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Critical functions in insurance undertakings – evaluation of selected insurance products and product groups*

The IRR directive requires the identification of critical functions in insurance undertakings. This article aims to provide a preliminary evaluation of five insurance products and groups of products in terms of their potential to be classified as critical functions. To achieve this, the definition of critical functions, as well as the available recommendations and methodologies in this area, were analysed. Based on this analysis, five groups of insurance products and services were selected and assessed in terms of the possibility of meeting the definition of critical functions. The premises for the evaluation of these product groups as critical functions were examined as well. The analysis does not exhaust all areas of insurers' activities in the context of identifying critical functions and further research directions may include, for example, investment activities in securities markets or transactions in the derivatives market.

Keywords: critical functions, insurance sector, resolution, restructuring and orderly liquidation, forced restructuring

Introduction

Insurance undertakings [hereinafter referred to as 'the undertaking(s)'] play an important role in the functioning of households, enterprises, and other entities. Numerous functions of insurance

* The article expresses the private thoughts and views of the Authors and should not be identified with the position of the institutions with which the Authors are professionally associated.

in the economy can be distinguished (e.g. preventive function, insurance protection, or the capital accumulation function¹), while insurance companies themselves are often identified as entities ensuring the continuity of economic processes and the fulfilment of various social functions². However, their significance in the economy and financial system depends on specific areas of their activity, which vary between insurance companies. The identification of these areas within individual undertakings is of particular importance from the perspective of crisis management because maintaining their continuity is one of the main objectives of the resolution and recovery process. The IRR Directive (IRRD)³ refers to these areas as ‘critical functions’. Also, given the economic and social importance of some insurance companies, as well as the need to implement the provisions of the IRR Directive, the identification of critical functions performed by individual insurance companies is of practical significance.

The purpose of this article is to provide a preliminary evaluation of five insurance products or groups of products in terms of their potential to be identified as critical functions. This requires an analysis of the concept of a critical function as described in the IRRD and the recommendations of various institutions regarding approaches to identifying such functions. The research problem addressed in this article is to verify whether, according to the IRRD, the selected insurance products (or groups of products) can be considered critical functions for undertakings operating in Poland.

It should be noted that until the IRRD is fully implemented, there will be no separate reporting required for the identification of critical functions of insurance companies. Therefore, in selecting and assessing insurance products for criticality, the authors have analysed only those products for which the available data allowed at least partial evaluation and where their expert knowledge enabled the verification of product features determining their criticality.

A critical analysis of the literature, an examination of existing sources, and an analysis of selected financial data were used as research methods.

The first section of the article reviews the literature on the significance of insurance and the role of insurance undertakings in the economy and the financial system. To ensure a broad foundation for the study, both Polish and foreign literature were examined. In the second section, the criticality of insurance undertakings’ operations from the perspective of crisis management was analysed. Considerations focused on the concept of a critical function, which is central to this area. The third section reviews the available guidelines and recommendations on how to identify the critical functions and the factors that should be considered in this regard. The fourth section presents the results of a preliminary assessment of five selected insurance products and groups of products in Poland in terms of their classification as critical functions. The analysis covers products and services such as savings and pension insurance (including unit-linked policies), compulsory

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1. Handschke J., *Zasady i funkcje ubezpieczeń gospodarczych* in: *Ubezpieczenia gospodarcze*, ed. T Sangowski, Poltext, Warszawa 2000, pp. 75–78; Grabiec R., *Podstawowe pojęcia i definicje ubezpieczeń gospodarczych* in: *Mechanizmy funkcjonowania ubezpieczeń gospodarczych*, ed. R. Grabiec, Wydawnictwo Politechniki Częstochowskiej, Częstochowa 2022, p. 15.
 2. Bednarczyk T., *Rola przedsiębiorstw ubezpieczeniowych w gospodarce*, Acta Universitatis Lodziensis, Folia Oeconomica, 2007, no. 203, p.263.
 3. Directive [EU] 2025/1 of The European Parliament and of the Council of 27 November 2024 establishing a framework for the recovery and resolution of insurance and reinsurance undertakings and amending Directives 2002/47/EC, 2004/25/EC, 2007/36/EC, 2014/59/EU and [EU] 2017/1132 and Regulations [EU] No 1094/2010, [EU] No 648/2012, [EU] No 806/2014 and [EU] 2017/1129.

insurance, financial insurance, agricultural insurance, and natural disaster insurance. The article concludes with a summary.

1. Significance of insurance and insurance undertakings activity for the economy and financial system

The importance of insurance undertakings' activities is inextricably linked to the functions of insurance. The literature presents various approaches to defining these functions. As argued by R. Grabiec, the functions of insurance are analogous to those of finance because of their fundamental nature. In this regard, he refers to the functions identified with public finances, namely distributive, control, redistributive, stimulative, fiscal, stabilising, and allocative functions, as well as the accumulation of funds. The identification of insurance with public finances appears to confirm its public, systemic role in the economy⁴. However, as indicated by R. Grabiec, insurance also has its specific functions, such as insurance protection (protective), preventive, and financial (profit-oriented financial investment)⁵. Other authors also propose similar classifications of insurance functions⁶, sometimes grouping them into broader categories within which more specific examples are distinguished⁷.

T. Bednarczyk draws attention to the role played in the economy by insurance undertakings as business units (rather than insurance itself). She lists the following aspects: enabling the continuity of production processes in the economy; providing the insured and their families with stable living conditions in the event of a sudden loss of ability to work due to disability, sudden illness, or old age; acting as intermediaries in the allocation of capital as institutional investors; contributing to the stabilisation and development of the national economy; serving as important employers (both for full-time employees and for a wide range of agents and brokers); and engaging in preventive activities (mitigating insurance incidents and their consequences)⁸.

The European Central Bank highlights the impact of insurance undertakings on the financial system due to their role as large investors, the growing interconnections between the insurance and banking sectors, and their function in safeguarding the economic stability of households and companies by insuring their risks⁹. On the other hand, A. French, M. Vital, and D. Minot (Bank

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4. This indirectly justifies the initiatives taken to strengthen the crisis management framework in the insurance sector. More on the importance and rationale for introducing a *resolution* framework in the insurance sector can be found in: Kozińska M., *Resolution w sektorze ubezpieczeniowym – przesłanki, modelowe rozwiązania i wyzwania*, 'Wiadomości Ubezpieczeniowe', 2022 no.4 and Kozińska M., *Zarządzanie kryzysowe w sektorze ubezpieczeniowym – o upadłości i resolution ubezpieczycieli w Polsce*, 'Bank i Kredyt', 2023 vol. 54(6).
 5. Grabiec R., *Podstawowe pojęcia i definicje ubezpieczeń gospodarczych* in: *Mechanizmy funkcjonowania ubezpieczeń gospodarczych*, ed. R. Grabiec, Wydawnictwo Politechniki Częstochowskiej, Częstochowa 2022, pp. 12–14.
 6. For example: Handschke J., *Zasady i funkcje ubezpieczeń gospodarczych* in: *Ubezpieczenia gospodarcze*, ed. T Sangowski, Poltext, Warszawa 2000, pp. 75–78.
 7. Lemkowska M., *Funkcje ubezpieczeń gospodarczych a zrównoważony rozwój*, 'Wiadomości Ubezpieczeniowe', 2020 no 2, p. 50; Pietroń R., *Ubezpieczenia gospodarcze*, Politechnika Wroclawska, Wrocław 2013, p. 9.
 8. Bednarczyk T., *Rola przedsiębiorstw ubezpieczeniowych w gospodarce*, Acta Universitatis Lodzianis, Folia Oeconomica, 2007, no. 203, pp. 263–279.
 9. European Central Bank, *The Importance of Insurance Companies for Financial Stability*, 'Financial Stability Review', December 2009, p. 160.

of England) identified three critical financial services provided by insurance undertakings to the economy and financial system: payment services, the channelling of savings into investments and risk insurance, as well as risk dispersion¹⁰.

G.J. Schinasi (International Monetary Fund) points out that the failure of an insurance undertaking can negatively impact financial stability through two channels: 1) adverse effects on banks and other financial institutions due to direct credit exposures, and 2) disruptions in the derivatives market. However, the issue of reinsurance undertakings, which plays a key role in the risk management of insurance undertakings, is analysed separately. The financial difficulties of several major reinsurers could result in a situation where many insurance companies lack adequate protection for their operations¹¹.

2. The concept of critical function

In accordance with the IRR Directive: *'critical functions' means activities, services or operations performed by an insurance or reinsurance undertaking for third parties that cannot be substituted within a reasonable time or at a reasonable cost, and where the inability of the insurance and reinsurance undertaking to perform the activities, services or operations would be likely to have a significant impact on the financial system or the real economy in one or more Member States including, in particular, the impact resulting from effects on the social welfare of a large number of policyholders, beneficiaries or injured parties or from a systemic disruption or a loss of general confidence in the provision of insurance services*¹².

The concept of a critical function, although related to the functions of insurance and insurers in the economy and the financial system, seems to be somewhat narrower, as it refers to specific activities, services or operations provided by the insurer rather than to the insurer as a whole. Nevertheless, the concepts of the critical function, the insurance function, and the insurer's impact on financial stability overlap to some extent or, at the very least, relate to similar notions. This is important in the context of the so-called public interest assessment (PIA) referred to in the IRR Directive¹³. This assessment also includes an analysis of the feasibility of continuing identified critical functions, as well as the impact of resolution and insolvency of the entity on financial stability. This constitutes both a direct and an indirect reference to the concept of financial stability under the PIA. However, the cited concepts appear to be distinct and should be differentiated due to their existing differences. A comparison of these concepts is presented in Table 1.

10. French A., Vital M., Minot D., *Insurance and financial stability*, 'Bank of England Quarterly Bulletin', 2015 Q3, p. 244.

11. Schinasi G.J., *Systemic Implications of the Financial Market Activities of Insurance and Reinsurance Companies* in: G.J. Schinasi, *Safeguarding Financial Stability. Theory and Practice*, IMF, 2005, pp. 268–270.

12. Art. 2 point 25 of the IRR Directive.

13. A positive assessment of the public interest premise determines the need to initiate resolution proceedings against the entity rather than liquidation under standard insolvency procedures.

Table 1. Comparison of critical function, insurance function, and impact on financial stability

Criterion	Critical function (IRRD)	Insurance function/ insurance undertaking function	Impact of the undertaking on financial stability (as a measure of the systemic importance of the insurance company)
Group of entities affected	Third parties, as well as the financial system and the real economy	The broader economy and financial system	Mainly the financial system (and, indirectly, the economy)
Scope of the insurance undertaking's activity	Selected activities, services or operations	Insurer as a whole	The insurer as a whole
Identifying entity	Resolution authority as part of periodic evaluations (possible consideration of insurers' self-assessments)	Scientists	Researchers or the financial safety net in periodic evaluations
Method of identification	Formalised	Informal, depending on the approach of the individual scientist	Can be partially formalised through the methodology used in systemic analyses conducted by safety net authorities

Source: Own study.

It is also worth noting that the definition of a critical function refers to activities, services and operations in a broad sense. This means that the critical functions of undertakings do not need to be strictly related solely to the insurance products they offer.

3. Identification of critical function in insurance undertakings – a review of recommendations and methodologies

The issue of identifying critical functions has been addressed by several international standard-setting bodies and entities that are, or will in the future be, responsible for identifying those functions in insurance undertakings. The Financial Stability Board's (FSB) key document outlining the standards for the functioning of resolution regimes¹⁴ for financial institutions often uses the concept of a critical function, emphasising the need for its continuation in the context of resolution activities, although it does not explicitly define the term. However, the FSB has developed separate guidelines for the identification of critical functions. According to this document, the criticality of a given function should be assessed through a three-step process (regardless of the type of financial institution), which includes¹⁵:

1. impact assessment
2. supply-side analysis
3. firm-specific test

14. FSB, *Key Attributes of Effective Resolution Regimes for Financial Institutions*, 2011 (update 2014).

15. FSB, *Recovery and Resolution Planning for Systemically Important Financial Institutions: Guidance on Identification of Critical Functions and Critical Shared Services*, 2013, p. 6.

Subsequent FSB guidelines, published in 2016 and dedicated to insurance undertakings, expanded the definition of a critical function by introducing an additional criterion—namely, the inability to replace the function within a reasonable time and at a reasonable cost¹⁶.

An approach that aligns with the FSB's assessment of critical functions in the insurance sector has been presented by the International Association of Insurance Supervisors (IAIS). The IAIS defines critical functions as those where disruption in their performance could have a systemic impact. It identifies two key characteristics of critical functions¹⁷:

1. The insurer's activity in the relevant area is important for the functioning of the financial sector and the real economy.
2. There are few, if any, readily available substitutes for this function (this situation occurs when there are few insurance companies in a given market or even a monopoly).

'Economic functions that should be continued to achieve resolution objectives' (i.e. critical functions) are also referred to in the IAIS document published in 2021. As the IAIS points out, these functions should be identified by taking into account the following elements¹⁸:

1. The nature and scope of the business, as well as its impact on other ventures (considering the volume and number of transactions, number of customers, etc.).
2. The materiality of the insurer's operations can be assessed based on its size, market share, connections, complexity, and international activity.
3. The nature of customers (retail, corporate, public entities).
4. The potential impact of discontinuation on markets, financial market infrastructure, customers and public services.

In contrast, the French resolution authority, ACPR¹⁹, in its methodology for identifying critical functions, established a two-stage process²⁰:

1. Defining the list of functions considered critical by nature.
2. Determining the criticality threshold to select, for each function deemed critical by nature, the largest insurance undertakings and groups for which the critical function is identified.

Another European country with experience in identifying critical functions is the Netherlands. In the Netherlands, between 10 and 15 insurance companies are identified for resolution planning. The factors that are taken into account by DNB²¹ when identifying critical functions include: the size of the company, the type of insurance product, the type of policyholder and the expected social loss in the event of a bankruptcy risk for a given insurer (with a primary focus on mitigating social consequences and protecting policyholders)²².

In Australia's methodology for identifying critical functions, the Australian Prudential Regulation Authority (APRA) has developed a temporary system that assesses the impact of discontinuing

16. FSB, *Developing Effective Resolution Strategies and Plans for Systemically Important Insurers*, 2016, p. 14.

17. IAIS, *Holistic Framework for Systemic Risk in the Insurance Sector*, 2019, p. 11.

18. IAIS, *Application Paper on Resolution Powers and Planning*, 2021, p. 35.

19. The ACPR is an internal unit of the Banque de France (i.e. the French Central Bank).

20. ACPR, *Identification of the critical functions of insurance undertakings*, 2020, pp. 4–10.

21. De Nederlandsche Bank, Dutch Central Bank, also serves as the resolution authority for the insurance sector.

22. FSB, *Identification of Critical Functions of Insurers, Practices Paper*, 2023, p. 11, 16.

a function on the stability of the financial system, as well as on current and future policyholders. The analysis covers the following aspects²³:

1. The potential impact of discontinuing a given function on clients, the financial system or the real economy.
2. Substitutability.
3. Market concentration/market share of particular insurance undertakings in a given function.

In China, a bottom-up approach has been used in identifying critical functions. This means that the starting point is a self-assessment of insurers, in which they evaluate their business based on several factors (e.g. business scale, number of customers, market impact, substitutability)²⁴.

Poland's Bank Guarantee Fund proposes a three-stage process for identifying critical functions in an insurance undertaking²⁵:

1. Defining a list of basic economic functions, among which critical functions are identified (specific insurance products or services, as well as types of activities undertaken by the insurance company beyond typical products and services).
2. Selecting, within each insurance company, critical functions from among the basic economic functions:
 - a. Identification of economic functions is considered critical due to their characteristics and role in the economy. These functions, in principle, are critical in any insurance or reinsurance company conducting activities in a particular area (the so-called critical functions by nature).
 - b. Identification of economic functions is considered critical in an undertaking due to its role, e.g. significant market share in performing this function on a market-wide scale (the so-called critical function from the perspective of the role of a given entity).
3. Identification of other critical functions in a given insurance or reinsurance company based on an expert assessment of the specifics of the undertaking's operations (the so-called firm-specific critical function).

To sum up, a review of international recommendations and the practices of public authorities indicates that the following areas are considered in the identification of a critical function:

1. Impact of the discontinuation of a function on the environment

The analysis of the impact of discontinuing a critical function is determined by the 'nature' of the function in question, which can be understood as the characteristics that directly affect the real economy and the financial system. In addition, the 'nature' of the function also includes the social consequences of its discontinuation by the insurance company. This aspect is referenced in the definition of a critical function in the IRR Directive through the concept of social welfare. The impact on the economy or financial system may be determined primarily by the length of the period of payments to injured parties (e.g. MTPL) and the compulsory or voluntary nature of the insurance.

2. Substitutability

When defining a critical function, the IRR Directive refers to substitutability within a reasonable time and at a reasonable cost. The level of substitutability of a function can be influenced by factors such as:

23. Ibidem, pp. 4–6.

24. Ibidem, pp. 6–7.

25. BFG, *Identification of critical functions in insurance and reinsurance companies*, <https://www.bfg.pl/wp-content/uploads/identification-of-critical-functions-in-insurance-and-reinsurance-companies.pdf> (17.07.2024).

- a. The number of other insurers also performing the function.
- b. Market concentration for a given function, defined by the market share of individual entities.
- c. Seasonality in the distribution of the function.
- d. The replacement cost of the function in question that is understood primarily as the cost to the policyholder of purchasing a new product or service providing the same or similar function.
- e. The ability of customers to purchase an insurance product, taking into account the applicable legal framework.
- f. The availability of alternative instruments on the market that serve the same or a similar function to the insurance under consideration.

4. Evaluation of selected insurance products and groups of products from the perspective of identifying critical functions in insurance companies

4.1 General characteristics of the analysed products and groups of products

First, while various areas of an insurer's operations can be deemed critical functions, one key area of identification should be the analysis of insurance products. In this regard, it should be made clear that, while the function of an insurance undertaking may sometimes be identified with a particular business line or statutory group (e.g. MTPL), this is not always the case. In most instances, the function is either a broader or a narrower concept than the business line (e.g. medical professional liability, legal professional liability, or broad categories such as agricultural insurance) or should not be linked to any business line at all (e.g. the function of insurance companies as investors). With this in mind, a list of various insurance products has been created for assessment regarding their role in performing a critical function.

Second, the insurance products included on the aforementioned list were assessed using publicly available data (such as market size and the number of insurance companies offering these products). This data enabled an expert assessment of the substitutability of the products. Also, when selecting products with a high potential to be deemed a critical function, existing methodologies used by resolution authorities for identifying critical functions were taken into account. However, the decisive factors were the specific characteristics of the insurance products (such as their mandatory nature, the degree of product standardisation, the existence of alternative products with a similar function, and market concentration).

Based on the process presented above, a list of five insurance products with the highest potential to be classified as critical functions (depending on the role of the insurance company providing that product in the market) was selected. The following section presents a preliminary assessment of selected products in the Polish market in terms of their eligibility to be identified as critical functions under the IRR Directive.

4.2. Long-term savings insurance

4.2.1. Pension products

From a social perspective, pension-related products are the key set of products that can be identified as inherently long-term and savings-oriented. This is because, regardless of the scale of a given

company's activity in the pension product market, the loss of these funds by individuals could have severe social consequences.

In the Polish market, the following pension products can be distinguished:

1. Occupational Pension Schemes (so-called PPE, pol. *Pracownicze Programy Emerytalne*),
2. Individual Retirement Accounts (so-called, IKE, pol. *Indywidualne Konta Emerytalne*),
3. Individual Retirement Protection Accounts (so-called IKZE, pol. *Indywidualne Konta Zabezpieczenia Emerytalnego*), and
4. Employee Pension Plans (so called PPK, pol. *Pracownicze Plany Kapitałowe*).

The position of life insurance companies in the market for regulated pension products is illustrated by data published by the Polish Financial Supervision Authority (KNF, pol. *Komisja Nadzoru Finansowego*), as shown in Table 2.

Table 2. The role of life insurance undertakings in delivering pension products

PRODUCT	ASSETS (BLN PLN)	ASSETS UNDER MANAGEMENT OF LIFE INSURANCE COMPANIES (BLN PLN)	NUMBER OF ACCOUNTS (THOUSANDS)	NUMBER OF ACCOUNTS MANAGED BY LIFE INSURANCE COMPANIES (THOUSANDS)	THE SHARE OF LIFE INSURERS IN THE MARKET FOR A GIVEN PRODUCT, AS MEASURED BY ASSET SHARE
PPE	25,6	3,84	676	84	15,00%
IKE	18,2	3,23	860	176	17,75%
IKZE	9,2	1,4	515	91	15,22%
PPK	21,8	0,22	3892	66	1,01%

Source: KNF, *Raport o stanie rynku emerytalnego w Polsce na koniec 2023 r.*, June 2024, https://www.knf.gov.pl/knf/pl/komponenty/img/Raport_o_stanie_rynk_u_emyrtalnego_w_Polsce_na_koniec%202023_roku.pdf [24.07.2024].

Data published by the KNF indicates that life insurance undertakings are not key providers of pension products in the Polish market and their limited significance may call into question the recognition of pension products offered by these companies as critical functions. If an insurance company discontinues offering such products, it seems there would be no difficulty in replacing its offer with alternatives, meaning that the function cannot be considered critical due to sufficient substitutability. This does not change the fact, however, that for individuals who purchased such products from a particular undertaking, the loss of funds accumulated there would be an extremely negative event.

4.2.2. Unit-linked products

The second set of long-term savings products that can be considered a critical function is unit-linked insurance (pol. *ubezpieczenie z funduszem kapitałowym*, hereinafter UFK – pol. *ubezpieczeniowy fundusz kapitałowy*), which primarily serves as a means of building savings. However, the classification of these products as long-term and savings-oriented is complicated by the following factors:

1. These products may involve different levels of investment risk (i.e. they are not always used as savings products).

2. These products may have varying recommended durations for maintaining the insurance contract (investment horizon).

Examining the size and structure of the UFK market at the end of 2023, the net assets of life insurance companies for which the investment risk is borne by the policyholder (UFK) amounted to PLN 40.3 billion. As the KNF points out, according to data from the end of 2020, the UFK market in Poland was characterised by ‘relatively high concentration’—the three largest life insurance companies managed more than half of the net assets associated with UFK²⁶. By the end of 2023, market concentration had increased even further. The three largest life insurance companies managed almost 66% of assets, with the largest player holding a 35% market share²⁷. A high degree of market concentration is one of the factors considered in the identification of a critical function. In the case of UFK, only those products whose primary feature is long-term savings (i.e. not all UFK products) should be considered critical—not by nature, but from the perspective of the role of a given entity, due to market concentration.

4.3. Mandatory insurance

The ACPR, in its approach, notes that one of the features of insurance that should be examined for criticality is obligation. The BFG also highlights in its approach that compulsoriness may be one of the features of insurance that increases the likelihood of a particular group of products being considered a critical function by nature. However, it is crucial to establish a clear classification of obligatory insurance products. This is because, in the Polish market, the term ‘obligatory insurance’ is also applied to products which, according to *the Act on Obligatory Insurance, the Insurance Guarantee Fund and the Polish Motor Insurers’ Bureau* (Polish Journal of Laws of 2003, No. 124, item 1152, hereinafter *the Law on Obligatory Insurance*), are not actually obligatory insurance (i.e. do not meet that definition²⁸). To emphasise this distinction, M. Orlicki, as well as E. Kowalewski and M.P. Ziemiak, use the term ‘compulsory insurance’ to refer to insurance for which there is a ‘compulsion’ to hold such protection or where the legislator classifies them as compulsory, even if they do not meet the criteria set out in the Law on Obligatory Insurance²⁹. In this context, it is important to note the great diversity of broadly defined obligatory insurance. In a study published in December

26. Decision of KNF of 16 June 2021, DNM-DNMZWP.6065.79.2021, Official Journal of the Polish Financial Supervision Authority, OJ PFSA 2021, item 16, <https://dziennikurzedowy.knf.gov.pl/legalact/2021/16/> (24.07.2024).

27. Zalewska A., *Aktywa UFK zbliżyły się do 40 mld*, <https://www.analizy.pl/raporty/34482/aktywa-ufk-grudzien-2023> (24.07.2024).

28. The notion of ‘obligatory insurance’ is defined in Art. 4, 11 and 22 of the Law on Obligatory Insurance. These are mainly third-party liability insurance for motor vehicle owners, third-party liability insurance for farmers, insurance of buildings that are part of a farm and insurance products resulting from the provisions of separate acts or international agreements ratified by the Republic of Poland, imposing the obligation to conclude an insurance contract on certain entities.

29. Orlicki M., *Ubezpieczenia obowiązkowe*, Warszawa 2011, pp. 164, 187–193; Kowalewski E., Ziemiak M.P., *Stan prawny ubezpieczeń obowiązkowych w Polsce*, PIU, 2013, p. 5.

2019, the Polish Chamber of Insurance (PIU) identified 243 examples of ‘compulsory’ insurance³⁰, including products that do not meet the definition under the Law on Obligatory Insurance³¹.

Taking as a starting point the list of obligatory insurance developed by the PIU, and considering factors such as the inability to carry out activities in the absence of compulsory insurance and/or the significance of social interest, it is possible to identify a preliminary list of obligatory insurance products, the provision of which could be considered a critical function:

1. Third-party liability (TPL) insurance in connection with financial activities performed by the following entities:
 - a. brokerage houses,
 - b. electronic identification entities,
 - c. alternative investment fund management companies,
 - d. alternative investment fund managers.
2. TPL insurance in connection with the medical or therapeutic activities performed by the following entities:
 - e. physiotherapists,
 - f. physicians and dentists,
 - g. nurses or midwives,
 - h. medical entities,
 - i. healthcare providers.
3. TPL insurance in connection with legal (or similar) activities performed by the following entities:
 - j. attorneys,
 - k. tax advisors,
 - l. restructuring advisors,
 - m. auditors,
 - n. bailiffs,
 - o. public notaries,
 - p. legal advisors.
4. Motor third-party liability (MTPL) insurance.
5. TPL insurance for air or rail transport activities performed by the following entities:
 - q. air navigation service institutions (agencies),
 - r. civil aviation security,
 - s. air-ground handling companies,

30. PIU, *Ubezpieczenia obowiązkowe w Polsce*, <https://piu.org.pl/ubezpieczenia-obowiazkowe-w-polsce/> [17.07.2024].

31. It is worth noting that the issue of the wide diversity of insurance groups is not limited to the Polish market. The number of compulsory insurance systems varies significantly across European countries. According to responses to the European Commission’s questionnaire on motor insurance and other compulsory insurance, France, Italy, and Portugal each have over 100 types of compulsory insurance. Belgium has around 70 compulsory insurance policies, while Germany has over 30 federal laws requiring such coverage. Ireland has no other compulsory insurance beyond third-party liability insurance for motor vehicles, whereas the United Kingdom has three additional compulsory insurance policies: employers’ liability insurance, nuclear energy insurance, and horse riding insurance. The significant variation in numbers suggests different national approaches to introducing compulsory insurance. The primary factors behind these differences appear to be legal and economic traditions, as well as socio-political considerations. Source: Max-Eup, *Compulsory Insurance*, https://max-eup2012.mpipriv.de/index.php/Compulsory_Insurance [17.07.2024].

- t. airport management companies,
 - u. rail carriers,
 - v. air carriers.
6. Obligatory crop insurance (outside the scope of the Law on Obligatory Insurance).
 7. Travel guarantee insurance.
 8. Personal accident (NNW) insurance for athletes participating in events organised by sports associations.
 9. Obligatory insurance for local government units.

The full and extended set of obligatory insurance products should be subject to an analysis of the impact of their discontinuation on the financial system and the real economy. The results of this analysis are shown in Table 3.

Table 3. Analysis of obligatory insurance from the point of view of identification as a critical function

Product	Level of product standardisation	Ease of purchase (availability)	Number of affected policyholders	Value of potential damages	Length of benefit payment period	Impact on the financial system or the real economy	Impact on a large number of victims due to long-term non-payment of compensation	Impact on policyholders resulting from the lack of insurance coverage (e.g. sanctions or the need to cover damages from their own resources)
MTPL	Standard	Easy	High	High	Long	Small	High	High
Medical TPL	Standard, but specialised	Easy	Average	High	Long	N/A	Average	High
Legal activities TPL	Standard, but specialised	Easy	Small	Average	Short	N/A	Low	High
Travel guarantee	Standard, but specialised	Difficult	Small	Average	Short	N/A	Average	High
Compulsory crop insurance	Standard, but specialised	Difficult	Average	Average	Short	Small	Average	Average
Personal accident (NNW) insurance for athletes participating in sports association events	Standard	Easy	Small	Small	Short	N/A	Low	Low
Obligatory insurance for local government units	Varies by product, but rather standardised	Difficult (e.g. due to public procurement law)	Small	Varies by product (from small to very large)	Varies by product (from short to very long)	Small	Low	Average

Source: Own study based on expert evaluation.

In summary, from the group of obligatory insurance products published by the PIU, the following types of products could potentially be identified as critical functions:

2. By definition:
 - a. Third-party liability insurance of certain professions, e.g. third-party liability insurance for the medical profession or the legal profession (high impact on policyholders and injured parties, low substitutability).
 - b. Obligatory crop insurance (low substitutability, limited selling period).
3. From the perspective of a given entity:
 - a. MTPL insurance.
 - b. Farmer's third-party liability and obligatory insurance for agricultural buildings.
4. Specific cases:
 - a. Obligatory insurance for local government units.
 - b. Obligatory professional insurance, where analyses indicate a concentration of the undertaking on specialised risks.

4.4. Financial insurance

The following arguments support the potential recognition of financial insurance as a critical function:

- A key product for the security of economic transactions, serving as a form of protection for trade activities.
- Protects against the consequences of counterparty bankruptcy and its absence can lead to a contagion effect, i.e. an increase in the number of bankruptcies, especially during economic downturns.
- A specialised product, whose price depends on the value of the contract being hedged and the risks associated with the industry or market in which the policyholder or its counterparties operate. For this reason, insurance coverage may not be easily substitutable for all entities.

From the perspective of identifying critical functions, an important feature of financial insurance is its strong connection with the economy (particularly the financial sector) and the business cycle. Financial insurance serves to protect investors or sellers if a counterparty is unable to meet its obligations. This occurs, among other instances, during economic downturns, when the number of corporate bankruptcies, composition proceedings or restructuring proceedings increases. In addition, in the context of financial insurance³²:

- Each risk is assessed on an individual basis and insurance contracts are often highly specific, as they involve particular business entities and transactions.
- Risk analysis is carried out not only before the insurance contract is concluded but also throughout its duration.
- The insurance premium is calculated individually, depending on the risk assessment, the length of coverage and its scope.
- There is a threshold level of risk, above which coverage is not provided. The principle of 'higher risk, higher premium' cannot be applied in such cases.

32. The list was prepared based on the analysis of the documentation for the sales processes of selected undertakings, for example: Ergo Hestia, *Ubezpieczenia finansowe, wytyczne do sprzedaży i obsługi*, https://cdn.bsbox.pl/files/hestia_elearning/ODU7MDA/documents/manual-ubezpieczenia_finansowe-final.pdf (24.07.2024).

Due to the limited number of entities offering this type of protection, market concentration, low standardisation of the product, and the risk of contagion effects in the event of bankruptcy of uninsured businesses, financial insurance should be considered a critical function.

4.5. Insurance related to agriculture

In Poland, economic insurance in agriculture can be divided into two groups: obligatory insurance and voluntary insurance³³. According to the law in force as of January 2025, farmers are required to take out three types of insurance:

- Insurance of farm buildings against fire and other random events, referred to as agricultural buildings insurance (under the Law on Obligatory Insurance).
- Farm liability insurance, referred to as farmers' liability insurance (under the Law on Obligatory Insurance).
- Obligatory crop insurance covering at least 50% of the area of field crops against risks such as floods, drought, hail, negative effects of overwintering, and spring frost. This applies to farmers who have received direct payments to agricultural land. The insurance covers crops such as grain, maize, rapeseed, canola, hops, tobacco, ground vegetables, fruit trees and bushes, strawberries, potatoes, sugar beets, and legumes, from sowing or planting to their harvest³⁴.

According to Eurostat, in 2022, the value of agricultural production in the European Union (EU) increased by 19%, while in Poland it rose by 43%. In terms of growth rate, Poland was surpassed only by Estonia. In addition, Poland is one of the leading agricultural producers in the EU—three-quarters of the value of EU agricultural production in 2022 came from seven EU countries:

- France (€97.1 billion, accounting for 18% of the EU total),
- Germany (€76.2 billion, 14%),
- Italy (€71.5 billion, 13%),
- Spain (€63.0 billion, 12%),
- Poland (€39.5 billion, 7%),
- The Netherlands (€36.1 billion, 7%), and
- Romania (€22.2 billion, 4%)³⁵.

At the same time, agriculture has a significant impact on other sectors of the economy, providing employment opportunities and stimulating economic development. It can also contribute to environmental sustainability through the use of natural, modern, or sustainable methods of crop cultivation and animal husbandry.

Strengthening food security and resilience to crises is one of the specific objectives of the Strategy for Sustainable Development of Rural Areas, Agriculture and Fisheries 2030, submitted by the Minister

33. Stempel R., *Ubezpieczenia rolne w gospodarstwach rolników indywidualnych Polski północne*, 'Wiadomości Ubezpieczeniowe', 2010 no.2, p. 33.

34. Art. 10c point 2 and Art. 3 para. 1 point 1 of the Act on Insurance of Agricultural Crops and Farm Animals of 7 July 2005 [Polish Journal of Laws of 2019, item 477].

35. PAP, *Wartość produkcji rolnej w UE w 2022 r. wzrosła o 19 proc., w Polsce – o 43 proc.*, <https://www.agropolska.pl/aktualnosci/europa/wartosc-produkcji-rolnej-w-ue-w-2022-r-wzrosla-o-19-proc-w-polsce-o-43-proc-1753.html> [17.07.2024].

of Agriculture and Rural Development and adopted in October 2019 by the Council of Ministers³⁶. This highlights the potential importance of agricultural insurance in ensuring the continuity of agricultural production and, consequently, securing food supply, which is crucial for food security and national economic development. A lack of insurance could lead to an inability to restore food production or rebuild livestock in the event of, for example, extreme adverse weather conditions. Mass damages are relatively common in agricultural insurance, and insurance plays a crucial role in ensuring farm liquidity in the event of crop destruction.

Climatic changes and meteorological conditions have a significant impact on plant vegetation cycles and, at the same time, on the growth and development of crops. Weather phenomena occurring during the growing season, such as temperature fluctuations and heavy rainfall, affect both the size and quality of crops, as well as the timing of fieldwork. Climate warming, irregular precipitation patterns, and extreme weather events can adversely affect the development of certain crop species. In addition, it can be difficult to carry out agrotechnical treatments at optimal times, which affects both the quantity and quality of yields. In recent years, drought has become an increasingly significant issue in agriculture, affecting different crop species depending on the timing of its occurrence. A PIU report shows that just a single year of drought (2018) resulted in PLN 1.5 billion in lost gross value added in agriculture, while the associated direct and indirect impact on the economy amounted to PLN 1 billion more. At the same time, between 2008 and 2018³⁷, farmers received more than PLN 3.2 billion in compensation for weather-related insurance claims³⁸. Furthermore, the Minister of Agriculture and Rural Development stated that the ministry is working on an amendment to the *Law on Insurance of Agricultural Crops and Livestock*, aiming to expand the list of crops eligible for state-subsidised insurance premiums. The amendment would include sunflower, phacelia, flax, and fiber hemp, as well as clarify the classification of buckwheat as a cereal in the official crop catalogue. The Ministry of Agriculture and Rural Development issued this statement in response to the Council's earlier demands, made during public consultations on the draft regulation on the amount of premium subsidies for crop and livestock insurance in 2024³⁹.

Given the limited number of providers of such insurance, the high potential impact on the real economy, and the restricted period during which such contracts can be concluded, crop insurance should be considered a critical function.

36. Ministerstwo Rolnictwa i Rozwoju Wsi, *Strategia zrównoważonego rozwoju wsi rolnictwa i rybactwa 2030*, <https://www.gov.pl/web/rolnictwo/strategia-zrownowazonego-rozwoju-wsi-rolnictwa-i-rybactwa-2030> [17.07.2024].

37. The source does not clearly define the meaning of the word 'received' mean. However, an analysis of another publication—Janowicz-Lomott and Łyskawa—suggests that it refers to damages; cf. Janowicz-Lomott M., Łyskawa K., *Funkcjonowanie dotowanych ubezpieczeń upraw w Polsce*, 'Wiadomości Ubezpieczeniowe', 2016 vol. 2, pp. 69–92.

38. PIU, *Klimat ryzyka. Jak prewencja i ubezpieczenia mogą ograniczyć wpływ katastrof naturalnych na otoczenie?*, <https://piu.org.pl/wp-content/uploads/2021/03/Raport-klimatyczny-1.pdf> [17.07.2024].

39. *Resort rolnictwa pracuje nad rozszerzeniem katalogu upraw ubezpieczanych w ramach dotowanych polis*, 'Gazeta Ubezpieczeniowa', <https://gu.com.pl/resort-rolnictwa-pracuje-nad-rozszerzeniem-katalogu-upraw-ubezpieczanych-w-ramach-dotowanych-polis/> [17.07.2024].

4.6. Insurance related to natural damages

Analysing potential critical functions (by nature) for the Polish market, it seems reasonable to consider insurance related to financial protection against the consequences of natural disasters. This group could include products that protect the basic needs of companies or households, i.e. facilities and property used for business or residential purposes. The rationale for assessing certain types of risks and customer groups in the context of evaluating designated insurance products as critical functions may include the following aspects:

1. Potential concentration of risk in areas particularly vulnerable to weather events—in the case of Poland, mainly floods and high winds. The Single Resolution Board (SRB) recognises the “region” as the relevant market for assessing the criticality of a function⁴⁰.
2. Scope of insurance coverage offered by individual products on the market—not all home or apartment insurance policies cover the consequences of weather events, such as flooding.
3. Analysis of specific economic sectors or business activities exposed to climate risk, particularly in terms of their impact on the financial system or the real economy, with a specific focus on the social welfare of a large number of policyholders, the insured, or beneficiaries.

Given the importance of natural disasters for the environment and society, as well as increasing regulatory pressure on environmental issues (not only within the financial system), it seems that insurance products related to natural disasters could be considered critical functions within selected insurance undertakings, particularly those most active in the market. The justification for such an assessment lies in the growing economic significance of natural disasters and the potentially severe infrastructure losses they may cause.

Summary

The literature identifies numerous functions of insurance and insurance companies. In economic practice, particularly under the requirements introduced by the IRR Directive, resolution authorities are obliged to identify so-called critical functions in insurance companies. These are understood as products, services, or activities whose discontinuation by an insurance company would result in negative consequences for the economy or the financial system. Available international recommendations and methodologies of resolution authorities indicate that, in the context of identifying critical functions, two key issues must be considered: the impact of discontinuing a function on the environment and its substitutability.

Analysing the Polish insurance market, while taking into account the nature of the products offered, available data, expertise, criteria used in the methodologies of other countries, it seems reasonable to examine the following groups of products from the perspective of critical function identification:

1. Long-term savings insurance.
2. Obligatory insurance.
3. Financial insurance.

40. SRB, *Critical Functions: SRB Approach*, 2018, p. 4.

4. Insurance related to agriculture.
5. Insurance related to natural damages.

For all of the identified product groups, it has been demonstrated (empirically, where possible, or analytically) that there are grounds for considering the activities of selected insurance companies operating in Poland in these areas as critical functions. Thus, the hypothesis that the five analysed insurance products (or groups of products) meet the definition of a critical function under the IRR Directive in certain areas of Poland has been confirmed. However, it should be stressed that the analysis presented above does not cover the full scope of insurance company activities in relation to critical function identification. As the definition indicates, not only the products and services provided by insurance companies can be classified as a critical functions. Other areas of the insurers' operations, such as investment activities in the market for particular securities, activities in the derivatives market, and entity-specific functions, may also be identified as critical functions. These areas provide further directions for analysis, particularly in terms of identifying critical functions for the purposes of crisis management in the insurance sector.

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Funkcje krytyczne w zakładach ubezpieczeń – ocena wybranych produktów ubezpieczeniowych i grup produktów

Dyrektywa IRR wymaga identyfikacji funkcji krytycznych w zakładach ubezpieczeń. Niniejszy artykuł ma na celu przedstawienie wstępnej oceny pięciu produktów ubezpieczeniowych i grup produktów pod

kątem możliwości zaklasyfikowania ich jako funkcji krytycznych. Aby to osiągnąć, przeanalizowano definicję funkcji krytycznych, a także dostępne zalecenia i metodologie w tym obszarze. Na podstawie tej analizy wybrano pięć grup produktów i usług ubezpieczeniowych, które poddano ocenie pod kątem możliwości spełnienia definicji funkcji krytycznych. Zbadano również przesłanki oceny tych grup produktów jako funkcji krytycznych. Przeprowadzona analiza nie wyczerpuje wszystkich obszarów działalności ubezpieczycieli w kontekście identyfikacji funkcji krytycznych i dalsze kierunki badań mogą obejmować np. działalność inwestycyjną na rynkach papierów wartościowych czy transakcje na rynku instrumentów pochodnych.

słowa kluczowe: funkcje krytyczne, sektor ubezpieczeń, resolution, restrukturyzacja i uporządkowana likwidacja, przymusowa restrukturyzacja

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