Anna Niziołek

ORCID: 0000-0002-5803-2756

Jagiellonian University

DOI: 10.19195/1733-5779.29.9

Opportunities and threats connected with the practical application of business interruption insurance

JEL Classification: K00

Keywords: business interruption, financial insurance, companies, entrepreneurs, lost profits, Insurance Business and Reinsurance Activity Act, Accounting Act, law, economy, finances

Slowa kluczowe: *business interruption*, ubezpieczenie finansowe, firmy, przedsiębiorcy, utracony zysk, ustawa o działalności ubezpieczeniowej i reasekuracyjnej, ustawa o rachunkowości, prawo, ekonomia, finanse

Abstract: This paper will attempt to indagate the subject of business interruption insurance — an insurance covering the lost income of a company after the occurrance of an accident or a disaster. At first, a brief history of property insurance and the institution being examined is presented. The line of examination is pursued further focusing on characterizing Polish business interruption insurance. The dissertation refers especially to the following: the legal acts connected with the aforementioned insurance, the objects and the subjects of it and the conditions recommended whilst signing a business interruption contract. Further reflection shows the statistical data considering the popularity of this insurance. Then the positive and negative aspects of the described institution are analyzed, partly illustrated by the figures revealing the collapse of ventures after suffering damage. This study also concerns the future of business interruption insurance, especially as long as the postulates referring to insuring cyberspace appear. The conclusions present the *de lege lata* and the *de lege ferenda* demands of the opponents of the recent functioning of business interruption insurance. Finally, the present work attempts to offer solutions which would increase the popularity of the insurance described.

Szanse i zagrożenia związane z praktycznym stosowaniem ubezpieczenia od utraty zysku

Abstrakt: Przedmiotem artykułu jest analiza *business interruption insurance* — ubezpieczenia umożliwiającego pokrycie utraconych zysków przedsiębiorstwa związanych z uprzednim wystąpie-

Studenckie Prace Prawnicze, Administratywistyczne i Ekonomiczne 29

niem awarii bądź katastrofy naturalnej. Na wstępie przedstawiono historię ubezpieczeń majątkowych oraz business interruption insurance. Dalsza część rozważań ma na celu scharakteryzowanie polskich regulacji dotyczących ubezpieczenia będącego przedmiotem artykułu. Omówiono w szczególności: akty prawne związane z business interruption insurance, jego zakres podmiotowy i przedmiotowy oraz zalecane warunki zawarcia umowy tego ubezpieczenia. Ponadto analizie poddano dane statystyczne związane z popularnością business interruption insurance wśród przedsiębiorców. Meritum artykułu stanowi omówienie pozytywnych i negatywnych aspektów ubezpieczenia od utraty zysku, między innymi poprzez odwołanie się do badań obrazujących, ile przedsiębiorstw upadło po awarii bądź katastrofie naturalnej. W artykule podjęta została również problematyka przyszłości business interruption insurance, w szczególności w kontekście ubezpieczania przestrzeni wirtualnej. Konkluzja odnosi się do postulatów de lege lata i de lege ferenda formułowanych przez przeciwników funkcjonowania omawianego ubezpieczenia w obecnej formie. Końcowym przedmiotem tekstu jest zaproponowanie rozwiązań mających na celu zwiększenie popularności business interruption insurance wśród przedsiębiorców.

1. Introduction

There is a marked tendency for many entrepreneurs to be aware of the likelihood of unexpected events and disasters as long as pursuing their economic activities is concerned. It seems reasonable to assume that each accident may inflict severe damage. Further reflection shows that its results can be seen not only in the assets of each venture, but also in its future income. In view of this fact, it is not unanticipated that every reasonable company owner ought to insure their business. Yet closer observation suggests that the kind of chosen insurance is strongly associated with the individual features of each venture and the possible dangers involved. For instance, when the business of the entrepreneur requires constant access to explosive materials, they had better provide their venture with fire insurance. Consequently, it is widely acknowledged that flood insurance is continually needed whilst doing business in flood risk zones. From these research results the conclusion may be drawn that every rational entrepreneur insures their company due to the probability of unexpected events. However, it frequently emerges that property insurance is not sufficient.

One cannot but wonder whether most of the insurance types, undoubtedly vital when a fire, flood or failure of the company system arises, do not cover the costs connected with "lost income." Experience speaks against the assumption that property insurance can cover all of the expenses after an accident or disaster. On the basis of the circumstances mentioned above it is possible to conclude that the unwillingness to cover "lost income" by fire insurance, flood insurance or similar kinds of insurance tends to be a recurrent issue to entrepreneurs.

The appearance of the problem mentioned above resulted in several attempts at solving it. For many years scholars aimed at improving the damage resulting

¹ This phrase refers to the profits which the company would make now if the unexpected event had not happened.

from the loss of income. Their work was intensive, especially in the late 19th century — as soon as the number of companies and workers considerably increased. After in-depth studies they finally proposed a seminal idea — creating a special kind of insurance called business interruption. From that moment not only have fixed expenses been covered, but also lost profit. Nowadays, business interruption insurance is one of the most popular and recently frequently-used solutions to cover the costs of "lost income" when company damage is concerned.

2. The history of business interruption insurance

One may reasonably suppose that the history of insurance does have its roots in the development of capitalism, due to the fact that the number of companies was constantly increasing in the last two decades of the 19th century. A more balanced assessment might, however, suggest that although it may be implausible, some transactions similar to an insurance contract were known even in antiquity.³ An interesting instance of proving that insurance has existed for more than about 150 years so far are many publications referring to that subject, for example the *Traité des Assurances* from 1783, written by Balthazard Marie Emérigon.⁴

According to the previously-mentioned statement, there is remarkable evidence that insurance had existed for a long time before. However, it was not until the late 19th century when passing insurance regulations caused a heated debate. The main reason for the "insurance movement" was the British and the American dispute considering the leading principles of tort law. Yet some of the opponents of that legislation argued that insurance was needed in every society, perceiving it as an alternative to tort law regulations. One of the first of the people to claim this was John Jordan Upchurch, who was also the founder of the first insurance association. His movement indicated the role of tort law opponents who fought for insurance for workers in the 1880s and 1890s.

It is widely acknowledged that the "insurance movement" had a strong impact on insurance law itself. However, historical facts speak against the assumption that it resulted automatically in creating business interruption insurance. Firstly, one needed to examine the practical appliance of property insurance and then discover if some legal loopholes are concerned. It was a tough task due to the fact that

² H. Kreibich et al., "Flood precaution of companies and their ability to cope with the flood in August 2002 in Saxony, Germany," *Water Resources Research* 2007, no. 43, p. 2.

³ W.R. Vance, "The early history of insurance law," Columbia Law Review 1908, no. 1, p. 1.

⁴ Ibidem, pp. 1–2.

⁵ "Insurance movement" may be defined as the demands of a group of people who claimed that the workers should be widely protected by the insurance law in case some accidents or disasters appear.

⁶ J.F. Witt, "Toward a new history of American accident law: Classical tort law and the cooperative first-party insurance movement," *Faculty Scholarship Series* 2001, no. 396, p. 777.

in itself, there existed a tendency to provide provisions from private insurance.⁷ However, most of the types of insurance did not include covering the cost of "lost income." Surprisingly enough, the issue of the loss of money an entrepreneur would earn if the accident had not happened, was quickly ascertained by financial scholars and company owners. By the same token, the history of business interruption insurance began in the late 19th century in Great Britain. 8 However, some scholars claim that the beginnings of business interruption insurance can be dated even earlier — in the late 18th century and in the beginning of the 19th century — in Great Britain and in Germany. The idea was instantaneously widespread among the United States of America and many European countries.

3. Business interruption insurance in Poland

The history of business interruption insurance in Poland is not as long as in Western European countries or in the United States of America due to two main historical reasons, one of them being the fact that the Polish people did not have their own country when the "insurance movement" fought for their rights. It would also appear that after regaining independence, during the interwar period, there was not sufficient time for a vivid discussion about business interruption insurance.¹⁰ This time has come in the last decade of the 20th century due to the fact that earlier, the corporate governance could not improve in the centrally planned economy system¹¹ which was developed in the Polish People's Republic until the political changes which started in the 1990s.

The circumstances mentioned above lead to the method of examination being made in this dissertation, which is investigating business interruption insurance on the basis of approximately 30 years ago, when the history of this special kind of insurance in Poland really began.

According to the previously mentioned facts, passing regulations referring to business interruption insurance was not the main aim for Polish legislators during the interwar period. Yet one might with equal justice agree that even if it had been the subject of a vivid dispute after regaining Polish independence, the

⁷ M. Mann, "Ruling class strategies and citizenship," *Sociology* 1987, no. 3, p. 342.

⁸ M. Cycoń, T. Jedynak, "Ubezpieczenie utraty zysku jako metoda zarządzania ryzykiem w działalności gospodarczej," Ekonomiczne Problemy Usług 2011, no. 63, p. 305.

⁹ M. Kita, "Ubezpieczenia utraty zysku jako element programu ubezpieczenia przedsiębiorstwa produkcyjnego," Copernical Journal of Finance & Accounting 2012, no. 1, p. 82.

¹⁰ Poland regained independence in 1918 (after not existing as a country for 123 years) and could develop new economy system for only 21 years due to the fact that Second World War started in

¹¹ C. Mesjasz, "Determinants of designing corporate governance systems in Central Eastern Europe," [in:] T. Baaken, J. Teczke, Managing Disruption and Destabilisation, Kraków-Münster 2014, p. 164.

political and economic changes would have indicated new insurance law. A brief reflection submits a painless answer — the market in the 1930s and the market in the 1990s were not similar. ¹²

The regulations considering business interruption insurance can be found in many legal acts, for example: the Insurance Business and the Reinsurance Activity Act¹³ and the Accounting Act.¹⁴ The 2nd Attachment to the Insurance Business and the Reinsurance Activity Act mentions business interruption among the categories of insurance connected with financial risk, which seems appropriate. In accordance with the legislation one might provide his company with business interruption insurance not only if they are a legal person, but also an organizational entity without legal personality or a natural person running a venture. However, the last group of company owners is able to insure their business only when they keep accounting ledgers, which is their duty according to the Accounting Act.

As mentioned before, the subject of the business interruption contract — and also the definition of "lost income," is the profits which the company would make now if the unexpected event had not happened. More specifically, it refers to the gross, not net gain. ¹⁵

While analyzing Polish business interruption insurance it is worth mentioning that this kind of insurance is not "independent." As a matter of fact, it can only be valid and binding when another property insurance contract already exists. The kinds of insurance that enable choosing business interruption insurance are as follows: fire and other unfortunate events insurance, machine disaster insurance and finally, agreement and assembly insurance. ¹⁶ It may be thus safely concluded that it is recommended to sign a property insurance contract and business interruption insurance contract for the same period of time. It is tempting to suggest that this solution may — at least in some cases, restrict contractual freedom.

Although the statistical data prove that more than 50% of financial losses are those connected with "lost income," business interruption insurance is rarely chosen by Polish entrepreneurs. Although being one of the varieties of the most popular insurance covering lost profits, it is not commonly used in comparison with other kinds of insurance, especially that of property. The research results

¹² Ibidem, p. 164.

¹³ The Polish original title: Ustawa o działalności ubezpieczeniowej i reasekuracyjnej z dnia 11 września 2015 roku, tekst jedn. Dz.U. z 2018 r. poz. 8 z późn. zm.

¹⁴ The Polish original title: Ustawa o rachunkowości z dnia 29 września 1994 roku, tekst jedn. Dz.U. z 2018 r. poz. 62 z późn. zm.

¹⁵ A. Szewczuk, "Business interruption: ewolucja kompleksowego programu ubezpieczeniowego dla sektora małych i średnich przedsiębiorstw," Ekonomiczne Problemy Usług 2010, no. 50, p. 526.

¹⁶ M. Kita, op. cit., p. 83.

¹⁷ R. Stempel, *Ubezpieczenia inżynieryjno-techniczne*, Olsztyn 2013, p. 91.

presented by D. Gajda and T. Jurkiewicz¹⁸ show that an insignificant number of micro, small and medium-sized companies 19 signed a business interruption insurance contract. The data would seem to suggest that Poland has not developed insurance for "lost income" that is adequately satisfying. However, while examining the situation in other countries one may ascertain that there is a marked tendency for a small percentage use of business interruption insurance among other types of insurance in many enterprises worldwide.

4. The positive and negative aspects of business interruption insurance

The line of examination needs to be pursued further, focusing especially on the positive aspects of the aforementioned insurance which would enable answering the question if some de lege lata and de lege ferenda demands referring to business interruption insurance are required. It is also worth mentioning the reasons why business interruption insurance is not a common insurance not only in Poland, but also in other countries.

One of the main reasons, undoubtedly prompting the popularity of business interruption insurance is the profit compensating damage as soon as a disaster or another unexpected event in a company occurs. Research results speak against the assumption that signing a business interruption insurance contract is unnecessary, especially while considering the accidents happening in middle-sized and large 20 enterprises. This can be illustrated by the data according to which when an unexpected event arises, only from 30% to 40% of financial losses of the venture are connected with the damage itself, due to the fact that the remaining 70% or 60% are losses connected with "lost income."²¹

Let this examination above suffice to show that the perception of many entrepreneurs is not appropriate while considering the consequences of the possible accidents or disasters. An illustration that suggests itself is that a major number of company owners tend to consider financial losses only connected with broken machines or destroyed warehouses. They usually have a habit of forgetting about the crucial issue being "lost income." Owing to the previously mentioned lack of knowledge, it is not surprising that only 25% of companies which managed

¹⁸ D. Gajda, T. Jurkiewicz, "Ubezpieczenia w sektorze MSP w latach 2007–2010 (wyniki badań ankietowych)," Wiadomości Ubezpieczeniowe 2010, no. 2, p. 25.

¹⁹ This classification is based on the number of people working in each company. As for the researchers, in a venture they are maximum 9 people employed, in a small venture — between 10 and 49 and in a medium-sized venture — from 50 to 249 people.

²⁰ A big entrepreneurship is the one that employs more than 249 workers.

²¹ http://www.janowski-wspolnicy.pl/ubezpieczenia-dla-biznesu/ubezpieczenia-majatkowe/#bi (accessed: 14.02.2018).

to repair the damage after an unexpected event were not looted.²² From other ventures 45% of them failed within one year and the remaining 30% within three years after the accident or disaster linked to their business had appeared.²³

Surprisingly enough, the statistical data appears to be similar to the Polish data, and also in companies from the United States of America. The figures reveal that 43% of the ventures suffering damage were incapable of continuing their business and another 29% of the re-opened ones collapsed within a period of two years.²⁴

However, it is common both in Polish and other societies for the wide divergences obtained in terms of considering the necessity of signing business interruption insurance terms and conditions. The supporters point of view refers to the more specific aspects of profit offered by this special kind of insurance. Take for instance: lowering the costs of bankruptcy, bonding investment decisions or monitoring the compliance of contractual provisions.²⁵ The currently described insurance can be frequently the best solution to an enterprise after suffering damage. Consequently, business interruption insurance might also be the only remedy almost guaranteeing that the business will not fail as a result of an unexpected event.

Yet one may with equal justice argue that the probability of some accidents or disasters is frequently not substantial enough to consider signing a business interruption insurance contract. As a matter of fact, opponents tend to claim that insurance covering "lost income" is very expensive. Furthermore, they demand lowering the costs of business interruption insurance which would not deteriorate the finances of the company not damaged by accidents or disasters. The question is whether all options that are offered by insurers covering lost profits are overpriced. There are several options of business interruption insurance recently available and each of the insurers usually has a rate structure different from each other.²⁶ However, one has to be aware that there are some other insurance benefits offered, apart from business interruption. Take for instance "Extra Expenses Coverage" which is not only connected with the future financial situation of each company, but also with covering physical loss.²⁷ On the basis of the above statement it might be predicted that business interruption insurance is not as expensive as Extra Expenses Coverage, albeit the two mentioned before can sometimes be perceived as the same kind of insurance. Furthermore, business interruption insurance itself

²² R. Stempel, op. cit., p. 91.

²³ Ibidem.

²⁴ V. Cerullo, M.J. Cerullo, "Business continuity planning: A comprehensive approach," *Information Systems Management* 2004, no. 3, p. 70.

²⁵ D. Mayers, C.W. Smith, "On the corporate demand for insurance," *The Journal of Business* 1982, no. 2, p. 293.

²⁶ H. Roberts, *Riley on Business Interruption Insurance*, London 2011, p. 66.

²⁷ https://www.americanbar.org/content/dam/aba/publishing/brief/tips_brief_BusIncoInsCoverage. authcheckdam.pdf (accessed: 15.02.2018).

has many options to offer, depending especially on the insurance company chosen by the entrepreneur. The prices can differ not only due to the venture which offers business interruption, but also according to the size of each enterprise. It emerges that the costs which are designed for big companies whilst selected by a small entrepreneur might seem significant. However, by way of contrast, the same insurance would be appropriate for a big venture which in turn may perceive the insurance for small company owners as not sufficient enough.

This highlights the other disadvantage of business interruption insurance, namely the duties of the entrepreneurs connected with choosing the most suitable insurance option. It does not refer to formal actions, especially those connected with signing documents, but rather to the less legal perception of each contract. From the above observations it follows that the entrepreneurs are frequently dissatisfied with their business interruption insurance due to having chosen the inappropriate type of insurance for their company. Apparently, it emerges that they do not usually ask for advice and choose the type of business interruption insurance themselves. The insurance covering the costs of "lost income" requires conducting several examinations before signing the contract to be relevant for each specific company owner. More to the point, the entrepreneurs might make some mistakes and overestimate their needs. That may be especially harmful while their branch of business is not risky and the probability of an accident or disaster is insignificant. Even though the observation by company owners is done correctly, it takes time or additional costs, for instance those connected with employing some legal or financial advisors.

5. The future of business interruption insurance

Business interruption insurance tends to be called insurance for bigger ventures. It can be seen from the statistical data that the percentage of the companies providing themselves with this insurance differs considering the size of each enterprise. Moreover, not only do the differences appear while comparing big and small ventures, but also medium-sized and small company owners.²⁸ However, there is a marked tendency for business interruption insurance to be more popular among Polish entrepreneurs insurance. The growth of companies deciding to sign the contract which can enable covering "lost income" is not spectacular, but discernible. For instance, from 2006 to 2011 the popularity of business interruption insurance increased by about 1.24%.²⁹

From these facts above it is possible to conclude that the insurance covering "lost income" is likely to become more popular in the future. There are also some

²⁹ Ibidem.

²⁸ A. Pawłowska, "Identyfikacja obszarów dysfunkcyjnych w polisach business interruption (BI)," Zarządzanie i Finanse 2013, no. 5, p. 212.

other problems company owners face which might be solved for instance by being covered by business interruption insurance. Take for instance the issue with curtaining electrical power.³⁰ Yet the question is whether insurers would adjust the conditions of the business interruption insurance contract to the needs and, especially, the financial situation of smaller ventures. That would permit more small and micro companies to decide to cover the costs of the possible loss of their profits. In this connection, it would also have a strong impact on business interruption insurance use.

The optimistic approach stated above may be possibly deranged by the constant development of technology and the appearance of new kinds of insurance. Recently, the types widely described among scholars are those connected with cyberspace and, more specifically — with cyber data. Yet, one might argue what the varieties of insurance referring to computer technology have in common with insurance covering "lost profit." The connection is described on the level of the transfer of data. Previously, all of the documents used to be written in paper form and kept in filing cabinets, whilst recently more and more documents are electronic. As a matter of fact, less protection is needed in the headquarters or the storage of each company because of not keeping there as many vital paper documents as before. Although the consequences of this issue to the popularity of business interruption insurance are not perceivable yet, it is true that the amount of electronic data is continually increasing. By the same token, there are more and more employees using computers in Poland — for instance 43% in 2012. 32

The previously mentioned statement referring to the possible outcome of the growing amount of computer data which companies use is based only on statistical data and predictable examination. It could be reasonably argued that the types of insurance connected with cyberspace would not lower the popularity of business interruption insurance. Moreover, it also seems wise to assume that in the near future, more small ventures might choose to insure their lost profits due to more beneficial offers.

6. Conclusions

The *de lege lata* and the *de lege ferenda* postulates are mentioned by both entrepreneurs and scholars frequently and mainly refer to the two issues described below.

³⁰ A.Z. Rose, S. Liao, G. Oladosu, "Business Interruption impacts of a terrorist attack on the electric power system of Los Angeles: Customer resilience to a total blackout," *Risk Analysis* 2007, no. 3, p. 515.

³¹ A.R. Willis, "Business insurance: First-party commercial property insurance and the physical damage requirement in a computer-dominated world," *Florida State University Law Review* 2010, no. 4, p. 1006.

³² https://stat.gov.pl/cps/rde/xbcr/gus/nts_spolecz_inform_w_polsce_10-2012.pdf (accessed: 16.02.2018).

The first of them is the cost of business interruption insurance itself. It is believed that the amount of money spent on insurance premiums is unprofitable, especially for small ventures which are not suffering from an accident or disaster. As stated before, the issue of paying more money is connected not only to the rate offered by insurers, but also to the insufficient knowledge of company owners. The other reason for claiming that business interruption insurance is very expensive is confusing this special kind of insurance with other kinds of solutions, for instance Extra Expenses Coverage.

The possible changes in the approach to business interruption insurance concerning the issue mentioned above require both time and effort, especially whilst examining the types of insurance and adjusting them to each venture. However, meticulous observation might indeed improve the situation described. The biggest profit would appear to be reducing the number of accidents not covered by business interruption insurance as a result of perceiving this insurance as too expensive. In connection with the in-depth analysis of the offers of insurers covering "lost income" and deciding to choose one of them, the number of companies collapsing after damage will probably decrease. It is beyond doubt that it would be beneficial not only for the owners of the ventures, but also for their clients, for instance those receiving regular supplies from each company. However, one might remember that the probability of an accident is an individual matter, connected with the specific circumstances and some of the knowledge each entrepreneur possesses about his company is constantly needed.

This brings the deliberation to another issue mentioned by supporters of the de lege lata and the de lege ferenda demands connected with business interruption insurance, namely the duties of company owners as soon as the moment of selecting insurance appears. Many entrepreneurs claim that they do not have time to examine the option offered and even when they do, they are incapable of choosing the best business interruption insurance option due to their lack of knowledge. It would appear that the best solution to that issue is to make the insurance offers more specified, focusing especially on describing the details connected with the recommendation for micro, small, medium-sized and big enterprises. At the same time, however, it also requires some help from the owners of the venture, being the ones knowing their business quite well. What is needed is the right balance between improving the insurance offers by companies offering business interruption insurance and examining the situation of the enterprise by their entrepreneurs.

According to scholarly opinion, the regulation which recommends signing a property contract and business interruption insurance contract for the same period of time is a restriction of contractual freedom. However, further reflection shows that this argument is adequate only while analyzing the aspect connected with the duration of the insurance covering "lost income." It does not interfere

with the freedom to choose whether to sign a business interruption insurance contract or not, nor does it force the entrepreneur to decide which kind of terms and conditions to provide his venture with. Furthermore, the recommendation for the insurance contracts to be signed for the same period of time enables wider protection of each company by guaranteeing that whenever an accident or disaster occurs, lost profits would also be covered.

When these circumstances are taken into consideration, it is not surprising that some changes need to be introduced to increase the popularity of business interruption insurance. This special kind of insurance, nowadays undervalued by many entrepreneurs, might prevent a large number of companies from collapsing once an accident or a disaster appears. Yet it is not to say that one might ignore the future of business interruption insurance connected with the comparison with other types of insurance, especially those referring to cyberspace. However, the main aim ought to be focusing on the focal issues connected with the *de lege lata* and *de lege ferenda* demands. It would appear that there is a strong probability that this would have a positive impact on the future of business interruption insurance.

References

Cerullo V., Cerullo M.J., "Business continuity planning: A comprehensive approach," *Information Systems Management* 2004, no 3.

Cycoń M., Jedynak T., "Ubezpieczenie utraty zysku jako metoda zarządzania ryzykiem w działalności gospodarczej," *Ekonomiczne Problemy Usług* 2011, no. 63.

Gajda D., Jurkiewicz T., "Ubezpieczenia w sektorze MSP w latach 2007–2010 (wyniki badań ankietowych)," Wiadomości Ubezpieczeniowe 2010, no. 2.

Kita M., "Ubezpieczenia utraty zysku jako element programu ubezpieczenia przedsiębiorstwa produkcyjnego," *Copernical Journal of Finance & Accounting* 2012, no. 1.

Kreibich H. et al., "Flood precaution of companies and their ability to cope with the flood in August 2002 in Saxony, Germany," *Water Resources Research* 2007, no. 43.

Mann M., "Ruling class strategies and citizenship," Sociology 1987, no. 3.

Mayers D., Smith C.W., "On the corporate demand for insurance," *The Journal of Business* 1982, no. 2.

Mesjasz C., "Determinants of designing corporate governance systems in Central Eastern Europe," [in:] T. Baaken, J. Teczke, *Managing Disruption and Destabilisation*, Kraków-Münster 2014.

Pawłowska A., "Identyfikacja obszarów dysfunkcyjnych w polisach business interruption (BI)," Zarządzanie i Finanse 2013, no. 5.

Roberts H., Riley on Business Interruption Insurance, London 2011.

Rose Z., Liao S., Oladosu G., "Business interruption impacts of a terrorist attack on the electric power system of Los Angeles: Customer resilience to a total blackout," *Risk Analysis* 2007, no. 3.

Stempel R., *Ubezpieczenia inżynieryjno-techniczne*, Olsztyn 2013.

Szewczuk A., "Business interruption: ewolucja kompleksowego programu ubezpieczeniowego dla sektora małych i średnich przedsiębiorstw," Ekonomiczne Problemy Usług 2010, no. 50.

Vance W.R., "The early history of insurance law," Columbia Law Review 1908, no. 1.

Willis R.A., "Business insurance: First-party commercial property insurance and the physical damage requirement in a computer-dominated world," *Florida State University Law Review* 2010, no. 4.

Witt J.F., "Toward a new history of American accident law: Classical tort law and the cooperative first-party insurance movement," Faculty Scholarship Series 2001, no. 396.

Legal acts

Ustawa o działalności ubezpieczeniowej i reasekuracyjnej z dnia 11 września 2015 roku, tekst. jedn. Dz.U. z 2018 r. poz. 8 z późn. zm.

Ustawa o rachunkowości z dnia 29 września 1994 roku, tekst jedn. Dz.U. z 2018 r. poz. 62 z późn. zm.

Internet sources

https://www.americanbar.org/content/dam/aba/publishing/brief/tips_brief_BusIncoInsCoverage.authcheckdam.pdf.

http://www.janowski-wspolnicy.pl/ubezpieczenia-dla-biznesu/ubezpieczenia-majatkowe/#bi. https://stat.gov.pl/cps/rde/xbcr/gus/nts_spolecz_inform_w_polsce_10-2012.pdf.