss of reputation due to difficulties in attracting and retaining stakeholders if a company does not act pro-climate or applies excessive price increases to its clients [EIOPA, 2021a].

Globally, the insurance industry is in a unique situation, because climate risk affects both sides of the balance sheet: on the active side – investments, and on the passive side – technical provisions, especially in the property line. It is also important to recognise emerging threats. If insurance companies suffer losses due to the climate transition, liability risks arise, magnified by the systemic nature of climate change, causing claims to increase in the short term. Embedding an appropriate risk management approach is essential to maintaining financial stability, ensuring effective insurance, and meeting the expectations of policy holders [Young, 2021]. From the perspective of the security and stability of the financial market, it is also worth taking a look at the current solutions proposed by managers of insurance sector institutions to address climate risk, in particular threats to the market as well as prospects and opportunities. Some solutions exist, but without setting the right direction, the tools themselves will be insufficient to adapt to the new economic and social situation.

On the one hand, insurance will protect against the consequences of climate change, but on the other hand, it is particularly exposed to climate change. From a security perspective and the stability of the Polish insurance market, it is worth taking a closer look at the insurance sector's approach to ESG regulation and green transformation, as well as of the clients themselves towards climate risk. Setting the right course of action will be extremely important for the next 10 years. The results of two Polish market studies are presented later in this article.

Methodology

The importance of the problem prompted the authors to undertake research aimed at determining the importance of ESG regulations and green transformation for the insurance sector and identifying the challenges facing insurance companies in this regard.

The analyzed research problem are the challenges of the insurance sector in the field of ESG. In order to analyze this issue, the following research questions were asked:

- Do the introduced ESG regulations have a positive impact on the local and European markets?

- Is the local insurance market less prepared for the green transformation than the European market?
- Which customers are most interested in green insurance products?
- Is climate risk a big threat to the insurance market?

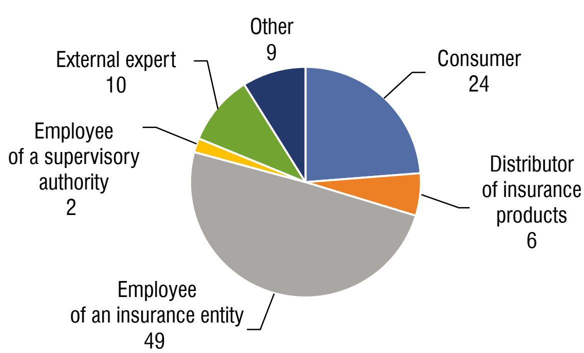
The rest of the article will present the results of two quantitative and one qualitative study, the results of which helped answer the research questions.

Insurance sector survey: Poland and Central and Eastern Europe

The research via an online survey was conducted between June and July 2023 in the form of a questionnaire in Polish and English language versions, and the target research sample were insurance market experts, further also called 'specialists' (employees of insurance companies, other sector institutions, and customers working in the financial sector). The survey was completed by 101 specialists from Poland and other countries in Central and Eastern Europe. This sample does not reflect the statistical characteristics of the population because experts are more educated economically and associated with the financial sector. The sample is also too small to conduct a significant statistical analysis, and the results should not be generalized to the entire sector. The study is exploratory and indicates the direction for further research. The analysis of the results aims to fill the research gap for Poland in terms of the insurance sector's perception of the challenges of green transformation.

The largest group of specialists are employees of the insurance sector, and they make up as much as 50% of all the respondents. The second largest group are customers, i.e. 25%, and the remaining respondents were external experts, distributors, or others.

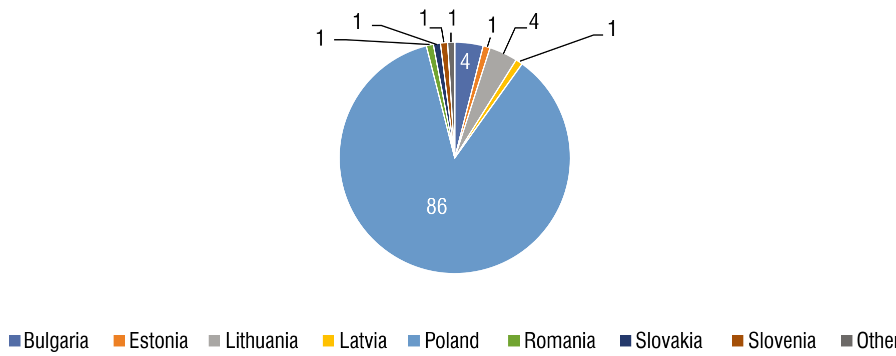
Figure 1. Structure of the research sample according to the connection with the insurance sector



Source: own study.

Most experts come from Poland, i.e. 87%. Two equally numerous groups are specialists from Bulgaria and Lithuania (8% in total). The panel also included people from Estonia, Latvia, Romania, Slovakia, Slovenia, and another unmentioned country. Due to the overrepresentation of Poles, for the purposes of this study it was assumed that the conclusions of the study would apply to the Polish insurance sector.

Figure 2. Structure of the research sample according to the local market



Source: own study.

Survey of the Association of Polish Brokers

In 2023, the Association of Polish Brokers conducted an online survey among brokers from the Polish insurance sector, which was conducted in the form of a questionnaire in Polish and completed by 361 respondents from Poland. This sample is too small to conduct a significant statistical analysis for the entire sector, but it reflects the statistical characteristics of the Polish brokers. The study is exploratory in nature and is the first stage in initiating larger-scale research. The analysis of the results aims to fill the research gap for Poland in terms of the insurance sector's perception of the challenges of green transformation. The survey form included two questions regarding climate issues in the insurance sector.

In-depth interviews with insurance sector experts

The research was conducted between March and May 2022 in the form of in-depth interviews with a group of five persons from top-management of the insurance sector, whose identity is anonymous for the purposes of the research. The respondents have many years of experience in the insurance market, and substantive market knowledge. Additionally, experts hold management functions in various insurance institutions (insurance companies, supervisory authorities, and regulators). What is also important, a key dimension of the sample selection strategy was to include those institutions that are involved in work on the implementation of ESG requirements in the Polish insurance market.

In-depth interviews were conducted according to a prepared scenario of 5 questions (Table 1 below). While answering the questions, the respondents expressed only their opinion, which cannot be directly identified with any sector institution, but due to the positions they hold, these opinions were of a professional nature.

Table 1. Questions for an individual in-depth interview

1.	Does climate risk threaten the stability of the insurance sector?
2.	Does the regulator and supervision of the insurance sector play a role in climate risk management?
3.	Are current insurance sector regulations sufficient to manage climate risk?
4.	Will the new regulations, i.e. Taxonomy, affect insurance companies?
5.	What obstacles may insurance companies encounter when investing sustainably in the Polish market?

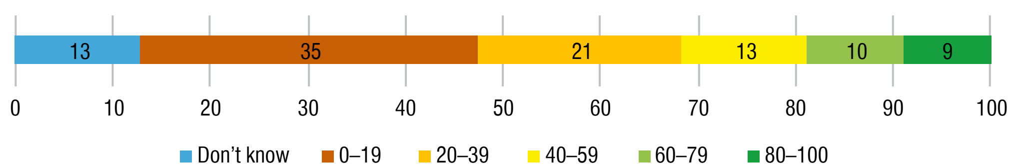
Source: own study.

Results and discussion

Survey in the insurance sector in Poland and Central and Eastern Europe: results

With regard to the first question from the survey, "How do you assess (in %) the impact of ESG regulations on your local market?", more than half of the experts answered 0%–19%, i.e. "very low" impact, or 20%–39%, i.e. "low impact". Less than 10% answered that the impact is "very high", and 13% could not define it.

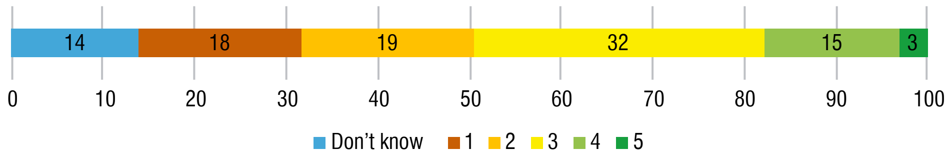
Figure 3. Share of experts' replies to Question 1: "ESG regulations have been implemented in the European Union in recent years and they also concern the insurance market. How would you estimate (in %) the influence of those regulations on your local market?"



Source: own study.

As to the next question from the survey "Do you agree with the statement? (1 – not at all, …, 5 – completely): EU ESG regulations provide an optimal legal framework for the development of the local insurance market", a vast majority of the specialists disagreed with this statement, but in the previous question 14% were unable to assess it. Therefore, it can be concluded that, according to a majority of the market specialists, ESG regulations are not optimal for the Polish insurance sector, although on the other hand, they assess the impact of these regulations as "low" or "very low".

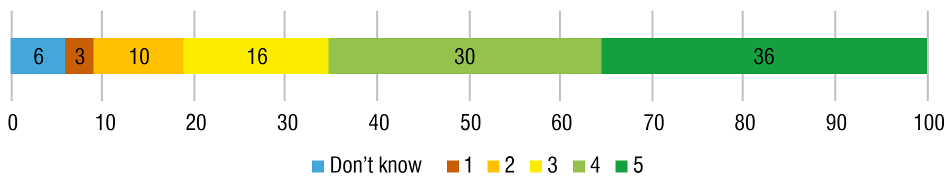
Figure 4. Share of experts' replies to Question 2: "Do you agree with the statement? (1 – not at all… 5 – totally): ESG regulations from the EU provide an optimal legal framework for local insurance market development"



Source: own study.

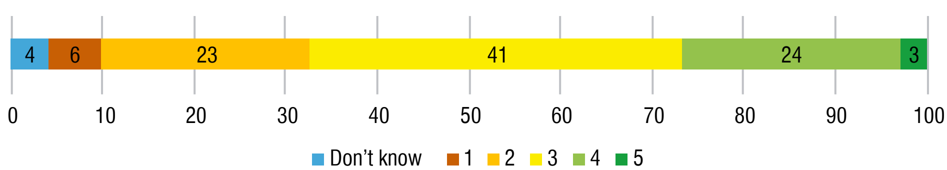
With regard to the third question from the survey "Do you agree with the statement? (1 – not at all, …, 5 – completely): European ESG regulations involve a lot of work in implementation, and a very limited effect in the local market in the near future", a vast majority of the experts agreed with this statement. Therefore, it can be concluded that most of the specialists believe that the regulations being introduced require a lot of work, but this does not translate into an increase in opportunities or possibilities towards sustainable development.

Figure 5. Share of experts' replies to Question 3: "Do you agree with the statement? (1 – not at all… 5 – totally): ESG regulations of the EU offer a lot of work with implementation and very limited outcome for the local market in the nearest future"



Source: own study.

Figure 6. Share of experts' replies to Question 4: "How would you assess (1 – very low… 5 – very high) the readiness of the European capital market to offer green investment products (ESG-oriented)?"

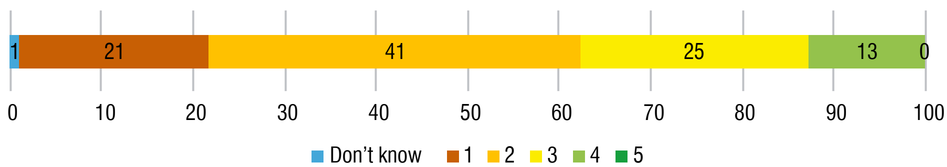


Source: own study.

With regard to the fourth question from the survey "How do you assess (1 – "very low", …, 5 – "very high") the readiness of the European capital market to offer green investment products (ESG-oriented)?", over half of the respondents rated this readiness as "moderate" or "low". According to 24% of the specialists, this readiness is "high". Analysis of the answers allows us to draw conclusions that according to the local market, the European market is currently not very well prepared. This diversity in answers probably results from different levels of preparation also in Western European countries.

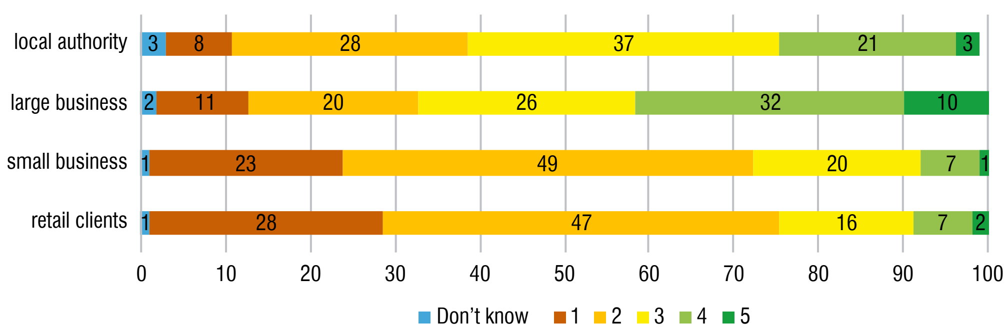
In turn, when asked the same question but regarding the "readiness of the local market", more than half of the experts rated this readiness as "very low", "low", and "moderate". There is a significant difference in the readiness assessment between the European and local markets. According to the specialists, their domestic market is less prepared for the introduction of green products than the rest of Europe.

Figure 7. Share of experts' replies to Question 5: "How would you assess (1 – very low… 5 – very high) the readiness of the local capital market to offer green investment products (ESG-oriented)?"



Source: own study.

Figure 8. Share of experts' replies to Question 6: "How would you assess (1 – very low… 5 – very high) local demand for green insurance products (ESG- oriented) of: retail clients/small businesses/large businesses/local authorities?"

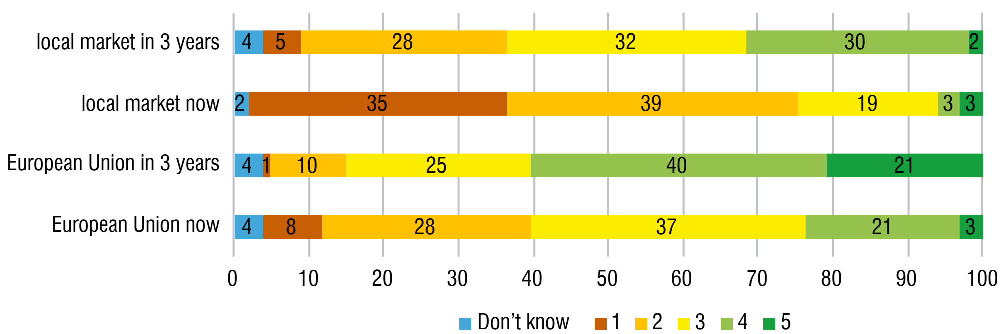


Source: own study.

In the sixth question, the specialists were asked to assess the "local demand for green insurance products (ESG-oriented)" on a scale of 1 – "very low", …, 5 – "very high", divided into four target groups: retail customers, small businesses, large businesses, and local authorities. Most respondents attributed "low" demand to both groups – retail customers and small businesses, while "moderate" and "high" demand was attributed to large businesses and local authorities. There is a significant difference in the assessment of demand for green insurance in the market. Therefore, it can be assumed that entities which have more funds are currently showing a greater interest in the market. The main reason could be a low availability of green insurance in Poland, making it less popular among customers. In turn, large market players are already looking for such solutions in order to respond to the challenges of green transformation and ESG reporting in a better and quicker way than others in the market.

In the next question, experts assessed “the readiness of the insurance market to offer green insurance products (ESG-oriented)” on a scale of 1 – “very low”, …, 5 – “very high”, divided into four groups: the EU now, the EU in 3 years, the local market now, and the local market in 3 years. For both the EU and the local market, the specialists assigned higher values (greater readiness) for the period in 3 years from now, so it can be concluded that they anticipate an improvement over this time and an increase in the availability of such insurance products in the market. The readiness of the local insurance market was currently rated worse than the readiness of the local capital market (question 5). More experts rated it as “very low” for the insurance sector, so it can be assumed that there are also differences in the financial sector. Perhaps other institutions, such as banks or investment funds, are better prepared than insurance companies in Poland and will respond faster to the challenges of the green transformation. Moreover, there is also a visible difference in the assessment of the readiness for the EU and the local market. Similarly to the answers to questions 4 and 5, the specialists rated local readiness lower than European readiness. Taking into account only the lowest ratings (“very low”), the greatest improvement in the readiness will occur in the EU in 3 years, because only 1% of such experts appeared in this category.

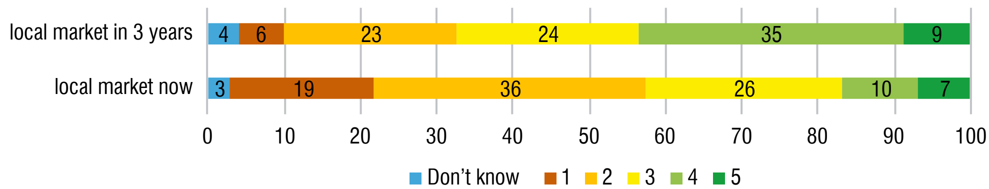
Figure 9. Share of experts' replies to Question 7: "How would you assess the readiness of the insurance market to offer green insurance products (ESG-oriented? (1 – very low… 5 – very high) in the European Union now/in 3 years and in the local market now/in 3 years?"



Source: own study.

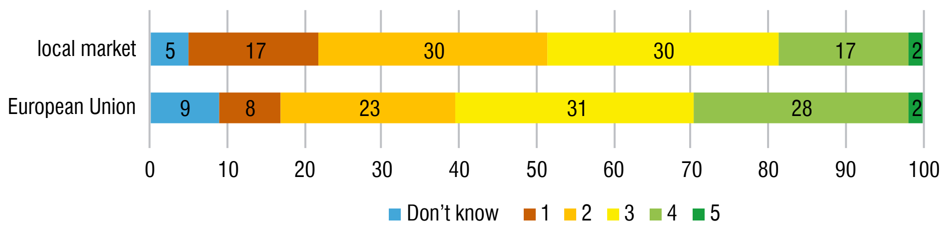
As to the eighth question from the survey, “How do you assess (1 – “very low”, …, 5 – “very high”) the ability of insurers to provide sufficient protection against climate risk?”, divided into two categories: local market now and local market in 3 years, the specialists assigned higher values (greater capacity) for the period in 3 years from today. For the situation now, 19% of the experts assigned a “very low” rating, and for the situation in 3 years only 6%. The share of “high” ratings also increased significantly from 10% to 35%. Perhaps this is due to the fact that, in the opinion of the specialists, in 3 years the market will be better adapted to climate change, ESG regulations will be fully applicable, and the entire economy will be undergoing a green transformation.

Figure 10. Share of experts' replies to Question 8: "How would you assess (1 – very low… 5 – very high) insurers' ability to provide a sufficient cover of climate risks in the local market now and in 3 years?"



Source: own study.

Figure 11. Share of experts' replies to Question 9: "How would you assess (1 – very low… 5 – very high) market risk level in insurance companies linked to climate risk (the connection of investment portfolio with climate risk) in the European Union/ local market?"



Source: own study.

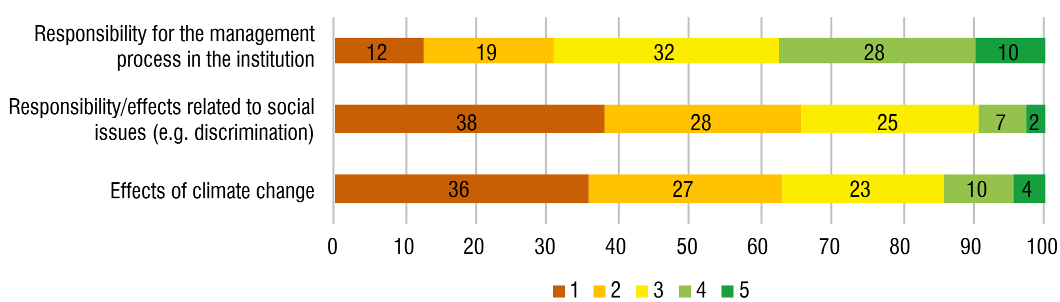
As to the ninth question from the survey: "How do you assess (1 – "very low", …, 5 – "very high") the level of market risk in insurance companies related to climate risk (linking the investment portfolio to climate risk)?", which was divided into two categories: the European Union and local market, the specialists assigned higher values (higher level of risk) to the EU than to the domestic market. The share of "moderate" ratings did not differ much for both categories, while the largest differences are visible for the "very low" and "high" ratings. More experts believed that the level of market risk in the EU was "high", while in the local market – "very low". Perhaps the reason for this is that, in the opinion of the specialists, the European economy is in a more advanced phase of transformation than national markets, which is why the market risk, e.g. related to stranded assets, is higher there.

The last survey question was a voluntary open question. Experts were asked to share their thoughts on the challenges of the insurance market in terms of green transformation and ESG regulations. 25% of the specialists answered this question, with the respondents pointing to the three most important challenges – ESG regulations, consumer awareness, and green products. According to them, a legislative burden has been imposed on insurance entities, which generates additional legal risk. Moreover, the legislation also covered the non-financial market, so the data necessary to manage climate risk can be expected to appear in insurance companies as well. The experts indicated low consumer awareness and expensive prices of green products as limitations to the development of green insurance. Another barrier is the limitations of the Polish economy and few green government initiatives and business incentives, despite European initiatives in this area. Additional bureaucracy when purchasing green insurance may be unattractive to customers as well. One specialist also pointed out that insurance companies play an important role in the green transformation, in particular institutional investors and risk insurers, including climate risk. There is currently a lot of emphasis on physical risk management, but little is said about transformation risk. Good market practices are still developing, mainly among large market players, and the cooperation of all insurance entities would ensure better adaptation to the green transformation.

Survey of the Association of Polish Brokers: results

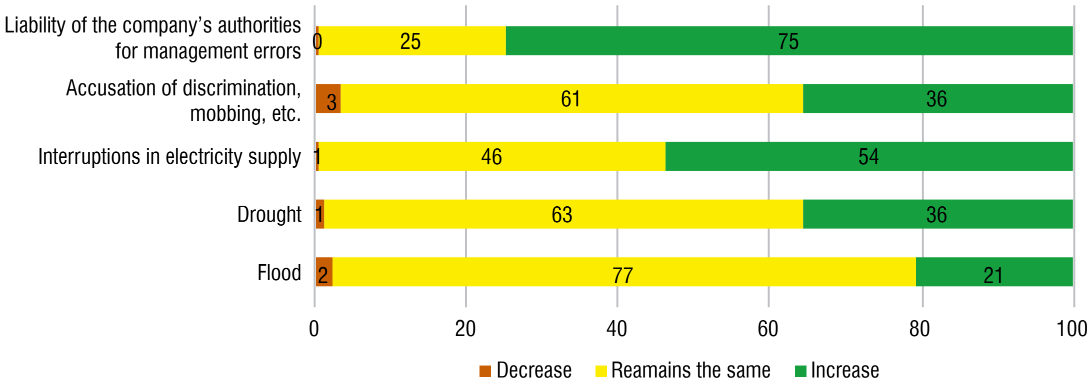
The first question regarding the assessment of customer interest was divided into three categories: the effects of climate change, responsibility/effects related to social issues (e.g. discrimination), and responsibility for the management process in institutions. The respondents indicated that the greatest interest (the highest average) was in the topic of responsibility for the management process in the institution, and the least interest (the lowest average) was in the responsibility/effects related to social issues. Brokers' clients were equally interested in climate risk and social responsibility. Perhaps the reason for this is the lower awareness of the effects of climate change and its impact on the operations of entities among clients, with the management process itself being the most important for them from the perspective of business continuity and strategic plans.

Figure 12. Share of responses to Question 1: "You sometimes hear about sustainable finance. How often do topics related to counteracting climate change, social problems (e.g. manifestations of discrimination against employees or contractors) and related to management issues (e.g. quality of internal audits, shareholder rights) appear in your brokerage activities as issues reported by your clients? (1 – never/very rarely, 2 – rarely, 3 – sometimes, 4 – quite often, 5 – very often)"



Source: own study.

Figure 13. Share of responses to Question 2: "How do you assess the importance of specific risks for your clients in the next 3 years (until 2026)?"



Source: own study.

The second question "How do you assess (increasing, decreasing, unchanged) the importance of a specific risk for your customers in the next 3 years?" was divided into 5 risk groups: flood, drought, interruptions in the supply of electricity, accusations of discrimination, mobbing, etc. and the liability of the company's authorities for management errors. Most respondents indicated that the importance for floods will remain the same, the same goes for droughts, for power outages it will increase, accusations of discrimination will remain the same, and for company authorities' liability for management errors it will increase. More than half of the brokers were in favour of no changes in "floods", i.e. 77%, and no changes in "droughts", i.e. 63%. This may be due to the specific nature of the activities of clients of this group of brokers – there is no advantage of farmers, hence there is no change in the risk of drought or flood. The increase in the importance of management board's responsibility in 3 years corresponds to the answer to the first question, where the management process was indicated as strategic. Also, interruption in the electricity supply aroused a greater interest among customers, which could be related to rising electricity prices and public discussions about possible blackouts as a consequence of the energy transformation.

In-depth interviews with insurance sector experts: results

The results of the previously presented survey research were supplemented with individual interviews with managers from insurance institutions. The respondents confirmed that there are currently no signals that climate risk threatens the stability of the insurance sector, with Polish sector supervision taking a conservative approach and monitoring the capital adequacy of plants on an ongoing basis. Thanks to the accumulated capital buffers, they will be able to manage climate risk, but this may be difficult if worst-case scenarios are implemented in the long term or in the event of a larger disaster. Experts agreed that it is currently impossible to create an accurate capital forecast scenario because most newly developed climate models have high variability. Climate change should not threaten stability because supervisory tools are available to assess the impact of changes on solvency and financial situations.

According to the experts, supervision plays an important role in managing climate risk in the sector. Three experts pointed out that European supervision, i.e. EIOPA, has a special role to play in this. On the one hand, it operates in accordance with the current work of the European Commission and its recommendations, while on the other hand, it also creates its own guidelines. In addition to EIOPA, the EBA and ESBA are equally important for the entire financial sector. Among other things, joint committees of these three bodies are organized, which allows for combining work and applying supervisory convergence. The respondents agreed that the role of both the European and Polish regulators is important in managing climate risk in the insurance sector, although the quality of legislation needs to be improved. They also highlighted the positive aspects of the new regulations. The SFDR and taxonomy are intended to reduce greenwashing and provide transparency to stakeholders. It is not advisable to expand regulatory requirements in the field of sustainable development and ESG. Financial institutions now need to focus on developing processes and collecting data. The regulator, in cooperation with the supervisory authority, should focus on finalizing the legislation for the entire market and additionally develop 'guidelines' for the market.

When investing sustainably in the Polish market, insurance companies identify problems similar to those in the European market. The respondents agreed that in the Polish market, many insurance companies operate within larger capital groups, with the parent companies originating from Western Europe. Adaptation to ESG regulations and implementation of sustainable development in the strategies of daughter companies result from adaptation to the strategy of the entire capital group. If we were to point to any source of pressure on insurers to offer ecological products, it would be the parent companies, not the Polish market or the state. This also results from belonging to capital groups – insurance companies must follow the strategies developed by the groups and, for example, cannot invest in brown bonds or have limits set for such investments. Business is changing, which is also due to how the groups are changing in terms of investing. As part of consultations with the European supervision, they report similar problems and doubts regarding Poland, especially the problems related to risk allocation. For example, if there are countries where coal is as important as in Poland, then the insurance industry has the same problem with reinsurance.

Summary

Regulatory and legislative changes are putting pressure on insurance companies to address climate threats, and current analyses of the sector are carried out in terms of responsible goals related to their insurance and investment activities. Recent years have seen significant changes in the perception of sustainable development in the European market. New European Union regulations give investors and consumers an opportunity to make informed decisions on the inclusion of ESG factors in portfolios and contribute to their popularization.

The results of the research presented in this article indicate that the impact of climate risk on the activities of insurance companies is particularly important and provide answers to the research questions. The results also show that participants of the insurance sector in Central and Eastern Europe believe that the impact of new ESG regulations on local markets will be low, and rate them as rather sub-optimal. They assess the market itself as averagely prepared in terms of the offer of green investment products, and the demand for such products is low. According to them, the level of readiness of local markets to offer green products is much lower than in Western Europe. The conducted research allows us to conclude that the interest of customers of Polish insurance companies in ESG aspects is at an average level, and the highest in corporate governance. The most important risk, according to brokers from the Polish market, are interruptions in electricity supplies and the liability of company authorities for management errors. However, according to them, climate risk is insurable to a low or medium degree. In turn, experts believe that climate change poses a particular threat to the operations of insurance companies, but climate risk does not threaten the stability of the insurance sector in Poland. The capital situation of Polish plants is stable, and insurance supervision is equipped with tools allowing for a complete assessment of plants at many management levels, as well as, if irregularities are detected, taking appropriate actions, including withdrawing their operating permit. Insurance market experts confirmed that taking early action will promote financial stability, helping businesses develop the right products for customers and reduce risk.

Undeniably, EU regulations shape the Polish financial market and the coming years will be crucial for ESG investments. Sustainable development can strengthen the position of the Polish financial market in the international arena. The need for dialogue between investors and business will increase, and the quality of reported ESG information will increasingly determine access to capital. Therefore, it will also indirectly support the transition of the entire economy to one based on the principles of sustainable development, increasing the business attractiveness of the entire region.

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