What Can the Covid-19 Pandemic Change in the Global Insurance Business? Identification of the Major Challenges

Alina Klonowska [0000-0003-4627-8668] and Grzegorz Strupczewski [0000-0002-7882-120X]

[1] The Cracow University of Economics, 27 Rakowicka str., Cracow, 31-223, Poland
klonowsa@uek.krakow.pl, Grzegorz.Strupczewski@uek.krakow.pl

Abstract. The significant role of the insurance industry in the economy motivated us to study potential consequences of the Covid-19 pandemic for this sector. The aim of the paper is to identify the challenges of the global insurance industry arising from the Covid-19 pandemic. The research period covers January to May 2020. We hypothesize that the negative impact of the Covid-19 is broad and rapid, but the long term consequences may appear to be positive for the entire insurance industry. Based on desk research of current insurance industry news and reports (until May 2020), we categorize the anticipated impact of the coronavirus for the insurance industry and derive some general conclusions. We found out that the insurance business was severely hit by the pandemic. But the Covid-19 has the long-term positive effect connected with an increase in social risk perception and greater awareness of the role of insurance in mitigating the negative effects of random accidents.

Keywords: Covid-19, Economy, Insurance Industry, Economic Growth.

1 Introduction

On January 30, 2020, the World Health Organization declared the COVID-19 a public health emergency. From that date, the pandemic spread across the world threatening almost every sector in the world economy. The scale of negative consequences is assessed as the most severe from the Second World War. The expected decline of global GDP may achieve 2%, but the decrease amongst developed countries could be even more than 4% [1].

Insurance industry plays an important role in most national economies. It means that any disruption in the insurance market is quickly transmitted to the entire economy. Preliminary data show that the insurance business was severely hit by the pandemic. As McKinsey reports, since the onset of the pandemic insurance industry has lost USD760 billion globally in market capitalization. This is the third highest score among all industries [2]. According to Accenture, it is assessed that the consequences of the current crisis for the insurance industry will be more extensive and sudden than in the case of pandemics and economic crises that have occurred in the past. The increase in operating costs combined with a decrease in the written premium is the most

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severe consequence [3]. The seriousness of the problem is emphasized by the fact that in March 2020 the Fitch rating agency lowered the rating perspective of all insurers to negative, recognizing the fundamental threats to the stability of this industry [1].

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Following this introduction, the paper consists of three sections. The first section outlines the role of insurance sector in national economy. Theory and empirical studies confirm the positive impact of insurance industry on GDP. In the second part, based on current insurance industry news and reports, we categorize the anticipated consequences of the coronavirus for the insurance industry. The last section concludes.

2 Literature review on the role and importance of the insurance sector in the economy

In narrow terms, insurance is a type of uncommon financial instrument that is fragile and prone to instability. This is due to the promise of certain benefits. Nevertheless, this confusingly delicate element of the socio-economic structure cannot be overestimated in relation to maintaining the financial and economic stability of the state. This significant aspect should be particularly highlighted when it is essential to take action to minimize the economic impact of the current pandemic. At this point, it should be recalled that the insurance institution has a fundamental social and economic role. The insurance protects and covers the financial effects of the materialization of personal and business risk, at the same time acting as an automatic economic stabilizer. In 2018 European insurers paid out claims and benefits in a total amount exceeding EUR 1 bn. In addition, in the same year, realized investments in this sector exceeded EUR 10 trillion [4]. This may indicate substantial size of capital flows and an extremely strong relationship between insurance and the financial market. Insurance protection is the subject of activity of entities constituting the insurance market. And this is an element of the market financial system, which, being a mechanism of co-creation and cash flow, determines the efficient functioning of the economy. Not to mention the connections of the insurance sector with the real sphere of the economy, it should be emphasized that depending on the size of the insurance sector and the policy pursued, the extent of its impact on the macroeconomic situation of the country may differ. As Skipper wrote, the more developed and efficient the insurance market in a given country is, the greater its contribution to economic well-being. This researcher adds that insurance provides at least several services that affect the economic situation. Mentioning, among others the fact that insurance helps to maintain the financial stability of individuals, entities or organizations; facilitate the efficient allocation of capital and increase the tendency to invest [5]. In the latter case, this may be due to a fact that is stressed by Ul Din, Abu-Bakar and Regupathi (2017) [6]. These researchers believe that human behaviour is characterized by risk aversion, which in principle leads to the avoidance of actions or excessive precautions. And this consequently results in social losses. Masum Billah (2014) [7] also shared this opinion. Therefore, in the absence of entities ready to take over the risk, the volume of economic activity is much lower and may lead to economic losses, as demonstrated by Ward and Zurbruegg (2000) [8]. In the opinion of Chau, Khin and Teng (2013) [9], insurance helps alleviate the unstable economic situation. Whereas Przybytniowski (2016) [10] notes that it is thanks to insurance that we can observe greater stability in economic development. And the emergence of a pro-quality management style only increased the role of the insurance sector in economic growth. In turn, Adams et al. (2009) [11] and Vucetich et al. (2014) [12] highlight that insurance conditions stimulate economic growth. These researchers say that there is a kind of feedback in this area. The unfavorable macroeconomic situation translates into reduced revenues from insurance premiums and lower rates of return on funds invested in assets ([13], [14]). The proof of this is the decrease in the penetration rate in 2007, but also the experts' predictions about the slowdown of the global economic environment in the years after 2019. It was then commented that in spite of the downturn, the impact of the weakening economy on insurance demand would remain positive [15]. Analysis of the literature on the subject allows to indicate other significant conclusions. Namely, the beneficial effect on economic growth has been proven in relation to life insurance only in developing countries, while non-life insurance influences growth in both developed and developing countries [16]. A little later, this theory was confirmed and supplemented by Ul Din et al. (2017). Researchers based on three indicators, i.e. net written premium, penetration and density, have proven that life insurance considerably affects economic growth in developed countries. And the role of non-life insurance is, in comparison with developed countries, greater in developing countries [6]. Many researchers agree with the thesis about the beneficial effects of insurance on the economy. Among them are also Madukwe and Anyanwaokoro (2014) [17], Cristea et al. (2014) [18], as well as Alhassan (2016) [19]. Nevertheless, Sliwinski (2019) [20] highlights that the current assessment of the impact of insurance on the economy does not allow to clearly determine what this impact is. The researcher bases his view on the claim that this type of research should be based on increasingly advanced methods and data sets. In turn, Przybytniowski (2016) [10] recalls that the discussion about the impact of the insurance sector on economic growth has been going on for several years, and the attempt to establish a cause and effect relationship between these two sectors is still being debated. Therefore, the insurance sector is a key element of the socio-economic system beyond any doubt. Its significance cannot be overestimated also on a global scale. This results not only from the conclusions drawn from the conducted research, but also from the analysis of statistical data of serious institutions. In response to an unprecedented increase in the insurance premium in 2018, Jérôme Jean Haegeli, the Group Chief Economist at Swiss Re, says that "the role of the insurance industry as a long-term investor is becoming ever more important" [21].

In practice, at least three indicators are used to assess the role and socio-economic importance of insurance activities [22]:

- gross insurance premium, which is defined as a major indicator of the importance of the insurance industry in the economy,
- the insurance penetration indicator, which shows the insurance industry role in the economy,
- density indicator, which means the average premium per person.

Table 1 shows the level of indicators with the highest value for selected countries of the world. The indicators are presented in total terms (life and non-life).

Table 1. Selected indicators of the global insurance market in 2018.

Insurance market	World insurance premium (%)	Total gross premium (USD, millions)	Insurance penetration (%)^1	Insurance density (USD)^2
Europe	32	469 120 (UK) 338 708 (France) 335 669 (Germany)	35,0 (Luxembourg) 13,0 (UK) 12,0 (Ireland)	40 668 (Luxembourg) 9 531 (Ireland) 5 643 (UK)
USA	34	2 632 284	11,0	7 082
Asia	32	402 773 (Japan) 192 810 (S. Korea) 69 089 (Hong Kong)	18,0 (Hong Kong) 11,0 (S. Korea) 8,0 (Japan)	8 807 (Hong Kong) 3 501 (S. Korea) 3 010 (Japan)

Legend: (^{1}) direct gross premiums / GDP; (^{2}) direct gross premiums / population.

Source: authors' own work based on [22, 23, 24, 25].

Swiss Re reports show that in 2018, for the first time in history, a very high increase in the insurance premium was recorded, which globally exceeded USD 5 trillion. Thus, it represented over 6% of global GDP [21]. Currently, the global insurance market consists of, in particular, the three most essential markets, i.e. American, Asian and European. From the point of view of the amount of the insurance premium, the United States of America is today the largest insurance market in the world. Nevertheless, the penetration and density indicators suggest that the Chinese insurance market plays a greater role in this economy than the US insurance market. It also means the growing importance of the Asian market on the international stage. It is estimated that by 2029 the Asian insurance market will accumulate as much as 42% of the global premium, of which 20% will fall to China, which may become the largest insurance market on a global scale [21]. In this context, the European insurance market is not losing importance. For many decades it is still one of the most significant insurance markets in the world. European insurance companies accumulate about 1/3 of the global insurance premium. And despite the fact that since the 1990s their number has been gradually decreasing, the insurance premium collected is still showing an upward trend. In the years 2009-2018, this premium was on average over EUR 1 billion annually. This may mean strengthening the position of the largest insurers on the European market. It should be emphasized, however, that the largest of the European insurance markets, i.e. the British, as well as French and German, invariably and for years have been making the greatest contribution to strengthening the position of the European insurance market on the international stage. However, the role of insurance in individual economies differs considerably. Undoubtedly, from the point of view of the level of penetration rate and density, Luxembourg significantly overstates the scale of assessment both among European countries, but also in comparison with some Asian countries and the American market. At this point, it should be highlighted that the European authorities in 2019 among the priorities to be implemented until 2024 indicated the maintenance of a globally competitive insurance and reinsurance industry while stressing that in terms of reinsurance, Europe is already a global leader. The implementation of this priority took into account the challenges of the need to create a suitable regulatory environment and global exchange conditions to allow European insurance companies greater access to international markets [26].

The objectives and challenges formulated in the past in relation to the insurance market in countries around the world are now subject to the necessary revision. Due to the unfavourable economic situation caused by the COVID-19 pandemic, as well as due to severe forecasts regarding future global economic growth, it is essential to define new priorities and adapt insurance companies' strategies to unusual economic conditions. The more so that, as Swiss Re highlights, the importance and role of insurance in supporting sustainable development and global resilience are becoming increasingly important [21].

3 Discussion of the results: Impact of the Covid-19 pandemic on the global insurance market

Based on desk research of current insurance industry reports and business news, potential negative consequences of the Covid-19 pandemic for the insurance industry were identified. Then they were categorized to one of the five areas: Insurance demand, Insurance claims, Operation of insurance carriers, Social and customer relations, Insurance supervision and regulation (Fig. 1).

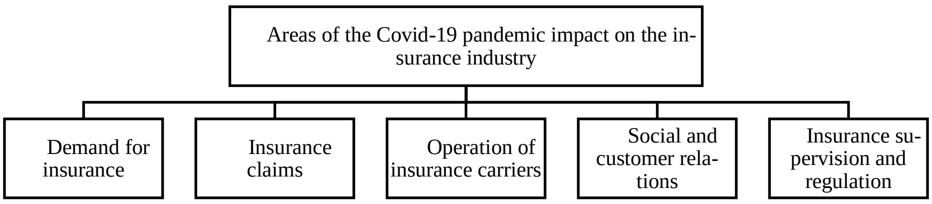

Fig. 1. Areas of the Covid-19 pandemic impact on the insurance industry

3.1 Area of the insurance demand

The immediate consequence of the pandemic is a decline in sales of some insurance lines: property, motor, cargo insurance. It results from limiting or suspending the activity of enterprises and households, a decrease in revenues, a decrease in the GDP growth rate and an increase in unemployment [27]. It is expected that the downward trend in insurance demand will continue in the coming months. We identify the following major issues in this area.

Property insurance. The decrease in demand for consumer goods, caused by the deterioration of the economic situation, will indirectly hit the property insurance lines due to the fact that the purchase of these goods was often accompanied by buying insurance coverage. The best example of such a relationship is the automotive market, which saw a clear drop in sales of new cars, followed by a decrease in the number of new motor insurance policies [28]. The decline in demand for motor insurance will also be the result of a reduction in vehicle fleets in enterprises and the disposal of cars in those households that owned two or more cars.

Motor insurance. Deep changes in consumer attitudes to motor insurance are expected. The pandemic caused a decrease in the number of cars on the road due to ‘stay at home’ orders. For this reason, some US insurers have returned some insurance premiums to the insured as a response to the alleged reduction of the road accident risk. However, it turned out that this risk was not actually reduced. During Covid-19, the number of serious and fatal accidents in the US cities increased, as did the number of overspeeding [29]. These surprising data call into question the adequacy of risk assessment in the usage-based insurance (UBI). Meanwhile, the increase in the role of remote work and less use of cars for daily commuting can change consumer attitudes towards motor insurance and increase interest in the insurance based on the UBI model [30]. Financial problems of individuals and companies, the need to rationalize expenses, consolidation of the habit of leaving home only when necessary, demand for more flexible, on-demand coverage - will inevitably stimulate these changes.

Cargo insurance. Another change on the market may be a drop in demand for cargo insurance. In connection with the quarantine obligation in international traffic, restrictions on movement, as well as a decrease in trade turnover, one should take into account the decrease in the number of transports, change of their routes, suspension of some commercial connections or delays in carrying out transport orders [31].

Life insurance. The Covid-19 pandemic almost immediately increased the demand for life insurance, especially among young people at the age 18-39. It is characteristic that 95% of people declaring their willingness to buy such a policy want to sign an insurance contract only remotely, without direct contact with an insurance agent [32]. McKinsey presents different predictions about the sale of life insurance. In its opinion, the demand will fall for three reasons: lowering the living standards of a part of the society, increasing premiums due to lower interest rates with a more cautious approach to underwriting, problematic access to medical tests [33]. Medical tests are usually required for life insurance policies with high insurance sums. It is anticipated that greater emphasis in personal risk underwriting might be placed on issues such as transnational movement, especially trips to countries with high number of Covid-19 cases. Perhaps more often than before insurers will use grace periods when entering into an insurance contract [34].

Health insurance. As a result of negative social experience the Covid-19 pandemic, in the medium term, more interest in insurance lines such as health insurance, daily hospital benefits and medical assistance can be expected [35]. In China after the SARS epidemic in 2003 spending on health insurance doubled [27]. On the other hand, the temporary loss of income that was experienced by many people during the economy lockout, may make them more aware of the need to accumulate savings, and this may result in increased interest in life insurance with long-term investment plans.

3.2 Insurance claims

The sharp growth in insurance claims related to Covid-19 will include a broad spectrum of insurance lines both for private individuals and enterprises.

Commercial lines. A surge in claims in trade credit insurance should be expected. Many companies will suffer from closing, declining revenues, reducing orders, and problematic international trade. This can trigger the insolvency chain throughout the entire supply chain, and it will directly hit insurers. A certain increase in claims will probably occur in surety, as well as in insurance lines covering the cancellation of commercial, cultural or sport events. For example, it is estimated that the canceled Olympic Games in Tokyo will cost insurers the amount of USD 2 billion [27].

KPMG assesses this situation differently. The company predicts that the impact of Covid-19 on property insurance claims will be limited [36]. Insurers after the SARS epidemic in 2003 modified insurance conditions to exclude damage caused by a pandemic. Take, for example, business interruption insurance. BI insurance generally does not cover damage caused by business interruption due to a pandemic, because there is no physical damage to the insured's assets as a cause of downtime. Exemptions related to the effects of viruses and bacteria were introduced into the terms of insurance after the SARS epidemic in 2003. However, insurers are afraid to enact laws by national authorities, which, motivated by limiting the negative effects of freezing the economy, could arbitrarily decide on the obligation to extend insurance coverage on the loss of profit caused by the Covid-19 pandemic. It is estimated that such a regulation could cost the US insurance industry alone from USD150 to USD380 billion a month. This scenario is very likely - at least in the US - for two reasons. First, in the public opinion, the insurance sector is rich and should participate in the economic costs of rescuing the economy after a pandemic. Secondly, after the 9/11 terrorist attack, the US authorities also ordered, contrary to the provisions of signed insurance contracts, that insurers had to pay compensation to those injured in this attack [37]. So the precedent is already there.

Workers compensation. The second area with potentially high insurance claims is workers' compensation insurance (work accident, health and employer's liability coverage). A wave of workers' claims against employers for not providing proper working conditions and excessive exposure to health damage during the pandemic can be expected. This may be the case in healthcare industry, municipal services and airport operators [27].

Health insurance. The scale of impact of Covid-19 on health insurance is difficult to estimate globally. It results from the diversity of national health care systems in particular countries. Generally speaking, public health care dominates in Europe, the private healthcare services play a key role in the US, while in Asia the public healthcare system is often inefficient and needs to be supplemented by private healthcare providers. Currently, rapid change in the model of providing private healthcare services can be observed. Stationary visits for a doctor are being switched to on-line consultations (so-called telemedicine) [36]. In many countries, testing for Covid-19 and treating cases is the domain of public healthcare providers. In such cases, the direct impact of the pandemic on private health insurance will be limited. The open issue is how people recovering from Covid-19 infection will use the benefits of private health insurance. A possible scenario is that after the patient is discharged from the intensive care infectious ward, he or she will continue treatment in a private institution financed by a medical policy. Other health policy benefits likely to be engaged are daily hospital benefits, drug reimbursement, or nursing care. However, the Covid-19 problem is not only the direct treatment of the virus infection. The increased interest in medical assistance whereas the healthcare system capacity is limited, pose a serious challenge to the government. It's worth to mention that health insurance buyers assess the value of their policies through quick access to consultations with a doctor. Failure to provide efficient and quick medical assistance may negatively impact the sale of this insurance line in the future.

Life insurance. The management of long-term life insurance reserves will have to be revised. Assumptions regarding interest rates, population mortality and morbidity rates, the likelihood of various insurance accidents may need recalculation. It may also be necessary to create additional technical provisions to cover the increased liabilities and insurance costs caused by the Covid-19.

Legal risk. The loss ratio of some insurance lines may be affected by legal risk. Governments and regulatory authorities may exert pressure to increase the liability of insurers under existing insurance contracts through changes in law or soft law to obtain greater compensation for pandemic damage. A similar effect on the loss ratio could have a shift in the line of judicial decisions aiming at support to victims.

Preliminary estimates of income losses suffered by the insurance industry as a result of Covid-19 show tens of billions of dollars in loss. Lloyd's of London predicts that insurance and reinsurance industry can expect greater loss than damage caused by Hurricane Katrina (USD 50 billion) [38]. According to Dowling & Partners analysts, property insurance claims alone might range from USD 40 billion to USD 80 billion [39]. They will be evenly distributed between the US, the U.K., Europe and other regions. The investment bank UBS, in turn, predicts USD 60 billion loss [40]. If the forecasts of abrupt increases in insurance claims were to come true, there might be a need for state intervention to save the solvency of the insurance sector in some countries. It is worth emphasizing that thanks to the Solvency II system, which is based on risk assessment and stress tests, the financial balance of European insurers should be maintained, even if hit by the Covid-19 market shock.

3.3 Operation of insurance carriers

Insurance carriers, like other companies, had their formal business continuity plans for the event of a crisis. However, such contingency plans are usually built as a response to natural disasters, cyber incidents, terrorist attacks or media outages. In the case of the Covid-19 pandemic, completely different types of disturbances appeared, such as quarantine, 'stay-at-home' orders, long-term school closures and travel restrictions. These circumstances were not taken into consideration, no remedies were developed in-advance that would ensure the maintenance of the company's operational capabilities and maintain the desired work efficiency. This can mean a significant reduction in the productivity of insurance companies during a pandemic [41]. The new challenges for insurance companies, created by the Covid-19 pandemic, are discussed in this section.

Cyber risk. The increase in exposure to cyber risk is the result of switching to the remote work model. Remote access from the employee's place of residence to the company's confidential processes and information assets requires a special model of cooperation with the highest cybersecurity standards. Using public and unsecured hotspots, lack of virtual private network (VPN) or using VPN with insufficient number of servers that are unable to handle the load created by employees, poor password quality - should not be accepted. It is worth mentioning that the use of digital technologies by insurance companies is nothing new, but during a pandemic and mass transition to remote work, the scalability of IT infrastructure may be a problem [42]. The sudden increase in demand for data transfer, access to the internal computer network, building a secure authentication system for employees working remotely, and even equipping them with laptops - these are undoubtedly high requirements for IT departments in insurance companies. And this is just the tip of the iceberg. Another challenge is the secure processing sensitive and confidential data in places that are not always sterile enough [42]. In these new working conditions, it is necessary to review crisis management plans because it turns out that the IT and help-desk departments have become the most critical points of an insurance company.

Overview of internal processes. It includes the need to adapt internal procedures to remote work, limited number of employees in the workplace, increased staff absence due to the need for personal childcare during school closures.

Reduction of work efficiency. It is expected that the staff work efficiency may be reduced due to remote work from home, less communication with other coworkers, lower concentration on a job due to negative stimuli from the environment (health risk, care for family, risk of income reduction and loss of job, troublesome access to health care) [41]. HR departments need to answer the questions how to monitor the intensity of remote work and to maintain it at a high level.

Issues with contractors. Insurance companies have to face possible perturbations in the availability and timeliness of external services provided by third party entities. Insurers' subcontractors, who have so far taken some responsibility for efficient, trouble-free and professional support of the insurance business and associated activities, may themselves experience difficulties arising from Covid-19, which will negatively affect the quality and continuity of their services. Particularly great difficulties can be expected in cross-border cooperation.

Acceleration of digital transformation. Insurance market experts agree that the long-term effect of a pandemic will be the acceleration of digitalization process in the insurance industry [28]. Technologies such as artificial intelligence (AI), machine learning (ML), Internet of Things (IoT), natural language processing (NLP) and computer vision will undoubtedly lead to automation, acceleration and increase of efficiency of many business processes in insurance companies. The distribution of insurance, underwriting and claims adjusting are key areas in which digital transformation is already taking place [43].

Adverse macroeconomic conditions. The unstable situation on financial markets will negatively affect the value of assets and profits of insurance companies [1]. Increased investment risk and limited confidence in capital markets translate into higher spreads, which in turn generates higher transaction costs for insurers. Low interest rates will reduce the investment income of insurance companies, which is particularly important in long-term life insurance. In connection with the deterioration of the economic situation, one should expect an increase in credit risk, insolvency or temporary liquidity disturbances among insurance debtors. Greater liquidity risk in some segments of the financial market will be manifested in the need to sell assets below their value.

3.4 Social and customer relations

Due to the epidemic situation, the quality of customer service and the approach based on CSR principles have become even more important. The manifestations of this trend are the increase in the importance of market communication, the company's assessment based on its response to a pandemic, sensitivity to security issues, increased risk of damage to reputation [41]. We identify the following major issues in this area.

Thoughtful approach to clients. Insurers' 'thoughtful' approach to their clients during a pandemic may become a new factor of competitive advantage in the post-Covid-19 era. What would it consist of? Extension of insurance premium payment deadlines, gentle approach to the interpretation of insurance conditions regarding epidemic exemptions, and striving for amicable settlement of disputes with stakeholders [44].

Corporate social responsibility. In face of the difficulties of national healthcare systems in providing all patients with due care, the insurance industry has actively engaged in material and financial assistance to hospitals. Activities such as providing latex gloves, masks and other items of medical clothing, founding Covid-19 tests, purchase of respirators, educational and information campaigns, consultations with psychologists - they all show the engagement of insurance industry in corporate social responsibility (CSR) [45]. Sometimes the help offered by insurers has a wider range than medical. Free legal and tax advisory for companies closed during the pandemic, running a help-desk on restrictions related to the Covid-19, popularization of healthy lifestyle while staying at home, supporting orphanages - these are just some examples of charity actions. They are funded not only by insurance companies, but also by public collections organized by insurers [46].

It is noteworthy that a global threat, such as the Covid-19 pandemic, can benefit the entire insurance industry. It strengthens public awareness on the role insurance coverage can play in minimizing the negative effects of random events. It seems that this fundamental truth has not always been noticed. There is therefore a real chance that the post-crisis increase in risk aversion will become a stimulus for insurance demand.

3.5 Insurance supervision and regulation

Supervisory authorities are calmly observing the insurance market during the pandemic. They try to monitor the situation on an ongoing basis, relying mainly on regularly collected data from insurance companies [47]. The EIOPA in the statement of 17 March 2020 expressed the belief that the European insurance sector is able to withstand a serious market shock thanks to adequate capital resources [48].

Additional reporting. According to the PwC, additional or more detailed reporting obligations in the insurance industry should be taken into account. In particular, they would cover such issues as: asset adequacy, stress-testing based on the pandemic, analysis of the impact of a pandemic on solvency, monitoring and regular reporting of financial risk, disclosure of information about the impact of the virus on operating activities [41].

Delay of legislation. Delays in legislation might be expected, including as crucial task as the Solvency II revision. Calibration of capital requirements at a later date can take into account the impact of Covid-19 on the insurance industry, which should be assessed positively. The scale of financial burdens of insurance companies against guarantee funds and the resolution mechanism will also have to be reconsidered. Delays will also affect the arrangements, opinions and public consultations of regulations such as disclosure of sustainable financing, the EU Sustainable Financing Strategy, revision of the NFRD directive on non-financial reporting, revision of the IDD Directive, climate risk sensitivity analysis, pan-European individual pension product (PEPP). The experience gathered during the pandemic will affect the shape of new regulations or changes to existing laws. This will undoubtedly be the case in the cybersecurity regulations (revision of the NIS Directive, European Cybersecurity Strategy, e-Privacy Regulation), where cyber risk rose during a pandemic.

Call for delay to compliance dates. European insurers signal that as a result of perturbation in their day-to-day operation and uncertainty in the entire economy, they have not been able to prepare to achieve full compliance with the initial margin requirements for non-centrally cleared derivatives. Therefore, it is suggested to postpone the date of application of these regulations [49].

Public-private partnership for pandemic risk. In the long term, OECD suggests considering a public-private partnership between the insurance industry and public authorities to support insurability of pandemic risk, especially if this risk is likely to grow. Similar solutions have been operating for years in covering natural disaster risk, terrorism or nuclear risk [50].

4 Conclusions

The Covid-19 pandemic is an unprecedented event for the insurance industry with unlimited possibilities to spread in time and space, which makes it a disaster. Its negative effects will undoubtedly be visible both in assets and liabilities of insurers. However, the measurable impact of the pandemic on the insurance industry is difficult to define clearly. It is visible in various aspects, both in the insurance carriers themselves and in their environment. Negative signs are already present on the insurance market, the others will be gradually appearing in the next months. Many endogenous factors (internal decisions of insurance companies) and exogenous ones (decisions of consumers, market regulators and other stakeholders) will influence the further development of the situation. The long-term positive effect of the pandemic will be an increase in social risk perception and greater awareness of the role of insurance in mitigating the negative effects of random accidents. The issues presented in this paper should become the subject of further, in-depth research based on new data that allow to capture the scale of the Covid-19's impact on the insurance industry.

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