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INSURANCE MARKET IN THE LIGHT OF COVID-19 PANDEMIC

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Abstract

The COVID-19 pandemic has been compared to world wars or other tragic events in terms of the death toll it has taken and huge economic losses it has caused. It is not a finished process, so it is difficult to predict the scale of its impact. According to IMF estimates, the contraction of the world economy will be much greater than in the years of the financial crisis of 2008–2009. The negative effects in different countries may depend on the severity and extent of the applied lock-down or interventions undertaken by governments. Changes taking place in various sectors of the economy are of a different nature. The effects of the pandemic can be also seen in the insurance segment. The aim of this article is to find answers to the following research questions:

- 1. To what extent did the COVID-19 pandemic affect the situation on the insurance market?
- 2. In which areas are its consequences particularly visible?
- 3. What kind of opportunities and threats does the pandemic bring from the perspective of the insurance market?

Methodology. The analysis used available scientific publications, reports prepared by the Polish Financial Supervision Authority, Polish Insurance Association and entities conducting brokerage activities or selected consulting companies.

The result of the research. In a few days, in March 2020, a real revolution took place on the insurance market. The insurers faced the need to introduce completely remote customer service. They also had to launch new tools, which in many cases were still in the testing phase and which they did not have the opportunity to use on a large scale. With the onset of the pandemic, they were quickly implemented. It was related to additional funds, huge commitment and discipline of all employees, liquidators, agents, sales departments, and administration. Consequent on this, clients gained full access to all services and insurance products, without leaving home. On the other hand, pandemic has led to the significant changes within the demand for the insurance services and customers' expectations, but also to growing scale of damages and compensation paid to the clients leading to the higher insurance premiums.

Keywords: insurance market, pandemic, COVID-19, threats, opportunities.

JEL Class: D53, D81, D84, G15, G22, G41, I13.

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INTRODUCTION

The phenomenon of a pandemic is nothing new. They have occurred many times in earlier stages of the human history. Those from the end of the 20th century were associated with a growing number of viral diseases appearing among animals (Madhav et al., 2017). The increasing frequency of subsequent pandemics has prompted many researchers, including T.A. Garrett (2007), M. Keogh-Brown et al. (2008), N. Madhav et al. (2017) and V.Y. Fan et al. (2018, 2020), to the conclusion that a large-scale global pandemic is inevitable. In the opinion of N. Ferguson et al. (2020) COVID-19 is the most serious pandemic event since 1918, when the so-called Spanish flu appeared¹. The COVID-19 pandemic has been compared to world wars or other tragic events in terms of the death toll it has so far collected² and the enormous economic losses it has led to (Wolnicki and Piasecki, 2021: 165). That process hasn't finished vet. It is difficult to predict the scale of its impact. According to IMF estimates, the contraction of the world economy will be much greater than in the case of the financial crisis of 2008–2009 (Przybytniowski, Grzebieniak and Pacholarz, 2021: 5). A group of scientists led by R.J. Barro (2020: 2-17) stated that, on average, 2.1% of mortality triggers to a 6% decrease in GDP and an 8% decrease in private consumption worldwide. According to the European Commission, due to COVID-19, global GDP will drop by 4.5%. The results of the EC's forecasts emphasize the risk of the greatest recession since the World War II (Przybytniowski, Grzebieniak and Pacholarz 2021: 17). Many economies are unlikely to reach the levels of production from the year 2019. The negative effects in particular countries may depend on the severity and extent of the applied lockdown³ and the interventions made by the governments⁴. The changes taking place in various sectors of the economy are of a different nature. COVID-19 disrupted international supply chains, contributed

¹ The authors of the report entitled *Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand* presented several potential scenarios for the development of events, depending on the actions taken or with a complete lack of response from the society to the recommendations and limitations implemented by the state.

² Globally, 586 577 948 persons have fallen ill so far and 6 442 310 have died since the beginning of the pandemic. In the case of Poland, this data is respectively: 6 105 306 and 116 717 (www11).

³ The social distancing measures may cause a decline in consumer confidence in the state.

⁴ To stop the spread of the disease, to save the economy and jobs in Poland, expenses in the amount of PLN 103 billion were incurred in 2020 (www9). Considering the data on the support programs launched under the Anti-Crisis Shields, the aid amounted to PLN 183 billion in the first year of the pandemic (www14). At the level of EU countries, a reconstruction plan has been created for a total amount of EUR 2 364 billion (including the Next Generation EU package and the budget for 2021–2027) (www15). On the other hand, governments around the world spent nearly USD 10 793 trillion for this purpose, which accounts for 6% of global GDP based on IMF data at the end of September 2021 (www10).

to a decline in aggregate demand, influenced the consumption patterns and the labor market (Boissay and Rungcharoenkitkul, 2020). The consequences of the pandemic are also observed in the insurance sector. V. Elenev, T. Landvoigt and S. Van Nieuwerburgh (2020) noticed a negative impact of COVID-19 on employee productivity, labor supply, and on corporate income. Along with the decline in revenues and non-payment of liabilities, a wave of corporate insolvencies starts, which may weaken the financial sector (including the insurance market). On the other hand, L. F. Céspedes, R. Chang and A. Velasco (2020) forecast that with the loss of productivity, the value of collaterals will decrease, which leads to a reduction in lending activity and a lower demand for insurance guarantees.

The following research hypothesis was adopted in the conducted analysis: *The COVID-19 pandemic is a challenge faced by insurance market participants and institutions having control over it.* Its verification required to answer the following research questions:

- 1) To what extent did the COVID-19 pandemic affect the situation on the insurance market?
 - 2) In which areas are its consequences particularly visible?
- 3) What kind of opportunities and threats does the pandemic bring from the perspective of the insurance market?

The analysis uses available scientific publications, reports prepared by the Polish Financial Supervision Authority (PFSA), Polish Chamber of Insurance (PCoI), Statistics Poland, and entities conducting brokerage activities or selected consulting companies.

1. CONSEQUENCES OF THE COVID-19 PANDEMIC FOR PARTICULAR SECTORS OF THE INSURANCE MARKET

"The modern economy is a complex network of interconnected parties: employees, companies, suppliers, customers, and financial intermediaries" (Gourinchas, 2020: 33). Due to a very high degree of connections and specialization, the process of collapsing supply chains and the accompanying flows have a cascading effect. The decreasing consumption affects the real sphere. The introduced lockdown causes production downtime, negatively affecting the demand for labor, the size of employment and unemployment. There is also a growing aversion to the state among citizens, combined with great uncertainty and a declining sense of security (Baker et al., 2020; Baldwin, 2020; Carlsson-Szlezak et al., 2020). This leads to a decrease of confidence in financial institutions, including insurers. Therefore, in the time of a pandemic, they face a serious challenge, in the light of which they should be aware of the that "in the

process of building trust and reputation, they must use not only the traditional instruments of public relations, but also much more broadly defined as client relations, i.e., instruments concerning the management and protection of relations between the insurance company and its most important clients" (Grzebieniak, 2015: 46–55).

The global insurance market has been hardly hit by the consequences of the spread of the coronavirus. COVID-19 was moving rapidly, affecting large parts of the globe. The outbreak of the pandemic caused a significant wave of insurance damages, mainly among large enterprises. They related to property insurance and business interruption insurance, insurance due to cancellation of events, travel, and transport insurance. Then were followed with improper performance of the contract or civil liability of the employer. This group may include damages related to the insurance of managers' liability for the proper management of the company, as well as cybersecurity risk insurance.

The scale of threats in the insurance sector differs, depending on the scope of activity of insurance companies. Those that offer life insurance (Sector I) have long-term liabilities, which result in a long-term risk of exposure to market turmoil (crises) (Przybytniowski, 2016: 159-162) and allows for long-term investment horizons, potentially supporting financial stability (Chodorow-Reich, 2020: 1901–1939) of this insurance division⁵. On the other hand, insurances within Sector II, which provide protection against various types of property losses, are implemented primarily through short-term contracts (usually annual). Consequently, they have a greater share in assets than those included in Sector I. Thus, there is a high probability that the companies from Sector II will be affected more seriously than life insurers (Przybytniowski, Grzebieniak and Pacholarz, 2021: 23). The crisis caused by the COVID-19 pandemic poses a serious challenge to the profitability of insurance companies, both in Sector I and Sector II. In addition, the long-term returns on investment, especially from life insurance, may also be low. In case of insolvency of enterprises, the potential losses associated with investments in various types of assets should be also considered (Przybytniowski, Grzebieniak and Pacholarz, 2021: 29).

The COVID-19 epidemic had a significant impact on the financial and technical results as well as the claims ratio of insurance products. The comparative data for Poland are presented in Table 1 and 2. They include information on both sectors and selected insurance groups. In terms of the values shown in Table 1, the decrease in the net financial result in Sector I was influenced by lower premiums in 2020 compared to 2019, along with the increasing values of some

⁵ Life insurers provide protection against the risk of death. In an ongoing pandemic, life insurance benefits increase faster, while expectation for disability benefits falls. These risks can offset each other from a long-term solvency perspective, although higher life insurance claims may have a short-term impact.

items included in the total costs. In 2021, there was an increase in the gross written premiums with a sustained upward trend in total costs. In the case of Sector II, the net financial result also decreased in 2020 in comparison to 2019, which was caused by changes in provisions as well as higher claims and other mandatory profit reductions. The year 2021 brought an improvement in financial results in non-life insurance sector because of a further increase in the gross written premiums and a favorable tendency in relation to the value of some components of total costs.

Many business lines have been hardly hit by the pandemic. However, in some areas there was a significant reduction in claims ratio. In the field of motor insurance (including civil liability insurance), the claims ratio during the lockdown period was at the level of 50–70% of the claims ratio before the outbreak of the pandemic. This decrease was caused by a lower frequency of damages (visible for a period of about 6–8 weeks). Unfortunately, the scale of the claims ratio improvement was reduced by the increase in the average loss (less traffic resulted in a more reckless driving).

Table 1. Net financial results and technical results of insurance companies in Poland in years 2019–2021 (in PLN)

Specification		01.01–31.12.2019	01.01–31.12.2020	01.01–31.12.2021	
Insurance companies in total	net finan- cial result	7 217 550 251,7	6 086 729 623,9	5 690 559 957,3	
	technical result	6 197 265 753,4	6 102 768 688,9	5 113 429 458	
Sector I	net finan- cial result	2 574 728 820,2	2 207 813 057,7	1 632 852 853,3	
	technical result	3 265 211 943,4	2 970 273 673,6	2 142 982 320,2	
Class 1 Sector I	technical result	788 656 736,7	206 039 693,8	-615 420 410,8	
Class 5 Sector I	technical result	1 903 574 190,8	2 421 741 267	2 058 576 254,5	
Sector II	net finan- cial result	4 642 821 431,5	3 878 916 566,2	4 057 707 104	
	technical result	2 932 053 809,9	3 132 495 015,3	2 970 447 137,8	
Class 3 Sector II	technical result	458 397 574,9	810 770 242,8	616 121 480,2	
Class 10 Sector II	technical result	904 179 590,9	521 300 393,2	582 753 617,1	

Source: own study based on reports of PFSA (www16 and www17).

Table 2. Gross claims ratio and claims ratio – net of reinsurance in Poland in years 2019–20216

Specification		31.12.2019	31.12.2020	31.12.2021
Insurance companies in total	Gross claims ratio	70,28%	68,39%	66,54%
	Claims ratio – net of reinsurance	71,02%	69,31%	69,43%
	Gross claims ratio	87,15%	84,07%	84,90%
Sector I	Claims ratio – net of reinsurance	87,55%	84,72%	85,63%
Class 1 Sector I	Gross claims ratio	74,14%	81,61%	83,84%
	Claims ratio – net of reinsurance	74,18%	82,03%	84,38%
Class 5	Gross claims ratio	43,16%	36,75%	40,26%
Sector I	Claims ratio – net of reinsurance	42,80%	36,32%	40,00%
	Gross claims ratio	61,51%	60,61%	57,42%
Sector II	Claims ratio – net of reinsurance	60,71%	60,17%	59,60%
Class 3	Gross claims ratio	68,32%	64,35%	67,65%
Sector II	Claims ratio – net of reinsurance	68,53%	64,38%	67,28%
Class 10 Sector II	Gross claims ratio	71,15%	74,36%	69,10%
	Claims ratio – net of reinsurance	70,15%	71,92%	70,19%

Source: own study based on reports of PFSA (www12 and www13).

It was also influenced by the reduction in the proportion of minor damages, an increase in prices (because of the interruption of supply chains and the lack of spare parts), an increase in the EUR exchange rate and an extended service of replacement vehicles. In the area of motor casco insurance, the scale of claims ratio's decline was smaller, reaching approx. $30\%^7$.

While analyzing other property insurance, actuaries pointed to a significant increase in the claims ratio in telemedicine-related products and some symptoms of deterioration in the SME insurance sector. In case of home insurance, the

⁶ Claims ratios are considered as efficiency ratios. They are calculated using the following formula: **Gross claims ratio** = (Gross claims paid + gross change in provision for claims outstanding)/gross earned premiums * 100%. **Claims ratio** – **net of reinsurance** = Claims incurred/(earned premiums - net of reinsurance) * 100%.

⁷ Similarly, to the third-party liability insurance, it was caused be the lower frequency of events with a simultaneous increase in the average loss.

effects of the lockdown were ambiguous: there was a slight improvement, and at the same time a significant deterioration in the area strictly related to assistance (www1).

The negative impact of the pandemic was visible in the travel insurance segment. In the initial phase, insurers observed a worsening in the claims ratio. After the introduction of travel restrictions, this group was frozen. When the lockdown was lifted, interest in these types of insurance grew in most European countries. Currently, insurance companies meet the expectations of those customers for whom flexibility in planning a trip is very important. They may wish to opt out of departure in various cases, including – falling ill with COVID-19⁸. The scope of treatment costs has also been extended, for which responsibility for the risk of COVID-19 and its consequences has been added. Travel insurance premiums remained at a comparable level to that one before the pandemic.

In the life insurance segment, there was a significant decrease in the claims ratio in health and group insurance. The reasons for that were as follows: limitations in a number of medical procedures performed, a lower number of various accidents because of the lockdown, and partially lighter flu season, which – despite the pandemic – resulted in a lower number of deaths in the general population (Przybytniowski, Grzebieniak and Pacholarz, 2021: 50). It should be remembered that non-compulsory insurance is not treated as a necessity and in the face of a crisis, market stagnation and a worsening of the consumers' financial liquidity, a temporary decline in their sales can be expected.

2. IMPACT OF THE PANDEMIC ON THE INSURANCE MARKET – THREATS

The pandemic has launched many processes that pose a serious challenge to the Polish insurance market. The data cited above indicates the risk of increasing the claims ratio in medium term in many business lines, including job loss or low contribution for mortgage loans, third-party liability/motor insurance, guarantees, travel insurance or telemedicine. It should be borne in mind that the increased claims ratio does not have to lead directly to the deterioration of financial results. The changes taking place on the market induce companies to modify the methods of calculating the level of premiums and adjusting them to the evolving risk profile, as well as to a more precise analysis at the stage of concluding contracts (e.g. verifying if companies have business continuity plans). Determining the levels of premiums and technical provisions is difficult in a dynamically changing

⁸ Until now, travel insurance has usually covered the resignation from travel due to illness of a loved one, loss of job, cancellation of leave, the need to look after a child or pet, and an important exam.

environment. The existing solutions, often of a retrospective nature, based on analyses of historical trends, may turn out to be inadequate in the current situation (Przybytniowski, Grzebieniak and Pacholarz, 2021: 32–33 and 50).

The deteriorating economic conditions represent another challenge faced by the insurance market. An increase in interest rates and in unemployment may reduce the demand for group insurance. In addition, the worsening of macroeconomic indicators results in lower car sales, and, consequently, in a lower number of motor insurance policies.

The issue of insurance fraud and abuse also deserves attention. In times of economic crises, these dangerous phenomena usually intensify. The current situation requires a careful observation of trends in this area. That is why some insurance companies strengthen their anti-fraud teams. An increased number of fraud attempts in motor insurance has already been noticed. Other insurance sectors, such as SME, may also be affected by this negative phenomenon. An unquestionable threat to the insurance sector is also the abuse of contractual conditions and new types of disputed benefits (e.g. BI – Business Interruption).

Significant challenges for the market are problems related to a precise definition of issues connected with the COVID-19 pandemic. The consequences of introduced lockdowns have led to discussions on the scope of insurance protection, especially to the question whether the risk of the COVID-19 pandemic is or can be covered by insurance in the current situation? (Przybytniowski, Grzebieniak and Pacholarz, 2021: 27).

Insurers should consider claims for compensation in the areas in which there have been no claims so far, and which are related to civil liability. Sylwia Kozłowska, Director of the Insurance Department, Willis Towers Watson, points out that: "The least appreciated threat on the Polish market are employee claims resulting from insufficient employer's practices aimed at ensuring employees a safe working environment. There are companies in Poland where many employees have been infected with the coronavirus. Will they consider claims against the employer? There are reasons for this. Additionally, this may be a good example of class action lawsuit's application" (www2).

3. IMPACT OF THE PANDEMIC ON THE INSURANCE MARKET - OPPORTUNITIES

In addition to several negative phenomena, the pandemic also created opportunities for the reconstruction of the market. Some areas of insurance have required it for a long time. Firstly, health and life insurance, in terms of which a downward trend has been visible in the last decade. The value of the gross written premiums decreased from PLN 30.3 billion in 2009 to PLN 21.3 billion in 2019, due to the lower competitiveness of savings products and bad press around

Insurance Capital Funds. The pandemic and the accompanying sense of danger may contribute to the increase of clients' awareness of the usefulness of classic protection insurance. Taking appropriate actions by insurers may result in healing the life insurance market in the long run, putting it on more durable foundations and returning to the roots – the classic protective activity. The opinion of Jan Grzegorz Pradzyński, the president of the PCoI, inspires optimism in this matter: "When it comes to customer behavior, we have noticed that they are looking for cheaper products, but do not give up protection. This is a key issue because damage will happen regardless of whether the economy enters a deep crisis or not. That is why it is important to maintain insurance coverage" (www2). Poles see the value of insurance as a mean of ensuring financial and health security for themselves, their family, and in the case of companies, also for employees and their business (www5). In this context, another opportunity for the sector may be an expansion of the product offer and its adjustment to the consumers' expectations. According to Łukasz Zoń, president of the Association of Polish Insurance Brokers and Reinsurance, new services or additional variants of the existing ones are being developed, mainly considering the risks associated with COVID-19 or other infectious diseases (www2).

Insurers offering group insurance have introduced new technological solutions, portals allowing the employee to be insured, also launched simple administrative procedures while concluding contracts by employers and adapted them to remote work. In addition, they abandoned the pandemic liability exclusion (www4).

Clients are also gradually becoming convinced of telemedicine. The current situation, if properly used, may also allow for the revitalization of other types of insurance (e.g. BI). According to Anna Zalewska, director of the Property Insurance Department at Willis Towers Watson, the discussion was triggered by the fact that for years, according to the market standard, there must be a strictly property damage (fire or flooding) to launch a business interruption policy (BI) (www2). Customers, who have learned from the experience of the pandemic, declare their interest in the offer, where the trigger for the BI policy would not have to be property damage. A pandemic can be classified as a catastrophic situation. Unfortunately, most insurance policies have not been helpful in this aspect. Compensation to entrepreneurs for downtime caused by reasons other than a breakdown or an accident are particularly problematic. It may change. However, this will be a significant challenge for the insurance market in the context of calculating the tariff and the premium for providing protection against loss of profit.

The simplification of several procedures may also have a positive impact on the insurance market. Buyers expect clear product structures and unambiguous declarations as to the scope of the contract, GIC, applicable liability exclusions

(those due to the pandemic will put into question the purpose of buying policies that do not help in the event of disasters). Moving away from offering the cheapest solutions (often not tailored to the actual needs of customers) may bring tangible benefits to the insurance industry. An important change is the extension of the scope of assistance. Insurers began to organize to a greater extent: shopping, visits to a doctor, nurse, rehabilitation, medical transport, private lessons for children, caring for animals or even adapting the apartment to the needs of disabled people. Some of home assistance services that were only an addition, along with the onset of the pandemic, became a basic element of insurance conditions (Przybytniowski, Grzebieniak and Pacholarz, 2021: 33 and 48). Considering the issues indicated above, the results of the survey conducted by AXA after first two months of the pandemic deserve attention. Persons, who declared having insurance, were interested in expanding the coverage to such an extent that it would provide benefits in the event of sickness, hospital stay or unemployment due to COVID-19. At the same time, up to 76% of respondents stated that the current situation was not an impulse to consider purchasing life insurance. For years, financial issues have been the biggest barrier. The respondents believe that insurance is too expensive, that they do not have sufficient funds to purchase it. or do not want to make such a financial commitment (www2). This is an important aspect in the context of shaping the demand for insurance products and educational activities taken to raise the awareness of (even the youngest) consumers

The rapid technological leap, which is taking place, carries certain risks, but at the same time it is an opportunity for the development of the insurance sector. This segment is often perceived as very conservative in terms of readiness to implement innovative solutions. Lockdown did not initiate technological changes, but undoubtedly accelerated them rapidly. Remote forms of work, sale, inspection, and claims handling have become popular. The process of technological transformation may turn out to be a factor that will increase the courage of insurance companies to further change. The new solutions can improve the service process, shorten the duration of various procedures, simplify formalities, and popularize insurance (www7).

One of the key areas that may contribute to the improvement of the profitability of the conducted activity is the growth of the analytical capabilities of insurers on many levels. Companies use innovative tools to support the process of matching the offer and price to the characteristics and needs of a specific customer (using the entire spectrum of data available to the insurer). They also adopt predictive models to support portfolio management or to optimize the

claims handling process. Undoubtedly, insurers can benefit from anti-fraud solutions that allow for the identification of fraud cases with high accuracy⁹.

In the context of technological changes, the interest in cyber insurance has also increased. This segment experienced the first wave of popularity after the entry into force of the GDPR. Mass remote work has made many entrepreneurs aware of the importance of securing IT systems not only against direct hacker attacks, but also data leaks caused by human errors. It can be expected that the offer will be enriched with appropriate products for individual customers, providing them with protection against the negative effects of online presence (www2).

The changes on the insurance market taking place in the light of the pandemic were also noticed by the European Commission, which recommended a review of EU regulations under the Solvency II Directives (www6). On the other hand, the European Insurance and Occupational Pensions Authority has introduced numerous recommendations for insurance intermediaries and insurers in the field of reliable customer service, procedures, and product management methods to improve insurance protection (www3). Moreover, PCoI considered the difficult situation of customers resulting from the COVID-19 pandemic. After consultation with the PFSA, it recommended its members to take certain measures to support individual and corporate clients, but also enterprises and contractors cooperating with insurance companies. In this way, it wants to protect them from liquidation and insolvency, reduce the negative effects of the pandemic, and enable the continuity of business activities. PCol recommendations include owners of vehicles in a difficult financial situation, several million borrowers and holders of savings and investment policies, over 4,000 tour operators, several thousand business entities participating in claims settlement, doctors, and paramedics (Przybytniowski, Grzebieniak and Pacholarz, 2021: 55).

CONCLUSIONS

In March 2020, a real revolution on the insurance market took place. The companies faced a need to introduce a completely remote customer service. They also had to launch new tools, which in many cases were still in the testing phase, and which they did not have an opportunity to use en masse. The implementation of some projects was planned for many months. With the onset of the pandemic, they were quickly introduced. It involved additional financial outlays, as well as great commitment and discipline of all employees, liquidators, agents, sales

⁹ Undetected insurance fraud hits the insurer, but it also is a detriment to all its clients, as it increases the payment of benefits and then premiums. According to estimates by Insurance Europe (European Association of Insurers) - frauds account for about 10% of the claims paid by the industry.

departments, and administration. Clients gained full access to all services and insurance products, without leaving home.

The conducted analysis also revealed several changes in the demand for certain types of insurance and in terms of consumer expectations. The COVID-19 pandemic should motivate insurers to develop products that go beyond mere risk transfer and to prepare a personalized insurance offer. In this way, companies would ensure their relationships with customers. Buyers would be given a sense of taking care of their changing needs. During pandemic, consumers attach particular importance to the way in which insurers build their credibility. Thus, it is becoming more important for companies to provide basic customer self-service on their digital platforms.

The effects of the pandemic were reflected in the size of claims and compensations, which affects the level of net financial results and amount of insurance premiums. These, however, should not grow rapidly due to the current fluctuations in the economy and demand. Experts emphasize that the Polish insurance industry is well capitalized and should survive the pandemic unscathed. The following changes may occur on the market: its consolidation, mergers, forming universal companies that benefit from the support of Insurtech start-ups, i.e., organizations that can stimulate the creativity of mature insurance companies.

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