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## FROM THE EDITORIAL COMMITTEE

We are giving you the next 30th 4 (2023) – part I issue of the Scientific Journal of the Faculty of Management at the Rzeszow University of Technology entitled “Humanities and Social Sciences”.

The aim of the Publisher is to raise the merits and the international position of the quarterly published by the Faculty of Management, that is why we are still developing the cooperation with foreign team of reviewers, as well as an international Scientific Council. The Editors have also attempted to apply for international databases; currently the quarterly HSS is indexed in **Index Copernicus Journal Master List, The Central European Journal of Social Sciences and Humanities (CEJSH) ERIH PLUS, DOAJ and EBSCO**.

The Journal has been also included in the list of projects qualified for funding under the **“Support for scientific magazines program”**.

The articles published in this publication are devoted to the broader issues of the humanities and social sciences. They are the result both of theoretical and empirical research. The subjects covered vary considerably and reflect the interdisciplinary nature of the Journal. We do hope that the papers published will meet your kind interest and will be an inspiration to further research and fruitful discussions.

On behalf of the Editorial Board of “Humanities and Social Sciences” we would like to thank the Authors for sending the outcomes of their research. We would like to express particular gratitude to the Reviewers for their valuable feedback that greatly contributed to increasing values of the scientific publications.

With compliments  
*Editorial Committee*



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**Robert BIAŁOSKÓRSKI<sup>1</sup>**

## THE THEORETICAL CONCEPT OF INFORMATION WARFARE: A GENERAL OUTLINE

This article presents the results of research on the theoretical paradigm of information warfare. The research methodology is based on political realism in international relations and observations of the war in Ukraine since 2014. It assumes that the main feature of the international system is the distribution of power and intersections between rival power centers. The principal roles are now played by states and groups of states as basic political units. From a broader perspective, in the future, the importance of non-state actors will also increase. The research produces a general outline of the theoretical concept of information warfare. According to the accepted terminology, information warfare is a process of achieving the strategic goals (interests) of any organization by offensive and defensive activities in the information space (infosphere), inspired and carried out against other organizations for self-protection and self-defense. The research indicates three key interconnected structures (components) of the concept of information warfare: participants (actors), tools (operators), and the information domination subprocess.

**Keywords:** cybernetic warfare, information warfare, information operations, information power, information geopolitics.

### 1. INTRODUCTION

Information warfare (IW) is an important element of the process of hybridisation of war consisting primarily of the growing role of the information domain in the management of contemporary armed conflicts. The experience of the battlefield, especially in the war in Ukraine, initiated by the Russian annexation of Crimea in 2014, and next by the military invasion in 24 February 2022, demonstrates in practice the evolutionary directions of development of the information warfare.

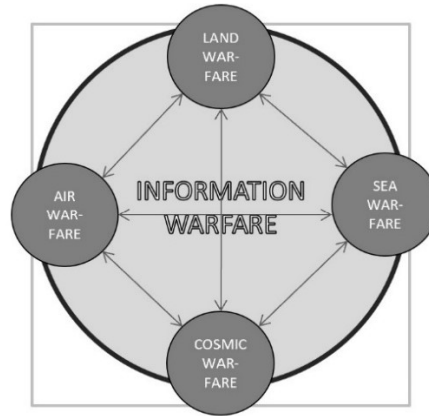
Progressing of digitization increases the involvement of nonmilitary means of the battlefield at all stages of war: preconflict, active conflict, and postconflict. The scope of the military impact of the information domain is in practice the most significant among the other kinetic domains: land, air, sea, and cosmic (Warden III, 1995). Any kinetic military operation begins, continues, and ends in the information domain. It brings the information domain to the rank of sine qua non factor of the success of any military operation. Simultaneously at the same war does not mean operating only in the information domain

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without the support of any other kinetic domain. It is the result of the military technological development (intelligent robotization) of the modern battlefield. In NATO terminology, it is called ‘multi-domain operations’ instead of the ‘joint operations’ strategy (Drawing 1).

In this context, we should rather talk about ‘information warfare’, not ‘information war’. This latter term should be treated more as journalistic metaphor for information warfare (Triqui, 2015), than scientific. But this approach is also found in scientific papers, political strategies and doctrines, and cybersecurity dictionaries (Maurer, Morgus, 2014).

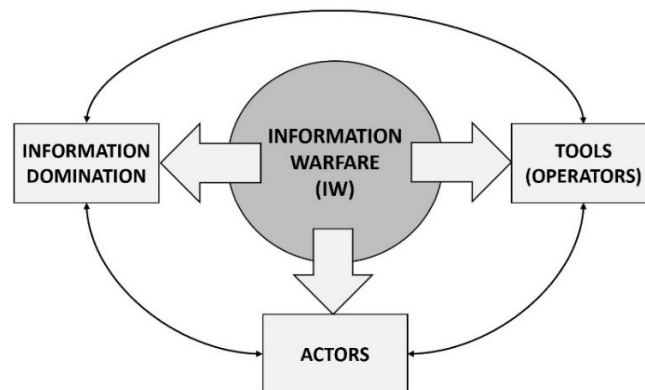


Drawing 1. The multi-domain military operations strategy

Source: own elaboration.

According to this research study, **information warfare is a process of achieving strategic goals (interests) of any organization by offensive and defensive activities in the information space (infosphere) inspired and carried out against other organizations for self-protection and self-defence.**

In this context, three key components of this model must be defined, such as actors, tools (operators), and the information domination subprocess (Drawing 2).



Drawing 2. Key components of the concept of information warfare

Source: own elaboration.



The adopted definition of IW refers to any state and non-state organization able to conduct IW, as an actor of this process<sup>2</sup>. Researching the theoretical aspects of IW is critical to develop its effective information doctrine and strategy in decision-making practise and activities. **Information domination is the acquisition of information advantage from an organization in offensive and defensive actions against other organizations during geopolitical struggle or armed conflict.** Two key tools (operators) of IW, such as **psychological information operations (PIOs) and cybernetic information operations (CIOs)**, are considered.

## 2. BRIEF REMARKS ON THE LITARATURE

The literature on information warfare is quite extensive. However, a gap should be noted in the systematic approach to this concept. The content of most books and papers concerns the discussion about the different definitional concepts, evolution, strategies, deterring, and case studies (especially in the aspect of hybrid warfare) of IW, as well as methods and techniques of IT attacks (e.g. J. Andress, R.A. Clarke, D.E. Denning, B. Gardner, J.J. Garstka, K. Giles, A. Greenberg, F. Kaplan, S. Komov, S.T. Lawson, D. Lonsdale, M. Libicki, T. Rid, T.A. Schnauffer II, D.C. Schleher, P.W. Singer, M. Snegovaya, R. Stiennon, R. Stengel, E. Waltz, S. Winterfeld). Studies on the information and cybernetic power are explored by a rather small group of researchers (Ch.L. Barry, D.J. Betz, D. Cassidy, W. DeSombre, M.A. Gomez, C.S. Gray, I. Hemani, S. Jones, A. Klimburg, D. Kuehl, D.T. Kuehl, A. Schwarzenbach, T. Stevens, J. Voo, E. Zimet).

## 3. INFORMATION WARFARE ACTORS

The information warfare actors are de facto all actors of the international relations. It can be divided into state and non-state and internal and external actors. However the role of non-state actors (e.g. transnational corporations) is increasing, but it is still the states (as well as the intergovernmental organizations) as the principle political units with their holistic material and intangible resources (potential) playing a key role in the international system. And according to the theory of political realism, the most important feature of every international system is the distribution of power (Aron, 2017).

Therefore, it is no exaggeration to say that the IW is currently a key tool in the geopolitical rivaling of states for the best possible position in the structure of the international system. A stronger position means greater power and opportunities to influence the international distribution of power (IDP) as a game of powers and interests in a global, regional, or local dimension. The rivalry between states is a so-called zero-sum game, where winning one side is a loss of the other side with the same size. In the IDP, a global power is always equal to 100%, while the ratio of states power is constantly changing. Rivalry between states for limited global resources ('source of survival energy')

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<sup>2</sup> The author has also developed a narrow definition of information warfare based on a multi-indicator model of defining and identifying cyber threats. This model is based on four indicators matrix: 1) attacking subject (agresor), 2) attacked subject (victim), 3) result, 4) purpose/motivation). According to this concept, information warfare is 'various actions in cyberspace inspired and directly or indirectly conducted by States and/or international organizations (attacking subject) directed against other States, international organizations and/or non-State actors (attacked subject), which directly or indirectly lead to injure or death people and damage or destroy the elements of critical infrastructure (result), in order to achieve the State's national interests or the interests of the organization (purpose/ motivation)' (Białoskórski, 2012).

takes two forms: (1) cooperation (trade resources) or (2) struggle (taking other people's resources). Cooperation is a so-called positive sum game, where all players profit, though to a different degree. Struggle (in different spheres: information, political, economic, military, etc.) is a so-called negative-sum game in which all players lose, though to a different degree. Therefore, in constant competition for the maximum share of power, states alternate between cooperation and struggle, depending on specific conditions (Sulek, 2013) (Sulek, 2020). Studying changes in the IDP in economic, military and geopolitical dimensions, the current international system can be reliably determined, especially in geostrategic studies (Białokórski, 2018, 2020, 2021).

The political, economic, military, technological, and cultural capabilities and influence of states are widely known in the social sciences domain. However, in the context of the IW, the special role of the system of state authorities, secret services, actors of military and civilian information domains (such as military reconnaissance), state society ('ordinary people'), and non-state actors must be taken into account. Secret services (intelligence and counterintelligence), as well as special operations forces, are the sensors ('eyes and ears') of the army in the harassment zone in front and behind enemy lines. There is also a category of people called 'useful idiots' who, without external inspiration, favour hostile interests with their views and actions. Non-state actors, such as cybercorporations, private military companies (PMC), such as the Russian 'Wagner' and 'Reduta' very active from the beginning of the Ukraine war, international cyber terrorist organizations (ICTOs), organized international cybercriminals groups (OICGs) covert or overt employment in cyberspace operations mostly as volunteers in state-to-state conflicts (Sigholm, 2013). In this case, the cooperation between ICTOs and OICGs is already an unusual and particularly dangerous cyberthreat. As an example, the joined operatives aligned between the Tunisian Cyber Army (TCA) and al-Qaeda Electronic Army (AQEA) and their assault on US government websites for US Customs and Border Protection and the Office of Personnel Management in 2015. The role of supporting actor in the information warfare process is also played by the civilian society. This applies to ordinary citizens who play the role of 'war signalists' taking advantage of home. The dictionary term 'signalist' means someone who makes signals or communicates intelligence by signaling ('Signalists', 2022). This term comes from the English word "whistleblower" and refers to a social phenomenon that has long been present in various countries and societies. It literally means blowing a whistle and refers to the act of summoning help, alerting, and signaling danger. It was proposed by Ralph Nader, an American lawyer and social activist in the 1970s. It meant the action of a prosocially motivated individual informing the environment that its organization violates the public interest. War signalists can inform the state authorities about the dislocation and movements of the occupying forces. It is necessary to include them in an organized information system, i.g. by mobile phones with emergency calls. There are known cases of monitoring and informing about the positions and mobility of Russian troops by Ukrainian citizens during the war in Ukraine. For some of them, spying on the Russians is even part of their own daily routine, playing a key role in guiding Ukrainian precision combat strikes. In particular, this applies to military operations in the Donbass. This is clearly evidenced by the statement of a Ukrainian security official: 'These people see Russian tanks moving, they see where the troops go to dinner, where they party, where they do their laundry, and they share that information with us' (Luxmoore, 2022).

Every country, the most intergovernmental organizations, such as EU and NATO lead cyber activities and policies such as the establishment of national (international) cyber strategies, enhancing research and development efforts, and strengthening international

cyber collaborations and regulations. The governments undertake defensive and offensive cybersecurity operations (officially announced in 2016) (Baram et al., 2018). This requires the building and involvement of a national information power in both civilian and military domains. Cyber-army and army intelligence play a special role in various forms (kinetic and non-kinetic) of international conflict. Their permanent tasks are monitoring and processing of information flow streams in the state critical infrastructure security system, as well as the fight against all form of cyber-threats and cyber-attacks, such as: cyberwarfare, cyberespionage, cyberterrorism and cybercrime (Białoskórski, 2012).

During military operations, army intelligence has issued a wide range of fully integrated aerial, ground, and cyber sensors based on intelligence, surveillance, and reconnaissance (ISR) capabilities to support kinetic fighting forces on the battlefield. To be effective against a networked enemy, it is demanded abilities such as full-motion video (FMV), signals intelligence geo-location, exploitation of captured documents and media (DOMEX), biometrics, advanced analytics, and more robust human and technical collection (Legere, 2012). It requires to be organised such branches as a special cyber defence centre (e.g., in the structure of General Staff), as well as similar centres in each military district and type of the armed forces. It is also necessary to create a military cybernetwork based on the intranet (without any connection to the internet) with multilevel protection abilities to prevent any offensive cyber-attacks. Beyond the information and communication technology (ICT) aspects, the most important is the protection of financial support and the hiring of professional military and civilian personnel.

It is clear that the Army needs fully integrated intelligence, security, information operations, and related support from the government and private ICT innovation sector. Covers areas such as intelligence collection and analysis, information operations, support of intelligence operations, facilities and systems, and support services.

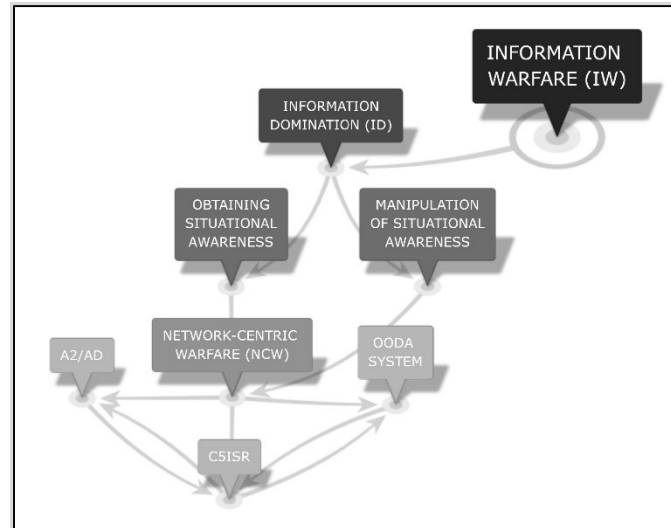
#### **4. INFORMATION DOMINATION**

Information domination (ID) is the obtaining of information advantage of an organization in offensive and defensive actions against other organization during geopolitical struggle or armed conflict. The key factors for ID are the achievement of self-situational awareness (self-awareness) and the manipulation of situational awareness, own and rival(s) (Drawing 3). This process is based on network-centric warfare (NCW), acting as the 'brain' of the information warfare process. It is an emerging theory of war in the information age ('Vice Admiral (Ret.) Arthur K. Cebrowski, Director, Office of Force Transformation, interview with Frank Swofford', 2004).

The NCW concept broadly describes the combination of strategies, emerging tactics, techniques, and procedures, and organizations that a fully or even a partially networked force can employ to create a decisive warfighting advantage (Garstka, 2003). There are three elements clearly distinct from the NCW definitions, that is, the impetus of NCW, the means to establish it, and the outcome/benefits it aims to achieve, that is, enhanced combat capabilities and their five attributes, such as extensive connectivity and interoperability, common and shared situational awareness, cooperative detection, cooperative detection, and compression of time and space (Soon-Chia, 2004).

The attribute of common and shared situational awareness decides on the ability to achieve '[...] a complete picture for the entire Area of Operation (AOR). NCW, enabled by increased network bandwidth, will see a proliferation of Common Operating Pictures (COPs) transcending through and distributed across the military hierarchies, from the

strategic level to the lower echelons (Soon-Chia, 2004). This tactic of armed war is based on the idea of swarming (BattleSwarm). It is based on systematic, pulsating and simultaneous multi-impacts from all diffused operation directions by specialized military components connected in NCW system. The permanent “pulsation” of power and high dynamics and pace of kinetic impact is a characteristic feature of the swarm’s tactics, making it difficult for the opponent to respond effectively (Olszyk, 2019).



Drawing 3. Information domination process

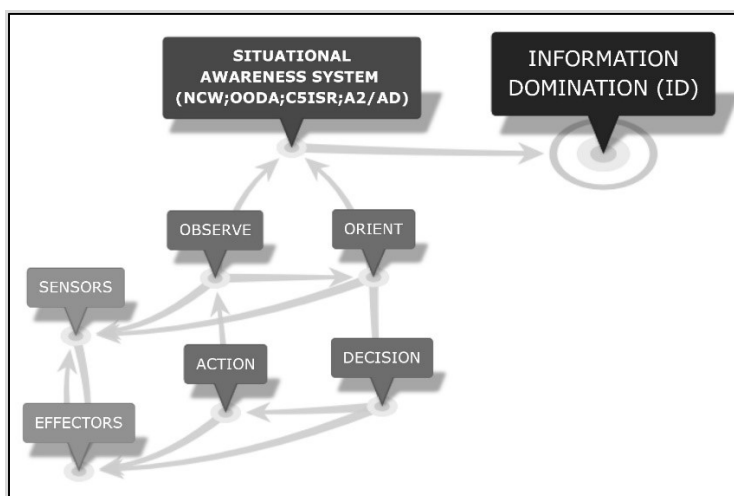
Source: own elaboration.

The operational success of the concept of the NCW process depends mainly on the OODA (observe, orient, decision, and action), C5ISR (command, control, communication, computers, cyber, intelligence, surveillance, reconnaissance), and A2/AD (anti-access/area denial) systems (Drawing 4).

The OODA loop strategy is a concept of situational awareness first developed in the mid-1950s, by USAF Colonel John Boyd (Kelly and Heliskiing, 2014) (Rađenović, no date). The OODA is the information management and control system of any organization. In the military aspect, it is the C5ISR system of the armed forces, during the period of peace (P) and war (W). The concept of the OODA system is based on the implementation of four circularly interconnected activities: observation (observe), orientation (orient), decision, and action. Observation and orientation act as sensors, while decision and action are the functions of effectors. The OODA concept is also the framework of a more advanced intelligence circle process (Krizan, 1999).

In the Ukrainian war, a special role of sensors is played by satellite and operational intelligence capabilities, including intelligence data of NATO member states and radio-electronic warfare (REW) systems, such as the western Airborne Early Warning And Control (AWACS) or Russian Palatin. From the operational and tactical point of view, an important role played by artillery reconnaissance and strike systems, such as Himmars and Gladius. This war showed the omnipresence of sensors and effectors almost

in all changing battlefield conditions, regardless of the season, day and night, or weather conditions. This is the first drone war with the complex of sensors and effectors (loitering munitions, kamikaze drones), where it is hard to hide.



Drawing 4. Situational awareness system

Source: own elaboration.

These experiences have also proven the particular usefulness of network-centric systems installed on mobile devices (smartphones), as an element of the military communication, reconnaissance, decision-making and strike network, such as TAK (Tactical Assault Kit-military, and Team Awareness Kit-civilian versions). TAK uses the CoT (Cursor on Target) information exchange protocol, e.g., to inform about the deployment of own and enemy forces (blue force tracking), map events, ability reporting, command forwarding, and obtaining information from sensors by users connected to the system, such as drone image. The main advantage of TAK is its simplicity, enabling very quick implementation and integration of various types of system, communications, sensors, and even effectors (Szopa, 2023).

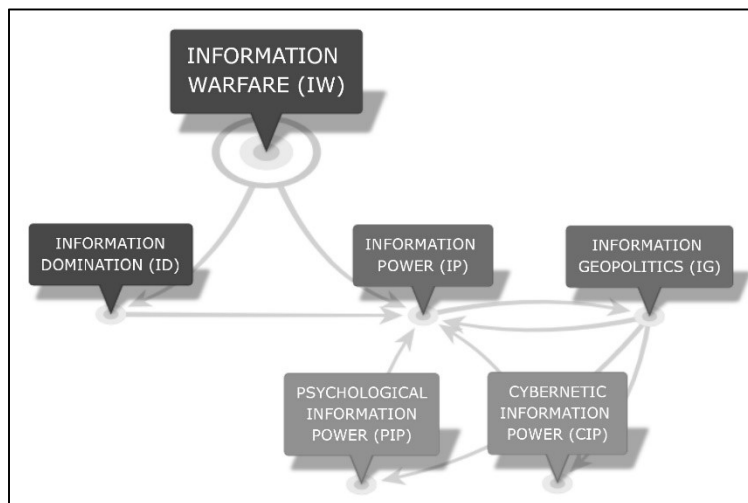
## 5. INFORMATION POWER AND INFORMATION GEOPOLITICS

At the beginning of the considerations, it is worth quoting two statements from the theory of international relations. The fundamental concept in social science is power in the same sense in which energy is the fundamental concept in physics (Russell, 1996). In a general sense, power is the ability to do, make, or destroy. [...] An individual's power is his ability to act, but above all to influence the actions or feelings of other individuals. On the international scene, power should be defined as the capacity of a political unit to impose its will on other units. In short, political power is not an absolute; it is a human relationship (Aron, 2017).

From the theory of social cybernetics, during the international game of power and interests, the states pursue their strategic goals by the increasing (maximizing) the national power (NP) as a form called by Marian Mazur as '**sociological power**' in contrast to

**‘material (kinetic) power’** (Mazur, 1996). In a mathematical formula, NP can be defined as a potential product (capability) and employing social support (will) and an appropriate strategy. It can also be expressed as a product of tangible (that is, material factor), intellectual (that is, information factor), and spiritual potential, as well as a product of national resources (potential, that is, material factor), strategy (that is, information factor) and the desire to pursue national strategy by the political unit (Sulek, 2010; Moczulski, 1999). The formula for the mathematical product means that all factors must be met for the power to be greater than zero. The Ukrainian conflict clearly showed the importance of the third factor of NP - spiritual, the will to fight for the life and survival of the nation and state. Victory on the battlefield is ensured by the synergy of will to fight, training, and technology. The bravery and heroism of the Ukrainian nation in the face of the overwhelming material (‘kinetic’) power of the enemy surprised and amazed not only the Russian aggressor, who was unable to break it, but also the entire international community.

This leads directly to a terminological convention, that **the information power (IP) is the organization's ability to pursue its strategic goals by influencing the information space (infosphere)**. Contrary to the already relatively developed research on the kind of ‘material (kinetic) power’, the study of IP is still in an early stage. The approach presented mostly in the literature treats IP as a ‘cyber power (CP)’ (Kuehl, 1997; Barnett, Duvall, 2005; Kuehl, 2009; Zimet, Barry, 2009; Stevens, 2010; Nye, 2010; Klimburg, 2011; Betz, Stevens, 2011; Gray, 2013; Yuen, 2015; Langner, 2016; Domingo, 2016; Van Haaster, 2016; Bebber, 2017; Knox, 2018; Voo et al., 2020a; Voo et al., 2020b; *Global Cybersecurity Index 2020. Measuring commitment to cybersecurity*, 2020; Cho, 2020; Gomez, no date). It is not and should not be treated in the same way as IP. The above results from the fact that IP is a kind of hybrid structure of two integrated components: ‘psychological information power’ (PIP), as a kind of ‘soft information power’ and ‘cybernetic information power’ (CIP), as a kind of ‘hard information power’ (Drawing 5).



Drawing 5. Information power and information geopolitics in information warfare

Source: own elaboration.

Both of these new terms are precisely correlated with two IW key operators, i.e. psychological information operations (PIOs) and cybernetic information operations (CIOs). Therefore, **‘psychological information power’ (PIP) is the organization's ability to pursue its strategic goals by ‘psychological information operations’ (PIOs) and ‘cybernetic information power’ (CIP) is the organization's ability to pursue its strategic goals by ‘cybernetic information operations’ (CIOs).**

The measurement of IP is the level of effectiveness of the implementation of strategic interests by any organization by the activities in the infosphere. It is expressed in the form of various indicators. There are known such indicators as: Cyber Power Index (CPI) (*Cyber Power Index. Findings and Methodology*, 2011), National Cyber Power Index (NCPI) (Voo et al., 2020b), Global Cybersecurity Index (GCI) (*Global Cybersecurity Index 2020. Measuring commitment to cybersecurity*, 2020). This issue requires further theoretical and empirical research.

In a broader sense, these considerations directly lead to the concept of information geopolitics (IG). This new direction of geopolitics research results mainly from the growing importance of the information power in relation to material (kinetic) power in the international system (Białoskórski, 2022). The main reason is the currently emerging polycentric nature of the international system, dominated by the United States and China, and the dominance of ‘hybrid conflicts’ (‘nonlinear conflicts’ in Russian terminology) and ‘diffusion (dispersed) conflicts’ over classic ‘kinetic (linear) conflicts’ (Siverson, Starr, 1991; Lawson, 2014; Gardner, 2018).

Geopolitics of information is one of the developing subdisciplines of geopolitics. However, in the literature it also appears as a synonym of ‘information geopolitics’ and ‘geopolitics of information’, as well as the related terms: ‘geopolitics of cyberspace’, ‘networked geopolitics’, ‘corporate geopolitics’, or ‘geopolitics of technology’. The etymology of the term information geopolitics is related to the evolution of geopolitics as a scientific discipline, from classical geopolitics to contemporary geopolitics. In the classical (traditional) sense of geopolitics, these are geographical conditions. The modern (new, critical) geopolitics concept has a multidimensional and real-time variable nature strongly associated with the impact of information stream flows in the infosphere. Moreover, it significantly deepens the classically understood geographical research area of geopolitics, redefining the space-time concept. It is already not only a geographical chessboard, but also a network of connections between various space-time factors and their geopolitical context interpretation. As a result, it is significantly more important in the science and practice of international relations.

This also gives grounds for the separation and development of **information geopolitics as a subdiscipline of geopolitics dealing with the study of the impact of the information space (infosphere) on the process of making strategic decisions (particularly political) by geopolitical actors creating the distribution of power and interests, as the main feature of the international system** (Białoskórski, 2022).

An important factor that determines information geopolitics is a **‘strategic culture’ (SC)** of geopolitical actors that formulate information policy, as well as strategies, concepts, and doctrines. The essence of considerations on SC is Carl von Clausewitz's theory that the goal of war is not only to defeat the enemy physically but also to incapacitate psychologically (Lantis, 2002, 2005). In the general sense, ‘strategic culture’ is culturally conditioned patterns and perception schemes characteristic of a given community (nation). It affects the perception of the security environment, the assessment of security threats, and the crisis management process (Snyder, 1977; Klein, 1991; Zaman, 2009). For example,

Russia's strategic culture is different from American, as well as American differs from Chinese one.

In the aspect of the war in Ukraine, the main features of the strategic culture of the Russian aggressor are important. Three of them are the most important: 1) relative historical durability and militarization (coexistence with military culture), 2) militarization of public space (interpenetration of the military sphere and the dominant state ideology), 3) traditional militaristic expansionism (Budzisz, 2021). This finds its expression in the 'spirit' and 'word' (content) of the Russian perspective of imperial geopolitics (Dugin, 2014) and mental (psychological) warfare strategy (ИЛЬНИЦКИЙ, 2021). This is also reflected in the theory of 'reflexive control' and, more broadly, in the 'reflective psychology' initiated by Vladimir A. Lefebvre. Reflection means the ability to create in our consciousness an image of 'inner world' of other human beings and assessing how others perceive us (Lefebvre, 1987). The goal of reflexive control is to 'control' the 'reflex' of the opponent by creating a certain model of behavior in the system it seeks to control (Kowalewski, 2017). The effect of his scientific work is the foundation of the theory and practice of Russian information warfare. This is the paradigm of techniques and methods of Russian psychological information operations (PIOs), as well as cybernetic information operations (CIOs) developing after the Second World War (Giles, Sherr, and Seaboyer, 2018).

## 6. INFORMATION WARFARE TOOLS (OPERATORS)

In the concept of IW, two types of information operations have been distinguished: psychological information operations (PIOs) as an operator of some kind of information 'soft-power' and cybernetic information operations (CIOs), as an operator of some kind of information 'hard-power'. It should be noted that these operations are carried out in the form of offensive and defensive by both the civilian and military security sectors, with CIOs, as a kinetic form, dominating the military sphere.

### 6.1. Psychological Information Operations (PIOs)

**The PIOs are defensive and offensive information activities that shape mental maps of social awareness in the process of decision-making information.** They are based on more spectrum of social management (social engineering) techniques feeding an opponent special selected (prepared) information to influence the opponent to make decisions favourable to the attacker. These activities are conducted firstly in non-autonomous (external) information system, towards the foreign environment, but also in autonomous (internal) information system, according to a native society. The Russian theory of information warfare (e.g. Sergey Komov) distinguishes such PIOs techniques as: Distraction, by creating a real or imaginary threat to one of the enemy's most vital locations (flanks, rear, etc.) during the preparatory stages of combat operations, forcing him to reconsider the wisdom of his decisions to operate along this or that axis; • Overload, by frequently sending the enemy a large amount of conflicting information; • Paralysis, by creating the perception of a specific threat to a vital interest or weak spot; • Exhaustion, by compelling the enemy to carry out useless operations, thus entering combat with reduced resources; • Deception, by forcing the enemy to reallocate forces to a threatened region during the preparatory stages of combat operations; • Division, by convincing the enemy that he must operate in opposition to coalition interests; • Pacification, by leading the enemy to believe that pre-planned operational training is occurring rather than offensive



preparations, thus reducing his vigilance; • Deterrence, by creating the perception of insurmountable superiority; • Provocation, by forcing the commander to take action advantageous to your side; • Suggestion, by offering information that affects the enemy legally, morally, ideologically, or in other areas; • Pressure, by offering information that discredits the government in the eyes of its population (Giles, Sherr, and House, 2018) – Quoted for: (Komov, 1997). Taking into account the ‘reflexive interaction categories’ defined and practised by Russian in the IW from the 1980s, it can be recognised as follows: Transfer of an image of the situation: Provide an opponent with an erroneous or incomplete image of the situation. • Creation of a goal for the opponent: putting an opponent in a position in which he must select a goal in our favour (e.g., for provoking an enemy with a threat to which he must rationally respond). • Form a goal by transferring an image of the situation: feigning weakness or creating a false picture. • Transfer of an image of one’s own perception of the situation: providing an opponent with false information or portions of the truth based on one’s own perception of the situation. • Transfer of an image of one’s own goal. • Transfer of an image of one’s own doctrine: giving a false view of one’s procedures and algorithms for decision making. • Transfer of one’s own image of a situation to make the opponent deduce his own goal: present a false image of one’s own perception of the situation, with the additional level of risk (Giles, Sherr, and House, 2018) – Quoted for: (Reid, 1987).

In the last decade, Russia has conducted IOPs in Georgia (7–8 August 2008) and still in Syria (since 30 September 2017) and Ukraine (since 2014) on the battlefield (in classic and hybrid forms). It is clear that a significant part of the streams of IOPs flow in **electronic media** (traditionally and modern), especially **social media** through various internet platforms and many providers, such as: social networks (e.g. Facebook, LinkedIn), video content (e.g. YouTube, Periscope), picture content (e.g. Instagram, Snapchat), book content (e.g. Goodreads, WeRead), training content (e.g. Garmin Conect, Strava), instant messaging (e.g. WhatsApp, Telegram), blogs (e.g. WordPress, Blogspot), micro-blogging (e.g. Twitter, Friendfeed), analytics tools (e.g. Klout, Geofeedia), crowd-sourcing (e.g. InnoCentive, Patreon), location services (e.g. Tinder, TripAdvisor) (Giles, Sherr, and House, 2018). There are many definitions with different approaches to social media and the discussion is still open (Giles, Sherr, House, 2018).

The Russian-Ukrainian war began in 2014 with the Russian military invasion and finally annexation of Crimea (10 March) and Russian military support of separatist separatist movements in the Donbas (symbolic so-called Putin's ‘green men’). After six years of ‘hybrid war’, it took the form of an open kinetic conflict (called ‘military special operation’ by Russian authorities) since February 24, 2022. From the beginning, both sides are conducting an information warfare in the external and internal environment. In the first phase of this conflict (2014–2021), Russia proved to be more effective in IOPs. As a result, Russia obtained one main geopolitical and geostrategic goal – the annexation of Crimea (territorial success) by a ‘soft’ international response (political success). From the first days of its second phase, Ukraine surprised Russia with the dynamics and effectiveness of PIOs. This shows well the training of the Ukrainian security sector by information warfare specialists from western countries. Ukraine and its supporting countries have successfully blocked Russian PIOs to undermine the Western consensus on supporting Ukraine, justify the war by Russia, and conceal war crimes. Russian campaigns addressed to both Russian and foreign societies are carried out by disseminating false information on social media using fake accounts, trolls, and bots, most often on several platforms at the same time. Increasingly, campaigns use artificial intelligence to create fictitious user accounts, photos,

videos, or satellite maps, or to send large numbers of messages at once. They use websites pretending to be well-known news sites, such as the BBC, CNN, and DW, or promote pseudo-scientific publications (Kaca, 2022).

However, the situation will escalate as the conflict continues. Although the instruments of Moscow's propaganda and information influence on the West are not so effective as before February 24, mass activity of Russians is visible in social networks aimed at creating further divisions within the Western world. Constantly aggressive Russian rhetoric, regular threats nuclear weapons, the desire to deepen the energy and economic crisis in the EU are intended to lead to the fatigue of Western elites and societies and to submission to Moscow's demands (Konończuk, 2023).

In addition, the impact of Russian IPOs on its own nation will be maintained and even intensified. Their advanced forms are 'false flag operations' (FFO). This is the type of 'camouflage' operation (Russian: 'maskirovka') practiced by secret services. It consists of impersonating foreign secret services, hiding the real identity. An example is the case of an alleged Ukrainian sabotage diversion in the Bryansk region on Russian territory in March 2023. Ukraine's authorities have denied these actions and point to Russian provocation in the form of FFOs to more strongly intimidate and control the Russian society (Bruszewski, 2023).

## 6.2. Cybernetic Information Operations (CIOs)

**CIOs are defensive and offensive cybernetic activities that affect critical infrastructure (people and objects).** This is the principle military information domain involving the armed forces (cyber-army, cyber-soldiers) and military secret services. CIOs are conducting during classical linear war, as well as nonlinear (hybrid) war. Their main operators are electronic warfare components with such operational tasks as: 1) permanent or temporary destruction of enemy electronic (cybernetic) systems, 2) electronic defense against enemy electronic attack, 3) electronic intelligence and counterintelligence.

Ad 1) Permanent or temporary destruction of enemy electronic systems (incl. autonomous weapons) is conducted by electronic attack (*use of electromagnetic energy for offensive purposes*) in its electromagnetic vulnerability (the characteristics of a system that cause it to suffer degradation in performance of, or inability to perform, its specified task as a result of electromagnetic interference). Electronic defence, as the use of electromagnetic energy to provide protection and to ensure effective friendly use of the electromagnetic spectrum, is an electronic countermeasures (that division of electronic warfare involving actions taken to prevent or reduce an enemy's effective use of the electromagnetic spectrum through the use of electromagnetic energy. There are three subdivisions of electronic countermeasures: electronic jamming, electronic deception and electronic neutralization) (*Słownik terminów i definicji NATO (AAP-6)*, 2014).

Ad 2) There are many electronic passive and active protective measures (countermeasures) of a defense strategy against an enemy electronic attack such as: electronic intelligence and surveillance, electronic neutralization, electromagnetic interference, electronic masking, barrage jamming, electronic jamming; jamming; spot jamming; sweep jamming, electronic deception and others. An important part of this strategy is military cyber networks isolated from the global network with multi-layered cyber protection system. The implementation of this strategy belongs to new special military scientific divisions as cyber-army, cyber-commands, cyber-soldiers, and intelligence corps.

Ad 3) The components of electronic intelligence and surveillance are the main components of electronic defence. It consists of the use of electromagnetic energy for the purpose of preemptive situational awareness and data intelligence. To the main components belong: SIGINT (Signals Intelligence), COMINT (Communication Intelligence), and ELINT (Electronic Intelligence), MASINT (Measurement and Signature Intelligence). Of course, activities within the framework of HUMINT (Human Intelligence) and OSINT (Open-Source Intelligence) are always important.

During the war in Ukraine, the most advanced and effective Russian CIOs occurred during the Russian annexation of Crimea. The effective attack on the communication systems of Ukrainian soldiers and politicians led to information chaos and paralyzed retaliatory actions (Kozłowski, 2014). Then, the Ukrainian cyber troops began to take over the operational initiative.

## 7. CONCLUSIONS

The presented research outcome fills a gap in the information warfare literature. The study of information warfare in the aspect of the war in Ukraine made it possible to verify and modify its theoretical paradigm. The result of this study is a new systemic concept of information warfare as a process of achieving strategic goals (interests) of any organization by offensive and defensive activities in the infosphere inspired and carried out against other organizations and for self-defence.

This model assumes the interaction of three of its key components, such as actors, information domination, and tools (operators) of information warfare. Among the actors of the IW, the main role is still played by the states as the principal political units. However, the growing importance of non-state actors, especially digital transnational corporations, needs to be observed and researched.

The sine qua non condition for the effectiveness of the information warfare is information dominance, as the obtaining of information advantage of an organization in offensive and defensive actions against other organization during geopolitical struggle or armed conflict. It means the ability to achieve self-situational awareness (self-awareness) and the manipulation of situational awareness, both own and rival(s). It depends on the efficiency of network-centric warfare (NCW) acting as the 'brain' of the information warfare process.

This concept involves the interaction of two categories of information warfare tools (operators): psychological information operations (PIOs) as an operator of some kind of information 'soft-power' and cybernetic information operations (CIOs), as an operator of some kind of information 'hard-power'. Both categories of IW operators use different methods and techniques to influence offensive and defensive information.

This requires increasing their information power, as the organization's ability to pursue its strategic goals by influencing the information space (infosphere). This also gives grounds for the separation and development of information geopolitics as a subdiscipline of geopolitics dealing with the study of the impact of the information space (infosphere) on the process of making strategic decisions (particularly political) by geopolitical actors creating the distribution of power and interests, as the main feature of the international system. In this sense, the factor of the strategic culture of organization plays an important role.

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## PUBLIC-PRIVATE PARTNERSHIP FOR THE DEVELOPMENT OF INFRASTRUCTURE INDUSTRIES: EUROPEAN EXPERIENCE OF STRENGTHENING NATIONAL ECONOMIC SECURITY

Economic security is a prerequisite for the stable development of any country; it is partially reflected in GDP *per capita*, employment, and unemployment rates. The purpose of this study is to determine the impact of investments for the development of infrastructure facilities on the basis of public-private partnership (PPP) on the economic security of a country. The analysis uses official data from the European Investment Bank and the Statistical Office of the European Union. The article concludes that there is a high correlation between accumulated investment in infrastructure and GDP *per capita*, employment, and unemployment. On this basis, it is reasonable to consider infrastructure development policy as important not only for national but also for economic security. Developing infrastructure facilities by attracting private investment can reduce pressure on national budgets and accelerate the implementation of capital-intensive projects.

**Keywords:** public-private partnership, infrastructure, indicator, economic security, investment, project.

### 1. INTRODUCTION

One of the main functions of the state, realization of which depends on the existing external and internal conditions, is economic security. Economic security means the protection of the national interests of the state in the local and international context, the ability of government institutions to protect the development of the national economy, maintain and restore the process of social reproduction, ensure sufficient military potential and socio-political stability of society (Kahler, 2004). A prerequisite for the country's economic security is the investments in the development of infrastructure sectors of the national economy and their efficient functioning (Böhme, Nowey, 2008).

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A number of infrastructure sectors are strategically important, as they create a prerequisite for economic security. They are transport, production of the energy, communal services, healthcare, education. Governments has to find trade-off between market pricing mechanisms, social politics and responsibility for the national economy security.

In most of cases the projects related to the development of certain infrastructure projects related to the development of certain infrastructure sectors (e.g., transport, energy, housing and utilities, etc.) are capital-intensive. Maintaining existing facilities and creating new ones in these sectors in the face of limited budgets is a challenge. This has prompted countries to look for new tools to find investment that will not be additional financial burden for the government. One such tool is the attraction of private investment by governments on the basis of public-private partnerships (PPP).

Partnerships between the state and private business involve not only the pooling of resources and competencies, but also the distribution split of responsibilities, revenues, and risks associated with the implementation of project. Sometimes the implementation of PPP projects requires the government to create prerequisites for a partnership with a private investor in a sector that previously served exclusively state interests.

As practice shows, in some cases attracting private investor can accelerate the implementation of capital-intensive projects with high social significance, reduce country's budget expenses, and increase employment level and business activity in the sector. These indicators partly reflect the country's economic security level (Ward, 1998).

In the following text we discuss the impact of infrastructure projects based on PPP to the economic security indicators in European countries.

The purpose of the study is to find out the impact of investments, in particular on the basis of PPP, in infrastructure industries on indicators of economic security of the country.

The text consists of three parts. In the first part, based on the literature review, a platform of modern understanding of the economic security of the country and the indicators by which it is evaluated is formed. In the second part, according to the data of the European Investment Bank, the analysis of the experience of implementing infrastructure projects on the basis of PPP is presented. It is shown that PPPs are an important factor in the activation of private investments in the implementation of capital-intensive and time-consuming projects in infrastructure sectors. National PPP projects are more successful where the institutional environment (in particular, legal) is more developed. In the third part, a model of the dependence between investments in infrastructure industries and the value of GDP per capita was proposed. There is a strong relationship between studied indicators.

The paper closes with the conclusions of the study and promising directions for research on public-private partnerships in European countries.

## **2. RESEARCH METHODS**

The study used methods mentioned below. The monographic method was used to formulate our point of view that based on the study of experience of implementing PPP projects, country's security reports and scientific literature.

Based on data from the European Investment Bank, we study PPP investment practices that have been completed in the EU-27, Great Britain, Turkey and the countries of the Western Balkans (Albania, Bosnia and Herzegovina, North Macedonia, Kosovo, Montenegro and Serbia). Budget of all these projects was at least 10 million euros.

The case study also used data from the Statistical Office of the European Union. Approximation was used to model the relationship between accumulated investments in infrastructure (independent variable) and GDP *per capita*, number of employed persons, and unemployment rate in European countries (dependent variables).

### 3. ECONOMIC SECURITY OF THE COUNTRY AND ITS INDICATORS

A reliable and efficient system of economic security is a prerequisite for stable and sustainable socio-economic development of a country and protection of its independence. In general, the country's security is formed at several levels: 1) international (global, regional) (Gbur, 2018); 2) national (state); 3) sectoral/meso level (sector, enterprises, financial institutions); 4) social (households, individuals). Among them the economic security of the country is most important for the the national security (Sytnyk, Blakyta, Huliayeva, 2020).

In turn, the economic security of a country is in the environment of number of interrelated elements: economic security of a region, industry, enterprise, financial sector, society, and an individual. The interaction of these elements can be represented as an open system since each of them has external connections that may be stronger than internal ones (Figure 1).

Economic security is understood as a qualitative characteristic of the economic system that determines its ability to maintain normal conditions of the system's performance, development within the framework of the goals set for the system, and in the event of various threats (external and internal), a system that is able to withstand them and restore its performance (Epifanov, Plastun, Dombrovsky, Bolgar, Vashchenko, 2009). Here it is worth adding that such qualitative characteristic must have clear rational base, main part of which are quantitative assessments.

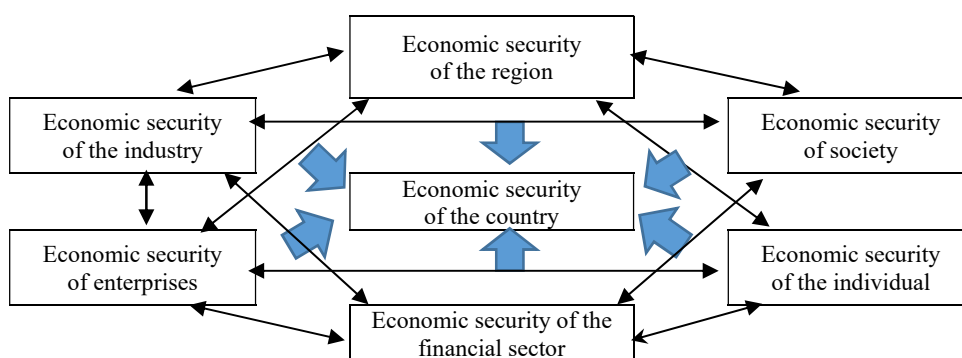


Figure 1. The system of economic security of the state

Source: (Kahler, 2004; Böhme, Nowey, 2008; Gbur, 2018; Solomina, 2018; Sytnyk, Blakita, Gulyayeva, 2020).

The main qualitative characteristics of the country's economic security are:

1. Economic independence, e.g., the ability to manage national resources, the ability to use national competitive advantages to ensure equal participation in international competition;

2. Sustainability of the national economy, e.g., protection of all forms of ownership, creation of guarantees for effective business activity, reducing of destabilising factors;
3. The ability to self-development and progress, i.e. the ability to independently implement and protect national economic interests, to carry out continuous modernisation of production, effective investment and innovation policy, to develop the intellectual and labour potential of the country (Kharazishvili, Dron, 2014).
4. Economic security is reflected in the following indicators: generalised labour productivity (GDP *per capita*), GDP growth rate, indicators of production technology, level of shadow economic, economic openness ratio, levels of export and import dependence, level of investment, growth of foreign direct investment, level of fixed assets renewal, ratio of average wage to living wage, level of shadow employment, indicators of natural population growth, level of monetisation of economic assets, level of economic activity, etc. Some of these indicators characterise the socio-economic well-being of the country's population. (Gbur, 2018).

Socio-economic well-being among other things is based on the development of transport infrastructure and level of the perceived quality of transport services, provision of acceptable living conditions through the development of housing and communal services, medical care system, education conditions, etc. In the context of economic security it means that achieving the target indicators requires a modern production forces and infrastructure. Some European cases show that PPP are an effective tool for ensuring the development of infrastructure sectors (Verweij, 2015; Festa et. al., 2016; Revoltella, Brutscher, 2017; Iossa, Saussier, 2018; Inderst, 2020; Cruz, Sarmiento, 2022; Fleta-Asín, Muñoz, 2023).

#### 4. PUBLIC-PRIVATE PARTNERSHIP IN EUROPEAN COUNTRIES

Joint of the public and private sectors can works on solving social important and industrial projects. In this context the following terms define the specifics of partnership between the state and private business (Bondar, 2014):

Private Participation in Infrastructure (PPI) is a term used by the World Bank;

Private Sector Participation (PSP) is a term used by international financial institutions within the development lending sector;

Private Finance Initiative (PFI), which was originally developed in the United Kingdom and then actively used in Japan and Malaysia;

P3 is a term used in North America;

Privately Financed Projects (PFP) – a term used in Australia.

The success of implementing infrastructure projects based on PPPs depends, first of all, on the level of development of the institutional (including legal) environment in the country. The experience of partnership between the state and private business, which exists in a certain country, is of great importance when implementing PPPs.

Today, European countries have the most experience in implementing infrastructure projects based on PPP. Figure 2 shows the dynamics of the number of infrastructure projects implemented in European countries in 1990–2022 with support of the European Investment Bank.

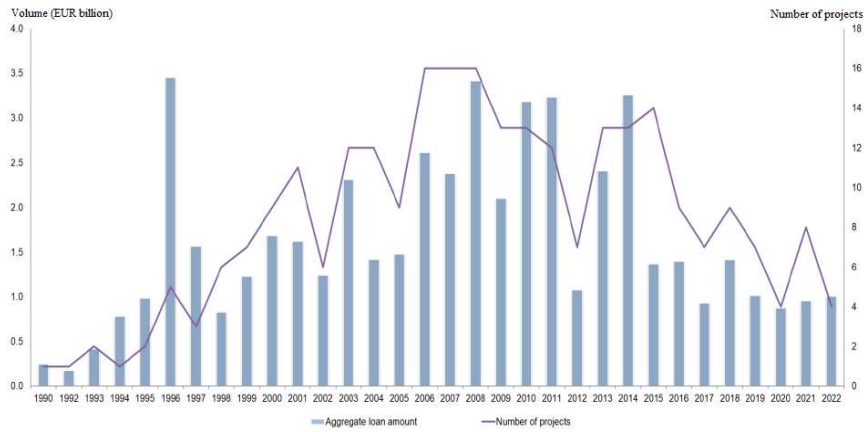


Figure 2. Investment volumes and number of infrastructure projects based on public-private partnerships in current prices

Source: (Public-private partnerships financed by the European Investment Bank from 1990 to 2022).

The largest number of projects and amounts of invested capital were observed in 1996, 2008, 2010, 2011, and 2014. The downward trend in activity stopped in 2017–2018. Since 2018, it has continued again due to the saturation of society's needs for infrastructure services. A decline in investment and the number of PPP projects is also observed in 2019–2022. Decline of economic in Europe was caused by the COVID-19 pandemia and Russia's military aggression against Ukraine. In 2022 Due to the war in Ukraine, the defense sector for the first time took second place after transport in terms of investment (Figure 3).

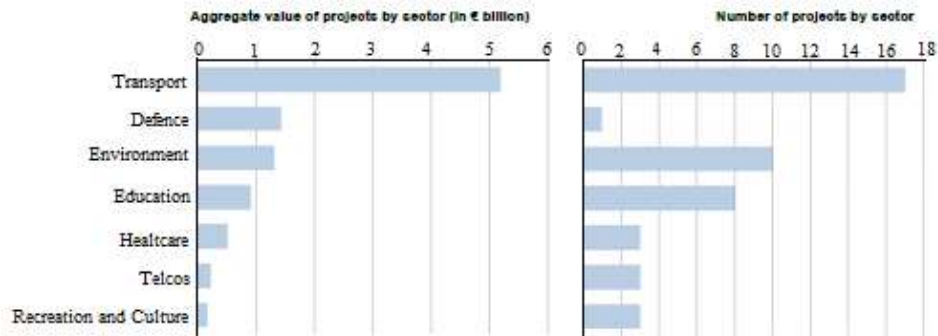


Figure 3. Distribution of economy sectors by aggregate value of projects and number of public-private partnership projects in 2022

Source: (Market Update. Review of the European PPP Market in 2023).

In 2022, 45 PPP deals reached financial close with a total value of €9.9 billion. Compared to 2021, the PPP market increased by 17% in value terms. The number of projects increased by 2%. This means that projects become more expensive.

Investments in the transport sector totalled €5.2 billion in 2022, compared to €6.0 billion in 2021. But, at the same time, the number of projects also increased (17 projects in 2022 compared to 16 projects in 2021). These included four road construction projects (two in France, one in Greece and one in Italy) and four port expansion projects (two in France, one in Croatia and one in Cyprus). That is, projects become smaller.

The transport sector has remained consistently popular with investors (Figure 4). The total amount of invested capital in 1990–2022 was almost €40 billion (€39,938 million). Education and healthcare are in second and third place, with investment volumes of €4.5 billion and €6.5 billion respectively.

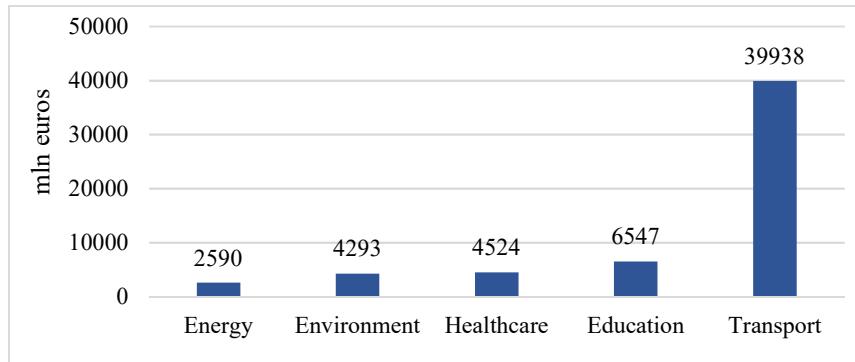


Figure 4. Distribution of PPP investments by sector (1990–2022)

Source: Own study based on: (Public-private partnerships financed by the European Investment Bank from 1990 to 2022).

A study of the practice of implementing infrastructure projects on the basis of PPPs by country in 2022 shows that France, Turkey, Cyprus, Ireland, Germany, Italy, Greece, Poland, Belgium, and the United Kingdom are the most active (Figure 5). 15 countries closed at least one PPP project. In 2021, there were 14 such cases.

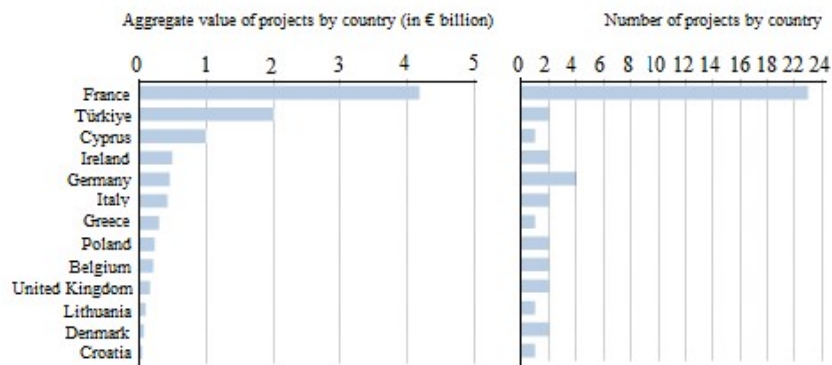


Figure 5. Distribution of countries by aggregate value of projects and number of projects in 2022

Source: (Market Update. Review of the European PPP Market in 2023).

In 2022, three major deals were concluded. Their total value was €4.25 billion, which is 44% of the total value of PPP deals in Europe. These are: Antalya Airport Concession (Turkey) – €1.8 billion; CEGELOG French Military Accommodation PPP (France) – €1.4 billion; Larnaca Port and Marina Area Redevelopment PPP (Cyprus) – €1.0 billion.

The list of leaders is somewhat different in terms of the number of deals concluded. France remains in first place (21 projects), Germany is second (4 projects), and seven countries with two projects each (Turkey, Ireland, Italy, Greece, Poland, Belgium, Denmark) are in third place.

## 5. THE RELATIONSHIP BETWEEN INVESTMENT IN INFRASTRUCTURE AND ECONOMIC SECURITY INDICATORS OF THE EU COUNTRIES

Given the lag between investment and their effect after, we analyse the dynamics of the average GDP per capita in current prices in accordance with the accumulated volumes of investments in infrastructure facilities on the basis of PPP (Figure 6). As can be seen, there is a high correlation between these indicators (0.9).

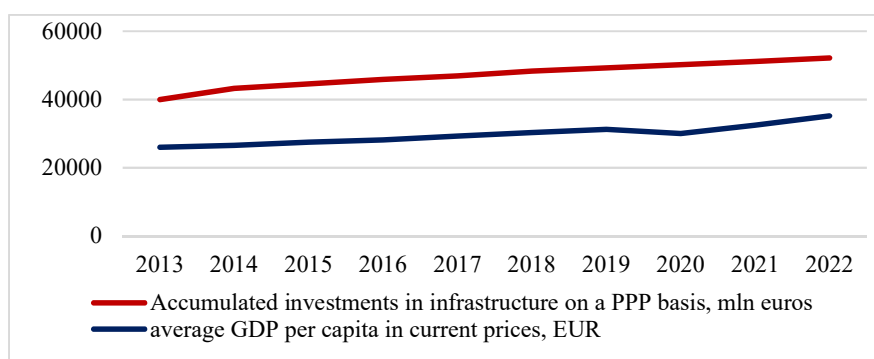


Figure 6. Dynamics of accumulated investments in infrastructure on the basis of PPPs and GDP *per capita* in the EU (2013–2021)

Source: Own study based on: (<https://ec.europa.eu/eurostat> [Access: 14.04.2023]).

The exponential function best reflects the dependence of average GDP *per capita* in current prices on accumulated investment in infrastructure based on PPPs (Figure 7).

It can be seen that investments made in infrastructure facilities, in particular on the basis of PPPs, have a direct impact on the average GDP *per capita* at current prices. Probably the services provided by new infrastructure facilities to society increase the added value created in the country's economy. Moreover, the accumulation of investments in infrastructure facilities creates new jobs. This has a positive impact on employment level.

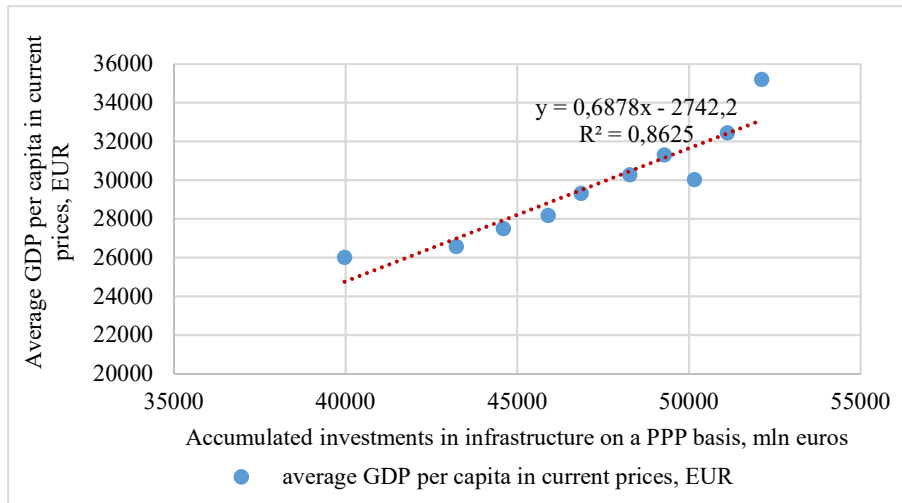


Figure 7. Dependence of average GDP *per capita* in EU countries in current prices on accumulated PPP-based infrastructure investment

Source: Own study based on: (<https://ec.europa.eu/eurostat> [Access: 14.04.2023]).

Figure 8 shows the dependence of the number of employed people in the EU countries on the amount of accumulated investment in infrastructure facilities. There is a direct, close relationship. It is best described by an exponential relationship.

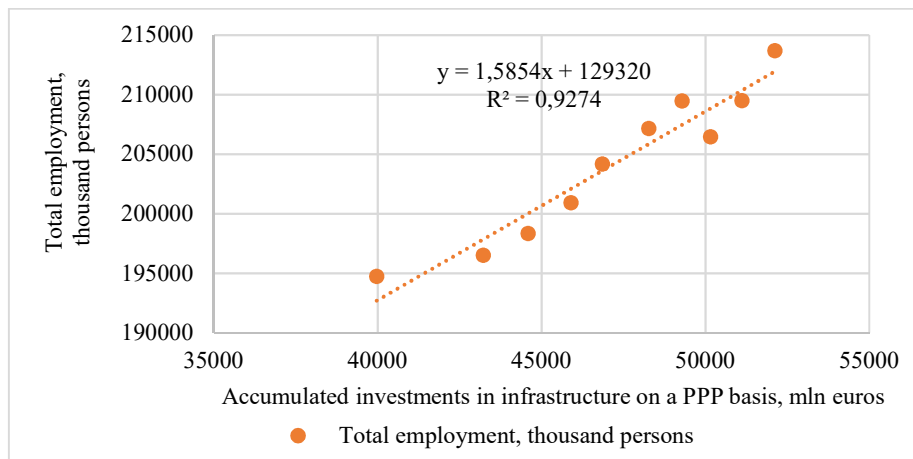


Figure 8. Dependence of total employment in EU countries at current prices on accumulated investments in infrastructure based on PPP

Source: Own study based on: (<https://ec.europa.eu/eurostat> [Access: 15.04.2023]).

Figure 9 shows the relationship between the unemployment rate and accumulated PPP-based infrastructure investment. The relationship between unemployment and



accumulated investment in infrastructure based on PPPs is best described by a polynomial function. The relationship is close and inverse.

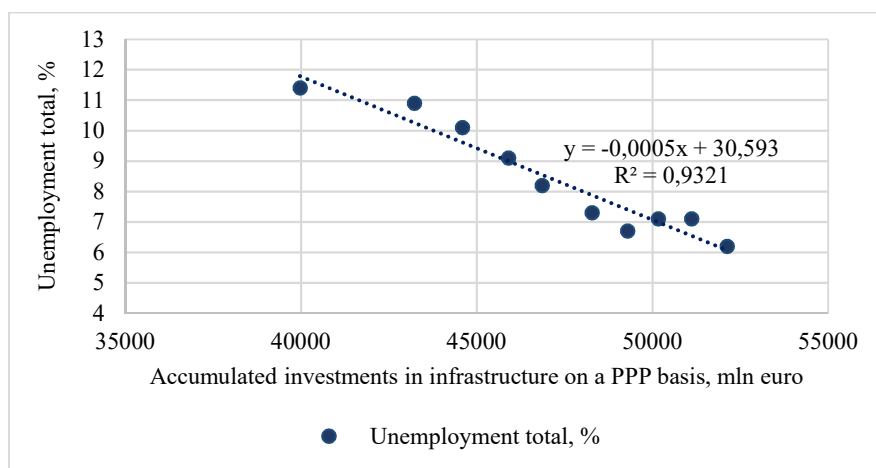


Figure 9. Dependence of the unemployment rate on accumulated investments in infrastructure based on PPPs.

Source: Own study based on: (<https://ec.europa.eu/eurostat> [Access: 15.04.2023]).

The percentage of unemployed among the active population decreases with the growth of accumulated investments in infrastructure. This is because business activity is increasing in the areas where infrastructure facilities are located, freight traffic is growing, local communities are developing. Unemployment is decreasing because: new jobs are created at the facilities where the investment was made; mobility (if it is transport) increases, so access to work improves. Productive capacity improves due to increased competition for jobs. Uninteresting work is done because of easier access to it (its attractiveness increases)

## 6. CONCLUSIONS AND DIRECTIONS OF FURTHER RESEARCHES

In summary, the results of the study on the direct impact of PPP investments in infrastructure on certain indicators of the country's economic security demonstrate the importance of a sound infrastructure policy. Such projects should be implemented, first of all, in areas that have certain delays in socio-economic development.

Countries with a high level of economic security include Luxembourg, Norway, Switzerland, Austria, the United Kingdom, Germany, Ireland, the Netherlands, Sweden, Denmark, Belgium, France, Italy, Spain, and Poland. These countries have considerable experience in developing infrastructure projects based on public-private partnerships. The projects relate to the development of transport infrastructure (roads, bridges, tunnels, sea and river ports, urban transport, airports, railways, railway stations, rolling stock), housing and utilities (gas and water supply, energy saving, construction of affordable housing), education, healthcare, law enforcement, environmental protection, tourist destinations, etc. Investments in transport development projects have the greatest impact on strengthening economic security.

In order to save budgetary funds and accelerate the implementation of socially important projects, it is important to attract private investment. This involves the creation of attractive conditions for private investors by governments. The study of the prerequisites for private investors to come to infrastructure projects and the study of the practice of creating such prerequisites in the EU countries is the focus of further research.

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## LONG-TERM POST-COVID-19-PANDEMIC EFFECTS FACED BY LIFE INSURERS IN POLAND IN THE CONTEXT OF EUROPEAN TRENDS

The COVID-19 pandemic has initiated or accelerated significant changes in the insurance sector, including remote customer service, along with changes to risk management processes and the insurance offer. In the post-pandemic environment, these may increase development opportunities and improve the market competitiveness of insurers. The aim of this paper is to identify and discuss the implications of the COVID-19 pandemic for life insurers operating in Poland. To examine the direct responses of life insurance markets to the COVID-19 pandemic, an analysis is conducted of the life insurance sector in Poland and the whole of Europe, based on the most up-to-date data available. Next, the implications of the pandemic for life insurers' technical operations and financial sustainability are examined. The article also discusses the main challenges to the further development of life insurance businesses in the context of long-term post-pandemic effects.

**Keywords:** life insurance, COVID-19 pandemic effects, Poland, mortality risk, Europe.

### 1. INTRODUCTION

There is no doubt that the COVID-19 pandemic has caused many changes in the economy, including the insurance sector, bringing various challenges for individual insurance market participants. In the initial period, severe disruption to the activity of many insurers was noted, but in the long run, the situation provided a great opportunity for dynamic development in many aspects of the insurance business.

In life insurance, due to the specific features of the products, a slightly different approach for analysis of changes resulting from the pandemic and their impact on the business activity and financial operations of life insurance companies is needed compared to non-life insurers. First of all, the risk of death and/or reaching a certain age is the main risk covered under the contract. Second, most life insurance products are of a long-term nature and enable the accumulation of savings that can be used in the future (Borda, Chmielowiec-Lewczuk, Kwiecień, 2020). The above-mentioned characteristics of life insurance require a specific approach to risk assessment and the financial operations conducted by life insurance companies.

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The COVID-19 pandemic has affected the life insurance sector directly by causing a significant number of premature deaths, which has increased the mortality risk for many life insurance products. Moreover, life insurers as financial institutions and long-term investors on the capital markets have faced new challenges related to the macroeconomic situation, in particular high inflation, as well as the instability of financial markets and new regulations.

The purpose of the paper is to identify and discuss the main challenges faced by life insurance companies in Poland in the post-pandemic environment. In order to present the direct response of life insurance markets to the COVID-19 pandemic, analysis is conducted of the life insurance sector in Europe and Poland, based on the most up-to-date data available. In addition, the implications of the COVID-19 pandemic are examined in terms of life insurers' technical activity and financial operations, as well as their solvency requirements. The paper also presents the main challenges in the further development of life insurance companies in the context of long-term post-pandemic effects.

## **2. ANALYSIS OF THE EUROPEAN LIFE INSURANCE SECTOR IN THE CONTEXT OF THE COVID-19 PANDEMIC EFFECTS**

The first wave of the COVID-19 pandemic had a tangible impact on the performance of the European life insurance sector. The main characteristics of the life insurance markets in European countries are presented below, based on the most up-to-date and verified data.

According to Insurance Europe data, in 2020 the European life market recorded the largest drop in the last decade in the basic indicators characterizing the market size and its level of development. In the year 2020, the total gross written premium amounted to EUR 640 billion, and after three years of increases it fell by as much as 9.4% compared to the previous year. Life benefits paid decreased by as much as 11.5% compared to 2019 and reached EUR 508 billion, which represents the lowest value in the period 2011–2020. Moreover, the density ratio expressing the average insurance premium per inhabitant decreased by 9.9% and the penetration ratio (gross written premiums as a percentage of GDP) declined by 0.24 p.p. respectively (Insurance Europe, 2021).

Table 1 shows the initial response of life insurance markets to the COVID-19 pandemic in individual European countries, taking into account the values related to premiums and benefits.

In Figure 1 the COVID-19 cumulated cases and deaths reported in European countries as of 27 December 2020 are presented.

Regarding the dynamics of written premiums and benefits paid, in general it can be expected that the increase in mortality associated with the pandemic has been translated into an increase in the total value of benefits paid, which consequently can lead to an increase in premiums in the next years. Additionally, an indirect, short-term effect of the pandemic may also be a decrease in the value of premiums, caused, for example, by the difficult financial situation of households and enterprises. At the end of 2020, the European region continued to account for the second highest number of new COVID-19 cases and deaths globally (37% and 42% respectively) (WHO, 2020). As Figure 1 presents, the cumulated number of COVID-19 deaths per 1 million population reported by the WHO as of 27 December 2020 was the highest in the case of: Belgium, Slovenia and Italy, followed by Bulgaria, Czechia, Spain and the UK, which did not always directly translate into an increase in benefits paid by life insurers. It should be mentioned that the total value of life

insurance benefits paid in a given country is determined not only by the level of mortality but also other factors, such as: the percentage of population covered by life insurance, dominant types of life insurance contracts, the range of insurance coverage including premature death caused by COVID-19, etc.

Table 1. Selected characteristics of life insurance markets in European countries in 2019–2020

Country	Change in written premiums (2020/2019, in %)	Change in annual benefits paid (2020/2019, in %)	Density ratio (in EUR)		Penetration ratio (in %)
			2019	2020	
Austria	-1.4	8.2	618	607	1.37
Belgium	-6.7	7.6	1409	1307	3.41
Bulgaria	-3.5	22.1	26	25	0.30
Croatia	-13.6	18.2	101	88	0.77
Cyprus	7.3	7.3	432	462	1.74
Czechia	-5.4	-15.1	176	166	0.85
Denmark	7.6	9.1	4151	4454	7.75
Estonia	-11.2	3.2	72	64	0.34
Finland	-17.3	-12.7	3979	3286	9.14
France	-20.0	-12.5	2073	1650	5.74
Germany	0.0	-3.4	1243	1241	3.00
Greece	-5.2	-7.3	205	195	1.17
Hungary	4.0	-6.7	147	153	1.00
Italy	-6.1	-1.4	2100	1996	7.09
Luxemburg	-17.7	20.7	43769	35320	42.30
Latvia	8.4	9.0	67	73	0.42
Malta	-4.6	19.5	766	701	2.85
Netherlands	-1.4	-1.9	716	701	1.52
Norway	-4.8	5.8	1913	1808	2.83
Poland	-2.5	-6.2	126	123	0.91
Portugal	-34.8	25.5	681	443	3.29
Romania	1.1	2.3	29	29	0.25
Slovenia	-0.5	0.6	336	332	1.46
Slovakia	-9.5	-19.6	170	153	0.98
Spain	-20.5	0.6	584	460	2.20
Switzerland	-17.8	-44.3	3274	2673	4.45
Sweden	15.1	9.7	2436	2776	5.26
United Kingdom	-11.7	-16.4	2260	1984	5.97

Source: Author's work based on Insurance Europe (2021).

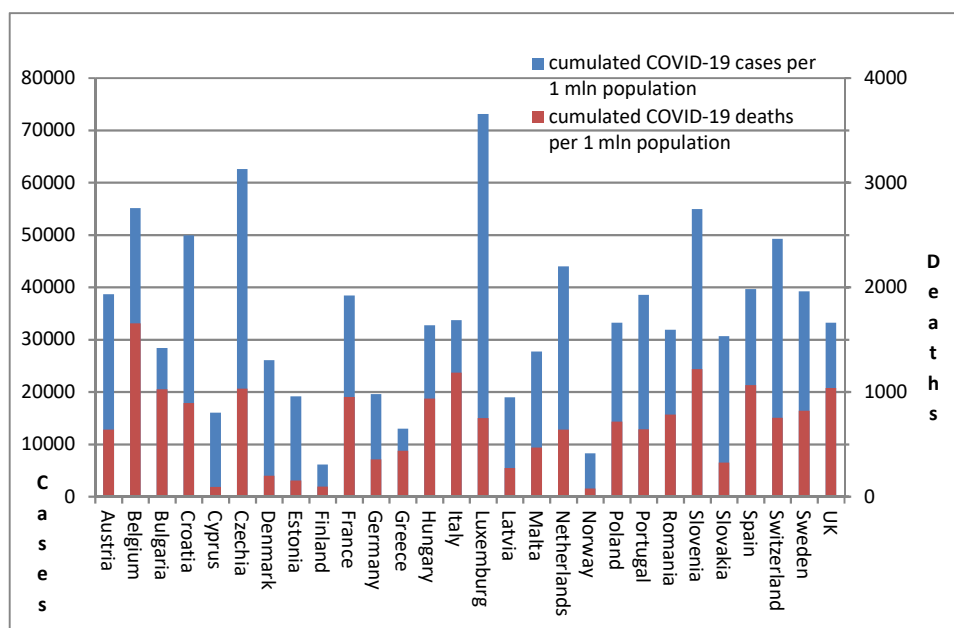


Figure 1. COVID-19 cumulated cases and deaths reported in European countries as of 27 December 2020

Source: WHO (2020).

As Table 1 shows, in 2020, for a number of the countries analyzed (Austria, Belgium, Bulgaria, Croatia, Estonia, Norway, Portugal) the observed decrease in the amount of premiums was accompanied by an increase in the value of benefits paid. However, 10 out of the 28 countries examined recorded a decline in life insurance benefits with a simultaneous decline in premiums compared to the previous year. This was the most pronounced in: Switzerland, France, Finland, the UK and Slovakia. Moreover, there were also countries where in the first year of the pandemic there was a noticeable increase in premiums with a simultaneous increase in the value of benefits paid (Cyprus, Denmark, Latvia, Sweden). It should be highlighted that the amount of premiums collected by life insurers in 2020 was influenced by various factors, such as insurance awareness in the face of the pandemic (recorded cases and deaths), the changeable financial possibilities of households and employers, types of life insurance contracts offered on the market (individual or group, traditional or unit-linked), improvements in customer service, distribution channels (traditional versus remote) and others.

In 2019–2020, most European countries were characterized by a decreasing density ratio, which was especially noted in the case of Portugal, Spain and France. Moreover, in most of the countries analyzed there was a relatively small decrease in the share of life insurance premiums in GDP, although the decrease was more dynamic in the case of Luxembourg, Finland, Portugal and Switzerland. Regardless of the effects of the pandemic, it is important to mention that one can still observe a great differentiation in the level of development of the life insurance sectors among examined countries (especially between CEE states and Western European states), measured by density and penetration ratios.



According to preliminary data collected by Insurance Europe, in 2021 in many European countries, life insurance premiums were able to return to their “normal” levels noted before the COVID-19 pandemic, with unit-linked contracts leading the growth. The main reason was that some of the household savings accrued during the pandemic were invested in life insurance products. In the case of unit-linked life insurance products, contrary to traditional life insurance, the investment component of the contract is separated from the protection one, giving more transparency and flexibility to the policyholders, however with the investment risk usually taken by them. The performance of financial markets generated good returns on investments and made unit-linked life insurance more attractive for customers. However, the recovery in life premiums was not observed in all European states. High inflation and changeable energy prices, especially towards the end of 2021, may have affected household savings and reduced demand for life insurance products in some markets (e.g. Germany and Austria) (Insurance Europe, 2022).

In 2021, the amount of benefits paid by life insurers varied across European countries due to the possible effects of the pandemic on life insurance payments. Excess mortality related to COVID-19 created a higher level of mortality claims, but possibly a lower level of life annuity pay-outs. Moreover, in some countries, people decided to surrender their private pension plans before maturity because they needed extra money due to the economic effects of the pandemic (Insurance Europe, 2022).

### **3. POLISH LIFE INSURANCE MARKET IN RESPONSE TO THE COVID-19 PANDEMIC**

In Poland, during the first wave of the COVID-19 pandemic, a decline was observed in both premiums collected by life insurers as well as the total amount of life benefits paid. In 2020, total life insurance premium reached PLN 20.8 billion (the lowest value in the last decade) and recorded a 2.5% decrease compared to 2019. As presented in Table 2, this situation resulted mainly from a 14% fall in investment life insurance premiums (group 3), with a simultaneous increase in additional health insurance premiums belonging to group 5 (by 5% compared to 2019) and a small increase in traditional life insurance products from group 1 (by 1.5% compared to 2019). This decline in written premium could be related to limitations in the sale of life insurance products with the use of traditional distribution channels (insurance agents, direct sale), as well as difficulties in collecting premiums in group contracts as an effect of liquidity problems experienced by enterprises (Borowski, Costa, Radwan, Sokoliński, 2020).

In 2020, a significant decrease in the claims ratio in the life sector was also noticeable, especially in the case of group life contracts and health insurance. Total benefits paid by life insurers fell by 6.2% compared to the previous year. As presented in Table 3, taking into account the types of life insurance products, despite a large increase in benefits paid out from traditional life insurance (an increase by 10.35%), the value of benefits from unit-linked insurance and additional health insurance decreased (cf. Polish Chamber of Insurance, 2020; Ronka-Chmielowiec, 2022). It seems that this could partly be the result of limitations in the number of medical procedures performed and the reduction in the number of various accidents as a result of the lockdown (Deloitte, 2022).

In 2021, the situation in the Polish life insurance market changed and both the benefits paid and gross written premium increased. This was mainly related to increased customer interest in protection life insurance products and the increased mortality in the population due to the pandemic. Total life insurance premiums amounted to PLN 22.1 billion, of which

as much as PLN 9.1 billion was related to traditional life insurance, including protection insurance (an increase by 14.39% in comparison to 2020). The pandemic increased the fear among Poles about the lack of access to medical care and the risk of serious illness or death of family members, which was translated into an increase in sales not only of protection life insurance, but also additional accident and sickness insurance, for which the premium amounted to PLN 7.1 billion (6.98% higher than in 2020).

Table 2. Selected indicators related to gross written premium according to risk classes in life insurance sector in Poland in 2019–2021

Classes	Share in total gross written premium in life sector (in %)			Dynamics 2020/2019 (in %)
	2019	2020	2021	
Class I. Life insurance	36.88	38.34	40.99	101.47
Class II. Marriage assurance, birth assurance	0.52	0.53	0.45	100.0
Class III. Life insurance, if linked to investment fund	32.20	28.37	25.68	85.98
Class IV. Annuity insurance	0.68	0.77	0.90	109.66
Class V. Accident and sickness insurance, if supplemental to the insurance referred to in classes I-IV	29.73	31.99	31.98	105.02

Source: Author's calculations based on data from Polish Chamber of Insurance (2021, 2022).

Table 3. Selected indicators related to benefits paid according to risk classes in life insurance sector in Poland in 2019–2021

Classes	Share in total benefits paid in life sector (in %)			Dynamics 2020/2019 (in %)
	2019	2020	2021	
Class I. Life insurance	31.24	36.73	40.76	110.35
Class II. Marriage assurance, birth assurance	0.65	0.69	0.54	99.17
Class III. Life insurance, if linked to investment fund	53.30	47.90	43.48	84.34
Class IV. Annuity insurance	0.45	0.54	0.54	111.90
Class V. Accident and sickness insurance, if supplemental to the insurance referred to in classes I-IV	14.36	14.15	14.67	92.46

Source: Author's calculations based on data from Polish Chamber of Insurance (2021, 2022).

It is worth mentioning that in response to COVID-19, insurers offering group life products have introduced new technological solutions, e.g. websites that allow employees to sign up for insurance, simplified administration of contracts by employers, and adaptation of procedures to remote working. In addition, insurers have waived the pandemic liability exclusion. This was the case for the few insurers that used this exclusion in their contractual provisions (Jaźnicki, 2021).

The increase in mortality as a result of the COVID-19 pandemic was undoubtedly the most important factor determining the increase in benefits paid by life insurers in 2021. Compared to 2020, total amount of life benefits grew by 5.65%, with the largest increase observed in the case of traditional life insurance (an increase by 17.24%), followed by additional health riders (9.58%) (Polish Chamber of Insurance, 2022). It is also important to mention that this increase in payments significantly worsened the performance results of life insurance companies. In 2021, the total profits achieved by life insurers reached the lowest level for the period 2009-2021. Technical results (profits) in the life sector amounted to PLN 2.1 billion compared to PLN 3.2 billion in 2019, and net financial result (profits) amounted to PLN 1.6 billion compared to PLN 2.6 billion in 2019 (Polish Chamber of Insurance, 2022).

In general, based on the data presented in Tables 2 and 3, the COVID-19 pandemic gave rise to increased interest in traditional life insurance contracts ensuring benefits in the event of the insured's death, as well as additional sickness and accident insurance riders that enable access to private health care services (see also Ronka-Chmielowiec, 2022). On the other hand, life insurance products linked to capital investment funds weakened their position both in terms of written premiums and benefits paid. More detailed studies on investment life insurance show that in the first period of the pandemic, due to a slump in the financial markets, the results of insurance capital funds worsened, but in the long term, the pandemic did not significantly affect the effectiveness of life insurance linked to capital investment funds (Ostrowska-Dankiewicz, 2022).

#### **4. CHANGES IN THE LIFE INSURANCE BUSINESS IN POST-PANDEMIC TIMES**

Taking into account the life insurers' perspective, the COVID-19 pandemic forced significant changes in their business, which should be continued in order to improve the risk management process, customer service, human resources management, and contributing to financial sustainability in the currently turbulent environment.

##### **4.1. Changes in technical activity**

First of all, the COVID-19 pandemic has increased the mortality risk. Mortality risk is the main risk which is insured under life insurance contracts and also affects the risk of an insurance company. The unexpected increase in mortality risk forced life insurers to implement changes in their technical activity, including risk identification and measurement, as well as the calculation of premiums and technical reserves. Life insurers must take into account the COVID-19 mortality risk based on an appropriate mortality model so as to better forecast the future financial stability of their operations (Zhang, Liao, Chen, 2021). It is worth underlining that the direct and indirect effects of the pandemic on mortality rates should be incorporated into such a model. The direct effects reflect simply the number of deaths caused by COVID-19, however there are also indirect adverse effects of the pandemic (e.g. limited access to healthcare services during the pandemic, social distancing, economic changes) that may increase mortality rates in the future (Clemente-Suárez et al., 2021; Hanna et al., 2020; Zhang et al., 2021). Consequently, life insurers should forecast future mortality rates taking into account the negative effects induced by the COVID-19 pandemic. In the international literature, there is an ongoing discussion on how temporarily stressed mortality rates change post-COVID-19 mortality rates and the

mortality term structure and premium calculations (Carannante, D'Amato, Fersini, Forte, Melisi, 2022; Harris, Yelowitz, Courtemanche, 2021; Milesky, 2021; Spiegelhalter, 2020).

Depending on the types of life insurance products offered, various effects of the impact of the increase in mortality on the amount of premiums and the costs of benefit payments can be observed, which directly translates into the profitability of the conducted business. For example, in the case of term insurance contracts, the increased number of premature deaths has led to an increase in mortality risk liabilities and the total amount of benefits paid by the insurer, which has reduced the profitability of the insurance business. However, it should be added that the extent of this effect depends largely on the age profile of the policyholders and their place of living (Farrell, 2020). On the other hand, in the case of life insurers offering life annuities, pandemic-related deaths may reduce the expected level of longevity risk. In a study by Carannante et al. (2022), the authors examined the long-term impact of the COVID-19 pandemic on life insurance profitability using the example of a life annuity contract. They found that the pandemic affected the profitability of medium- and long-term annuity contracts in a positive way, however they conclude that much more attention should be paid to longevity risk, as it is a systematic risk that has a significant impact over the entire duration of a life annuity contract.

In the life insurance sector in Poland, annuity contracts are still not very popular and have a marginal market share measured by gross written premium, in contrast to term insurance and other life insurance contracts under which the risk of premature death is covered. Moreover, in Poland there are no current assumption whole life insurance (CAWL) products on the market, in which the volatility in mortality rates, investment results and expenses is taken by policyholders (Black, Skipper, 2000). Therefore, the main effects of the COVID-19 pandemic are related to changes in the mortality risk covered under traditional life insurance contracts. One should also add that in the medium- and long-term perspective, a separate challenge will be the calculations of premiums and technical provisions in such a dynamically changing environment. Existing solutions, which are often based on a retrospective approach and analyses of historical trends, may not be easily applicable in the current situation.

#### **4.2. Changes in the financial operations**

The increase in mortality risk, as an effect of the COVID-19 pandemic, has also had a significant impact on life insurance companies' risk profiles and the adequacy of their funds for covering the capital requirements under the Solvency II regime. As Karlsson (2020) indicates, the pandemic may represent a serious threat to the solvency stability of insurance companies. In a study by Puławska (2021), the results demonstrate that the pandemic has negatively affected the functioning of the European insurance sector, e.g. solvency ratios decreased in the Belgian, French and German insurance markets. According to the Solvency II system, in the life sector the life underwriting risk represents the most important component of the solvency capital requirement (SCR), calculated with the standard formula, followed by market risk. In a study by Jaśkiewicz (2020), the author found that for life insurers operating in Poland in 2016–2017, the life underwriting risk had the largest impact on the amount of SCR (representing 59–82% of SCR), with the second greatest being market risk, which constituted 44–57% of SCR. For both of these risks, the impact of the pandemic (increase in mortality rates, volatility on the financial markets and higher costs) may result in the need for insurers to maintain higher levels of their own funds in order to cover higher solvency capital requirements.

It seems that in long term, the impact of the COVID-19 pandemic on the investment activity of life insurance companies may be more considerable for their economic solvency than the above-mentioned impact of the increase in mortality rates. From the beginning of the pandemic, the life insurers as the institutional investors on the financial markets have been exposed to significant market risk related to higher volatility in equity markets and dynamic changes in interest rates (Campbell, 2020; Farrell, 2020). Such changes could have an adverse impact on life insurance liabilities and solvency ratios, as in the life insurance sector, significant assets are held to cover future liabilities to policyholders. However, it should be mentioned that the net effect of the market risk impact on a life insurance company's balance sheets will depend on the asset duration compared to the liability duration (Farrell, 2020). Currently, the combination of rising interest rates and high inflation seems to be a significant challenge for life insurance companies, especially with regards to adequate product valuation and investment activity.

In response to the financial implications of the pandemic, the European Insurance and Occupational Pensions Authority (EIOPA) has encouraged the use of flexibility within the Solvency II system. Consequently, in some European countries, insurance regulators have introduced a flexible approach to the valuation of insurance liabilities. For example, the Italian Institute for the Supervision of Insurance has introduced a change in the Solvency II framework with respect to the valuation of insurance liabilities by using a country-specific volatility adjustment (see in: Sugimoto, Windsor, 2020).

### 4.3. Other post-pandemic challenges

Among the other long-term post-pandemic challenges faced by life insurance companies operating in Poland are the following (see more in: Borowski et al., 2020; Klonowska, Strupczewski, 2021; Volosovych, Zelenitsa, Kondratenko, Szymła, Mamchur, 2021):

- Development of the product offer – including implementation of new products and changes to existing ones. The COVID-19 pandemic and the accompanying sense of threat has generated increased interest in traditional life insurance and additional health insurance products that guarantee quick access to health care services and cover for treatment costs. An important opportunity for the life insurance sector may also be the expansion of the product offer, including the introduction of product innovations. The best examples in this area seem to be telemedicine, especially in private health insurance, and simplification of the structure of existing products, as well as the creation of products addressed to new groups of customers, for example people suffering from chronic diseases, who until now have often been excluded from insurance cover.
- Further digital transformation of processes and improvement of remote customer service – including implementation of modern technologies such as artificial intelligence (AI), machine learning (ML), the Internet of Things (IoT), natural language processing (NLP) and computer vision, which should lead to automation and an acceleration and increase in efficiency of many processes in insurance companies. It is also expected to improve remote communication with customers in terms of the purchase of insurance products, contract renewal, change of data, and the possibility of making appointments online to see a doctor, as well as improvement in the risk management process including risk assessment and claims handling.

- Implementation of crisis management strategies in insurance companies – containing effective coordination of the operations of all organizational units in the event of a crisis situation, detailed analysis of possible scenarios of the impact of a crisis situation on the insurer’s financial stability, and planning post-crisis changes and activities.
- Implementation of a long-term hybrid work model for employees – including adequate management tools, coaching and employee cooperation.

It is worth mentioning that in the long term, the above-mentioned changes in the life insurance business initiated by the COVID-19 pandemic may build strong opportunities for establishing a stable market position, and may contribute to the application of a sustainable insurance approach.

## 5. CONCLUSIONS

Due to its multifaceted nature, the COVID-19 pandemic has affected the activity of life insurers in various ways, leading to long-term effects. This “abnormal” situation has highlighted some inefficiencies in the traditional business model used by life insurers, including risk management and technical calculations, product structure, and interaction between insurers and their customers, and has encouraged life insurance companies to focus more efforts on innovations and investments in digital solutions.

The conducted market analysis, based on the available and most up-to-date data, showed that the direct responses of the life insurance markets in European countries to the pandemic situation were differentiated depending on the development level, the structure of the life insurance products offered on the market (protection life insurance versus life annuities), distribution channels, the financial situation of households and other factors. In Poland, one of the positive and visible post-pandemic effects is an increasing customer interest in the area of traditional life insurance and health insurance products. This creates an excellent opportunity for life insurers to improve their offer by taking into account the experiences of the pandemic, changes in mortality risk management and premium calculations, changeable customer needs, and the use of innovative solutions. On the other hand, the pandemic situation showed still low level of insurance education in the Polish society, especially in the area of unit-linked life insurance products. From the financial point of view, the life insurers in Poland should pay a significant attention to the life underwriting risk as the main component affecting their solvency capital requirements.

It is worth adding that not only the post-pandemic effects, but also high inflation, the energy crisis, Russia’s invasion of Ukraine and the threat of economic stagnation or recession may all have a significant impact on consumer attitudes and their financial possibilities in the nearest future, and consequently on the profitability of the life insurance business. These challenges also serve as future research opportunities.

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## A DIFFERENTIATION OF THE BENEFITS OF ISO 14001 ADOPTION IN MANUFACTURING COMPANIES

This article aims to analyze the benefits of implementing Environmental Management Systems (EMS) in accordance with the ISO 14001:2015 standard in Polish manufacturing companies. The study focuses on identifying how the internal characteristics of a company, and its financial situation, influence the variety of benefits obtained from ISO 14001 implementation. The main goal is to understand the role of EMS in the context of the broadly defined Qstrategy of sustainable development (SD) of enterprises. Filling the research gap also involves determining the factors differentiating the scale of benefits, considering both the attributes of enterprises and the parameters of their financial situation. The research methodology uses primary data, collected through a questionnaire survey of enterprises, and secondary data, including financial information. Mann-Whitney and Kruskal-Wallis statistical tests are used to analyze and evaluate the differentiation of benefits. The results indicate significant differences in perceptions of the advantages of implementing ISO 14001, depending on factors such as the enterprise's origin of capital, the geographical scope of its activity, and its financial condition. Among the most significant benefits mentioned are compliance with legal requirements, an improved company image, increased customer numbers, and growth in operational efficiency. The article contributes to the literature on environmental management, emphasizing the importance of diversification of a company's internal and external factors in the context of the benefits arising from EMS. The implications of this study are significant, both for the theory of environmental management and for business practices; it offers insight into how companies can maximize the benefits of implementing the ISO 14001 standard.

**Keywords:** environmental management system, ISO 14001 benefits, companies, environment, social and government (ESG), organizational eco-innovations.

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## 1. INTRODUCTION

A company's ability to sustain itself in an increasingly competitive market relies on several factors. These include not only internal factors such as resources, technology, level of costs, price setting, and distribution networks but also external factors, namely market preferences, availability of substitutes, and offers from competitors. The role and significance of these factors are interchangeable, with some losing value while others gain. One factor growing in importance in companies' development is the organizational attitude aimed at respecting principles of environmental protection (e.g., Johnstone and Hallberg, 2020; Su et al., 2015; Wang, Zhao, 2020). Add to this the increasing significance of environmental protection issues in national and EU legislature, and changing organizational attitudes are also due to the growing societal ecological awareness that continues to influence established companies and entrepreneurs.

Environmental management aims to design and implement integrated solutions that fulfill requirements for sustainable development (SD), namely activities aimed at reducing pollution and minimizing negative impacts on the natural environment, economy, and society (Ociepa-Kubicka et al., 2021; Stec, Grzebyk, 2022). Companies, in their attempts to comply with principles of environmental protection, undertake varied activities aimed at better utilization of resources and production materials or at improved efficiency of initiated processes that constitute the organization's pro-environmental activities. Such endeavors include, amongst others, elimination of pollution through investment activities in efforts to change the physical properties of processes/products, recycling of materials involving the accumulation and management of physical waste products for re-use, reduce the overall quantity of waste generated by introducing changes to ongoing processes, reducing fuel and energy consumption through the application of innovative solutions and limiting water usage (Schoenherr, 2012; Wu et al., 2022; Bravi et al., 2020; Camilleri, 2022). Organizations are supposed to transform toward energy consumption that is environmentally friendly and renewable (Wang, 2020).

Environmentally friendly companies conduct their business with the intent to minimize their burden on the natural environment, which ultimately proves to be profitable for them (Matuszak-Flejszman, 2009). Moreover, such organizations gain further, benefitting from their improved ecological image by winning the confidence of their customers, investors, and other stakeholders (e.g., Mosgaard et al., 2022). Therefore, a company's obligation to conduct business while respecting natural resources is more often demonstrated. It is more the case with companies whose activities impact the natural environment. Companies undertake varied initiatives to protect the environment by implementing certified systems and programs, including environmental management systems (EMS) in compliance with ISO 14001:2015.

The ISO 14001 standard is a set of management processes and procedures that enable organizations to analyze, monitor, and reduce environmental impacts of their production and service activities, aimed at reducing manufacturing costs, improving production efficiency, reducing the volume of waste generated, thus ensuring compliance with legal and other requirements which the organizations have committed themselves to (Melnyk et al., 2003; Zobel, 2013; Will et al., 2021).

This system is a worldwide solution suitable for application in any organization to obtain improvements in environmental outcomes (Testa et al., 2014). It is voluntary and based on the continual progress in minimizing pressure on the natural environment; however, the reduction scale depends on the company (Matuszak-Flejszman, Paliwoda,

2022). The ISO 14001 standard is implemented by organizations regardless of their business profile. However, using ISO 14001 certificates is visible mainly in manufacturing sectors (31–33 according to the North American Industry Classification System – NAICS) (Su et al., 2015).

Manufacturing companies are aware of the importance of environmental requirements requirements. They reduce the negative impact of industrial activity on the natural environment and thus adopt environmental management systems. Companies that have decided to implement the ISO 14001 standard must identify processes that significantly affect the natural environment and define procedures for their continuous improvement (Brodnicka, Jakubiec, 2016; ISO Survey, 2021).

Entrepreneurs, as such, focus on management geared toward SD (Bravi et al., 2020; da Fonseca et al., 2015; Kiselakova et al., 2020; Ociepa-Kubicka et al., 2021). The activities of companies can be defined by considering the economic, environmental, and social aspects of sustainability at its core (Fonseca et al., 2021; Pagell and Gobeli, 2009; Sroufe 2018). Structural change can foster environmentally friendly economic growth by shifting from carbon-intensive industries to greener alternatives (Villanthenkodath et al., 2022).

Standardization nowadays should be seen not only as a tool for the achievement of SD, strengthening green growth, or stimulating eco-innovations (Hajduk-Stelmachowicz et al., 2022) but also as a significant factor bringing us closer to the implementation of the assumptions of the circular economy (Szczygieł et al., 2022). Companies that adopt ISO 14001 standards signal their dedication to environmental excellence, foster trust within the broader community, and nations with numerous certifications exhibit an increased likelihood of attaining more sustainable economic development (Wang and Zhao, 2020). Technological advancements correlate with eco-friendly growth, and ISO 14001 is also significantly associated with SD (Abid et al., 2022; Szpilko, Ejdyś, 2022).

Implementing environmental standards in the enterprise can lead to many benefits. Among them, there are tangible benefits and intangible ones. The implementation and use of this system allow for improving the company image. By adopting the ISO14001 system, the company can stand out from the competition, increase its market share, enter new markets, and reduce pressure on the natural environment (Sam, Song, 2022).

Achieving these and other benefits, however, depends on the actual commitment of the company to minimize the negative impact on the environment. Improving environmental performance can, therefore, translate into improving the company's economic performance (Sroufe, 2003). Only then will the system improve the company's competitiveness and will not be an additional burden or source of further costs. However, the scale of benefits achieved by enterprises varies (Johnstone, Hallberg, 2020). This differentiation may result from the company's involvement in pro-environmental initiatives and external and internal conditions (Fura, 2020). Different results can also come from the extent to which a company integrates environmental and governance improvements across business functions and operations (Sroufe, 2018).

Within this study, we aim to recognize the benefits of implementing and using the ISO 14001 EMS in Polish manufacturing companies. Moreover, we define and look at the differentiation of these benefits depending on the internal characteristics of companies. Thus, we attempt to make contributions to this field of research by answering the following research questions:

1. What are the main benefits of implementing ISO 14001 and being certified for manufacturing companies in Poland?

2. Do firm features such as size, legal form, the source of capital, and conducting export activity impact the benefits of implementing ISO 14001?
3. Does the financial performance of certified companies impact the scope of benefits?
4. Does the maturity of the EMS of certified companies impact the scope of benefits?

This study is structured into five sections: an introduction followed by a literature review, the research method used in this study, the results and discussion of results, and, finally, the conclusions.

## 2. LITERATURE REVIEW

The benefits of adopting ISO 14001 systems have evolved. Danish research shows that the most common EMS objectives focus on energy/climate, waste, and water consumption, and the least common refers to external and product-related areas (Mette et al., 2022). Among the most frequently mentioned benefits is a reduction in operating costs. Pollution prevention, one of the foundations of EMS, creates mechanisms that minimize the consumption of raw materials and energy (Petruaru, Gavrilăscu, 2010). By improving the efficiency of current processes and implementing new, more effective processes, the system can thus influence the reduction of production costs (Christmann, 2000) and the improved quality of products/processes (Sartor et al., 2019). It starts from designing products and services in the most effective way to optimize/reduce the consumption of natural resources and energy without compromising quality, proper waste management, optimization of the selection of raw materials, materials and products, increasing the efficiency of the infrastructure used, storage, packaging and transport processes, reducing the level of wastage or non-value-added activities, struggle for cost-saving through enhancing the level of productivity and efficiency (Chen et al., 2022; Dev et al., 2020; Rossi et al., 2022).

Using an EMS makes it easier for the company to meet legal requirements (Jagodźńska, 2019; Matuszak-Flejszman, 2009). Regular supervision over compliance with environmental regulations should ensure that the company has a whole picture of its obligations in this area. It may help the company avoid fines and an unfavorable image regarding violating environmental protection regulations.

Developing an appropriate culture and pro-ecological awareness among the management and staff allows for the prediction of and often also influences future legal regulations in the field of environmental protection. This, in turn, allows harmonizing and adapting the development plans of enterprises to these regulations. An additional benefit is the possibility of gaining an advantage over competitors who begin adapting activities to the new regulations only when they are introduced (Psomas et al., 2011). The findings suggest that firms with a more substantial commitment to environmental performance are more likely to embrace ISO 14001 certification (Simpson, Sroufe, 2014; Vilchez, 2017).

Other benefits of implementing and using an EMS include environmental risk prevention through better management of environmental activities (Bravi et al., 2020) and risk reduction (Zębek, 2021). The EMS requires the identification of potential threats related to the company's operations and preparation against such threats. Therefore, the probability of situations that could harm the environment is reduced.

Banks, insurance companies, and potential investors base their decisions on risk assessment. Therefore, a systemic approach to the problem of minimizing potential threats puts the company in a favorable position regarding the abovementioned entities. Nevertheless, organizations in Poland seldom confirm discounts granted by the insurer

for being certified (Matuszak-Flejszman, 2009; Hajduk-Stelmachowicz, 2013; Hajduk-Stelmachowicz, 2017; Lemkowska, 2020). There is a need to build integrated environmental risk management tools based on awareness (including the risk of liability for environmental damage and its severity).

The ESMS – like the Environmental, Social, Governance (ESG) reporting system currently being promoted in the European Union (EU) – is based on risks and opportunities analyses and requires organizations to manage the environmental risks associated with their activities. The integrated management approach in ESG and an ISO 14001 – certified EMS indicates that organizations should consider environmental and social factors and their impact on the company's overall management and growth strategy. This approach provides the basis for setting SD goals in the coming years (Corporate Sustainability Reporting Directive – CSRD, 2022).

The number of organizations requiring their suppliers or partners to implement the ISO 14001 EMS is growing fast. The possession of such a system is more and more often a condition for maintaining or establishing cooperation (Seroka-Stolka, Gajda, 2015). Companies that supply large, transnational organizations often belong to the small and medium-sized enterprise (SME) sector. The situation may expand and result from the global tendency to introduce the principles of SD. On the other hand, there is growing evidence suggesting a gap between the sustainability commitments claimed by supplier companies and their real-world practices (Shalique et al., 2022).

The possibilities mentioned above of reducing own costs and improving relations with regulators, recipients, and society create conditions for strengthening or improving companies' market position. Moreover, a certificate of compliance with the ISO 14001 standard may also become a strong argument in applying for public contracts (Sorooshian, Ting, 2018).

According to research results (based on empirically tested on an international sample of 583 listed companies in 46 countries throughout 2009–2018), it was proven that ISO 14001 adoption "(1) contributes to reducing firm carbon emission intensity and increasing firm profitability; (2) the impact of ISO14001 on profitability is greater for companies from countries with high environmental awareness of the society and for larger firms; and (3) the impact of ISO 14001 on carbon intensity is greater for headquartered in countries with low environmental awareness of the society" (Arocena et al., 2021).

Benefits from implementing and certifying an EMS according to ISO 14001 from Brazil's companies were attributed to developing preventive cultures, methodologies for addressing environmental concerns, emergency preparedness, and effective document control. These measures potentially led to fewer penalties from the São Paulo State Environmental Agency (Rino, Salvador, 2017).

Environmental organizations in Poland are not very strong yet, but their role is undoubtedly growing. Examples from Western Europe show that they have a considerable impact force, and – if significant irregularities are detected in the use of the environment – conflict with them may turn out very unfavorable for enterprises. The research results on Norwegian companies indicate that companies facing greater complexity or environmental risk tend to derive more significant overall benefits from the ISO 14001 implementation than those with lower complexity or lower environmental impact (Gudeta, 2019).

The natural environment is primarily a concern of the societies of developed countries. Research in EU countries has shown that the environmental management idea motivates employees much more than the commercial aspects regarding quality assurance systems.

When internal stakeholders, e.g., employees, are aware of environmental problems, especially local ones (after training regarding environmental preservation and resource optimization), it is relatively easy to involve them in environmental protection activities (Awan et al., 2021). On the other hand (according to some research), difficulty in boosting employee/employers' environmental awareness and willingness is highlighted as one of the main barriers to ISO 14001 implementation (next to increased bureaucracy and increased complexity of environmental procedures) (Bravi et al., 2020; Camilleri, 2022). However, it requires an attitude from the management that proves that care for the environment is a part of the company's strategy and not just a temporary change in the practice.

Not all the benefits mentioned above will be visible immediately after implementing the system or receiving the ISO 14001 certificate. The benefits of putting the legal situation in order are usually indisputable and almost immediate. However, the benefits related to improving the image, motivating employees, employee support, enhancing talent attraction, retention, and productivity, improving the relations with stakeholders, or increasing market share take much longer.

The literature clearly shows that investment in environmental management leads to better business performance. The involvement of enterprises in environmental management practices can be explained by various reasons, particularly factors connected with a potential improvement in the enterprises' economic performance (Sarkis and Sroufe, 2004). The enhancement of internal processes, strengthening of results, prevention of potential problems, and a large number of stakeholders indicate serious performance improvements (Reis et al., 2018).

Results show that the benefits appeared in certified companies classified into internal, external, and relations issues. However, certification's impact on enterprises' economic performance is positive according to one study, negative according to others, and neutral according to another. It is suggested that the ISO 14001 standard has clear benefits on operational performance, people, and customer results and that the effects on financial performance are inconclusive (Szubart, Fura, 2016; Hajduk-Stelmachowicz, 2017). This situation results from the diversified context of the research along with internal and external conditions for the functioning of enterprises. Therefore, the paper fills the existing research gap by identifying the factors influencing the differentiation of benefits resulting from the ISO 14001 certificate implementation.

### 3. METHODS

The research within this study makes use of both primary and secondary data. The data was obtained using a questionnaire. The analysis was conducted mainly by applying computer-assisted telephone interviewing (CATI). Company respondents were asked to assess ISO 14001 benefits according to the scale with values from -2 to 2, where -2 – definitely do not agree, -1 – do not agree, 0 – neither yes nor no, 1 – agree, 2 – definitely agree.

The empirical analysis of the primary data was based on the Mann-Whitney and Kruskal-Wallis tests. The Mann-Whitney test is a non-parametric equivalent of the Student's t-test applied in case of two comparative groups, and the Kruskal-Wallis test is a non-parametric equivalent of a variance analysis used in case of three or more groups (Aczel, 2000). Apart from their parametric equivalents, the tests do not require many restrictive assumptions (Józwiak, Podgórski, 2012). If the Kruskal-Wallis test was

significant, then a post hoc analysis was used additionally to indicate different groups (Stanisz, 2006).

Secondary data, i.e., data from the companies' financial statements, was also used. They were available in the Emerging Markets Information Service (EMIS) database. In this way, information about liquidity, profitability, debt level, and business efficiency was obtained, making it possible to assess the average financial situation of the companies in the years 2012–2017. The assessment was performed by using the E. Mączyńska discriminant function. This model is defined by the linear function (Mączyńska, 1994):

$$ZM = 1.5X_1 + 0.08X_2 + 10.0X_3 + 5.0X_4 + 0.3X_5 + 0.1X_6 \quad (1)$$

where:  $X_1$  – (gross profit + depreciation)/total liabilities,  
 $X_2$  – gross profit/total liabilities,  
 $X_3$  – gross profit/balance sheet total,  
 $X_4$  – gross profit/sales revenues,  
 $X_5$  – value of inventory/sales profit,  
 $X_6$  – sales revenues/balance sheet total.

A negative value of ZM means that a company is at risk of bankruptcy; a positive value of ZM, yet less than 1, represents a weak company but not at risk of going bankrupt; a positive value within the range of 1–2 means a relatively sound company, and a value above 2 shows that a company is in a very good situation. To classify the companies, two groups were distinguished, i.e., companies in a good financial situation ( $ZM \geq 1$ ) and companies in a bad financial situation ( $ZM < 1$ ).

#### 4. RESULTS AND DISCUSSION

##### Sample selection

The research was nationwide. The statistical population included 21,317 entities conducting business operations, which, as of 21<sup>st</sup> January 2018, were classified in the EMIS database in the manufacturing sector (31 according to the NAICS). For the above-mentioned statistical population, the minimum size of the sample was assessed to include 1,016 entities (Sample Size Calculator, 2018). Due to the number of companies registered in the macroregions (NUTS 1, 2018), the representative sample was drawn using an online generator of random numbers (Random Number Generator, 2018). The response rate was 76.8%, and the size of the examined sample was 780 entities (Table 1).

Table 1. Structure of the sample/population by macro-region and voivodeship

Macroregion	Population	Sample	%	Voivodship	Population	Sample	%
North	3919	187	18.38	małopolskie	1412	67	6.62
				śląskie	2507	119	11.76
North-west	4135	197	19.40	wielkopolskie	2790	133	13.09
				zachodniopomorskie	834	40	3.91
				lubuskie	511	24	2.40
South-west	2326	111	10.91	dolnośląskie	1770	84	8.30
				opolskie	556	26	2.61

Table 1 (cont.). Structure of the sample/population by macro-region and voivodeship

Macroregion	Population	Sample	%	Voivodeship	Population	Sample	%
North	3897	186	18.28	kujawsko-pomorskie	1335	64	6.26
				warmińsko-mazurskie	644	31	3.02
				pomorskie	1918	91	9.00
Central	1670	80	7.84	łódzkie	1251	60	5.87
				świętokrzyskie	419	20	1.97
East	1944	93	9.12	lubelskie	598	29	2.81
				podkarpackie	869	41	4.08
				podlaskie	477	23	2.24
Mazowieckie vivodeship	3426	163	16.07	mazowieckie	3426	163	16.07
Total	21317	1016	100.00	Total	21 317	1016	100.00

Source: own studies.

### Sample Characteristics

Out of 780 surveyed companies, 300 had implemented the ISO 14001 EMS. The remaining 312 companies did not implement the system, and 168 declared the implementation of other management systems. Among ISO 14001-certified enterprises, small companies accounted for almost 13.34%, medium entities for 35.33%, and 51.33% were large companies.

Among the enterprises with the ISO 14001 system implemented, the highest percentage constituted companies that had implemented the ISO 14001 environmental management system for over 12 years (32.0%). Companies that used the system for 9 to 12 years accounted for another percentage, i.e., 20.3%. Those who used the system from 6 to 9 years and 3 to 6 years accounted for 16.3% each. The smallest share (12.0%) constituted companies that used it for the shortest time, i.e., less than 3 years. The rest were missing data (3.1%).

The sample dominated companies operating on an international scale, constituting 84.35%. The remaining 15.7% of companies were acting on a local, regional, or national scale.

Export activity was related to the spatial scale of the companies' activity. Among the entities with the ISO 14001 certificate, only 5.7% did not conduct export activities. Such activity was the domain of 92.7% of companies. The remaining percentage was missing data.

Among the entities with an implemented ISO 14001 EMS, 61% were companies with a majority of Polish capital, 38.3% had a predominance of foreign capital, and 0.7% had missing data.

Limited liability companies dominated the sample. They constituted 63% of companies with the ISO 14001 certificate, 24.3% of joint-stock companies, and 12.7% represented a different legal form.

### ISO 14001 Benefits

The potential benefits achievable from implementing ISO 14001 are shown in Table 2.



The surveyed organizations believed compliance with legal obligations and contractual agreements was the highest advantage of operating an EMS based on ISO 14001. More than 90% of enterprises strongly agreed and agreed that such a benefit would occur. It is surprising because, in the light of applicable regulations, each organizational unit is supposed to operate under applicable legal provisions. On the other hand, implementing ISO 14001 requirements helps companies better identify and understand legal requirements regarding environmental protection that apply in their area of activity (e.g., industry or market). Thanks to this, enterprises can not only adapt their processes and activities to current legal and other requirements but also prepare for planned changes, avoiding the risk of violating the law, possible sanctions (including financial image), or generating the effect of priority on the market compared to increasingly stringent legal requirements, which may require significant changes in the area of, for example, the production process or pro-ecological evolution of the product.

Table 2. ISO 14001 benefits

Benefits	I definitely do not agree	I do not agree	Neither yes nor no	I agree	I definitely agree	N.A.
Improving the properties of products	12	25	103	138	21	1
	4.00%	8.33%	34.33%	46.00%	7.00%	0.33%
Improving product quality	7	36	98	137	21	1
	2.33%	12.00%	32.67%	45.67%	7.00%	0.33%
Improving the image of the company	0	1	57	181	60	1
	0.00%	0.33%	19.00%	60.33%	20.00%	0.33%
Reducing pressure on the environment	0	7	48	199	45	1
	0.00%	2.33%	16.00%	66.33%	15.00%	0.33%
Increasing productivity / efficiency	2	28	91	154	24	1
	0.67%	9.33%	30.33%	51.33%	8.00%	0.33%
Increase in the number of customers/increase in market share	1	26	68	152	52	1
	0.33%	8.67%	22.67%	50.67%	17.33%	0.33%
Increasing work safety	2	19	62	179	36	2
	0.67%	6.33%	20.67%	59.67%	12.00%	0.67%
Improving relationships with stakeholders	0	11	47	152	88	2
	0.00%	3.67%	15.67%	50.67%	29.33%	0.67%
Compliance with legal requirements	1	0	25	155	117	2
	0.33%	0.00%	8.33%	51.67%	39.00%	0.67%

Source: own studies.

Identification of stakeholders, and thus a better understanding of their needs and changing expectations over time, reduces the risk of conflicts and improves relations with them. It should translate into a greater level of mutual trust and better cooperation.

The second most important benefit in the opinion of the surveyed enterprises was the reduction of pressure on the natural environment (e.g., by managing the impact of the organization's activities on the natural environment, reducing costs by preventing pollution, e.g., reducing greenhouse gas emissions, efficient use of resources, waste management, biodiversity protection, and other activities on for SD and environmental protection). 81.33% of enterprises strongly agreed with the occurrence of such a benefit.

Two further benefits, which received 80.33% and 80% strongly affirmative and affirmative ratings, respectively, were the company's image improvement and improved relations with interested parties (including customers, suppliers, investors, local community, and employees). As previously mentioned, a properly functioning environmental management system is increasingly perceived as a crucial element of the ESG strategy. More and more investors and financial institutions pay attention to ESG factors when making investment decisions. Companies focusing on ESG can attract more informed investors, increase market value, and build a better image. Taking ESG into account over the long term can contribute to a more sustainable and SD of both companies and society. It should be remembered that subsequent generations of individual customers (e.g., Generation Z) are increasingly sensitive to the pro-ecological image of the company confirmed by an independent and trustworthy certification organization.

In the opinion of 71.67%, the implementation, operation, and improvement of EMS contributes (12.00%) and contributes (59.67%) to increasing work safety. The proper functioning of the EMS is based on training. As a result, employees may be better prepared to deal with environmental and work-related threats. The actual involvement of management in the continuous improvement of the system, in the actual implementation of goals, and in providing employees with the resources necessary to manage risk (after its correct identification) should translate into increased awareness of threats, understanding the essence of prevention and changing undesirable behaviors to those that improve the quality and safety of work. Integrating policies and strategies within both systems (quality and environmental management) reinforce each other, leading to a coherent approach to safety, health, and environmental protection and generating a synergy effect.

Based on the opinions of the surveyed company respondents, there was an increase in the number of customers/market share. 17.33% of enterprises fully agreed with this benefit, and 50.67% agreed. In total, 68% of the surveyed entities noted such a benefit. In some industries and regions, ISO 14001 certification is required or preferred by customers, suppliers, or public authorities. For enterprises, this may open new markets (including international ones) or enable participation in tenders (public procurement) that require such certification.

According to the respondents, ongoing development of the formal EMS under discussion produced financial advantages in addition to image benefits. A total number of 59.33% of enterprises recorded an increase in efficiency/productivity. This value comprised 8% of "I definitely agree" responses and 51.33% of "I agree" responses. Modifying the processes implemented in the company to make them more environmentally friendly can lead to improved product properties. Such a benefit was confirmed by a total of 53% of respondents. The advantage that received the fewest affirmative answers was the product quality improvement. In total, 52.67% of the surveyed enterprises answered definitely agree and agree. It was also in the case of this benefit that the most answers were "neither yes nor no" – 34.33%, as well as the answers "I disagree" and "I definitely disagree."

It can be assumed in simple terms that the operation of an EMS based on ISO 14001 aims to reduce the negative environmental impact of a company's activities. Some researchers stress that an EMS is not directly related to improving product quality. The reasons that may result in a lack of noticeable improvement in product quality due to ISO 14001 certification include:

- Focus on environmental aspects: Enterprises may focus mainly on meeting requirements related to environmental management and reducing the negative impact on the environment (mainly in the context of meeting legal issues), forgetting about the simultaneous improvement of product quality (lack of integration of environmental and quality aspects within the PDCA cycle).
- Lack of link between the ISO 14001 standard and product quality: ISO 14001 focuses on environmental issues and refers to a management system, while improving product quality is usually related to other norms, such as ISO 9001, which refers to quality management (no actual integration of quality and environmental management systems).
- Failure to properly implement and supervise the operation of the system: If the company has not implemented ISO 14001 adequately or does not provide adequate resources and adequate supervision of the processes, this may lead to a lack of visible benefits, including improvements in product quality (in this context, internal audits do not fulfill their function and management commitment is illusory).
- Lack of measurement and product quality monitoring (area for improvement: operational control). Companies may fail to monitor and measure the quality of their products adequately (e.g., considering quality-environmental metrics), which prevents the identification of quality improvements to ISO 14001 certification.
- Focus on short-term goals (as exemplified by a *greenwashing strategy*): Some companies may focus on achieving minimum regulatory requirements to meet certification requirements or customer expectations rather than aiming for long-term improvements in the quality environmental characteristics of products throughout their life cycle – to eliminate this problem, the application of a Provenance-By-Design approach to EMS may be an exciting solution (Moreau et al. 2023).
- Lack of adequate employee involvement: Effective product quality improvement requires employee involvement at all levels of the organization. Suppose employees are not adequately involved in the quality improvement process. In that case, this can hinder noticeable results (employees perceive differences between statements and actual actions – lack of a strategic, systemic, and process approach to environmental-quality issues). In this context, cultural factors influencing the perception of quality should be kept in mind (Małkowska et al. 2022) – quality is approached differently in Japan, Ukraine, and Georgia.

According to the researchers, there is a need for further research so that it is possible to adjust the quality and environmental approach (integrating qualitative-environmental actions in all decision-making processes) when improving the quality of products, especially in SMEs (Siwiec et al., 2022; Hajduk-Stelmachowicz et al., 2022).

### **Differentiation of Benefits**

The assessment of the variation in the benefits of implementing ISO 14001 EMS was first carried out about the variables source of capital of the enterprises, export performance,

financial situation of the surveyed enterprises, and spatial extent of business activity. The Man-Whintey test was used to assess differentiation (Table 3).

The companies' responses varied according to the origin of the companies' capital. Here, differentiation was observed for the following benefits groups: an increase in the number of customers and improved stakeholder relations. Enterprises with foreign capital rated the scale of the listed benefits higher than companies with Polish capital. The export grouping variable (yes/no) also differentiated the responses of enterprises in the case of benefits: increase in the number of customers and benefits: compliance with legal requirements. The scale of these benefits was statistically significantly higher among exporters than non-exporting enterprises. The responses of enterprises did not vary depending on the financial situation of the surveyed enterprises. It means that the scale of the analyzed benefits of implementing, applying, and improving an environmental management system based on the requirements of the ISO 14001 standard was similar for both companies in good and bad financial situations. However, the responses of the enterprises differed according to the spatial scale of the enterprises' activities. This variable differentiated the occurrence of the following benefits: improved product characteristics, improved product quality, and compliance with legal requirements. A higher benefit in terms of improved product characteristics and improved product quality was noted among enterprises operating locally/regionally/nationally than among enterprises operating in international markets. In contrast to businesses operating locally, regionally, and nationally, those engaged in international markets benefited more from adherence to legal requirements.

Table 3. Differentiation of ISO 14001 benefits – Mann-Whitney test results

Grouping variable:	Capital (Polish/foreign)		Export (yes/no)		Financial situation (good/bad)		Spatial range (local, regional, national/international)	
	Z adj.	p-value	Z	p-value	Z adj.	p-value	Z adj.	p-value
ISO 14001 benefits								
Improving the properties of products	0.2180	0.8274	-0.79356	0.427453	-0.94075	0.346836	2.88077	0.003967*
Improving product quality	0.2612	0.7939	-0.36739	0.713330	-0.47685	0.633468	3.58968	0.000331*
Improving the image of the company	-0.6091	0.5425	-0.72743	0.466964	-1.13189	0.257680	1.94108	0.052250
Reducing pressure on the environment	-0.4025	0.6873	-1.26382	0.206297	-0.87006	0.384271	0.40655	0.684342
Increasing productivity/efficiency	-0.6071	0.5438	-1.33288	0.182571	0.67787	0.497855	0.96913	0.332481
Increase in the number of customers/increase in market share	-1.9953	0.0460*	-2.16759	0.030191*	0.20550	0.837183	0.92541	0.354754

Table 3 (cont). Differentiation of ISO 14001 benefits – Mann-Whitney test results

Grouping variable:	Capital (Polish/foreign)		Export (yes/no)		Financial situation (good/bad)		Spatial range (local, regional, national/international)	
	Z adj.	p-value	Z	p-value	Z adj.	p-value	Z adj.	p-value
ISO 14001 benefits								
Increasing work safety	-1.0492	0.2941	-1.74311	0.081315	-0.05001	0.960115	0.08291	0.933922
Improving relationships with stakeholders	-1.9905	0.0465*	-1.93925	0.052472	-0.73621	0.461606	-0.87746	0.380236
Compliance with legal requirements	-1.2082	0.2270	-2.79016	0.005269*	-1.31155	0.189673	-2.25869	0.023904*

\* significant at the level of 0.05.

Source: own studies.

It can be surmised that the foreign-owned enterprises surveyed rated the scale of the listed benefits of a formal EMS higher than Polish-owned enterprises because:

- they often have more financial, technological, and operational resources than local enterprises. It may enable them to invest in more advanced technologies, increase their operational efficiency, and pursue expansion on a larger scale;
- they have access to cutting-edge technologies and know-how that may be more advanced than those available in the local market. It can result in more innovative and competitive products and services;
- thanks to their presence in many markets, they can have easier access to global distribution networks, customers, and business partners (market knowledge);
- they often have an established reputation and recognition in international markets and have culturally specific knowledge, which can help them gain customer trust and increase the attractiveness of their products;
- in some cases, foreign companies may receive support and incentives from the local government to invest in a particular market.

Subsequently, the variation analysis was carried out against the variables: company size, legal form, and the maturity level of the ISO 14001 EMS. The results of this analysis were carried out using the Kruskal-Wallis test (Table 4).

Table 4. Differentiation of ISO 14001 benefits – Kruskal-Wallis test results

Grouping variable:	Size		Legal form		ISO 14001 maturity	
	Kruskal-Wallis test	p-value	Kruskal-Wallis test	p-value	Kruskal-Wallis test	p-value
Improving the properties of products	H (2, N= 299) =2.180360	0.0183*	H (2, N= 299) =2.064477	0.3562	H (5, N= 291) =3.724233	0.5898
Improving product quality	H (2, N= 299) =2.929388	0.2312	H (2, N= 299) =3.361475	0.1862	H (5, N= 291) =5.753481	0.3310
Improving the image of the company	H (2, N= 299) =2.117230	0.3469	H (2, N= 299) =1,828513	0.4008	H (5, N= 291) =9.495590	0.0909

Table 4 (cont.). Differentiation of ISO 14001 benefits – Kruskal-Wallis test results

Grouping variable:	Size		Legal form		ISO 14001 maturity	
	Kruskal-Wallis test	p-value	Kruskal-Wallis test	p-value	Kruskal-Wallis test	p-value
Reducing pressure on the environment	H (2, N= 299) =3.871644	0.1443	H (2, N= 299) =.1933012	0.9079	H (5, N= 291) =9,688971	0.0845
Increasing productivity / efficiency	H (2, N= 299) =5.994162	0.0499*	H (2, N= 299) =1.430044	0.4892	H (5, N= 291) =2.310389	0.8047
Increase in the number of customers / increase in market share	H (2, N= 299) =18.66476	0.0001*	H (2, N= 299) =8.052317	0.0178*	H (5, N= 291) =1.299942	0.9349
Increasing work safety	H (2, N= 298) =7.092225	0.0288*	H (2, N= 298) =.8085400	0.6675	H (5, N= 290) =4.702540	0.4533
Improving relationships with stakeholders	H (2, N= 298) =14.20928	0.0008*	H (2, N= 298) =5.184913	0.0748	H (5, N= 290) =4.193407	0.5219
Compliance with legal requirements	H (2, N= 298) =8.006362	0.0183*	H (2, N= 298) =3.863064	0.1449	H (5, N= 290) =7.452152	0.1891

\* significant at the level of 0.05.

Source: own studies.

The size of the enterprise is associated with the following benefits: improved product characteristics, increased productivity/efficiency, increased number of customers/market share, increased occupational safety, improved stakeholder relations, and compliance with legal requirements.

The scale of the benefits mentioned was higher in small enterprises than in medium-sized enterprises. The organizational structure and activities in larger companies are more complex, and the accountability process is blurred. Implementing solutions resulting from ISO 14001 can help systematize and standardize activities, resulting in greater flexibility for small enterprises in the decision-making process. It may contribute to increasing the actual control over the impact of entities on the environment, which translates into the implementation of the established goals resulting from the adopted strategy. Small enterprises (especially those operating in industrial processing) most often have to work in supply chains if they want to acquire new customers/conquer new markets/expand the scope of their operations. These entities are subject to additional audits, their documentation is relatively easy to verify, and all this favors the creation of goals relating to pro-environmental issues.

On the other hand, in the case of SMEs, requirements relating to internal audits and managerial reviews are particularly challenging to implement. According to research by other authors, SMEs encountered the most significant challenges in implementing the following objectives: reducing reliance on primary raw materials, working towards achieving climate neutrality and SD, and attaining closed-loop material processes. These problems undoubtedly affect the scope of benefits obtained from the system's functioning (Kafel, Nowicki, 2023).

The variable: legal form differentiated the responses of enterprises only in the case of benefits: increasing the number of customers/increasing market share. The number of

customers increased to the greatest extent in joint-stock companies and was significantly higher than in enterprises organized under another legal form. Joint stock companies, especially those listed on the stock exchange, are subject to strict requirements and regulatory supervision. Their reports are subject to an in-depth analysis by investors, clients, and other actors, e.g., the media. Building a positive image of the company in the conditions described requires a greater degree of transparency, which translates into stakeholder trust. It is particularly significant for the implementation of CSR goals. Joint-stock companies often have access to more substantial financial resources, which promotes the appropriate operation and improvement of the environmental management system compliant with the ISO 14001 standard. Investors, especially those interested in ESG aspects, may be more interested in investing in such companies, which draw additional funding and permit expansion firms. It may translate to retaining existing customers and acquiring new, more ecologically conscious ones.

The importance of a certified EMS based on ISO 14001 for listed companies will continue to grow. The Corporate Sustainability Reporting Directive (CSRD), introduced in December 2022, aims to deepen the connection between financial and non-financial reporting. Companies must disclose information on sustainability risks and their impact on financial results. The first reporting under the new rules is estimated to cover approximately 50,000 companies in the EU and should apply to the financial year starting on or after January 1, 2024 (PWC, 2022). The link between ISO 14001 and ESG reporting stems from organizations implementing the ISO 14001 standard having clearly defined procedures for managing their environmental impacts and properly documenting activities in this area. The international standard ISO 14090, "Adaptation to climate change", does not directly extend the scope of ISO 14001 but can be a complement to this standard, among others, in the context of providing tools and methods for climate risk management (including those relating to changing weather patterns, the risk of floods, droughts, fires, extreme weather conditions, interruptions in energy supplies, staffing problems, disruption of supply chains, *lockdowns*, *blackouts*, or insufficient availability of raw materials, reduction of greenhouse gas emissions) (Silk Road Certification, 2023).

The last of the grouping variables included, i.e., the maturity level of the ISO 14001 EMS, was not a variable that differentiated the scale of potential benefits from implementing and using the ISO 14001 EMS. It means enterprises with both the system for the shortest and the longest time similarly experienced the scale of benefits. It is a surprising situation that should be subjected to further scientific research.

## 5. CONCLUSIONS, LIMITS, AND FUTURE RESEARCH

From year to year, activities for environmental protection constitute one of the most critical tasks in the management strategy for the top management in companies. Paradoxically, a lack of understanding of this task in the past or waiting for legislation to force action can put manufacturing firms in a reactive position. This business-as-usual approach of the past misses opportunities to realize internal and external benefits while detrimental impacts on the environment continue to cause problems for the planet and society. More and more often, enterprises strive to achieve visible effects of environmental activities through controlling their products and services. Across various industrial sectors, a company's environmental management undergoes a series of distinct developmental stages. Each stage includes descriptions, involved stakeholders, policies, tools, indicators, organizational structure, and temporal behavior graphs (Ormazabal et al., 2017).

Enterprises with a functioning certified EMS enjoy several internal and external benefits. These benefits may vary over time. This area requires more in-depth analysis by researchers. According to the companies surveyed, the maximum benefit is compliance with legal and other requirements to which the company has committed itself. In this way, companies avoid, among other things, environmental penalties and boycotts from increasingly environmentally conscious consumers. The idea of continuous improvement of the pro-environmental management system seems increasingly significant for Polish manufacturing companies. This fact is recognized by local communities and stakeholders, particularly representatives of the younger generation (Generation Z and Alpha). Greenwashing does not improve stakeholder relations – building a socially and environmentally responsible brand is a new area for building a competitive advantage.

In addition to the image benefits associated with implementing and using an EMS, enterprises also notice economic and image benefits. As a result of using the system, manufacturing companies may experience increased productivity and efficiency. This growth is possible, but at the same time, it depends on determinants that differentiate enterprises, such as size. For economic benefits to materialize, the company's involvement in minimizing the negative environmental impact, improving processes, or rational managing resources leading to genuine savings is needed. Image benefits were more important for large enterprises than small and medium-sized enterprises, entities exporting and operating on international markets than for enterprises operating locally, and entities with foreign capital.

In summary, it can be concluded that the scale of the benefits of ISO 14001 varies. It can be explained by the wide variety of companies operating in the manufacturing sector. There are small entities that are, for example, sub-suppliers of multinational corporations that are required to comply with the rules of large corporations, as are their customers. Being environmentally friendly is the be-all and end-all of small businesses. The largest group of companies, however, are the large operators who cannot afford to operate in non-compliance with legal requirements. Often, such entities take even more restrictive actions towards the natural environment, overtaking their rivals and increasing their competitiveness.

Implementing and continuously improving the EMS can allow all stakeholders to collaborate and cooperate. It creates better and more efficient communication and knowledge management. It also enhances societal well-being. Benefits resulting from ISO 14001 adoption in manufacturing companies in Poland are heterogeneous phenomena, and they should be studied using a multidimensional approach. Future studies should examine other business fields to differentiate benefits resulting from ISO 14001 adoption in various countries.

The raised problem of integrating the circular economy (CE) idea and EMS is significant at the international level (Jabbour et al., 2020). In this situation, both political decision-makers and the management of companies should exert their efforts and be focused on those issues related to sustainable strategic performance measurement on the macro-, mezzo-, and microeconomic levels. The ISO 14000 family can help in it as a component of knowledge management, e.g., in the field of open innovation, environmental innovation concerning environmental organizational and process innovation, and environmental product and marketing innovation, which have positive impacts on the companies' competitive capability (e.g., Skordoulis et al. 2020; Nguyen et al., 2022).



Expanding EMS into a CE requires new business model designs and partnerships (Kristensen et al., 2021). Environmental innovation is the intermediary factor that translates the gains achieved from environmental performance into improved financial performance. (Ong et al., 2019). Gaining measurable profits is impossible without designing and improving the model to develop the competency of internal environmental auditors (Apiworathanakorn et al., 2019).

The connection between EMS and the CE is rarely studied in emerging markets (Jabbour et al., 2020) – it should be changed. There is also a need to explore the organizational factors (the role of top management support, employee commitment, development of human capital) through which the internal culture and atmosphere of the organizations are improved to acknowledge acceptance of advance learning in attaining green innovation in sustainable practices (Zhang et al., 2022).

In terms of the limitations of this study, it is significant to be aware that most enterprises cannot indicate to what extent working with an ISO 14001-based EMS is responsible for obtaining specific groups of internal and external benefits in the economic, environmental, and social spheres. In the case of management system integration, it is difficult to determine whether the functioning of an organizational eco-innovation alone is responsible for a given outcome. Analytical instruments are necessary to quantitatively assess both the benefits and costs resulting from the operation of an EMS. Using metrics relating to green accounting is still insufficient, so isolating, evaluating, and quantitatively comparing benefits over time is very difficult. This aspect is pointed out by several researchers working on systemic (strategic) approaches to environmental management.

Our findings on the differentiation of benefits of ISO 14001 system adoption have important implications for academic research on EMS and policy implications for agencies responsible for compliance with sustainability standards and guidelines. The results of this study should be helpful for decision-makers, both enterprises with the adopted EMS certificate and entities without the ISO 14001 certificate. The management staff can use this knowledge to identify the potential benefits that can be achieved as a result of the implementation and functioning of the system. Engaging employees in these procedures gives them independence, increases morale, and promotes a healthy work environment, reducing downtime and increasing productivity.

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## FOREIGNERS' EMPLOYMENT IN THE PODLASKIE LABOR MARKET: SELECTED ECONOMIC ASPECTS

The Podlaskie voivodeship is popular among foreigners, especially citizens of Belarus, as a place to live and work. Thus, it has become essential to recognize the effects of this process on the local labor market. This study's main objective was to present selected economic aspects of employing foreigners in the Podlaskie voivodeship; it accomplishes this by analyzing available publications and statistical data. The article commences by indicating selected economic consequences of foreigners taking up employment in a host country's labor market. It shows the scale of foreigners' employment and distinguishes the numerous national groups taking up employment in the Podlaskie voivodeship, including their employment structure. The study also indicates the employment of foreigners in the deficit professions of the Podlaskie labor market. It concludes by indicating selected economic reasons and benefits of employing foreigners in this market.

**Keywords:** labor market, regional labor market, employment of foreigners, economic aspects of employing foreigners.

### 1. INTRODUCTION

The XXI century can be called the century of migration. The spatial mobility of people was also present earlier, but it is in the XXI century that we observe particularly intensified migration movements. The reasons for migration are a combination of motivating factors, ranging from political and social factors to demographic and economical to environmental factors (Przyczyny migracji, dlaczego ludzie migrują?, 2020). Currently, the most common factors of migration are identified as: threats to life due to military conflicts, political persecution, poverty or lack of access to basic services such as medical or education (Skupień, 2023). However, regardless of the reasons, migration is a huge challenge for sending and receiving countries.

This study focuses on only one aspect of migration, i.e. the economic consequences of this phenomenon for the labour market of the receiving country. The article aimed to present selected economic aspects of employing foreigners in Poland. It was assumed that

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due to socio-economic differences, the labour market of individual voivodeships might react differently to the employment of foreigners. Therefore, the research area was limited to one voivodeship - Podlaskie voivodeship.

In order to achieve the goal formulated in this manner, the method of literature analysis and the analysis of statistical data obtained from Statistics Poland and the Ministry of Labour and Social Policy were used.

## **2. THE CONSEQUENCES OF TAKING UP EMPLOYMENT BY FOREIGNERS FOR THE LABOUR MARKET OF THE HOST COUNTRY**

Researchers of migration phenomena have not yet developed a unified position on the consequences of labour immigration for the host country. In their deliberations, they touch on many issues, often explaining them differently.

However, an analysis of the literature shows that the fundamental issue in this area is the problem of the mutual relationship between domestic and foreign labour resources, i.e. answering the question of whether employed foreigners complement deficiencies in the host country's labour market or rather displace the native labour force. When incoming immigrants displace domestic workers from their jobs, foreign and domestic labour resources are substitutable for each other. On the other hand, when there is no such threat, when these groups are complementary in the labour market, or even when there is a situation where the inflow of foreign workers creates additional demand for domestic workers, we can speak about the complementarity of these labour resources (Moszyński, 2010).

Nevertheless, according to many authors, the co-existence of both effects is inevitable in conditions of a strong influx of foreign workers. Such a situation is called imperfect substitution (Okólski, 2019).

In the case of complementary employment, there is a positive effect on the economy and the labour market. Employing foreigners is then a way of filling a gap in labour resources (and also sometimes a way of incurring lower labour costs than hiring local workers), (Urbański, 2022). However, if there is the substitution of employment of foreigners, then there can be instability of employment for native workers and a reduction of wages in a particular profession or industry (Kałuża-Kopias, 2016). Nevertheless, practice shows that predicting the actual relationship between the two labour resources under consideration is difficult.

For instance, research by C.L. Smith showed that an influx of immigrants with a high school education or less reduced the employment (measured in terms of hours worked) of native teenagers, which may suggest that newly arrived adult immigrants may be closer substitutes for native teenagers than for their adult equivalents (Smith, 2012). In their study, G. Ottaviano and G. Peri, using a structural production function approach, showed that immigrants and native residents were imperfect substitutes, especially among the lower-skilled (Ottaviano, Peri, 2012).

As noted earlier, there is also a concern that hiring foreigners will reduce the wages of domestic workers. However, research also on this issue does not provide a clear answer. Numerous studies using a cross-sectional approach comparing the number of immigrants in a particular area with wages in that area have shown that immigration has negligible or no significant negative impact on the wages of domestic workers (Orrenius, Zavodny, 2006).



In research on the effect of higher levels of immigration on the wages of domestic workers, P.M. Orrenius and M. Zavodny showed that an increase in the level of foreign employment has a downward effect on the wages of domestic workers in the case of blue-collar occupations but does not have a statistically significant negative effect on the wages of natives in skilled occupations. Nevertheless, their research also showed that if immigrants stay in the host country for a longer period and try to raise their immigration status, this nonetheless has a significant negative effect on the wages of native workers in skilled occupations (Orrenius, Zavodny, 2006).

Therefore, assessing the consequences of employing foreigners is not straightforward and even necessitates observing this phenomenon in practice.

### 3. CHARACTERISTICS OF FOREIGNERS WORKING IN THE PODLASKIE LABOUR MARKET

At the very beginning, it should be emphasised that in the scale of the whole country, Podlaskie Voivodeship is not one of the leading voivodeships in terms of employment of foreigners. The data from the MLSP indicate that in 2021 the most significant number of work permits for foreigners was issued in the Mazowieckie, Wielkopolskie and Łódzkie voivodeships. Podlaskie Voivodeship is ranked in this respect only in 12th place, ahead of Opolskie, Warmińsko-Mazurskie, Podkarpackie and Świętokrzyskie voivodeships. Nevertheless, the Podlaskie Voivodeship is one of the leading Polish voivodeships in encouraging the arrival and taking up employment of Belarusian citizens, whose number in Poland has also been visibly increasing in recent years. In this respect, the Podlaskie Voivodeship is in third place, just behind the Mazowieckie and Lubelskie Voivodeships. Since Podlaskie Voivodeship is attractive for taking up employment by foreigners, particularly Belarus citizens, evidenced by the number of work permits issued in this voivodeship in 2021, it is worth noting some selected economic aspects accompanying the employment of foreigners in the Podlaskie labour market.

Table 1. Number of work permits issued for foreigners in 2021 by voivodeships

Foreigners in total		Belarus		Ukraine	
Voivodeship	Number of issued permits	Voivodeship	Number of issued permits	Voivodeship	Number of issued permits
mazowieckie	90 962	mazowieckie	8373	mazowieckie	54 152
wielkopolskie	74 558	lubelskie	7346	wielkopolskie	47 565
śląskie	54 315	<b>podlaskie</b>	2996	śląskie	39 465
dolnośląskie	44 579	wielkopolskie	2839	dolnośląskie	33 334
pomorskie	38 668	łódzkie	2500	pomorskie	25 403
łódzkie	34 894	dolnośląskie	1962	małopolskie	21 311
małopolskie	32 359	śląskie	1676	kujawsko-pomorskie	20 552
kujawsko-pomorskie	30 095	pomorskie	1669	łódzkie	20 352
lubelskie	27 378	małopolskie	1649	lubelskie	14 305
zachodnio-pomorskie	17 438	kujawsko-pomorskie	1065	zachodniopomorskie	12 029

Table 1 (cont). Number of work permits issued for foreigners in 2021 by voivodeships

Foreigners in total		Belarus		Ukraine	
Voivodeship	Number of issued permits	Voivodeship	Number of issued permits	Voivodeship	Number of issued permits
lubuskie	13 935	świętokrzyskie	769	lubuskie	10 213
<b>podlaskie</b>	13 511	lubuskie	631	opolskie	6583
świętokrzyskie	9036	zachodnio-pomorskie	574	świętokrzyskie	5556
opolskie	8726	warmińsko-mazurskie	432	<b>podlaskie</b>	5462
podkarpackie	7414	opolskie	188	podkarpackie	5204
warmińsko-mazurskie	6304	podkarpackie	161	warmińsko-mazurskie	3727
Total	504 172	Total	34830	Total	325 213

Source: Own study based on MPiPS statistical data.

In order to examine the scale and structure of employment of foreigners in the Podlaskie labour market, data from the Ministry of Labour and Social Policy on the number of issued work permits for foreigners were used. The data for 2020 shows that the most numerous group of foreigners working in Podlaskie Voivodeship based on a work permit were citizens of Ukraine and Belarus.

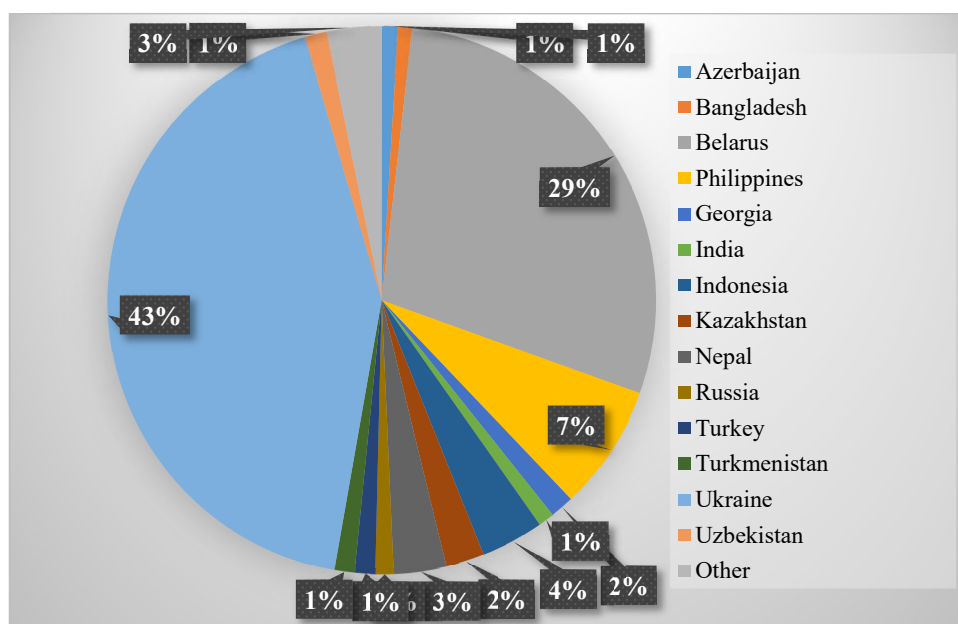


Figure 1. Foreigners working in Podlaskie voivodeship by country of origin (based on a work permit) in 2020

Source: Own study based on MPiPS statistical data.

Citizens of Belarus constituted 29% of the total number of foreigners working in the Podlaskie Voivodeship in 2020, while citizens of Ukraine were the most numerous group in this respect, as they accounted for 43% of the total number of foreigners employed in the Podlaskie labour market based on a work permit. Other groups of foreigners employed in the Polish labour market in terms of numbers were Filipinos (7%) and Indonesians (4%). Noteworthy is that citizens of Ukraine and Belarus together accounted for 72% of foreigners employed in the Podlaskie labour market. As a reason for the interest in the Podlasie labour market among citizens of Ukraine and Belarus, A. Piekutowska indicates, among others, geographical and cultural proximity and links with Polish citizens in eastern Poland (Piekutowska, 2007).

The most numerous groups of foreigners in the Polish labour market, i.e. citizens of Belarus and Ukraine, mainly undertook work in such occupations as industrial and craft workers (36.5% of the total number of foreigners employed in the Podlaskie labour market), operators and fitters of machinery and equipment (26%) and workers performing simple works (23.9%), in which Ukrainian citizens predominated (Figure 2).



Figure 2. Belarusian and Ukrainian citizens working in Podlaskie Voivodeship (based on a work permit) by significant groups of professions and specialisations in 2020

Source: Own study based on MPiPS statistical data.

Citizens of Belarus and Ukraine found employment less frequently in professions such as service and sales workers (4%), technicians and other middle personnel (2.8%), office workers (1%), farmers, gardeners, foresters and fishermen (0.7%), specialists (0.6%), representatives of public authorities, senior officials and managers (0.1%).

#### 4. ECONOMIC ASPECTS OF EMPLOYING FOREIGNERS IN PODLASKIE VOIVODESHIP

Analysing the phenomenon of labour immigration in Podlaskie Voivodeship, it is worth noting its substitutional or complementary character. Substitutional immigration occurs when foreign workers compete with the domestic labour force and is complementary when the employment of foreigners is complementary to domestic labour resources (Kałuża-Kopias, 2016). Table 2 compares the employment of foreigners in the Podlaskie labour

market with the needs of the local labour market. On the left-hand side of the Table are all job positions indicated in 2020 by the Voivodeship Labour Office as deficit professions, i.e. professions in which employers' demand is high and exceeds the supply of employees with the necessary qualifications. On the right-hand side of Table 2, there is an indication of the number of foreigners working in Podlaskie Voivodship in 2021 based on a work permit and the percentage of foreigners working in a specific profession in the total number of foreigners employed in Podlaskie Voivodship. Data in Table 2 show that the majority, i.e. almost 83.5%, of foreigners employed in Podlaskie Voivodship are employed in deficit professions, thus filling the gaps in the Podlaskie labour market.

Table 2. Foreigners employed in 2021 in professions identified as scarce in 2020 in Podlaskie voivodship

Deficit occupations in Podlaskie voivodship in 2020	Employed foreigners	
	By the numbers	Percentage
Carpenters and joiners	358	2,65%
Roofers and tinsmiths *	169	1,25%
Electricians, electromechanics	188	1,39%
Truck and tractor-trailer drivers	3707	27,44%
Bus drivers	7	0,05%
Cooks	338	2,50%
Doctors	0	0,00%
Warehouse Workers	264	1,95%
Automotive mechanics	12	0,09%
Bricklayers and plasterers**	926	6,85%
Teachers of practical training	0	0,00%
Teachers of special schools and integration departments	0	0,00%
Earthmoving equipment operators and mechanics	2	0,01%
Babysitters	0	0,00%
Carers of an elderly or disabled person	0	0,00%
Nurses and midwives	1	0,01%
Construction finishing workers	685	5,07%
Construction workers***	3972	29,40%
Welders	285	2,11%
Chefs	0	0,00%
Locksmiths	222	1,64%
Pavers	-	-
Building installers	-	-
Uniformed services employees	-	-
<b>Total in deficit occupations</b>	<b>11136</b>	<b>82,42%</b>
<b>Total foreigners working in Podlaskie voivodship</b>	<b>13511</b>	<b>100,00%</b>

\* among them, 169 were roofers, 0 were tinsmiths

\*\* among them, 677 were bricklayers and related workers, 249 were plasterers and related workers

\*\*\* among them, 2429 were construction and related workers (excluding electricians), and 1543 were shell and related workers

- no data available

Source: Own study based on: MPiPS statistical data and <https://www.barometrzwodow.pl> [Access: 17.03.2023].

Furthermore, in the data in Table 2, we can see that employing foreigners in the Podlaskie labour market may solve the labour force deficit only in some professions. Deficit professions in the Podlaskie labour market also include doctors, nurses and midwives, or teachers (of practical vocational training or special schools and integration wards). Unlike the previously mentioned, foreign workers do not fill labour shortages in these professions. Among foreigners employed in the Podlaskie labour market in 2021, the majority were men (83.4%). Women accounted for 16.6% of the total number of foreigners. Hence, we can observe a higher employment rate of foreigners in professions requiring physical strength or considered "typically male", such as construction workers, truck and tractor drivers, bricklayers and plasterers, or construction finishers. It is essential to point out that the young generation of foreigners was the most eager to come to the Podlaskie Voivodeship for work purposes, as almost 50% were persons under 34. Based on Figure 2 and Table 2, it can be observed that in Podlaskie Voivodeship (as well as in the whole country), a dualism of the labour market in employing foreigners is visible. The labour market is divided into two segments: the so-called better and worse workplaces, and foreigners with minimal access to the better ones, with a large domestic workforce supply, take up employment in professions not willingly performed by domestic employees (Augustyńczyk, 2019).

As one of the economic reasons for employing foreigners in the Podlaskie labour market, unfavourable changes in the population should also be pointed out. According to Statistics Poland, in Poland by 2030, in 1007 Polish administrative districts, the population will have decreased by more than 5%, while in 322 municipalities, the population loss will be more than 10%, with a particular concentration of this phenomenon in eastern Poland, mainly in the Podlaskie Voivodeship. According to the forecasts of Statistics Poland, as many as 44% of municipalities in Podlaskie Voivodeship will experience a population loss of over 10%.

In addition, there is a rapid population ageing process in Poland, which is also particularly noticeable in the Podlaskie Voivodeship. In 2016, the percentage of people aged 65 and over was higher than 20% only in 107 municipalities (4% of the total number of municipalities), most of which were located in Podlaskie and Lubelskie Voivodeships. The forecast of Statistics Poland also indicates that Podlaskie Voivodeship concentrates municipalities with a negative migration balance. Moreover, Podlaskie Voivodeship will be characterised by a negative birth rate until 2030, so the process of population loss and ageing in these regions will be highly intense (GUS, 2017).

Alongside the parallel process of ageing of the population, negative changes should be expected in the growth of the working-age population. According to the population projection prepared by Statistics Poland, only seven municipalities in Podlaskie Voivodeship will increase their population. It is especially the case for municipalities located near the central city of Podlaskie Voivodeship - Białystok. Such depopulation, on the one hand, clearly impacts the labour market because, as a consequence of unfavourable demographics, labour supply decreases, which makes it necessary for employers to look for new possibilities of supplementing staff deficits, e.g. by employing foreigners (Kamińska-Gawryluk, 2020).

On the other hand, as C. Żołędowski points out, in the case of unfavourable demographics, which do not provide replacement of generations, reaching for a foreign labour force becomes a method of ensuring the liquidity of the entire pension system. Indeed, the smooth functioning of the pension system significantly impacts public confidence in the state (Żołędowski, 2019). In this respect, the employment of foreigners

benefits the country and the region, increasing the number of people paying taxes and social security contributions (Organiściak-Krzykowska, 2017). According to ZUS data, in 2020 alone, foreigners in Poland paid a total of PLN 6.2 billion in pension and disability insurance contributions, which equated to 3.3% of the contributions paid for all insured in ZUS. In 2021, the number of foreigners paying social insurance contributions stating Podlaskie Voivodeship as their residence increased almost eight times compared to 2015. Furthermore, among all Belarusian citizens reported for pension and disability insurance, the most significant number, 33.5%, was registered in the Mazowieckie Voivodeship, while 12.9% was registered in the Podlaskie Voivodeship (ZUS 2020, 2022).

When examining the economic aspects of employing foreigners in the local labour market, their impact on wages is also worth noting. So far, no significant negative impact of foreigners on the wages of local employees can be seen, which is confirmed by data from the Ministry of Labour and Social Policy. The majority, i.e. 72%, of poviats surveyed in 2021 have not observed the phenomenon of lowering or hindering the growth of wages in the local labour market in connection with the employment of foreigners, 19% of offices stated the occurrence of this phenomenon in a slight intensity, whereas 9% in a medium or strong intensity (MRPiT, 2022). The data mentioned above should be considered more optimistic because in a similar survey in 2016, when the Polish labour market was still not such a popular destination for foreigners, more than half of the surveyed poviats, 56%, indicated lowering of wages as the most significant risk of employing foreigners in the local labour markets (MRPiPS, 2016).

## 5. CONCLUSIONS

To sum up, the activity of foreigners in the Podlaskie labour market should be indicated as a result of their adaptation to the needs of the local labour market by taking up employment mainly in the professions of the Podlaskie labour market deficit. It means the presence of foreigners in the Podlaskie labour market increases the supply of the labour force ready to take up jobs in professions with many vacancies, so that we can refer to complementary immigration regarding this issue.

Completing labour deficits in the Podlaskie labour market is only one of the prerequisites and economic benefits of employing foreigners. Further reasons include the deepening demographic crisis - low birth rate, and population ageing, predominantly affecting the Podlaskie Voivodeship. The lack of replacement of the generations may lead to the development of a future labour force gap and a pension solvency problem. The foreigners in the regional labour market also increase the population of contributors to social insurance benefits.

Furthermore, foreigners also provide increased consumption in the region and increased tax revenue to the budget. Because the employment of foreigners in the Podlaskie labour market is mainly complementary, there should also be no adverse impact of their employment on the wages of the population in the region.

Podlaskie Voivodeship and Poland recently faced a significant challenge of increasing foreigners' demand in the Polish labour market. Although Podlaskie Voivodeship is not a particularly attractive destination for labour migrants compared to the whole country, it has successfully attracted citizens of Belarus and Ukraine for years, offering them jobs in professions requiring lower qualifications, which are reluctantly performed by the local labour force.

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## ALONG THE ROAD TO STALINISM: SOCIAL POLICY IN POLAND BETWEEN 1944 AND 1950

This article presents the transformations that occurred in Polish social policy between 1944 and 1950. The aim is to show the evolution of a fundamental reorientation of the ideas, objectives, and activities of Polish social policy, or even the actual dismantling of its many traditional elements, brought about by an ideological rationale. Through this process, the activities of the state authorities, instead of being aimed at solving social issues, became an instrument for supporting the processes of Socialist industrialization. This was yet another element of the socioeconomic transformations that took place in Poland, with the aim of adapting the system to the Soviet model. Towards the end of the period in question, Polish social policy became a part of the Stalinist system. The result was not only the redefinition of its objectives, but also fundamental changes to the way the social activities of the state were undertaken. This led to the use of fewer instruments, and a noticeable limitation to activities aimed at minimizing the numerous postwar social problems.

**Keywords:** Stalinism, Poland, post-second World War history, social policy.

### 1. INTRODUCTION

The Stalin's system, introduced at the end of the 40s in the countries of Central and Eastern Europe (which were under the domination of the Soviet Union), brought considerable changes in the political, economic and social life. It also brought dramatic transformations within the social policy. This was of particular importance especially because of the fact that social policy was becoming a significant sphere of influence of the state authorities on social issues in the middle of the 20<sup>th</sup> century. The Great Depression and, later, the trauma of the 2<sup>nd</sup> World War made social policy more involved in the processes of solving social problems, which became particularly noticeable after the end of the war effort. After the war, Western countries started to build their own welfare states, following the ideas presented, i.a., in a popular Beveridge Report (1942) and on the basis of the inter-war experience as well as on the Keynesian economic policy (Dziwięcka-Bokun 2000; Książkowski 1999).

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At the same time, along the implementation of the Stalin's system, the social policy, in its existing shape, was being dismantled in Eastern Europe. The disassembly, in the literal sense of the word, brought the institutional changes as well as the marginalization of the scientific research in this area. Under the influence of Stalinism, social policy became unnecessary and the job security system, centralization and planning were going to fulfil the needs of all citizens without the necessity of resorting to the solutions which originated in the Capitalist system and to those who supported it. The Soviet solutions, considered to be perfect by the propaganda, were the model solutions and their duplication became the unquestionable cannon in nearly all aspects of social life in the states ruled by Communists (Auleytner 2002; Inglot 2010; Lancmański 1952; *Nowe prawo pracy* 1950).

The same happened in Poland which was facing a lot of damage after the war. The fact that Communists overtook the full authority in the country resulted in the implementation of the above described scenario. Polish social policy lost its identity which originated from the European traditions and, to a greater extent, reflected the Soviet solutions. It is worth taking a closer look at this process which, in a few years, brought a sudden reorientation of the objectives, methods and institutions used by the state to influence the social sphere. The result was the construction of a new system which had nothing to do with a classic social policy. In order to analyse it, we need to outline the opening balance sheet of that policy after the end of the occupation, the evolution which led to Stalinism and was carried out in the following years as well as the achievements and fundamental problems of the actual influence of the state on the social sphere in the period from the end of the war to 1950 when the process of Stalinization of the Polish social policy came to an end.

## 2. OPENING BALANCE SHEET

The construction of the social policy system was a complicated but fairly successful process in the inter-war Poland. The main difficulty was the fact that Poland, after the 1<sup>st</sup> World War, was reconstructed from three separate parts. The advancement of social solutions, to a great extent, differed from one part to another. Polish lands which previously had belonged to the German Empire participated in the development of modern social institutions from the very beginning, whereas on lands under the influence of Russia social security institutions were practically unknown. Therefore, the main task for the creators of the Polish social policy was the territorial unification of binding regulations and to encompass the entire territory of Poland with the institutions necessary from the point of view of the social policy at that time.

What were the results of the processes taking place in the inter-war Poland? It is difficult to give an unequivocal answer to this question. Surely, the creation of the legal and institutional framework of the social policy system, which covered the entire territory of the state, was a success. What also needs to be recognized was a quick structuring of the issues related to work legislation. Modern solutions, such as an eight-hour working day or 46-hour working week, started to be introduced from the very first weeks of the existence of the independent country. With time, the system of fundamental social security was unified and it covered the entire area of Poland. What is more, Poland, as one of the first countries, introduced the insurance against unemployment in 1924. Employment policy was relatively well developed in the 30s and it resorted to the extensive catalogue of animation activities. At the end of the 30s, the Parliament adopted the law on the public health service which encompassed all citizens of the country (Grata 2013).

On the other hand, however, this optimistic image was spoiled by some major problems resulting from the economic, social and financial conditions. Polish social policy of the inter-war period was invariably underfunded, which had an impact on the possibilities of the actual influence on social issues. First of all, the process of encompassing the entire area of Poland with the workers' pension insurance was relatively long (it happened as late as in 1934). What is more, the fact that the social and economic structure was based on agriculture resulted in a very limited availability of insurance provided by the social security (it only encompassed 15-17% of all citizens). Modern work legislation was very often a theoretical value and the problems with the compliance with the law, to a large extent, resulted from underfunding of the Labour Inspectorate (Journal of Laws 1933, no. 51, pos. 396; Grata 2015; Klott 1937; own calculations).

Despite its high level of activity, employment policy was not able to end the structural deficit of workplaces which, together with unemployment in rural areas, affected millions of people. Health protection, not related to sickness insurance, was unavailable to the vast majority of citizens and the main indicators in this respect (the number of doctors, support personnel, hospital beds) were one of the lowest in Europe. Social services, which local authorities were responsible for, was also far from satisfactory. Although in big cities it functioned relatively well, it was only a theoretical entitlement in rural areas. Also in this matter, when compared to other countries, the situation in Poland turned out to be very unfavourable (Grata 2021).

Unemployment and a very limited access to health protection were the most serious and unsolvable social problems in the late 30s. Both issues also became the most important areas of the conceptual work of Polish political circles during the war and occupation. At that time, unemployment eradication and full employment as well as the construction of the public health service, which would encompass all citizens, became a common postulate, regardless of the political orientation. Like in Western Europe, previous experience as well as the war and occupation prejudged the main aims of the social policy.

In the case of Poland, which had to deal with a great war damage and destruction, the aims were broader. The occupation meant the liquidation of the majority of Polish institutions and those which continued their activity had to promote the interests of the occupant. They also incurred enormous human and material losses. After the liberation, it was necessary to reconstruct social security institutions and labour protection, the system of job centres and, last but not least, adequate social care institutions. After the liberation, the scale of the needs was unmeasurable and the number of those who needed support was estimated to reach the level of about 6.1 million, i.e. 26% of the population (AAN, Urząd Rady Ministrów, sign. 5/86; Sprawozdanie 1985).

Remembering the above-mentioned underdevelopment of the health protection system, which resulted from the losses of medical personnel during the war, it needs to be acknowledged that the opening balance sheet of the Polish social policy was very pessimistic after the war. What is more, with time, the situation became even worse due to the political solutions imposed by the East.

### **3. THE RECONSTRUCTION OF THE SOCIAL POLICY IN THE AFTER-WAR POLAND**

After the end of the German occupation, political forces, associated with Communists and supported by the Red Army, were gradually taking the power in the country. By taking away their right to legal activities, they openly fought against traditional groups, which

represented the majority of the society and symbolized the continuity of the country. On the other hand, in the first period after the liberation, Communists and their allies were forced to base their rule on the pre-war legal order which, with time, was more and more modified (Kersten 1990; Paczkowski 1993; Żenczykowski 1990).

The same happened in the case of the social policy whose restitution was based on the institutions and regulations established before 1939. In the summer of 1944, the Polish Committee of National Liberation, which took power on the liberated lands on the east side of Vistula river, established the department of labour and social and health services. Later, within the Provisional Government established by Communists in 1945, there was the Ministry of Labour and Social and Health Services. It carried out the duties which, before the war, had belonged to the Ministry of Social Services and many pre-war officers played important roles there. The substantive range of the responsibilities of the Ministry covered labour protection, employment policy, social insurance, social services and health protection (Grata 2020).

Despite the fact that the legal legacy concerning the social policy of the Second Polish Republic was accepted, derogations from it started to happen relatively quickly. The aim of some of them was to win political support and they included, e.g., changes in the work legislation which favoured labourers (e.g. holiday regulations or working time). That way, new authorities wanted to increase their control over workers' environment, e.g. by issuing the decree on the works councils in 1945. What revealed a new attitude towards employment was the decision of the Provisional Government of 6<sup>th</sup> February 1945 which ruled out the payment of unemployment benefits, which was against the bidding legal regulations. By assuming that offering jobs to the unemployed was the priority, the government decided that any job was better than receiving benefits and this direction of the employment policy was to be followed in the following years. At the same time, the pre-war initiative related to employment and the Labour Fund was politically marginalized. It didn't fit in the after-war social and political reality and its tasks were taken over by the national employment offices established in September 1945 (Grata 2017b).

An important step towards taking control over another segment of social activities was the decision (Dec 1944) on the liquidation of the Central Welfare Council which had been very successful during the occupation. It was replaced by the new structures of the Central Committee of Social Welfare, dependent on the state administration. The authorities did not try to hide the political aim of that move (Miernik 2010).

Two important decisions of the Provisional Government, made in April and June 1945, were of significant importance. The first one established the Ministry of Health on 11<sup>th</sup> April, which was to prove that the authorities cared about health protection. The new department very quickly became the protagonist of the systemic changes which not only aimed at establishing the public health service but also at planning and centrally managing this sphere of public life. In June, the Ministry of Education became responsible for social care over children and teenagers, aged 3–18. It was going to support and facilitate the educational process of children who resorted to the institutionalized support. Time would show that this decision was an introduction to the process of the nationalization of support institutions. Also, activities indoctrinating children and the youth were to be easier to implement in the future (AAN, MPiOS, sign. 45; AAN, URM, sign. 23154).

#### 4. THE EVOLUTION OF THE POLISH SOCIAL POLICY

Despite the fact that some organizational changes were introduced as early as in 1945, already existing structures and institutions were mainly in use in the first period after the liberation. This can be proved by the fact that the social insurance institution, insurance treatment and the Labour Inspectorate were successfully reconstructed, employment increased and unemployment was limited. Social services and its institutions were quickly developing and Caritas, a charitable organization associated with the Catholic Church, played an important role. It quickly became the biggest support institution in the country (Zamiatała 2000.).

This apparent stabilization of the social policy could not be permanent under the changing political conditions. Communists, who gradually were taking full control in the country, also wanted to initiate changes in this sphere of the state activity. Although in 1946 the direction of those changes was not fully defined, certain signs could indicate it. Especially because new objectives ahead of the social policy were clearly visible. The centralization of activities and the idea of planning were announced and the solutions related to the model used in the Soviet Russia were more often talked about.

One of the examples was the program by the Ministry of Labour and Social Services formulated in April 1946 in which it was declared that the traditional tasks of the social policy would no longer be carried out. Instead, new aims would be achieved with the use of the methods known from the experience of the Eastern neighbour. Despite the visible tendencies for maintaining a certain balance between the old and new approach, it is worth mentioning that there was a vigorous pursuit to walk away from charity and philanthropy towards strict state control or employing the idea of productivisation of the disabled, so popular in the Soviet Union (AAN, URM, sign. 5/86)<sup>2</sup>.

The ideas of the Plan of Reconstructing the Economy for 1947–1949 (so called the Three-Year Plan) went even further. Next to the conventionally defined intensions related to the assumed increase of standard of living above the pre-war level, a fundamental transformation of the specificity of the social services was also planned. As in the case of the activities in favour of the disabled, its task was to prepare dependants to undertake employment. This limited the provision of support only to those with permanent or 100% inability to work. All other adult dependants were to undertake employment, which was the element of the pursuit to achieve the state of full employment of the available workforce (AAN, MPiOS, sign. 261; Jarosz 2008; Orlewicz 1947 Grata 2022a). However, the final shape of the systemic political and economic solutions was still unknown. Therefore, the officers of the Ministry of Health, involved in the reconstruction of the relations in the health service, said that “solving the problems of the health service depends on the shape of the economic model” (AAN, KRN, sign. 46: 7; AAN, MZ, sign. 2/17).

Although the road was still long in 1946, January 1947 brought a fake election victory of Communists and their full control in the country quickly resulted in entering the road of the construction of the Stalin’s system. At that time, the changes in the social policy clearly accelerated, but they were still more visible in the conceptual and political rather than legal and institutional sphere. Planning, present both in employment and support policy, was becoming more important, which Helena Radlinska, a prominent expert on that issue, warned against. Despite this, further development of the social policy was already clearly

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<sup>2</sup> It is worth noticing that Edward Osobka Morawski, the prime minister, by announcing further major reforms in the social security system in the State National Council on 26th April, declared that people living in rural areas would be covered by it (see: Sprawozdanie Stenograficzne 1946).

defined and the best summary of the situation was provided by Kazimierz Rusinek, the Minister of Labour and Social Services, who declared that “a big and important section of the social policy decisively joined a firm plan of the construction of the right path for the Polish People’s Republic” (AAN, URM sign. 1/11; Radlińska 1947).

What confirmed the ongoing processes was the fate of the legislative project on the public health service, which had been prepared from the middle of 1945 and whose aim was to create a common system of healthcare. In Autumn 1947, its place was taken by a totally new proposal, i.e., a decree project on the planned economy in the health service, which assumed uniform state management based on planning which used centralized administrative structure (AAN, MZ, sign. 2/17; Protokół... 1948).

## 5. A SHIFT TOWARDS STALINISM

1948 is, for a good reason, regarded as a turning point in the systemic transformations taking place after the 2<sup>nd</sup> World War in the countries controlled by the Soviet Russia and ruled by the Communist parties. The emergence of the Cominform and the decisions made within it, defined the directions of the ongoing processes. The same happened in Poland which, in 1948, entered the road to Stalinization practically in all aspects of political, economic and social life. The centralization and unification of management as well as the introduction of the planned economy became its foundation and its symbol, in the global dimension, was, so called, unification of workers’ parties and the foundation of the Polish United Workers’ Party as well as the beginning of work on the Six-Year Plan, officially called The Plan of Constructing the Fundamentals of Socialism. Its aim was to implement the Soviet model of industrialization in Poland, similarly to the remaining countries in the region (see: Garlicki 1993; Jarosz 2010; Werblan 1991; Skrzypek, 2002).

Inevitably, social policy became one of the elements of the construction of the new order. Minister Rusinek openly confirmed it by saying that the objective of the Ministry of Labour and Social Services was the implementation of the slogan: “Socialism as the case of a man”. It was based on the intensification of the activities in favour of centralization, planning and indoctrination which would result in the creation of “a new man”. Support activities were going to be fully controlled and state entities were going to play more important role, making social charitable institutions less and less visible.

At this point, however, it is worth pointing to the pragmatism of the authorities in this respect. An example of that was tolerating the existence of Caritas, closely related to the Catholic Church, and the reason for that was the apparent inability of the state to substitute it with its own institutions. Despite this, the process of taking over or closing down social support institutions was accelerating. The nationalization happened to the institutions which previously had belonged to the Central Committee of Social Services (closed down in 1949) as well as to other social organizations, including Caritas whose situation was becoming more and more difficult at the end of the 40s. Along the liquidation of some of the institutions, the condition of social services infrastructure and the access to support activities was deteriorating (for example, in 1948, as the result of the reduction of the network of orphanages, it was necessary to reduce the number of beds. Orphans already living in orphanages had to be requalified which resulted in some of them being given back to their parents) (AAN, MO, sign. 3583; AAN, URM, sign. 2/34; Grata 2022b; Zamiatąła 2000).

Passing the act on social healthcare institutions and planned economy in the health service (on 28<sup>th</sup> October 1948) can be regarded as the symbol of entering the road to

Stalinism by the Polish social policy. Not only was it going to create the foundation to planning in the health service but also to guarantee full subordination of diversified health structures to the Minister of Health, or even the obligation of doctors to work in social healthcare institutions. What is more, the act assumed compulsory relocation of doctors who exceeded employment standards in a given institution to the areas where there was a shortage of medical personnel. Another result was the nationalization of the majority of hospitals which previously had not been dependent to the state or local authorities (Journal of Laws 1948, no. 55, pos. 434; 1949, no. 38, pos. 277; Grata 2017a).

At the beginning of 1949, the centralization and subordination to the state was also initiated in the system of social insurance. On the basis of the 1<sup>st</sup> March act, previously separate insurance funds were consolidated and the unified insurance premium was introduced. At that time, social insurance was already perceived in a totally different way than before. It ceased to be an institution which guaranteed a certain equivalent of the lost income. Instead, its main task was to “improve life standard of the working class”. The aim of the regulation amendment was “including problems with insurance in our planned economy” (Journal of Laws, no. 18, pos. 109; Krygier 1949).

This type of „incorporation” had happened much earlier within employment policy. It was regarded as natural because the pursuit to eradicate unemployment and to achieve the state of full employment had been present soon after the war in practically all countries of Europe and it was difficult to perceive it as an integral element of the policy of the Communist party. William Beveridge had been already talking about it in his report during the war. According to him, one of the fundamental responsibilities of the state was the provision of work to citizens. In 1947, Waclaw Szuber, an outstanding Polish social politician, expressed an opinion that the aim of the employment policy was no longer the fight against unemployment but the pursuit of “the full use of productive forces”. On the other hand, the creators of that policy in Poland openly put *iunctim* between the systemic transformations in the country and the introduction of planning in the activities in favour of the development of employment (Beveridge 1942; Szubert 1947; Pragierowa 1947).

What is important, it did not end with declarations only. From 1947, the action of the professional activation of the unemployed was implemented (so called PA action), which was mainly directed at the unemployed women. There was also an attempt to introduce a job clearing which was set on relocation of free workforce resources. In 1949, the PA action, based on the creation of jobs for qualified women, adopted the features of the planned activity. However, along the preparation to introduce the socialist industrialization, this format started to be perceived as inadequate to the needs of the changing reality. It was to be replaced by the mass recruitment of workforce, initiated in 1948. Like in the Soviet Russia, this channel of the distribution of workforce resources was going to provide an adequate security of the economic needs. As early as in the first two years of its functioning, it encompassed (yearly) about 100 thousand people recruited to work in the branches which needed workforce the most (construction, mining, state agriculture) (Talejko 1949).

## **6. FINALIZATION OF THE PROCESS OF STALINIZATION OF THE SOCIAL POLICY**

The first year of the implementation of the Six-Year Plan meant the finalization of the process of the transformation of the social policy which in 1950, and 1951 at the latest, fully complied with the Soviet example in the majority of the aspects. Most importantly, it was going to be used to achieve totally different aims than before. Its responsibility was no

longer solving social issues (which, by the way, were going to be non-existent in the new system), but supporting the industrialization processes in the country, visible practically in all areas of the social activity of the state.

The above-mentioned reorientation was visible in the most traditional sphere of the social policy, i.e., work protection. Significantly, the changes were heading towards the reduction of its outreach and the limitations imposed on employers were regarded as a serious obstacle in the process of the socialist industrialization. Under the conditions of the nationalization of ownership and along the propaganda which proclaimed that the conflict between the capital and work ended, the role of the incapacitated and subordinated administration of the Labour Inspectorate was less and less significant. On the other hand, the foundation of, so called, social labour inspectorate in 1950 was symptomatic. For many years, it had “successfully” functioned in Russian factories and it was based on the principle that the controlling functions were to be carried out by workers themselves. In the same year, separate labour judiciary was closed down as it was regarded as the unnecessary institution under the new system conditions (Journal of Laws 1950, no. 6, pos. 52; no. 49, pos. 446; Kołodziejczyk 2003; Gan 1950; Zieliński 1951).

What summarised the dismantling of the work protection system under the Stalinist conditions were the legal changes related to working women and working youth, made in February 1951. In the name of “allowing” women to do the jobs which had previously been unavailable, the list of prohibited jobs was greatly reduced, although it had not been respected for many years. At the same time, the ban on night shifts for women, which had been binding for over 25 years, was removed. Another proof of the progressing devastation of the protective legislation was the decree of 2<sup>nd</sup> August 1951 on work and professional training of the youth conducted in workplaces. Although the minimum age for work was increased from 15 to 16, in practice, 14-year-olds were employed under the disguise of learning profession (Journal of Laws 1951, no. 12, pos. 94, 96; no. 41, pos. 311; Jarosz 2000; Puławski 1951; Rusinowa 1951).

The changes taking place in the second classic area of the social policy, i.e., social insurance, were equally extensive, although their aims were slightly different. On one hand, they were organically connected to the process of the full centralization of the health service management, on the other hand, their aim was to take over the financial resources of insurance funds for the purposes of industrialization. In July 1950, together with passing the act on the Workers’ Treatment Centre, the Minister of Health ended his strive to take over the structures of insurance treatment which were in the hands of social insurance companies which had many years of experience. At the same time, insurance companies were also closing down. What is more, with the act of 20<sup>th</sup> July 1950, the financial separation of the insurance system was no longer binding and all premium incomes were merged with the state budget. That way, they became yet another element of, so called, socialist primary accumulation. Still, it was not the end of the changes in social insurance. In 1955, the Social Security Office was closed down and its functions were taken over by trade unions, closely related to the Communist party (as early as in 1955 they had a dominant influence on social insurance boards) (Journal of Laws 1950, no. 36, pos. 333; 1955, no. 6, pos. 31; Garlicki 1950).

At that time, the employment policy headed directly towards the implementation of the economic objectives of the country. In fact, the evolution of its activities had been taking place for many years already. The mass recruitment of workforce, which aimed at meeting the employment needs, encompassed 140 thousand people in 1950. On the other hand, the right (from the point of view of the interest of the authorities) allocation of the new



resources was to be guaranteed by the regulations of the act of 7<sup>th</sup> March 1950 on the employment of vocational school and university graduates. Its aim was the planned “distribution” of graduates to social workplaces and to allow youngsters to join the construction of Socialism in Poland (AAN, MPiOS, sign. 31; sign. 572; Journal of Laws 1950, no. 10, pos. 106; Rakowiecki 1950; Szymańska 1951).

The process was also enhanced by the social services whose tasks were very similar to the tasks of the employment policy. The changes in this sphere of the social activity of the public authorities were taking place on two fundamental planes. The first one concerned the institutions, the second one the practice of support activities. What summarised the process of the nationalization of social services institutions was taking over the Church organization, Caritas, in 1950. Before that, other important entities had been liquidated, e.g. the Central Committee of Polish Jews. What is more, the organizations responsible for taking care of children were forced to merge (the Friends of Children Association was founded). In 1949, foreign entities, organized as the Foreign Charity Association Board which had been present in Poland practically till the end of the war and which played a major role in support activities, left Poland. What completed the centralization of the social services was passing the act of 20<sup>th</sup> March 1950 on the liquidation of the remaining territorial self-governments. According to it, the support activity (on the local level) was subordinated by the state via adequate presidiums of national boards (Grabski 2015; Jarosz 2002; Kelm 1983; Zamiatła 2000).

In the sphere of practical activities, along the construction of the new reality, the aims related to the common productivisation of dependents were coming into life. Assuming that the Socialist system ended the main source of poverty, i.e., unemployment, social support was based on two fundamental principles. The first one proclaimed that every man had the right to work and the second one, which followed the Soviet solutions, originated from the scriptures of St. Paul who said that “who does not work shall not eat”. That way, only those who were 100% unable to work had the right to receive benefits. All others, including the majority of the disabled, should be prepared to undertake employment. The result of such an approach was the fundamental change in spendings on support activities (shifting the centre of gravity towards professional training) and in the level of financial input on support activity which, inevitably, was limited, as was the range of the activity itself. This, again, proved the thesis on the dismantling of the social policy in the discussed period (Łopato 1991; Rusinek 1950).

It has already been mentioned that in the summer of 1950 there were fundamental changes in the health system, which was the actual implementation of the announcement included in the act of October 1948. According to the act of 20<sup>th</sup> July 1950, the Workers’ Treatment Centre, subordinated to the Ministry of Health, took over insurance treatment which previously had been independent from the department. This, together with the final stages of the process of the nationalization of hospitals, ended the process of the centralization necessary for the introduction of planning in the health service, so important in the new reality (a year later, the Workers’ Treatment Centre was closed down and this form of treatment was directly taken over by the board of the Minister of Health and local administration). Along further systemic changes, the process of subordinating medical environment to the authorities continued. One of its element was the liquidation of the Medical and Dentistry Boards, which constituted the body of the professional self-government. This was done by the means of the act of 18<sup>th</sup> July 1950. At the same time, the activities aimed at the indoctrination of the environment and politicisation of the work of social healthcare institutions intensified. Vice-managers of hospitals for political issues

were responsible for it (Journal of Laws 1950, no. 36, pos. 326–327; *Kronika...*, 2005; Grata 2017a; Jastrzębowski 1993).

The most definite confirmation of a new, often ideological, approach to the issues related to health protection was the adopted direction of the activities related to the health service in rural areas, which had already been neglected before the war. From 1945, its reconstruction was perceived as one of the priorities for the Minister of Health and the idea was to make the public health service more accessible to people living in rural areas. In the meantime, ongoing political processes and the pressure put on the collectivisation of agriculture brought dramatic changes. Instead of common and available health service, Communists offered “class-like” approach to the problem. As early as in 1949, the Vice-Minister of Health directly spoke about the concept of the health service which would take into account the order of priority of respective social groups. The first confirmation of that was the act on hospital payments which landless villagers and smallholders were exempted from and which were imposed on those with more land. A year later, the department openly connected the development of health service infrastructure in rural areas with the progress in collectivisation by declaring that, in the first place, it would start founding health centres in the areas where agricultural cooperatives were set up (Journal of Laws 1949, no. 25, pos. 174; Lewandowski 2008; Szarejko 1950; Sztachelski 1949).

## 7. “NEW” SOCIAL POLICY IN PRACTICE

The political and ideological layer fiercely determined the direction of the evolution of the Polish social policy in the late 40s of the 20<sup>th</sup> century. From the point of view of the public perception as well as great social needs and responsibilities ahead of the state, problems related to the effectiveness of minimizing the results of numerous social problems in the society destroyed by the occupation were equally important. Therefore, what can help to present the entire image of the “new” social policy on the brink of Stalinism is the answer to the question about the effectiveness of the social policy in the discussed period, together with the knowledge on the institutional changes taking place within it.

The assessment of the actual achievements of the after-war social policy in Poland should theoretically take into account the factors which would become their reference point. They included the way of the implementation of the tasks within this field before the war, the extent of challenges resulting from the war and occupation, the extent of financing the social tasks carried out by the public authorities, the progress in the impact and effectiveness of the respective detailed policies, the dynamics of the ongoing processes, their adequacy in relation to the objectively identified social needs and, last but not least, the comparison with other countries which had already been unfavourable for Poland before 1939.

Despite the natural tendency to refer to the pre-war period, it is difficult to rely on it when it comes to the assessment of the changes in the Polish social policy in the first years after the occupation. Such thesis can be proved by the transformation of the socio-professional structure of the population and its smaller number, which resulted from the change of boundaries. Also, by the population loss during the war which was dramatic as it reached 6 million of people. As the result, at the beginning of 1946, the number of the population reached only 24 million and was lower by 11 million, that is by 30% when compared to 1939. On the lands which formerly had belonged to Germany the industrial infrastructure was much better than on Eastern borderlands. Moreover, the number of

people living there was smaller. Therefore, it was possible to think about the reduction of unemployment, perceived as the structural phenomenon before the war, and the increase in employment outside agriculture. This resulted in the greater access to social insurance and, thus, health protection as well as to the social services whose outreach, due to the higher degree of urbanization, was broader and which, traditionally, was better developed in the cities.

Due to the changed conditions, it is more important to define the degree of accessibility of respective services offered within the social policy and the effectiveness of the activities, assessed in the confrontation with the visible needs as well as the quality expectations, so important from the point of view of beneficiaries. The criteria of such an analysis must be diversified. It seems, however, that on the basis of the collected source material not only is it possible to be carried out but it also makes it possible to assess the impact of the systemic transformations (in the late 40s) on the way the tasks of the social policy were implemented.

As the result of the above mentioned conditions, the implementation of the tasks in the sphere of employment, which had been regarded as impossible to stabilize, turned out to be the easiest. After removing the most enormous war destructions and opening the majority of industrial factories, the employment quickly increased. In 1946, it reached the level of 1.2 million workers in the industry, exceeding the level recorded in 1937 by 40%. The following years brought, along the progressing reconstruction and new investments, further increase in the number of workers both in the industry as well as in the entire sector outside of agriculture. In the middle of 1949, 1.7 million people found employment in the industry and crafts and 3.9 people outside agriculture. On the other hand, it is worth noticing that such rapid increase was related to a very high staff intensity. This can be proved by the fact that the size of industrial production within new borders was exceeded as late as in 1950. However, it happened at the expense of employment being higher than 45% in comparison with the pre-war period (AAN, PKPG, sign. 3014; sign. 3021; Rocznik Statystyczny 1949; Rocznik Statystyczny 1950; Chumiński 2015).

The result of the rapid increase in the number of workers was the reduction of unemployment which, in the discussed period, was not even close to the pre-war indicators. Obviously, there were no reliable statistical data as the benefits were not paid to the unemployed and, therefore, they did not register with job centres. Despite this, the unemployment rate was not high, especially in the 30s when it exceeded the level of 30% during the crisis. In Autumn 1947, the department of labour and social services estimated that it was on the level of 3–9%, depending on the region, and two years later it reached the level of 5%. In 1950, unemployment officially ceased to exist (at least for some time) and this was facilitated by the rules on the registration of job seekers introduced around that time. Thanks to that, it was possible to register those who received a job referral and the unemployed who did not accept the offered job. Therefore, Boleslaw Bierut, the leader of the Polish Communists, could proudly declare that the eradication of unemployment was “the result of overthrowing the Capitalist system and the increase in manufacturing forces” (AAN, MPiOS, sign. 578; Rocznik Statystyczny 1948; Rocznik Statystyczny 1949; Bierut 1950).

Along the higher number of the employed, the number of the insured increased as well. Before the war, the low number of people covered by the insurance against life risks was yet another unsolvable problem of the Polish social policy. Thanks to the broader range of sickness insurance and a quick increase in the number of workers outside agriculture, there was a major progress in this matter. At the end of 1946, the number of the insured was already higher than before the war. A year later, together with family members covered by

insurance, it reached 7.2 million. In 1950, the number of the insured was nearly 6 million and, together with family members, it amounted to 10.5 million. This meant that insurance covered 42% of the citizens and, together with state social workers and pensioners, it covered nearly half of the entire population of the country. Family insurance, introduced at the beginning of 1948, became an important backup for the employed. It guaranteed benefits to their children and unemployed family members and it was perceived as “the greatest trophy of the labour reality (AAN, ZUS, sign. 1/8; Journal of Laws 1947, no. 66, pos. 414; Radzimowski 1964; Krogulski 1951).

What cast a deep shadow on this optimistic image of the development of the social insurance system was the implementation of liabilities to citizens. In the case of long-term insurance, despite the fact that the number of people entitled to receive benefits increased by several times, the level of their payment was appalling. Soon after the war pensions were estimated to be ten times lower than in the 30s when benefits had already been regarded as low. In 1945, pensions were so low that people were discouraged to apply for them! The attempts to raise their level, made in the following years, were not successful. During the discussed period, the level of pensions was dramatically low in relation to incomes and it amounted to only 17–18% of the salary, which was regarded as beggarly (AAN, MPiOS, sign. 200; Radzimowski 1991).

The situation of the most important element of the system, i.e., insurance treatment was not any better. Also in this case, the fundamental problem was very low expenditure, which was reflected in a very limited access to doctors and their severe overworking. The increase in the number of poorly paid doctors working for social insurance companies was never high enough to meet the needs of the increasing number of people entitled to receive treatment. Between 1945 and 1949, the number of doctors increased by 60% but, in the same period, the population of those entitled to make use of their service increased three times. As the result, the access to treatment and the quality of health protection was, in the case of sickness insurance, unchangeably low. Also, what proved that doctors worked too much was the fact that, in 1948, they saw six patients per hour on average. In some places the average was ten patients per hour and some doctors were able to see even 50–60 patients a day (Rocznik Statystyczny 1950; Janiak 1948; Ordyłowski 1991).

It was difficult to talk about the positive effects of exercising the rights granted by the binding regulations on work legislation. In this aspect of the social policy, objective reasons, resulting from the war damage and destruction which, for a long time, made it impossible to provide adequate working conditions, overlapped with the above mentioned practice of the marginalization of safeguard provisions and the activities of the Labour Inspectorate which acted as their guardian. The number of the recorded instances of breaching the safeguard provisions quickly increased and, in 1949, it was three times higher than before the war. The majority of those instances were related to health and safety, however, equally important were the problems related to complying with the regulations which protected youth and woman employment. Although the number of violations was relatively low, it mainly resulted from the increasing liberalization in this respect and from not adhering to the principle of many binding standards (the same happened with the regulations on working time which were notoriously breached by state employers) (AAN, MPiOS, sign. 737; sign. 740; own calculations).

The worst situation developed in the context of observing the regulations on woman employment. Night shifts, prohibited by the act of 1924, became a standard practice after the war and there was no indication that the situation would change. In 1948, 10% of all employed women worked at night. A year later, the number increased to 13%, i.e. nearly

80 thousand women. 29% of women worked at night in the traditionally feminized textile industry and 35% in the steel industry. The regulations on working time of women and the ban on their employment under particularly difficult conditions were also notoriously breached. For example, in 1946, 32 thousand of women, i.e. 18% of all women working in the industry, did the jobs which were prohibited by the regulations. With time, fewer and fewer people paid attention to the situation and such devastation of the regulations led to the above mentioned legal changes introduced at the beginning of 1951 when the binding regulations were simply adopted to the after-war practice of woman employment (AAN, MPiOS, sign. 670; Rutkowska 1947).

In spring 1945, it was announced that health protection, which was the biggest problem for the Polish social policy in the inter-war period (next to mass unemployment), was relatively quickly going to become a widely available commodity to all citizens. This was going to be achieved by the legislation changes as well as by the plans of the health department to set up a network of health centres across the entire country. Initially, what came across as an obstacle was the deficit of medical personnel, especially doctors, 40% of whom died during the war. Even with the smaller size of the population, it resulted in the decreased indicator for their availability per 10 thousand citizens, which had already been poor before 1939 (from 3.7 in 1938 to 3.2 in 1946). In the following years, the number of medical personnel was increasing, however, it only resulted in going into the state of saturation (in 1950) which equalled to the level before the war (this was not achieved in the case of dentists) (Rocznik Statystyczny 1947; Rocznik Statystyczny Ochrony Zdrowia 1945–1967).

Personnel deficit, together with the lack of realistic financial possibilities, made the promise of establishing 1.2 thousand new health centres in 1946 impossible to fulfil (in 1938 there were about 650 of them). As it turned out, the number of health centres did not exceed the level of 1.2 thousand by the end of the discussed period, which meant that the needs of people, especially in rural areas, were not satisfied. What is more, along the ongoing political changes, the aims of their functioning also changed. At the turn of the 40s and 50s, health centres became institutions which supported the activities of insurance treatment and they did not guarantee meeting the health needs based on the collectivisation of farmers. In 1950, it was openly announced that health centres should be made available to “the insured in the first place”, which completely contradicted the initially formulated principles behind their establishment (AAN, MZ, sign. 2/21; Rocznik Statystyczny 1947; Rocznik Statystyczny 1949; Rocznik Statystyczny 1950).

The situation in hospitals was different. Western and northern lands, acquired from Germany, were much better equipped in inpatient treatment infrastructure than, so called, former lands, i.e., the lands which had belonged to Poland before the war. Thanks to that, despite the war destruction, the number of hospital beds was equal to the pre-war level as early as in September 1945. The newly acquired lands were home to 40% of hospitals with 1/3 of all hospital beds in the country. The number of hospitals reached the pre-war level at the end of 1946 (about 630), however, in the following years there was a planned reduction of their network; the smallest institutions were closed down as they were perceived as unnecessary (in 1950 there were 516 hospitals). Although the number of available beds went up from 85 thousand in 1945 to nearly 100 thousand in 1950, a quick increase in the number of the population meant that the progress was minimal (from 3.8 beds per 10 thousand citizens to 4.0 in 1950). Importantly, like before the war, the indicator was much poorer than in other European countries (soon after the war, the indicator in Czechoslovakia was 6.9, in Denmark 10.0 and in Switzerland 14.8) (AAN, KRN,

sign. 263; AAN, MZ, sign. 2/18; Szarejko 1948; Rocznik Statystyczny Ochrony Zdrowia 1945–1967).

Considering a lethargic character of the available infrastructure and the continuing deficit of medical personnel, it was difficult to expect a considerable progress in the context of the effectiveness of health protection. What can be considered as the success was the improvement of the situation in the field of communicable diseases, so dangerous in the after-war period, which was achieved thanks to the implementation of extraordinary actions. It was far more difficult to expect results in meeting the conventional health needs of the society. Primarily, access to treatment was not granted to all citizens. Along the development of social insurance, the number of people entitled to receive treatment increased a few times, however, uninsured citizens, especially in rural areas, remained outside the system, as was the case before the war.

Therefore, the progress in the availability of treatment resulted from the structural changes in the economy and the increase in employment outside agriculture and not from the planned actions of the Ministry which was responsible for the health policy of the state. Along the shift towards Stalinism and the change of principles underlying the policy towards rural areas, the phenomenon of depriving their residents of the access to health protection became a permanent element of the system and it encompassed nearly half of the population at the beginning of the 50s (43.6% of the society made their living by working in individual holdings). What only confirmed a poor access to treatment was low ratio of the use of hospital beds which, in the last years of the discussed period, was on the level of three quarters. With an indicated low level of resources, it meant that the society remained divided into two parts, of which one, still very numerous, could not benefit from health protection (AAN, MZ, sign. 2/20; Grata, 2017a).

The functioning of the social services can be assessed in a very similar way. At that time, a great number of after-war needs meant that it was impossible to fully satisfy them. However, it was necessary to take actions which would, at least, minimize the scale of problems. In the first period after the liberation, it was necessary to undertake rescue operations aimed at hundred thousand people relocated from the frontline areas (their number was estimated to be about 800 thousand). With time, the majority of those in need received support but it took too much time, which can be proved by the fact that two years after the war the Legislative Parliament set up another committee to examine the situation on, so called, bridgeheaded areas. Despite the fact that the majority of problems was solved, nearly 2 thousand families in kieleckie voivodship still lived in bunkers and huts at the turn of 1948 and 1949 (AAN, URM, sign. 2/34; Miernik 2012).

The conventional forms of support activities were also in dire straits. Like before the war, there was not enough specialist institutions and only at the end of the 40s the number of available places exceeded the level from before 1939. The technical condition of many support institutions was very poor and, unchangeably, one of the obstacles was the lack of premises where such institutions could be set up. What is more, the liquidation of some of private care houses, initiated during Stalinisation, meant that their accessibility was poorer and even created the necessity to dismiss children from the orphanages which, in majority, were state owned. In general, till the end of the discussed period, it was not possible to achieve acceptable state when it comes to the size and the quality of care institutions (inpatient health care). In the case of the outpatient health care, many taken actions made it impossible to meet the social needs (an example was an unsuccessful initiative on limiting the outreach of social pathologies spreading after the war). Ironically, the situation was going to be improved thanks to the introduction of the changes in the approach towards

support activities at the end of the 40s. As the result, the number of those entitled to receive support was going to decrease, which would make it possible to minimise the negative effects of the infrastructure shortages that still existed (Grata 2018).

The major problems with the organization and the functioning of the social services mainly resulted from the shortage of funding in this sphere of public life. Importantly, this factor also influenced the remaining elements of the social policy. There was a lack of money for insurance doctors, the establishment of health centres, higher salaries and insurance benefits which were appallingly low. That way, the extensive range of actions taken in favour of the social policy remained inadequate in terms of the quality or availability. Crucially, along the noticeable development of the range of activities, the budget for this area of public life did not increase. It was relatively the largest soon after the war as it amounted to about 10% of all budget spendings. Later, it remained on the level of 8% which, with the increasing number of tasks and the number of people benefiting from them, revealed the tendency towards stagnation rather than development. The process was summarised by the changes taking place at the turn of the 40s and 50s when, along the reorientation of the aims of the social policy, there was a number of significant structural shifts related to spendings. One of the examples was the increase of the budget allocated to the productivisation of support institution dependants at the cost of support activities. Another example was imposing purposeful constraints on the development of the state health service, which interconnected with allocating the budget of health service infrastructure to insurance treatment, later called labour treatment (Grata 2018).

## 8. CONCLUSIONS

When summarising the analysis of the transformations taking place in the Polish social policy after the war, it needs to be pointed out that, at the beginning of the 50s, it became a totally different entity than it had been a few years before. It didn't have much in common with its traditional understanding and its new political objectives determined the undertaken activities. What is also important, it performed its roles to a lesser extent than before. The planned reduction of the outreach of the social support, the devastation of labour protection institutions, the nationalization and centralization of the social insurance system, the pro-industrial tasks of the employment policy and, last but not least, the selective and ideologically motivated approach towards health protection were the main features characterising the new social policy.

For the authorities, the social policy was an insignificant addition to the processes taking place in the country; it was an unnecessary factor, regarded as a relic of the Capitalist system. This was proved by the elimination of the scientific research on the social activity of the state as well as the liquidation of the Ministry of Labour and Social Services which was planned to happen in 1951. According to the binding vision of the reality, it was supposed to be replaced by the Ministry of Workers' Reserve (AAN, PZPR, sign. V/11), which seems to summarise the processes related to the social policy in the discussed period in the best possible way. In the end, the Ministry was not closed down, however, the changes taking place at the turn of the 40s and 50s were permanent and even walking away from Stalinism, which happened in the following years, did not change much in this matter.

The confirmation of that was the fact that people living in rural areas received access to free health protection in the Polish People's Republic as late as in 1972, i.e., 30 years after the declarations formulated by Communists during the occupation. The Labour Inspectorate did not regain its position until the 80s when the establishment of the

”Solidarity” movement attracted attention to the existing working conditions. Despite the reactivation of the Social Insurance Institution, the position of social insurance remained unchanged till the end of the People’s Republic. The principle of full employment, favoured in the following decades, not only brought the eradication of unemployment but also low work efficiency, lack of organization and respect towards such easily available commodity, i.e. work in the period of real Socialism.

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## HUMAN RIGHTS AND US FOREIGN POLICY

Human rights are fundamental elements of the post–World War II world order, and in contemporary international relations. They constitute the moral base of the West, which, through the system of international institutions, has been implemented all over the world. Treated as universal, they constitute a bridge between the West – and, above all, the United States – and the rest of the world, in a moment of changes in the global order. The aim of this paper is not to analyze these changes, but to show how human rights happen to be politicized and what the consequences may be. The position and foreign policy of the United States as the architect of the liberal order after World War II, and its care for human rights in an era of global changes at the beginning of the 21<sup>st</sup> century, seem to be of key importance for international policy on the fate of humanity.

**Keywords:** human rights, foreign policy, US exceptionalism.

### 1. INTRODUCTION

Human Rights are considered to be a crucial for World Order after World War II. As a product of the West, they were qualified as universal and included in the global liberal system. It was assumed that the implementation of human rights by all or most of the states in the world would help to avoid repeating the traumatic experiences of the War. Moreover, by guaranteeing individual and collective rights, they were to ensure the stability of the new system and the stability and predictability of social and national movements. In this way, having a moral foundation based on the concept of human dignity, they became not only ends, but means to build secure international relations. But analyzing foreign policies of states, it can be seen that human rights are also used to achieve the particular goals of individual states. Especially the US foreign policy, on the one hand, the chief architect of the Global Order after World War II, and on the other exceptional, with the status of *primus inter pares*, can explain the actual place of human rights in international relations.

The paper consists of following parts. Methodology of research and conceptual framework give the theoretical basis for further considerations. HR in US Politics Research Review presents the state of research on the topic as of today. Later the author investigate whether human rights are tools of foreign policy of individual states and if the United States happen to use human rights to achieve political goals in the world. The literature of the subject is rich and consists of scientific articles, monographs, documents and international

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agreements. Sources regarding global order and the importance of human rights in international relations allow to outline the background and the environment in which entities operate.

## 2. METHODOLOGY OF RESEARCH

Since the aim of the paper is to investigate the role of human rights in the politics of states, especially the United States, none of the theories of international relations will be leading. Each of them will refer to the importance of human rights in the IR, and will shed light on the problem of their politicization, but at the same time the perception of this phenomenon will be different. Among the many, the most important in this context will be realism, liberalism, constructivism and the English School. Especially the latter, and in particular the dispute between solidarists and pluralists, will help to answer the question whether human rights are universal value in themselves, the common good of humanity, and states should take responsibility for them, or whether culturally diverse human rights are the sovereign responsibility of individual states, and the international community should not interfere in their implementation.

Liberalism assumes that the legitimacy of the internal order of states stem from respect for human rights, but also for democracy and free market. Human rights, are universal in nature, although the values and achievements of the West are the point of reference in this area. For foreign policy and international relations from the liberal perspective, it is extremely important to promote human rights as an emanation of moral principles desired both in the domestic politics of states and in international politics. Although this often requires states to sacrifice their own national interests, it serves the international community. Human rights are an expression of respect for human dignity as the highest value, as well as give credibility to states in the international arena and are one of the guarantors of non-violence (Burchill, 2005). In liberalism the world is perceived not as a perpetual state of war, but as war and peace, and peace can be achieved by eliminating war. Competition exists but is not limited to power. International institutions have an impact on relations between states. They differ from each other, and the criterion of their qualification depends on their attitude to human rights. Obligations of the state are not limited to ensuring security, but include protection and promotion of individual rights. Realism, on the other hand assumes that relations between states are of an anarchic nature which does not exclude trade between them, cultural interactions, and the existence of international law as an institution regulating international relations. However, this is state that remains a basic and strategic player in the international arena. Some of them focus on expansion, others only on survival but none of them can maintain lasting cooperation with others. States are selfish and fear each other. This does not mean, however, that they do not cooperate – *clubs are trumps*, and all goods have a relative value, determined by the measure of strengthening one's own security (Doyle, 1997).

Constructivism assumes that states, through their mutual interactions, co-create a system and the structure of this system influences their identity and interests. This mechanism applies to human rights: the state's attitude to HR shapes the system, and within it, standards are created and implemented in this area. It is a feedback loop. The mutually created social structure excludes the assumption that human rights policy, because it is implemented by selfish states, results only from their particular interests, ensuring their independence and security (such an approach is represented by some representatives of

liberalism). This does not mean that states do not act in this way, but the calculations mentioned above arise as a result of social interactions between them (Mertus, 2008).

The English School assumes that subjects of IR are socialized by the structure, and that the international community is a political and social concept. However, there is no consensus as to what kind of values are promoted by this system. The division of the English School into pluralists and solidarists is important for the search for the role of human rights in international politics. The former assume that the international community is not the same as the universal community of humanity. Therefore, it is only a framework for the international order in which states work together to achieve the common interest. States remain as separate entities, and the standards created by the international community are intended to maintain this distinctiveness. Pluralists represent the point of view in which states are the main actors and as a result of the principle of sovereignty, and differences between them (also regarding the interpretation and implementation of HR) are desirable (Buzan, 2004). Solidarists assume that human rights, understood in a cosmopolitan and universal way, are essential to the international community as such. Raymond Vincent (1986) dismisses the allegation that human rights, as an expression of Western values, can serve imperialist purposes and be essentially a tool to curb the emancipation of the rest of the world, not to promote them<sup>2</sup>. The author notes that values implemented from the West serve primarily to limit rather than promote any hegemony. The world of shared moral values serves the security of the weaker and the stronger in the same degree. Therefore, human rights must be regarded as an end in itself that serves the good of the international community and, therefore, of all states<sup>3</sup>.

The activity of states in the area of guaranteeing respect for human rights, the risk of overzealousness or too far-reaching restraint, raise questions about the reasons for undertaken or omitted actions. The paper works with the above IR theories and the aim is to use them as a background and test them. The aim of the paper is to find out whether and to what extent HR in US foreign policy can be described as means or ends. They will not be analyzed individually, but their groups. Human rights are based on the principles of equality, universality and morality. The implementation of the above principles in US decisions and actions may be a determinant of whether human rights are ends (if the principles are fully respected and implemented) or means (in the opposite situation, when none or not all principles are reflected in the foreign policy of this superpower). Considerations base on a qualitative methodology in a form of instrumental case study where human rights is an independent variable, foreign policy and its tools, global order, ideological basis for the US foreign policy are mediating variables and the US foreign policy is a dependent variable.

### 3. CONCEPTUAL FRAMEWORK

To consider the place of human rights in the US foreign policy, it is necessary to explain the way and extent to which states are obliged to abide by them. It is not an aim of the paper to analyze the essence of human rights and assess the quality of their functioning. According to the jurisprudence of the International Court of Justice, they can function as a custom, and thus legally bind also those states which have not acceded to relevant

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<sup>2</sup> For the conceptions of the West and the Rest see also (Bonnett, 2004; Kurth, 2009; Zakaria, 2008; Huntington, 2013; Khanna, 2008; Gajewski, Gruszko, 2018).

<sup>3</sup> The presented dispute is best illustrated by an approach to the principle of non-intervention. See: (Buzan, 1993; Devlen, James, Özdamar, 2005; Linklater, 2005).

international agreements. Human rights may also be qualified as mandatory at all times and circumstances, not a subject to derogation and be included in the *ius cogens* system. In practice, only international tribunals decide which laws are mandatory. States in doing so, would impose self-limitation, so none of the international, universal or regional organizations has undertaken and will probably not take such action in the future. So only their judicial authorities decide which human rights are not subject to derogation. At present, the number of such rights remains limited (Mazurkiewicz, 2015).

According to moral foundation of human rights it is necessary to underline the definition of social order, which emphasizes such distribution of entities that allows the implementation of the most important values and goals. Social, political, international or global order will be subordinated to these values. At the same time, the existence of order does not allow the implementation of undesirable or harmful ones (Bull, 2012). The definition of Kissinger's Global Order, a representative of realism in international relations, allows the application of values and principles proposed by a region or civilization to the whole world. Standards, rules and institutions define the system, but at times of crisis, rules such as balance of power will guarantee its survival and stability (2014).

It should be emphasized that, although democracy is not a human right, according to the United Nations it plays a significant role in maintaining peace and security in the world, ensuring economic and social progress and development, as well as respecting human dignity. Its Member States recognized in 2005 that democracy, development and human rights are mutually reinforcing and the rule of law is a condition for the protection of individuals and groups (United Nations, 2005). The Universal Declaration of Human Rights and the Paris Charter made peace and security dependent on democracy and respect for human rights. Even after the end of the Cold War, democracy was recognized as a prerequisite for conflict prevention especially in the context of non-international conflicts (Clark, 2009).

The above definitions of the concept of order show how important the values are and the mechanisms aimed at guaranteeing them. After World War II, a Global Order was based on liberal economic and political principles. This order was created under the leadership of the United States and became a reflection of the values of the Western World. The Cold War strengthened the position of the United States in the new system, while the power fulfilled the role of leader by exercising the rights and obligations that resulted from the nature of the system they created. One of the most important elements of the liberal order after World War II was the development of a catalog of universal human rights, which was reflected in the Universal Declaration of Human Rights (Ikenberry, 2011).

A foreign policy of state can be defined in many ways. It is assumed that this is the behavior of one state towards others. Such behavior results from decisions made by an individual or a group of people. The main goal of foreign policy will be to change or to continue the behavior of others, depending on what is conducive to the implementation of the national interest. Values of a given state affect foreign policy it implements. It happens that they become foreign policy tools, as in the case of exporting democracy or the free market in the case of the United States. In their case, affective investment has become one of several pillars of foreign policy. American exceptionalism emphasizes the moral superiority of the US, their uniqueness, but most importantly, values happen to be treated as the basis for aggressive foreign policy – their exports, fighting against evil or conversion of others into American ideals. It contains an element of moral superiority. As a *city on the hill* the US has the right and duty to emphasize its own models and ideals (Izadi, 2016). The ideologization of the US foreign policy finds expression in their specific approach to



it. Michael Hunt noted that ideology is the basis of American activity because it is an inherent element of their vision of the world and determines their place in the world (Hunt, 2009).

The above assumptions do not mean that US foreign policy can only be assessed as a cynical game of a power and human rights remain just slogans used to achieve the state's particular goals. The Author notes, however, that they might be one of many tools that states, especially powers, might have in their toolbox. On the other hand, their moral overtones testify to their uniqueness and require special care and caution. Without it, there is a risk of undermining the moral leadership of the US in the world. Due to the research problem, the Author focuses mainly on those examples that illustrate how human rights can be used in contemporary international politics in a different way, and have a chance to play a leading role as a new global order develops.

In the paper the Author assume that human rights are often not the goal of the state's foreign policy, but become means to achieve often other goals, also particular ones. Basing on the above, the author proposes the following hypotheses:

1. Human rights can be tools of foreign policy of individual states.
2. The US happens to use human rights to achieve political goals in the world.

The verification of the above hypotheses requires the answer to the following research questions:

1. Why did human rights become one of the elements of global liberal order after World War II?
2. What does the politicization of human rights look like?
3. What are the consequences of politicizing human rights?
4. What role do the values play in US foreign policy?
5. How does exceptionalism affect US foreign policy?
6. Why does the US usurp a special position towards human rights?

Activities in the field of foreign policy will not be analyzed in terms of the structure of the US political system and its main elements and actors, although the decisions of the presidents of their administration will be an important element of the analysis.

#### **4. HR IN THE US POLITICS RESEARCH REVIEW**

The place of human rights in the US foreign policy is examined from different points of view. In the context of the American tradition of political thought, many authors refer to Tocqueville and his concept of equality and natural law (Tocqueville, 2012). Other authors focus on the US political system, which requires the consent and cooperation of several decision-making institutions. The problem was most extensively described during Carter's presidency, when there was a return to moral values in foreign policy. However, some authors believe that it was the Reagan presidency that put most emphasis on promoting human rights (Keys, 2014). The war on terrorism and the neoconservatism of the presidency of George W. Bush caused a return of discussions on this topic. Cultural conditions, and above all exceptionalism, are often indicated as the main cause of double standards and even hypocrisy in the US HR policy. The dichotomous and simplified vision of the world allows to usurp the right to carry out the mission of promoting democracy and human rights, and many researchers point out that this mission is only a tool to achieve particular goals. With a simultaneous ambivalence to multilateral cooperation, it makes the USA unreliable, and the lack of consistency of actions causes reluctance and weakens the state's Soft Power. In the literature on the subject, many works are devoted to the activities

of American non-governmental organizations, whose activities deviate from this state policy, but due to the research problem of the article, they will not be analyzed in detail<sup>4</sup>.

The uniqueness of US policy, including foreign one, is being emphasized. Its cultural foundations determine that it has a highly polarized character, situated between idealism and realism. The former forces actions to combat evil, although neoconservatism presupposes a balance between morality and political power. Successive presidencies represented a different perception and understanding of human rights (Apodaca, 2006). Schlesinger (1978) emphasizes that human rights play a special role in the US tradition, which is particularly evident in the state's foreign policy. The question the Author is asking is not whether, but how the United States has carried out this mission. Activities to promote human rights in the 1970s initially sparked anxiety and fears about far-reaching messianism, resulting from the American tradition, and about the use of HR as such in the Cold War conditions.

Carter's human rights policy sparked initially criticism from those who feared the far-reaching self-limitations of this unique task, especially in the area of security and the economy. The active protection of human rights jeopardized the US's good relations with those states that did not guarantee them to their citizens. Consistency and selectivity equally exposed the United States to losses, and a similar calculation can also be observed today. Jack Donnelly and Debra Liang-Fenton (2004) point to the presence of this dilemma in US foreign policy, and consider the search for an optimal solution to be a difficult and complex task. What is required in this respect is coherence and consequence, as well as a skilful combination of means and goals, taken into account at the stage of formulating goals and strategies.

Carter's decision to return to the inclusion of moral values in US foreign policy should be understood, according to Hal Brands (2016), as a decision to use democracy and human rights as weapons in the Cold War confrontation. It was supposed to be so much more effective that against the background of the above, traditionally American values, the shortcomings of the totalitarian system of the Soviet Union were highlighted. Nevertheless in implementing this plan, the United States referred to a number of actions, also morally questionable, such as persuasion, backstage diplomacy, and selective military and economic aid. However, it lacked consistency. Moreover, Carter's human rights policy interfered with arms control and Detente.

Joe Renouard (2016) sees a specific approach to human rights in the general reluctance of Americans to multilateral agreements. While the bilateral agreements within the framework of human rights policy in the 1970s were respected, those organized within the UN were not. The second reason, according to the author, resulted from the contradiction between the laws of states and the rights of individuals. Since the principle of sovereignty remained the basic principle regulating international relations, many states included human rights in the sphere of autonomous state decisions. Changing this logic would require a reinterpretation of the concept of sovereignty<sup>5</sup>. Moreover, the very concept of human rights is imprecise and it is unjustified to define them as universal. The argument is made here that they reflect Western values, and to deny this is equal to neo-imperialist actions. Importantly, the proposed concept of human rights ignores not only the East-West division,

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<sup>4</sup> For nongovernmental organizations and global civil society see: (Schlesinger, 1978; Dietrich, 2006; Acuto, 2009; Forsythe, 2006). See also social movements and HR: (Renouard, 2016).

<sup>5</sup> See above discussion between pluralists and solidarists in the English School IR Theory.

but also collectivism-individualism, capitalism-Marxism, religiosity-secularism, and also Christianity-Islam ones.

US human rights activities are extensively analyzed in the context of the war on terrorism. The necessary multilateralism in this regard has been weakened in favor of unilateral actions, possibly bilateral arrangements. The aim of changing the regime and guaranteeing security was also achieved using human rights arguments, but these were more imprecise rhetorical figures than legal language (Roberts, 2003). The US attitude to human rights is most often described as ambivalent. Many authors use even stronger terms such as hypocrisy and double standards. According to Andrew Moravcsik (2005), the latter are particularly visible in the US accession to a series of human rights treaties after World War II. The liberal order and the US leadership in the world were based, *inter alia*, on their respect for them, but also on multilateral agreements and, consequently, on imposing self-restraint by this power. The failure to ratify many documents regulating individual rights in more detail is frequent, not only in comparison with the West, but also in relation to all states of the world. The US rejects regulations that give its citizens the opportunity to pursue their rights before national and international courts. Few of the norms have been directly incorporated into domestic law.

John Dietrich (2006) points to several factors that have prevented the United States from implementing full human rights in international relations. It is a lack of sufficient force, illustrated by the failure in Vietnam, a historical caution in multilateral cooperation, especially permanent (e.g. agreements, international organizations), lack of consistency in choosing policy priorities (*ad hoc* political goals often took precedence over human rights, e.g. the Doctrine of Containment) and the lack of sufficient support within the USA (systemic conditions necessary for the formulation and implementation of foreign policy). Barbara Keys (2014) however, sees the importance, place and role of human rights in US foreign policy differently. She points out how important a role they played in shaping and transforming American identity. They are not only a point of reference for the American people, but also for defining its role in the world. After the defeat of Vietnam, it was the promotion of human rights that became not so much a foreign policy tool as an externally used internal policy tool aimed at washing away guilt and responsibility.

The aforementioned dichotomous vision of the world and the entrenched division into the civilized and barbarian world is, according to Robert Kagan (2007), a legacy of continental expansionism, in which Americans, in the name of spreading values, modernizing the West and Manifest Destiny, implemented a plan of conquest and destruction of indigenous people. The author calls this phenomenon proto-globalization, imposing a liberalism that the Indians and their culture did not want or were unable to accept. The United States today is liberating states and individuals rather than subjugating them. The American ideology of a state against colonialism and imperialism proposes the export of democracy and human rights in this place. Nevertheless, the history of American expansionism shows that these are not true intentions in US foreign policy (Douzinas, 2007).

William Schulz (2008) emphasizes that the theory of natural law is considered one of the most important sources of human rights in the United States. For neoconservatives, the minimum participation of the state in the protection and implementation of human rights is very attractive, and human rights equate to civil and political rights, recognized in the American tradition. Moreover, natural law assumes the universal nature of human rights, and the world vision presented a dichotomous division into the above-mentioned division: civilization and barbarians. As a result, the United States repeatedly failed to act in the face

of genocide, on the one hand, and on the other hand, applied a policy of introducing moral principles through legislation. The export of democracy, on the other hand, was to be a sufficient condition for the HR implementation and respect.

Clair Apodaca (2019) draws attention to the problem of the nature of the US human rights policy. Due to the American political system, they are largely a part of political rhetoric or political marketing. Successive presidents use human rights, like democracy or torture, objectively, as a tool in both domestic and foreign policy. The division of competences between the president and Congress in the field of foreign aid additionally aggravate this problem.

Harold Koh (2003) also emphasizes the importance of human rights in the rhetoric of US presidents. Despite the differences between them, the common trait has always been exceptionalism. It causes a certain inconsistency on the issue at hand. The US is both an advocate of human rights and a state that violates them itself. According to the author, promoting double standards causes harm to the US, which is consequently included in the group of states that maintain the death penalty for juvenile offenders, such as Iran, Saudi Arabia and Nigeria. The parallel promotion of human rights does not build their credibility. The result is a lack of consistency in the assessment of other states in terms of HR protection. The use of double standards does not strengthen Soft Power USA, trust or the willingness to duplicate the values of a state that is putting itself in the role of a global moral authority. Flexible approach to human rights, optional using of them as means or ends, depending on particular interests, undermines faith and trust in the rights themselves. When it comes to human rights, Michael Ignatieff (2005) divides American exceptionalism into three elements. The first comes down to the practice of signing international treaties in this area, with reservations in the form of even non-ratification or non-compliance with the provisions. The second element is the use of double standards, being more lenient with oneself and allies and more demanding with enemy states. The last one is the refusal to implement human rights norms into domestic law, while invoking independence, autonomy and a different tradition.

Exceptionalism is particularly apparent in public diplomacy, and respect for human rights is necessary to build Soft Power. Michele Acuto (2009) emphasizes that this is a sphere where the ideals of human rights and the diplomatic activities of the state overlap. Due to the specificity of public diplomacy and the fact that its main recipients are not states but individuals, societies and nations, a sharp distinction between human rights as a tool and as a goal is impossible. The situation is particularly dangerous when states, especially the strongest ones, cynically use propaganda under the banner of public diplomacy (Gruszko, 2020).

The promotion and protection of human rights as such and how they are included in the strategies and activities of foreign policy, and in particular the concept of Human Rights Diplomacy, are not widely described in the literature. As a result, in the actions of states, human rights are presented more often in hard and confrontational politics than in soft politics (O'Flaherty, Kędzia, Müller, Ulrich, 2011). Rein Müllerson (1997) defines the HR Diplomacy as both the use of foreign policy tools to promote human rights and the use of human rights to achieve the particular goals of the state. While this is a combination of human rights as goals and tools, it should, in the author's view, be implemented with many caveats, not arbitrarily. First, human rights should be treated as a priority by states, as their implementation is a condition of international security and stability. There is a relationship between domestic stability and predictability in the international arena, but the author warns against excessive simplification in this respect. It is not only the fact of a democratic

or authoritarian system that determines the state's behavior, but also other, individual factors. It is imperative to accept a realistic view of international relations in which states act rationally, but it should be remembered that double standards against states that violate human rights are detrimental to the entire international community.

## **5. HUMAN RIGHTS AS A TOOL OF FOREIGN POLICY OF INDIVIDUAL STATES**

The truth is that the Universal Declaration of Human Rights is the most important document, but in fact no state can guarantee its citizens all of its rights. Every human rights policy requires choices and distribution of focus, that governments decide what tools and resources they have and how they will use them to implement these rights. Cultural differences and security issues will also affect the diverse implementation of rights in each state or group of them (Borshoff, 2016).

There is an agreement that important element of human rights is to meet basic human needs, such as access to food, water and education. In the case of weaker or repressive and corrupt states, the implementation of human rights might be impossible. It is postulated to eliminate differentiation and gradations between the first and second generations of human rights - they function in symbiosis and are interdependent. There is also a close relationship between human rights and security. Excessive militarization and perception of the state's position according only due to power often strikes at human rights. National security depends on the environment in which it operates and vice versa. The source of internal conflicts may arise from economic, social and ecological tensions that cause problems such as unemployment, poverty underlying tensions between social groups and classes. Application and respect for human rights of all generations makes it possible to eliminate these tensions, but this is not possible in all types of systems as e.g. totalitarianism excludes human rights (Felice, 1998). Human rights affect the quality of relations between states. On the one hand, the institutionalization of human rights alone will not create a liberal-capitalist unification in the approach of states to social, political and economic issues. On the other hand, individual rights, not the system as such, provide a starting point for achieving this goal (Noonan, 2009).

Even some proponents of IR liberal theory claim that human rights are one of many, not necessarily the most important means to guarantee respect for human dignity. Islamic, Asian and non-Western states say that especially the American model of human rights protection is too individualistic and has no elements of collectivism. Criticism of the human rights system is also found in the West. There is too much emphasis on civil and political rights, too little on the social, economic and cultural aspects of human dignity. It is claimed that they are too secular and unjustly treated as universal, which is why they strike local cultures and religions. Globalization also gives a rise to particularisms that oppose universal human rights system. On the other hand, we have the example of the Arab Spring in 2011, in which the grassroots demanded democracy and respect for human rights traditionally understood. In addition, many states are constantly seeking membership of the OECD, an organization of liberal democracies with a capitalist system in which human rights of the three generations are respected (Forsythe, 2012). Especially the end of the Cold War resulted in the activities of the international community to improve the quality of governance and the implementation of liberal values such as democracy and human rights in international politics. Development aid, as an element of international policy for

development or post-war reconstruction, has become part of the policy of the European Union and NATO (Clark, 2009).

Human rights in the assumption of the liberal order after World War II were to be one of its pillars. From the very beginning they have been defined as tool to achieve a more important goal according to the international community – peace and security. Therefore, it should not be surprising that in the politics of individual states they are also used to achieve particular goals. From the point of view of international relations, it is important to agree whether the implementation of these states' goals strengthens the global goal – peace and security. And security is not only a goal, but also, as Robert Jackson (2003) emphasized, is a moral issue.

The earlier part of the paper has mentioned President Carter's HR policy, which was to constitute an ideological counterpoint to the totalitarian system of the USSR. However, this logic was also used earlier by the Soviet Union. Jan Eckel (2019) points out that in the late 1940s the Truman administration became the target of criticism from an opposing power for discriminating against African Americans. The aim of such actions, reinforced by propaganda, was to weaken the support for the USA from African and Asian countries and human rights were tools in the Cold War game, and the arena of action was the UN forum.

States politicize human rights, often using propaganda. HR are used to draw the dividing line between worlds, e.g. the civilized and failed ones, which the US used in the war on terrorism. Human rights in such a constellation are tools and serve to build individual strength and position, not agreement between states. The achievements of international law in the field of implementation of human rights are rich, but the insufficient number of mechanisms to verify and monitor their implementation puts the intentions of states into question. These could be effective independent committees, legal instruments or ad hoc summits. The mechanism of shaming is also politicized, as it comes down to reacting in most cases, not promoting or condemning (Acuto, 2009).

Human rights are important element of foreign policy. States take actions to influence the behavior of others through a series of tools. By traditional diplomacy, states can take action against violation of human rights. They are used to protest or to draw attention to specific issues. It is discrete and helps to deal with such problems without publicity. When the matter becomes public, such a state may become subject to repercussions and a negative reaction of the international community. This in turn leads to a stiffening of their attitudes and a lack of willingness to cooperate. Sometimes *naming and shaming* activities are deliberately used, intentionally used to put pressure on a given state. Sometimes, however, they are used to support states to strengthen the protection of human rights. This is how international organizations and conferences operate. Similarly, economic measures can be used to exert both pressure and support. In the first group, we have economic sanctions, which may amount to suspension of trade, financial assistance or other forms of foreign support. In the area of human rights, states usually use multilateral sanctions, combine them with certain forms of incentives, are aware that sanctions that last longer than two years are ineffective, complement them with other means of pressure. Often, so-called smart sanctions are used to ensure that the effects of sanctions are least perceived by civilians. On the other hand, economic assistance programs are proposed and initiatives aimed at building civil society are supported. Military measures are used in the form of humanitarian intervention, which, however, rarely leads to improved protection of human rights. Here the question arises about the purity of intentions, especially if the activities are not authorized by the UN Security Council (Forsythe, 2012). Above we have circumstances in which not human rights themselves but other tools are used.

No state merely pursues a human rights policy, and its issues are part of a broader foreign policy strategy. In such a system, each state will lay its weights differently, and the shifts will result not only from the changing international reality, but also from the balance of political forces and their values in country. The positioning of HR as goals or tools in the foreign policy of states will depend on the above set of priorities and goals.

After World War II, it was decided that positive, internal and international law must meet the highest moral standards. Natural law was also recognized as the foundation of liberal democracy and human rights. The human rights system is a reflection of liberal political thought. Although considered universal, they reflected a particular view and system of values, because they grew out of the political and philosophical output of the West. The universality of modern human rights is rather expressed in the assumption that they should be used as moral norms for the assessment and judgment of human actions. Proponents of such a system of human rights protection assumed that their solutions are obvious and liberal values are universal. In fact, they are neither universal nor universally accepted (Langlois, 2013). Here human rights themselves become a tool of some Western states foreign policy.

What is more, many rights are mutually exclusive. The Western World while puts emphasis on specific political and personal rights and freedoms, manipulate or even overlook others. The implementation of rights requires certain compromises, and individual states focus on different values resulting from both cultural and developmental differences as well as current policies. Thus, the right to freedom and self-determination as well as the right to development may result in individual states understanding and implementing them in different ways (Felice, 1998). The above conditions create tendencies to politicize human rights and introduce relativism in their perception and implementation. States implementing the so-called human rights policy adapt their prioritization to their own capabilities and strength, as well as the interests they want to pursue.

When it comes to HR, researchers most often complain of a lack of consistency. While accepting the politicization of human rights, it is important that states treat them as priority. Pluralism and cultural differences that differentiate human rights and treat them as universal can equally weaken faith in them. The power of human rights depends on whether states and individuals believe in their effectiveness. As a reflection of universal moral values, in essence, they should be accepted and desired by all of them. The erosion of the human rights myth (Gruszko, 2018) can pose a serious threat to the entire international community. For this reason, they should be reflected in the foreign policy of states, even as a tool, but treated not only in a priority but also far-sighted in way, not ad hoc. They must also bring about the tangible results desired by states and individuals. A picture of the conflict between security and state sovereignty in the context of HR is the problem of humanitarian interventions, represented by the English School. This discourse is described by Matt McDonald and Alex J. Bellamy (2004) as an immanent critique of traditional security practices and of 'insecurity of security'.

## **6. THE US POLITICAL GOALS IN THE WORLD AND HUMAN RIGHTS**

American exceptionalism has its roots in the values of Enlightenment. However, human rights introduced into the liberal global order after World War II, it was argued, were to be universal and therefore could not be American. In this way, it would cause distrust of weaker states that they are merely a tool for building and maintaining American

imperialism. The right to property and entrepreneurship was the basis of the American system, but including it in the system of international protection of human rights would be contrary to the right of nations to self-determination (Kane, 2003). Contemporary public opinion polls display that Americans still support liberal internationalism. However, specific questions reveal strong elements of realism apparent in the desire for independence and security. Multilateralism, human rights and democracy and its promotion are still supported by less than half of the respondents (Drezner, 2008). Democracy and free market themselves are not human rights, but from the American point of view they create environment for their best implementation.

In the same time in the United States, there is a strong belief that their task is to promote democracy in the world to help others, as well as to create and maintain a safe and predictable environment for themselves. Experience shows that US foreign policy is more complicated, and cases of support for undemocratic governance, including dictatorships, can be found in their history. Some researchers believe that democracy as a value is part of the US strategy, some that only a rhetorical structure used as a tool to achieve political goals. The argument is made that it is subordinated to the achievement of other goals and values, such as access to markets, increasing investment opportunities, and access to raw materials. In terms of security, it functions as a mean to ensure stability, order and hegemony of the US (Pee, 2016).

Understanding the historical determinants of US foreign policy helps to understand their complex and complicated attitude towards international institutions, human rights, democracy promotion, unilateralism and the use of force. Traditional American exceptionalism is dichotomous and cyclic. Exemplary and defensive one presents the United States as a model state that should be copied as a *city on the hill*, unique and better in comparison to the rest of the world and implemented by isolating from the worse. Missionary and offensive, Wilsonian one, can be put down to an active export of democratic values and free market outside the US, implemented by two traditions of US foreign policy interventionism or multilateralism (Restad, 2015).

From the beginning of the establishment of the state the dominant feature were restraint and neutrality. The assessment of the actions and decisions of President Donald Trump is in most cases negative, but a closer analysis allows one to understand that it is a continuation of isolationism and neutrality of tradition rather than its breach. It is rather the policy of Obama, Bush, who after 9/11 launched a campaign to build and promote democracy in Afghanistan or Iraq or Clinton, who broke isolationism or neo-isolationism and promoted overseas economic expansion supported by political initiatives, can be treated as an exception. Trump confirms rather the rule. However, continuing the thoughtless traditions, which do not take into account changes in the international environment, may have a destructive impact on the Global Order created by the United States and implemented under their leadership, and introduce uncertainty in world politics in the 21st century (Paterson, 2018).

In the US foreign policy we can find also dichotomy between liberalism and imperialism, although norms and institutions have repeatedly prevented the US from using its full strength. Anti-statism and anti-imperialism are liberal values. A society that shares such values will be against the actions of the government that breaks them and choose its representatives who share them. In addition, international institutions and commitments may also act in a similar way (Meiser, 2017).

The assumption that human rights are universal is often synonymous with the primacy of Western values over non-Western cultures. It causes fears of attempts to dominate and



impose own solutions, violating sovereignty (Burchill, 2005). The American view of human rights differs fundamentally in how it is viewed in other parts of the world, even in Europe. As emphasized by Noam Chomsky (1999), pure ideas of the Enlightenment have survived in the USA in an almost unchanged form to this day, which would explain treating them as absolutely universal. At the same time, the actions of this country towards the indigenous people of the continent, slavery maintained and accepted for a long time, and later actions in Vietnam did not destroy the myth of human rights, freedom and individualism.

During the Cold War, the promotion of democracy and liberal values were used as means to limit the influence of the USSR. It manifested itself in interference with elections, influencing regime change, and accepting undemocratic but anti-communist regimes. After the end of the Cold War, the United States continued to show a selective attitude towards human rights. On one hand, President Clinton's policy promoted the extension of the area of democratic states, and on the other, towards China after the massacre of Tiananmen Square, the issues of trade cooperation were separated from human rights. G.W. Bush supported the freedom agenda, and at the same time used human rights and the promotion of democracy to fight terrorism. By contrast, Obama avoidance of the imperial overstretch contributed to the fall of the Arab Spring. Donald Trump introduced in his policy hostility and distrust among democratic countries, using antagonizing them against each other (Chhabra).

Strengthening democratic institutions and human rights standards have long been a key element of US foreign policy and foreign assistance is allocated to raise democratic standards and promote American values, such as building civil society, and programs supporting human rights and the rule of law. An example would be the Marshall Plan as part of a far-reaching foreign assistance program, one of the most important activities in US foreign policy. Today, the goal of foreign assistance is first of all to support stable governments and economies so that disruptions in this area cannot turn into crises. Secondly, the military potential of partner states is being strengthened, which is in the interest of the US. If states can help guarantee security, it will save the US from costly oversea military operations. Thirdly, a significant portion of economic and military assistance is provided through American companies, which stimulates the US economy and opens up foreign markets (Paterson, 2018).

In the literature on the subject, the US selectivity towards HR is most often illustrated by their attitude to signing and ratifying international agreements in this area. The US has been a liberal democracy since its inception, emphasizing the extension of civil rights throughout the world. On the other hand, however, they are not a state that fulfills international obligations in this area and do not accede to some relevant treaties. Lack of ratification concerns documents such as American Convention on Human Rights 1978, Convention on All Forms of Discrimination Against Women (CEDAW) 1981, Convention on the Rights of Persons with Disabilities 2008, The Convention on the Rights of the Child (CRC) 1990 (United Nations Treaty Collection). This may be due to the characteristic ambivalence between unilateralism and multilateralism. Traditionally, multilateralism along with Smart Power is expected to be implemented by the administration of Democrat, while unilateralism and Hard Power by Republicans. However, it should be emphasized that the ambivalent attitude to human rights applies not only to the US, but also to other powers like Great Britain, China, Brazil, India. At the level of international organizations their strength is disproportionately reflected and especially human rights are implemented at the legal, less legislative level. Weaker states, basing on the jurisprudence

of international tribunals, make efforts to eliminate treaty reservations of the stronger ones. Such actions may also be treated as the use of human rights as foreign policy tools.

In the Helsinki Final Act of 1975, the US introduced the provision that 'participating states will respect the equal rights of peoples and their right to self-determination'. This was refilled gradually by the CSCE, until in 1990 it was decided that individuals decide which minority they belong to. This meant that any minority had the right to political autonomy and even statehood. At the same time, the United States did not share this view. Philosophically, they themselves arose on the basis of civil and political ties, not ethnic or religious, which is a source of a lack of understanding of European, Asian or African states. US human rights policy is based on individual, non-collective rights, both during and after the Cold War. The pragmatic reasons for this policy are associated with the avoidance of the position of arbitrator between parties requesting a given territory. Moreover, the right of nations to self-determination would be implemented selectively – there is no way for every nation to gain statehood and it is difficult to create fair criteria. A selective approach would devastate the moral foundations of human rights. Ultimately, strengthening such collective rights could cause internal conflicts in the US and accusations of hypocrisy. That is why they remain neutral towards such demands (Cullen, 1992/93).

The justification for prioritizing between certain groups of human rights can be found in the Presidential Review Memorandum-28 (PRM-28) of July 8, 1977, the primary strategy document for the US human rights policy, which is:

it is somewhat easier to use leverage we have to achieve a reduced level of violations with respect to the first group than to make meaningful improvements in the second or third groups (The Deputy Secretary of State, Presidential Review Memorandum on Human Rights, Washington, 1977).

Two years earlier, Donald Fraser, a member of the House of Representatives, made his own decision to restore human rights to US foreign policy. He took the position that human rights should not only be present in US foreign policy, but should also be an end, not a mean. In a memorandum of 1977, he said:

there is a need for up-to-date reporting on human rights conditions. It would be desirable to make an annual report on all countries, not just on those countries to which military equipment will be sold. [...] Such reports provide an opportunity to show positive change without making a direct link to U.S. efforts (Foreign Relations of the United States, 1977–1980, Vol. II, Human Rights And Humanitarian Affairs, Washington, 1977).

The conduct of President George W. Bush towards the permanent International Criminal Court is characteristic for American treatment of human rights. The establishment of this institution was interpreted at the beginning of the 21st century as a milestone in efforts to protect human rights, humanitarianism and hope for effective protection of the population in times of armed conflicts. The United States made its support for the initiative conditional on the UN Security Council obtaining the power to scrutinize cases that the Court would deal with. In practice, this concept boiled down to excluding own soldiers from the jurisdiction of the ICC. The US President not only refused to sign the founding

agreement, but also took the diplomatic initiative of creating a network of bilateral agreements with other states aimed at achieving this unique position (Mertus, 2008)<sup>6</sup>.

## 7. CONCLUSIONS

There is an agreement that human rights are a fundamental element of Global Order and the international system, an utterly important institution of international relations. The above analysis presents human rights not only as a moral foundation of interstate relations after World War II, but also mechanisms of their application in order to induce specific behaviors of certain entities. The main dividing line concerns weaker states and powers. Both categories use human rights to limit the stronger or to put pressure on the weaker. The emotional load that human rights are burdened with, is used to strengthen both Hard and Soft Power of given state. Politicization of human rights does not serve to strengthen the stability of international and global order.

The specific US approach to human rights and its human rights policy is determined by the state's general approach to international policy. Historical and cultural background do not serve to comprehension between the main architect of the order after World War II and other entities. Certain values will result in some ambivalence and lack of continuity in US foreign policy. It is often accused of hypocrisy. This accusation results not only from the objectification of human rights in their foreign policy, but also from a misunderstanding or varying understanding of their concepts. Human rights have evolved differently in different parts of the world. In the US, they have survived in almost unchanged form since the Enlightenment, and the ideas of that period also became the foundation of statehood. The violation of human rights, even in its most brutal form, found its explanation in exceptionalism and expansionism. Likewise today, the US human rights policy lacks coherence and consistency. And it is needed in the actions of every state, along with skillful and priority placing them in the foreign policy strategy. This would make the actions on the international stage more credible and dismiss the accusations of non-transparent and grass-roots initiating protests and social movements – that is, in the eyes of partners, interfering in the internal affairs of other states.

Thus understood and implemented activities in the field of human rights may not only be foreign policy tools, but an external policy tools aimed at maintaining a sense of community, assembling citizens around pride, not shame. Democratization begins at home, which, while insignificant in relation to China, may become a starting point for the US to democratize not only states but the global system. The promotion of human rights, the deepening of democracy in the United States itself, and greater citizen participation in shaping foreign policy could contribute to ending the application of double standards, restoring moral strength and strengthening the US position in the international arena.

With regard to shaping the behavior of other participants in international relations, the use of double standards weakens their Soft Power and credibility. Selectively reacting to violations of HR, or reacting in a different intensity depending on whether it concerns an allied state or on the contrary, raises justified accusations of hypocrisy. HR became one of the pillars of the liberal order after World War II, which was created to ensure peace and security for the international community. Thus, they are, in a sense, a tool of state policy, provided that their use leads to the protection and strengthening of the most important and

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<sup>6</sup> So called *hub-and-spokes* structure is often used by the US as a substitute for multilateral cooperation. Most often this state stays as its hub which is an exemplification of the *primus inter pares* rule.

universal values. Often, however, states, not only the US, politicize human rights, using them to achieve individual goals. When accepting such foreign policy mechanisms, it is important that states treat HR as a priority and far-sighted rather than ad hoc. HR may be foreign policy tools, but must be used in an appropriate, consistent, responsible manner appropriate to their importance for international security.

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## MODERNIZATION OF THE FISCAL SYSTEM: SOME REMARKS ON THE INTRODUCTION OF CAPITAL AND WAR WEALTH LEVIES IN SELECTED COUNTRIES FROM WESTERN AND CENTRAL EUROPE

This article aims to show that extraordinary taxes, introduced after WWI, performed better in Central and Eastern European (CEE) countries than in Western countries, even though they were originally a Western idea. The research reveals that these taxes generated some revenue, but their main function was to show that governments were trying to tackle the unfairness that had resulted from years of running a war economy. It is doubtful that these taxes are useful components of fiscal systems, as they are something of a paradox. They create more injustice (Adam Smith's principles of taxation were partially broken when these taxes were applied), although they should theoretically reduce the inequalities caused by war.

**Keywords:** War Wealth Levy of April 13, extraordinary levies, taxes, levies, tax base, valuation.

### 1. INTRODUCTION

Historically, capital taxes preceded income taxes because capital was always easier to monitor than income. In addition, wars were the exact reason why taxes were collected at all (Scheve, Stasavage, 2016). Things changed in the 20th century when welfare states with modern fiscal systems appeared (Mehrotra, Martin, Prasad, 2009). After World War I (WWI), income taxes became the primary source of funds for national states and their needs. These needs were most pressing in the first period, right after the war. Both Western and Central and Eastern European (CEE) countries experienced high inflation and growing internal and external debt caused by WWI. The situation repeated after World War II (WWII). Because of that, Polish and Czechoslovakian cases will be compared with Italian and German examples. Four of the five cases presented in paper stem from a period right after WWI. Other cases from this period cannot be included due to insufficient data. The inclusion of the War Wealth Levy of 13<sup>th</sup> April 1945 is motivated by the fact that this typical increment tax is missing in the classical analysis (Robson, 1959) of WWII cases

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and demonstrates the rarer situation of extraordinary tax usage in CEEs<sup>2</sup> (adoption of fiscal solution originating from Western Europe in a country belonging to the Soviet bloc is a surprising fact itself). It seems interesting to find out how countries coped with difficulties by employing new, extraordinary fiscal measures – capital levy (CL) and levy on war wealth (WWL). The use of the word “modernization” in this paper is somewhat artificial as, generally, the notion is vague in the context of fiscal systems. It is used simply to mean that the idea of CL and WWL were new kinds of taxes. The idea was born in the United Kingdom. Italy and Germany were the first to use them in practice. However, CEE countries also tried them. The article aims to answer two specific research questions:

Q1. Are extraordinary (CLs and WWLs) taxes just?

Q2. Are extraordinary taxes effective and easily feasible? Do their efficacy and feasibility differ between Western Europe and CEE countries?

To address questions Q1 and Q2, the following hypotheses will be verified:

H1: Extraordinary taxes can be considered (un)just in regard to three empirically testable ideas (channeled through discourse): the ability to pay, treating people as equals and compensatory arguments (Scheve & Stasavage, 2016)

H2: Historical examples provide rich evidence that such taxes are not easily feasible and, contrary to Piketty’s view (2014), they do not solve the problem of national debt in the best possible way. Qualitative factors (institutional/cultural) cause big differences among countries striving for extraordinary taxation.

## 2. LITERATURE REVIEW

The philosophical aspect of tax justice has rarely been subject to scientific investigation; however, two authors raised it (Daunton, 2007; Scheve, Stasavage, 2016), mostly commenting on the results of the British debate after WWI. This debate reached its peak in 1918, in the summer volumes of “The Economic Journal” (Arnold, 1918; Hook, 1918; Mitchell, 1918; Pigou, 1918, 1919; Scott, 1918). It was started though by the great David Ricardo himself (Roberts, 1942), and one can find more detailed arguments concerning fairness in texts from the 1920s (Gini, 1920; Jastrow, 1920b; Rašín, 1923). Later papers (Comstock, 1928; Singh, 1970; van Sickle, 1926) contained economic reasons for and against CLs and WWLs (Q2/H2).

Four historical overviews showed the development path of the whole idea of extraordinary taxation (Eichengreen, 1989; Hicks, Hicks, Rostas, 1942; Robson, 1959; Rostas, 1940). However, the growing body of literature also had drawbacks. New notions were invented to express well-known concepts, like “capital levy” in place of the simple “wealth tax” (Pethick-Lawrence, 1920), and WWL was called an “Increment Tax” (Robson, 1959)<sup>3</sup>. Current papers reveal a strong renewal of interest in extraordinary fiscal measures, especially due to the COVID-19 pandemic (Daunton, 2021; O’Donovan, 2020, 2021) and, more recently, the war in Ukraine. Nick O’Donovan (2020, 2021) has reported on Ireland, Iceland and Cyprus, where modern, but different, forms of extraordinary CLs were introduced after 2000.

<sup>2</sup> Simple expropriation was more often used in USSR countries.

<sup>3</sup> It should be noted that it was called that way for a good reason – it taxed increments of wealth arising from war.

### 3. THEORETICAL FRAMEWORK

CLs and WWLs are not the only ways to reduce the national debt. There are sensible alternatives to these solutions, e.g., bond issuing, expropriations, compulsory loans, cutting government spending (*austerity policy*), inflation, privatization, or simply bankruptcy<sup>4</sup> (Piketty, 2015). Within solely fiscal solutions, there is still room for more diversity (capital gains tax, excess profit tax/duty, wealth taxes). People convinced of the concept of justice, understood as equal treatment, will opt for a flat tax. Those who prefer the ability-to-pay doctrine would usually choose progressive taxes as the optimal solution, while those who care most about liquidating the unfair advantage of the rich would opt for extraordinary taxation, similar to the WWLs and CLs analyzed in this article (Scheve, Stasavage, 2016). To debate the ethical aspect, I chose the interdisciplinary approach proposed by Kenneth Scheve and David Stasavage. Its main advantage lies in its empirical nature. They discussed justice in taxation by comparing arguments that were raised by politicians and the public after WWI, when the first CL and WWL were introduced. They took the United States, Great Britain, Canada, and France as examples; this article expands this approach to include Poland, Czechoslovakia, Germany and Italy. They appropriately emphasized that compensatory arguments are the strongest in the specific context of the postwar situation. It was impossible to lead a purely economic, rational discussion about financial sacrifice in the form of WWL and CL when so many young people had died “on the altar of motherland”. Another advantage of suggested approach is that this framework avoids heavy theorising which would necessarily involve deep and arduous task of analysis of works of Amartya Kumar Sen, Robert Nozick and John Rawls (Kwarcinski, 2011; Nozick, 2010; Rawls, 2013). For debating effectiveness, one has a plethora of options, but for the purposes of this article, Robson's purely economic classification presents the highest level of usefulness as it was directly used for WWL and CL analysis.

Framework for justice analysis (H1):

- 1) equal treatment arguments;
- 2) ability to pay arguments;
- 3) compensatory arguments (Scheve, Stasavage, 2016).

Framework for efficiency analysis (H2):

- 1) Anti-inflationary purpose;
- 2) Compensation aim;
- 3) Financing ordinary budget needs (Robson, 1959).

### 4. WESTERN CASES – ITALY AND GERMANY

#### 4.1. Italy

In Italy, the name of the postwar tax was the Italian Royal Decree of November 24, 1919, and it consisted of both CL (*imposta straordinaria progressiva sul patrimonio*) and WWL (*imposta sugli aumenti di patrimonio derivanti dalla guerra*). After WWI, Italy found itself in difficult circumstances as the war had strongly influenced the development of industry. It also accelerated the concentration of capital in the hands of a few people who took advantage of the increased demand for certain goods. Profits in the steel industry increased by approx. 10 p.p. and in the automotive industry by 22 p.p. (Gierowski, 1985). Italy had an unfavorable trade balance and massive foreign debts. Enterprises went bankrupt, and inflation continued to rise. The election of November 1919, which preceded

<sup>4</sup> This solution should not seem silly as Argentina regularly declares bankruptcy.

the introduction of the tax, was won by the Socialist Party. In the context of the growing power of left-wing parties, it is easier to explain the understanding of WWL and CL as a just solution. The reasons why the authorities felt they were obliged to introduce heavy taxation were, above all, social discontent and the rapidly growing public debt. The government's goal in the entire undertaking was to collect 20 billion Italian lire (ITL) for the state budget, although none of the available sources indicates that the final result was even remotely close to this number. This step was meant to improve the state of the budget by reducing both the debt and excessive liquidity in the markets (Gini, 1920).

Regarding the origins of the tax, in August 1919, an agreement was reached that the tax would be of a dual nature – both WWL and a compulsory loan to the state related to the value of the taxpayer's private property. Ultimately, the idea of the compulsory loan was abandoned, and it was decided to use four other public finance instruments:

- 1) Royal Decree No. 2168, with which the issuance of voluntary 5% bonds began;
- 2) Extraordinary tax on dividends, interest, and bonuses;
- 3) Extraordinary wealth tax (Royal Decree No. 2169) [CL];
- 4) Tax on war enrichment (Royal Decree No. 2164) [WWL].

The most effective tool of wartime public finance of those listed was the bonds, although a disadvantage is that they generate growing internal public debt. The effectiveness of the bonds is presented in Table 1:

Table 1. Issues of Treasury bonds and budgetary revenues in ITL during the war, according to Edwin Seligman's data

Year	APY (Annualized Percentage Yield)	Single bond price	Budget income
1915 ( <i>Mobilization loan</i> )	4.5%	97	1,000,000,000 ITL
1915 ( <i>First war loan</i> )	4.5%	93–95	1,146,000,000 ITL
1916	5%	97.5	3,014,000,000 ITL
1917	5 %	90	3,985,000,000 ITL
1918	5 %	86.5	6,120,000,000 ITL

Source: (Seligman, 1919).

Internal loans were a much more important way of financing the state's current short-term liabilities<sup>5</sup> than WWLs and CLs. Bond emission was so crucial that experts (Seligman, 1919) usually considered them to be a much better source of extraordinary financing in the never-ending "taxes versus loans" debate (Pigou, 1919). In this way, the Italian government collected more money than CL and WWL combined. It was decided that both the CL, and WWL will be charged from natural persons and legal entities. Taxes were not mutually exclusive, but complementary – one could become the subject of both. The tax allowance was up to 20,000 ITL (the same tax allowance for both charges).

In the case of CL (Royal Decree No. 2169, 1919), there were three phases: the Draft from the end of September, the Act of November, and the Amendment of April 1920. In the first stage, CL was planned as a one-off tax burden, and According to the September draft, the payment deadline was set for January 1, 1920, when the entire amount had to be paid. However, the taxpayer could demand that the amount be spread over a period of four

<sup>5</sup> Also known as *floating debt*.

to six or eight annual installments. The tax rates of the extraordinary property tax were progressively scaled from 5%, based on 20,000 ITL, up to 40% on the biggest capitals. The November decree fundamentally changed the essence of the tax – the top rate of CL was reduced to 25%. It basically became an addition to the income tax (Einaudi, 1920). The value of the property remained the benchmark (*ad valorem*), but the repayment was spread over 30 annual installments, which made it possible to satisfy the state's claim from income generated by taxed capital.

On the other hand, the Royal Decree of April 22, 1920, significantly changed some of the regulations. Among others, the tax-free amount was increased from 20,000 to 50,000 ITL, and the progressivity of the tax scale was increased. Additionally, the time for payment was shortened from 30 to 20 years (for landowners and the real estate industry, as it was more difficult for these people to sell their property quickly) and to 10 years for entities relying on individual capital in over 60%. The key modification was increased tax rates, up to 50% (Einaudi, 1920).

In the regulation of WWL (Royal Decree No. 2164, 1919), the rates were as follows (art. 7–8): for an increment in wealth in the range of 5–10%/in normal income in the range of 50–100%, the tax rate was 10%; for 10–20%/100–200%, the tax rate was 20%; for 20–30%/200–300%, the tax rate was 30%; for 30–40%/300–400%, the tax rate was 40%; for 40–50%/400–500%, the tax rate was 50%; for 50%+/500%+, the tax rate was 60%. Discounts were provided for men over 50 and women over 40, as well as for married couples. The tax was not paid by parents, grandparents, or the children or grandchildren (up to the age of 25) of taxpayers, as long as they were financially dependent on the taxpayer and living with him, and if they were not themselves obliged to pay. For equity reasons, the unfit for work, war invalids, widows, and parents and orphans of people killed during the war were also granted relief. The tax was to be paid in three installments.

A tax declaration had to be submitted by March 31, 1920, estimating the entire property, including war enrichment. Payment in very different forms was allowed – money, securities, treasury bonds, and checks. Enterprises that suffered as a result of the war were given relief. The State Treasury reserved the right to audit the value of the taxpayer's property “if his style of life should appear not in accordance with the ascertained amount of his estate” (Gini, 1920). Consulates and embassies were asked not to facilitate the concealment of assets by foreigners. However, it did not help much. Corrado Gini reported that the vast majority of foreign estates were quickly exported at the end of 1919 (Gini, 1920). After the amendment of April 1920, increases in wealth between 1<sup>st</sup> August 1914 and 31<sup>st</sup> December 1919 were taxed up to 80% (Einaudi, 1920).

Correctly calculating the tax was not simple since different values in percentages applied to different parts of wealth, constituting enrichment (tax rates were marginal; it meant that the rate was different for every tax bracket). The difficulty might also have been due to the complexity of the whole fiscal system, which made it challenging for the fiscal administration to act effectively. In order to camouflage the failure of WWL, the government added a clause that ensured that foreign deposits within Italian banks would not be subject to taxation. After this decision, the return of foreign capital to Italy was almost immediate. According to Gini, the parliament adopted not the extraordinary CL but a simple property tax, while Einaudi called it simply a super-tax on income. The name of the regulation (*imposta straordinaria*) remained the only thing from the idea of the extraordinary nature of the tax. It is difficult to talk about the extraordinariness of a tax that is paid out of current income for 30 years (Gini, 1920).

Gini saw the main disadvantage of CL in the gross injustice between the generations. Citizens living between 1914 and 1918 would lose a significant portion of their property, and the beneficiaries of the war would be their children and grandchildren. This is quite an unusual point of view because it could very well be argued that it would be just as inequitable to burden future generations. Other defects of the regulation included current difficulties in meeting tax obligations and the consequent disruption of the natural process of establishing market prices, the depreciation of property caused by the inability to use it for tax payment, the excessive increase in the value of insurance, and the debt crisis. The reason why the authorities had to withdraw from the CL/WWL idea was obvious to Gini. He described it as “the impossibility of carrying out with celerity a valuation of wealth” (Gini, 1920). His only positive recommendation boiled down to proposing provisional estimates of the value of assets.

Gini's arguments for the good side of the tax are sarcastic: “The advantage, as has been shown, is essentially due to the fact that the levy on capital had to be abandoned” (Gini, 1920). Still, the most natural solution was simply a super-tax on income. And this recommendation is the conclusion of his judgments (Gini, 1920). Nevertheless, one cannot draw final conclusions from Gini's assessment – the lack of statistical data from this period is the obstacle. The Italian case can be recapitulated by a reflection by Walter Scheidel: “high taxes and sharp progression were born of the war effort” (2017).

#### 4.2. Germany

The title of the German law that introduced property tax, *Reichsnotopfergesetz* (which can be translated as “sacrifice for a homeland in need”), was not accidental – it referred to ethical values such as patriotism and social solidarity (Gesetz über das Reichsnotopfer, 1919). It reminded citizens that they were all equals in Germany and that there was severe war damage that had to be compensated for. In order to understand the German case, it is necessary to briefly present the situation of the Weimar Republic after the Treaty of Versailles, which imposed war reparations on Germany. Ignaz Jastrow explained the disturbances of the period after the Treaty: “the Treaty contains provisions so severe that it is difficult to find terms in which to characterize them [...]” (Jastrow, 1920b). John Maynard Keynes, in turn, prophetically saw in the Versailles regulations the seeds of WWII as early as 1919 (Keynes, 2009).

The government was made up of Social Democrats, Centrists, and Democrats. As in Italy, the growing popularity of socialist ideas may partly explain the perception of the CL as a just solution. The reasons for applying CL could be equated with the motivations of Italian politicians, e.g., social discontent and a willingness to reduce public debt. The only significant distinguishing feature of the Weimar Republic from the rest of Europe was the problem of war reparations, which constituted an additional reason for introducing CL.

According to Jastrow, *Reichsnotopfergesetz* was definitely belated. The regulation did not enter into force until December 31, 1919, although he suggested introducing CL as early as 1916. It was signed by the President of the Reich, Friedrich Ebert, and Finance Minister, Matthias Erzberger. The term defining the name of the tax that Jastrow proposed was incorporated into the Act, although he lamented that only the name remained of his idea. On the other hand, one can still point out that his compensatory argument for the tax was preserved through the provision of art. 1 (Act *Reichs...*, 1919. art. 1): “Ownership [...] makes a sacrifice to the extreme need of the nation by a large contribution from property [...]”.

With the end of the war, the public's enthusiasm for making a common "sacrifice" on the "altar of the Fatherland" disappeared (as Scheve and Stasavage put it, powerful compensatory arguments lose their full force). Due to the delay, the levy lost its initial sense, and payments were spread over a very long period (30 years; in the case of agriculture, 50 years). With the tax designed in this way, it transformed the idea of severe CL into a small project, similar to a surtax on income/normal wealth tax.

The reform package included instruments that were far more important than CL: harmonization and an increase in corporate tax, personal income tax, and inheritance tax. Indirect taxation was also increased. These changes shape the foundations of Germany's public finances to this day.

The tax was to be paid by natural and legal persons. A broad catalog of exemptions broke the principle of universality, i.e., everyone has to pay taxes since we are all equals. These exemptions included communes, local government institutions, religious associations, universities, banks, political parties, charity organizations, and loan offices. One can also argue that these organizations have different status and therefore the rule of equality was not endangered. Some allowances also applied to natural persons. Under the condition of "economic threat", it was allowed to postpone the payment of the tax practically until death; in addition, there was no interest. Elderly people benefited from a rate reduced by 20–33%. A married man could write off 5000 marks ( $\mathcal{M}$ ) on the amount of the liability "on the wife", as well as another 5000  $\mathcal{M}$  for every child, except the first. This example of a tax preference irritated Jastrow to such an extent that he accused his government of wanting to please the electorate (Jastrow, 1920b).

The adopted tax rates did not satisfy Jastrow, who wanted each citizen to sacrifice 25% of their property (he meant an effective tax rate of 16.5% for the first four brackets). He also argued that other authors proposed as much as 33%. Ultimately, in accordance with the tariff contained in Section 24 of the Act (*Act Reichs...*, 1919. art. 24), the tax rates varied from 10% to 65% (Jastrow, 1920a). Conveniently for taxpayers, payments in non-cash forms (e.g., bonds) were allowed. The tax allowance was 5,000  $\mathcal{M}$ . For married couples it was increased to 10,000  $\mathcal{M}$ . At that time, it was two and a half times the average salary. For selected entities, i.e., capital companies and foundations, a flat preferential tax rate of 10% was available.

As in Italy, CL in Germany triggered tax evasion. Property "fled" abroad before it was taxed – hence Jastrow's final appeals for international cooperation to prevent this phenomenon. His appeal was formalized in the provision of Section 4 (*Act Reichs...*, 1919. art. 4).

On the issue of tax justice, Jastrow spoke differently from Gini. He asked rhetorically: "The opponents of the tax are right: why should children and grandchildren pay taxes till 1950 or 1970 on a property as it was on December 31, 1919 (the day of the assessment)?" (Jastrow, 1920b). His question contained a hidden compensatory argument that tells us that during WWI, young people were forced to fight. This was equivalent to their labor being conscripted. Therefore, the elderly should, at least, suffer the conscription of wealth. Jastrow also admitted that the tax broke Adam Smith's ethical principles. Perhaps this was why he was reluctant to call it a tax, but instead a kind of "sacrifice". According to Jastrow, tax reliefs, exemptions, and the tax allowance were all unfair solutions. Shifting the debt onto the next generation was inequitable (Jastrow, 1920b). An extraordinary tax that breaks the classic rules of taxation can only be justified in exceptional circumstances, such as Germany's situation after WWI. Jastrow did not consider it justified to apply the exemption

for small estates: “the exemption of small properties up to 5000 marks is economically unjustifiable, as I believe to have demonstrated in detail” (Jastrow, 1920b), which differed significantly in this matter from Gini. In his opinion, the size of the property does not affect the ability to pay, and the eventual exemption of these small amounts from wealth taxation revealed the misconceptions of the rulers.

Jastrow also mentioned a multitude of other taxes (e.g., capital gains tax, war taxes, and local and agricultural taxes) that were supposed to support budget revenues in addition to CL. It is not surprising that the German government reached into the pockets of its citizens in every possible way. In 1921, war reparations accounted for 32.4% of all budget expenditure, and in 1922 as much as 35.7% (Baltensperger, 1998). The expected tax revenue stood at 70–90 bln  $\mathcal{M}$ , while the actual revenue reached just about 15 bln  $\mathcal{M}$ . However, due to the lack of reliable statistical sources for this period, the estimated amount should be approached with caution. In any event, this amount only partially covered the inflation-induced increase in the nominal value of the debt. The total debt at the end of 1919 was over 200 bln  $\mathcal{M}$ , exceeding 150% of the annual GDP (Bach, Buggeln, 2020).

It is also necessary to look critically at Jastrow’s negative judgment of the tax. He may have assessed the introduced regulation with a strong bias. The article he wrote appeared in May 1920, while data on the revenue from the *Reichsnotopfer* for 1920 was not published until 1924. These revenues exceeded the plan by nearly 300%. If Jastrow had written the text from a long-term perspective, and not just a few months after the announcement of the act, he probably would not have underestimated nearly 10 bln  $\mathcal{M}$  for 1920 (almost 20% of the total budgetary income). The exceptionally good result of the *Reichsnotopfer* in 1920 (Statistisches Jahrbuch, 1922), together with the negligible fiscal result for the following years, also means that despite the plan for the long-term payment of ordinary property tax in installments, the realities of the tax assessment action reduced this project to its original, one-off character.

In Germany, the cause of the tax failure was inflation and, later, hyperinflation. As early as the turn of 1919/1920, prices had increased significantly, while the act did not include any indexing clause. Attempts were made to amend the act (Gesetz zur beschleunigten Veranlagung und Erhebung des Reichsnotopfers, 1920) to ease the provisions and accelerate tax enforcement. However, these actions did not significantly improve the results of the tax assessment action. Once again, the destabilization, which was caused by hyperinflation, meant that tax installments ceased to have any economic significance. Analysis by the German Institute for Economic Research (DIW) indicated several short-term effects of the regulation, i.e., the financial authorities’ inability to comprehensively estimate assets, political outrage, social resistance, and tax evasion (Bach, 2012).

The long-term effect of the CL is that it had been replaced from 1923 with ordinary wealth tax, which was levied until 1996. It can therefore be concluded that the *Reichsnotopfergesetz* did not play a great role in itself. However, it was still important, permanently co-shaping the development path for German wealth taxes. In general, the post-WWI Erzberger fiscal reforms (of which CL was only a small part) substantially increased all taxes – they would then never fall back to their original levels.

## 5. CEE CASES – CZECHOSLOVAKIA AND POLAND

### 5.1. Czechoslovakia

Czechoslovakia already differs when it comes to historical and political background, although it experienced the same postwar struggle with economic conditions as Western



countries. By the end of 1919, there were several problems: high inflation, problems with tax administration, a growing budget deficit, currency depreciation, and a production crisis (Oleksiuk, 2021). However, unlike most countries involved in WWI, their history was shaped not by the Treaty of Versailles but by the Treaty of Saint-Germain-en-Laye, signed on 10<sup>th</sup> September 1919 (Rašín, 1923). Czechoslovakia was constituted on the remnants of the Austro-Hungarian Empire, which is very important to understand some fiscal reforms that helped make CL and WWL possible. The printing of banknotes, a census of all types of wealth, the recording of all bank deposits and an embargo on 50% of them (later lowered to 20% of deposits) seem draconian without realizing that Czechoslovakia inherited its currency problems from the Austro-Hungarian Empire. The Austrian-Hungarian krone had to be withdrawn, although much of it was still in circulation (Novokmet, 2018).

These measures were undertaken by the end of August 1919 (Rašín, 1923). However, CL and WWL were not introduced until 8<sup>th</sup> April 1920 (Act no. 309, 1920) by the left-wing government of Vlastimil Tusar. Nevertheless, the finance minister, Alois Rašín, paved the way for CL with his strict reforms. He was a right-wing politician, representative of conservative liberalism. Thus, he combined free market ideas with a slightly conservative look on the social sphere and cultural aspects, similar to Adam Smith, Alexis de Tocqueville and Friedrich August von Hayek. He opted for deflationary politics (Oleksiuk, 2021). CL had moderate rates: 1–30% (for natural persons) and 3–20% (for corporations). WWL, as usual, had a slightly higher top rate: 5–40% (WWL was applied only to natural persons). Still, rates were high enough to satisfy compensatory claims. Such claims were voiced both literally: “new cry for shifting the burden onto the wealthy” (Rostas, 1940) and metaphorically: “the aim of the Republic [...] is to heal the injuries inflicted by the burden of bank notes. But these steps alone will not suffice [...]” (Rašín, 1923, p. 55). The second quote shows that Rašín, who was not only a politician, but also a well-educated economist, freely mixed ethical motives with economic concepts.

What is remarkable about Czechoslovakian case is that the whole package of reforms preceded extraordinary tax, making it truly feasible. Without those additional steps, extraordinary taxes in Czechoslovakia would have failed as hard as they did in Western Europe. The Czechoslovakian authorities collected 45 bln Kč (Czech koruna), equivalent to about £45 mln in 1929. Laszlo Rostas compared this partial success to CL’s fiscal effects in Austria (30.06.1920) and Hungary (1921) – they collected an amount equivalent to £3 mln and £15 mln, respectively (Rostas, 1940). A positive side effect of the whole story is that nowadays, census data from the period of Czechoslovakian CL and WWL allow us to measure the historic levels of inequality in the country (Novokmet, 2018).

## 5.2. Poland

The Property Tax Act of August 11, 1923 (Act nr 94, poz. 746, 1923) displayed many signs of an extraordinary nature. The first words hide an ethical compensatory argument: “for purposes related to the repair of the Treasury of the Republic of Poland” (Act, 1923. art. 1). In Poland, the war economy lasted longer than in the West because of battles for borders and the Polish-Bolshevik war. There was extreme damage that had to be compensated for. The strength of compensatory arguments in this particular case might have been caused by high inequalities in Polish society (Wroński, 2022). Additionally, although inflation never reached extreme levels, like in Germany, inflation was still accelerating greatly in the period preceding the tax. The tribute was, therefore, a response to the economic crisis. The tax was also introduced because of the political will to rebuild the country, reduce public debt, and strengthen the army (Taylor, 1929).

The Act was jointly signed by different Polish politicians, but the initiator and active executor of the regulations was Władysław Grabski, a strong figure who, accidentally, for a short time, did not hold any function in the government. The regulation of CL was one of the elements of the stabilization policy package (Grata, 2008; Koryś, 2018; Wroński, 2022). In this case, it was aimed mainly at the wealthy part of society (Bukowski, Novokmet, 2019). It was agreed that an amount equal to 1 bln Swiss francs (CHF) would be collected from the tax. Having achieved this amount, the tribute was not to be collected any further. Thus, an atypical combination of progressivity and a quota (or, as Marcin Wroński (2022) proposed, “a so-called ‘contingent’”) was used.

Regarding the scope of the regulation, natural and legal persons had to pay the tax (Act, 1923. art. 2). Pursuant to art. 5, the tax was applied to “all immovable and movable property of a taxable person (art. 2) after the deduction of debts and burdens, which reduce this property, as of July 1, 1923.” (Act, 1923. art. 5). The tax-free amount was 3,000 PLN (Act, 1923. art. 3. par. 4). A characteristic feature of the regulation was the large number of tax thresholds – 33. CL was progressive to a lesser extent than the corresponding Western European solutions (the range was 1.2–13%). These rates were not set at an extremely high level (Act, 1923. art. 9). Crucial distinct feature of Polish rates was that they were applied to total wealth. They were not marginal as in Czechoslovakia, Italy, and Germany (Wroński, 2022).

The sources from which the 1,000,000,000 CHF was to be raised were divided: half was to be provided by agriculture and forestry, 3/8 by industrial and commercial enterprises, and 1/8 by “other” categories of property (Act, 1923. art. 8). This regulation discriminated against farmers by placing a disproportionately heavy burden on them. However, Roman Rybarski clarified that not all farmers were disadvantaged, only the large-scale ones: “property tax did not follow the universality principle; especially in agriculture, where it applied very lightly to small agricultural property” (Rybarski, 2015).

Richer citizens sometimes reacted by providing the authorities with underreported tax statements. However, such practices were very risky as CL was designed in a very transparent and efficient manner (Wroński, 2022). Art. 26, which describes the shape of the tax declaration, explains what was included in the tax base: land, buildings, enterprises, capital, and property rights, as well as household appliances and everyday objects (Act, 1923. art. 26). Such a varied tax base was difficult to grasp. Rybarski accused the authorities of arbitrarily estimating the tax base, arguing: “it is known, for example, that the value of farm livestock and buildings is not in constant relation to the value of land” (Rybarski, 2015). He also stated: “the valuation committees had quite a lot of freedom in this respect” (Rybarski, 2015). He also accurately pointed out a weaker reference to the standard of valuation according to market value than in the West. In its place, more questionable and overly complicated methods, typical of income taxes, were used (e.g., classifying lands according to distance from a city or type of cultivation).

As in Italy and Germany, this tax also partially failed, which was reflected in the tax commission's proposal from January 1926 to reduce the target amount from one billion to 407 mln CHF. In place of the missing 593 mln CHF, a permanent (no longer extraordinary) low property tax was suggested. This suggestion was put into practice. The effects of the tax assessment action were summed up by Edward Taylor, who estimated that almost 40% of the planned 1 bln CHF was raised (Taylor, 1929). The tax assessment action was so long that the extraordinary tax became a fixed tax. This change was proposed by Grabski

himself, who claimed that the tax in the form enacted in 1923 unfairly<sup>6</sup> treated people on equal grounds (Skodlarski, 2015).

After WWII, Poland found itself in the zone of influence of the Soviet bloc. Two political camps emerged: the right-wing government in exile and the communists in Poland. The authorities, based on The Decree of the Polish Committee of National Liberation (PKWN) of September 6, 1944, carried out the land reform, which can be seen as the beginning of nationalization. Back then, WWL could have been seen as part of the process of nationalizing capital. The fact that CL and WWL idea emerged in the Polish People's Republic<sup>7</sup> is surprising. The main reasons for introducing WWL included war losses (Kłusek, Luterek, 2022) and the need to slow down inflation and stop the growth of public debt, which was significantly exacerbated by the costs of the war. Officially, the WWL of 13<sup>th</sup> April (Act nr 13, poz. 72, 1945) was aimed mainly at entities that got rich illegally during the war. However, in practice, it simply hit the wealthier part of society. The explanation for the introduction of WWL was fake. The tax allowance of up to 100,000 PLN was meant to exclude the poorer strata of society from heavy taxation. The ethical reasons for introducing the tax, i.e., the fight against collaborators, looters, and blackmailers, like the fiscal target, were “smoke screens” aimed at justifying the fundamentally unjust fiscal measure.

Its true motives can be found in the implementation of the Marxist ideology and caring for the interests of the state administration, i.e., more jobs in the tax administration. Before WWL, in August 1944, the communists decided to carry out money exchange in such a way that people were simply robbed of their money to a much greater extent than with WWL (Dziewanowski-Stefańczyk, 2015). Despite all the unfairness of this decision, it must be admitted that economically it had the desired anti-inflationary effect after the war by drawing excess liquidity from the market (unlike WWL, which totally failed as an anti-inflationary measure).

On the other hand, stronger arguments than for the alleged pressure from the East (the “Eastern” hypothesis of tax genesis) support the hypothesis about the “Western” genesis of WWL. The first draft of the tax on war enrichment was created by the circles of the Polish Home Army in 1943, calling it “The Act on Tax on War Profits” (AANA). The decree of April 13<sup>th</sup>, 1945, describes the subject of taxation almost exactly like the draft of 1943. The hypothesis about the “Western” provenance of the tax is also confirmed by Karol Dąbrowski (Dąbrowski, 2016):

It should be emphasized that the draft tax on war enrichment was developed (...) around Czesław Klarnier – the head of the Treasury Department of the Government Delegation of the Republic of Poland. The later decree of April 13, 1945, was essentially identical to the draft act on the tax on war profits by underground activists and contained similar provisions. The main difference was that the Treasury Department's project treated taxpayers who had suffered losses

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<sup>6</sup> After some time, he realized the pointlessness of his own solution, according to which the declarations of the amount of property from 1923 legally bound taxpayers for many years – a few years later, a taxpayer could have already lost the formerly declared property, and in the meantime, new proprietors could arise who would no longer be taxed as they had made no statement of wealth in 1923.

<sup>7</sup> Technically speaking, this was the official name of the country after the 1952 constitution. However, I use the name here to highlight that this modern, western idea somehow managed to appear in an almost purely communist land.

during the war, started small businesses, acquired an inheritance, [or] received a donation (...) more equitably.

The practical attempt to tax the war enrichment after WWI was taken in, among others, Italy, Hungary, Austria, and Czechoslovakia (Rostas, 1940). After WWII, CL and WWL were used in Austria, Denmark, France, the Netherlands, and Norway (Robson, 1959). It is difficult to indicate examples of WWLs in the Eastern Bloc, where less sophisticated solutions were used. In Bulgaria, the “People’s Court Act” legalized the seizure of property belonging to fascists and collaborators (Dimitrov, 1986). In other instances, tax revenues were increased through quotas (“contingents”), as in Bolshevik Russia (Pipes, 2006). In the GDR, as Wojciech Karpiński wrote: “in principle, the existing taxes were maintained, but rates were raised in a uniform manner” (Karpiński, 1961). Since solutions as simple as raising tax rates and confiscatory measures were used in the sphere of the USSR’s influence, the hypothesis of the “Western” provenance of the “modern” idea of WWL seems a sensible, albeit surprising, explanation of the phenomenon.

Pursuant to art. 1 of the WWL, war enrichment (defined as an increase in property between August 31, 1939, and June 30, 1945) did not have to be obtained for oneself (Act, 1945. art. 1). It was added that tax liability was also associated with obtaining enrichment in the name of substituted persons. Article 4 regulated the tax base, defining as the tax base the surplus of property value resulting for the taxpayer in the period from August 31, 1939, to June 30, 1945 (Act, 1945. art. 4). The word “surplus” suggested the existence of something that should not be there (i.e., something redundant). The provision specified that the “surpluses” were not reduced by the losses resulting from the war. An exception to this rule was made for movable property (Act, 1945. art. 2, par. 6). Rates were as follows: for enrichment in the range of 100,000-250,000 PLN, 15% of this enrichment; for 250,000–500,000 PLN, 20%; for 500,000–1,000,000, 35%, for 1,000,000–2,000,000 PLN, 50%, for 2,000,000+ PLN, 75% (Act, 1945. art. 5, par. 2).

To conclude, the WWL of 13th April exposed the war industry sector to substantial losses. In 1946, the Ministry of Justice critically assessed the attitude of lower authorities responsible for the implementation of the tax: “the tax on war enrichment did not find full understanding and interest, and its meaning [had not been] fully appreciated” (AANb). The cooperation of several types of entities (e.g., offices, tax chambers, local government, political parties, tax directors and even notaries) completely failed during the tax assessment action. There was also no sign of a civic initiative in revealing those who were war-enriched. Problems with the valuation of assets were also fundamental. The fact that the valuation was to be carried out according to the market value of the items was not enough to precisely define the method, and different methods of determining value were appropriate for different assets. Despite this, court experts managed to exercise moral independence by lowering the multipliers in the valuation process in a way that benefited citizens (Kłusek, 2017).

## 6. COMPARISON

Table 2 deals with the efficiency question, while Table 3 summarizes the ethical dilemmas connected with extraordinary taxation.

Table 2 displays an important regularity. Taxes with a very high top rate (Germany – 65%, Italy – 80%, Poland after WWII – 75%) failed to a much more significant extent than taxes with a lower top rate (Czechoslovakia – 40%, Poland after WWI – 13%). Thus, the table confirms indirectly that WWL and CL performed slightly better in CEEs. In general,

WWLs gave worse results (they were even rarer introduced, as Table 2 shows) than CLs as the tax base to be reached was tougher to measure. It is harder to calculate increment of wealth instead of wealth typically understood – all assets minus obligations.

Table 2. Summary of the tax rates of the extraordinary capital taxes

Country	CL	WWL (aka Increment Tax)
Italy – project 1919	0, 5–40%	–
Italy – act 1919	0, 5–25%	10–60% (enrichment level specified by percentages of prewar wealth)
Italy – amendment 1920	0, 4.5–50%	10–80% (enrichment level specified by percentages of prewar wealth)
<i>Reichsnotopfergesetz</i> 1920	0, 10–65%	–
Czechoslovakia 1920	1–30% (for natural persons) 3–20% (for corporations)	5–40% (for natural persons; enrichment level specified by percentages of prewar wealth)
<i>Grabski's Wealth Tax</i> 1923	0, 1.2–13%	–
War Wealth Levy of 13 <sup>th</sup> 1945	–	0–75% (enrichment level specified by nominal quotas)

Source: Own elaboration based on: (Rostas, 1940; Royal Decree nr 2164..., 1919. art. 7–8; Act on Property Tax..., 1923. art. 9; Einaudi, 1920; Jastrow, 1920a, 1920b; Křusek, 2017; Rašín, 1923).

Table 3. Results of the research based on the proposed theoretical framework

Country	Ethical motive	Economic motive	Economic result
Italy 1920	compensatory arguments	Financing current budget, anti-inflationary, will to reduce national debt	Small part of floating debt covered, generally failure (data problem as ISTAT <sup>8</sup> was not founded yet)
<i>Reichsnotopfergesetz</i> 1919	compensatory arguments, ability to pay doctrine	Financing current budget, will to reduce national debt	19.47% of budget income in 1920, later total failure due to hyperinflation, about 20% of planned revenue
Czechoslovakia 1920	compensatory arguments, patriotism of Alois Rašín	anti-inflationary	Partial success (\$45 mln, about 8.18% of national income, about 60% of planned revenue – more than in the case of Hungary and much more than in Austria)

<sup>8</sup> Italian counterpart for Polish “Main Statistical Office”. The first comprehensive fiscal statistics (but still not detailed enough to distinguish extraordinary taxes) in Italy appeared only in 1923, thanks to the reports of the Bank of Italy (*Banca d'Italia*).

Table 3 (cont.). Results of the research based on the proposed theoretical framework

Country	Ethical motive	Economic motive	Economic result
<i>Grabski's Wealth Tax</i> 1923	compensatory arguments, patriotism of Władysław Grabski	Financing current budget, anti-inflationary, stabilization	16% of budget income in 1923 (about 40% of planned revenue for period 1924-1927), failure in following years
War Wealth Levy of 13 <sup>th</sup> April 1945	fake compensatory arguments, treating people as equals	Financing current budget	Total failure (ranging between 0.06 – 0.7% of budget income in years 1946–1949)

Source: own elaboration based on: (Gini, 1920; Jastrow, 1920a, 1920b; Kłusek, 2017; Rašin, 1923; Rostas, 1940; Statistisches Jahrbuch, 1922; Taylor, 1929).

There are endless examples of such ethical arguments during the legislative procedure, including speeches from the period of proceedings in the Polish case of *Grabski's Wealth Tax*. Poniatowski claimed: “All amendments directed rightfully towards a higher level of burdening the rich and guaranteeing some exemptions and reliefs to the working class [...] were refused by you. Things definitely have a deeper sense [...]” (SSSU, 1923, p. 10). Wierzbicki responded: “We make it possible so that not only some, but most citizens are responsible for saving the Treasury because this is the only way to save Fatherland” (SSSU, 1923, p. 14). What is characteristic about such speeches is that they lack substance; they are simply emotionally loaded expressions of certain moral claims. The more persuasive political party dominates in the end by pushing through the law (all analyzed cases) or by blocking the law (Great Britain, France, Canada, and the United States after WWI (Scheve, Stasavage, 2016)).

## 7. CONCLUSIONS, DISCUSSION, AND POLICY RECOMMENDATIONS

Formulated research questions and hypotheses have not been fully confirmed or rejected. They remain open to further research. However, some inconclusive evidence for low levels of efficiency, feasibility and significantly unjust character of CL and WWL has been displayed. Available data was enough only to show that there are premises suggesting that CL and WWL performed better in CEE countries than in Western countries.

Since there are always better solutions (e.g., the issue of bonds (Italy), increasing indirect taxation, inheritance taxation, income taxes (Germany), and money exchanges (Poland after WWII)), it was never an economic motive that drove politicians to apply CL and WWL. Although the economic crises were real, they never created fiscal necessity (Scheve, Stasavage, 2016). The true reason beyond heavy postwar taxation was compensatory arguments. They were strengthening typical ethical argumentation based on treating people as equals and arguments about the doctrine of the ability to pay. All these ethical claims were found in papers of famous economists such as Gini, Jastrow, Pigou, and Rostas, as well as legal acts (*Grabski's Wealth Tax*), titles of legal acts (*Reichsnotopfergesetz*, *imposta straordinaria*) and parliamentary speeches. A deeper analysis of the formulations of arguments regarding justice seems to be another promising

research direction. People simply demanded justice, and politicians had to meet these expectations.

The tax assessment action was troublesome in all countries. CL and WWL had no rational reason to give better results in CEEs than in Western Europe (except for lower rates, as shown in Table 2). They did give better results, though, partly because of prominent figures supporting the tax. Both Władysław Grabski and Alois Rašín showed a true statesman's attitude, unafraid to reform their countries, even at the cost of their own popularity. For them, WWL and CL were just little pieces of a bigger reform package. One could argue that the same description applied to Erzberger, the Finance Minister of the Weimar Republic. However, history showed that he lacked the necessary discipline to fight soaring inflation (Feldman, 2007). Effective anti-inflationary politics requires extremely unpopular actions that will never bring more votes in future elections. It is always concrete persons behind the undertaking of a certain policy, e.g., in Great Britain, Lloyd George opposed CL and WWL. The impact of his individual power meant that even three years of heated discussion did not end up with the levy being imposed (Daunton, 2007). In Italy, Gini was skeptical about the tax, while in Germany, the inventor of the idea – Jastrow – expressed negative opinions on the final version of *Reichsnotopfergesetz*. The CL idea failed spectacularly in countries where notable figures did not support the idea.

To conclude, the influence of particular individuals is often underestimated when formulating conclusions about economic phenomena. Another conclusion is that political economy plays a crucial role in understanding CL and WWL. These taxes were introduced when a left/centrist party was in charge (i.e., Italy, Germany, Poland, and Czechoslovakia). When conservative MPs outnumber them, the idea usually fails in an early stage, before being pushed through. CL and WWL were introduced in democracies, but they did not succeed there. Surprisingly, they succeeded in authoritarian environments, like in Turkey during WWII (Lewis, 2002; Ökte, 1987) or Japan after WWII (Eichengreen, 1989).

Payments in installments transformed CL and WWL taxes into small super-taxes on income or ordinary wealth taxes. Installments spread over many years (Italy and Germany are extreme examples, while Poland and Czechoslovakia are moderate) lost the initial concept of these kinds of taxes being one-off taxes. The modern approach to the idea of CL (as WWL cannot really be seriously discussed outside the context of war due to its name) indicates that this feature of the tax is necessary – otherwise, taxpayers will be afraid that the tribute will be repeated, which will likely lead to more tax avoidance and evasion (O'Donovan, 2020, 2021). Low wealth taxes are nowadays commonly accepted parts of modern fiscal systems. Severe projects of CLs and WWLs constituted the central idea from which modern wealth taxes originated. In such a sense, CLs and WWLs were the beginning of the development path for modern, low-rate wealth taxation.

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## RENEWABLE ENERGY SOURCES IN THEIR SOCIOECONOMIC CONTEXT: PROSPECTS FOR THE TRANSFORMATION OF THE GLOBAL ENERGY LANDSCAPE, A BIBLIOMETRIC ANALYSIS

Focusing on renewable energy sources (RES), this article examines their comprehensive impact on society and the economy. This publication goes beyond traditional approaches by introducing bibliometric analysis using CiteSpace. By identifying key research trends in the scientific literature, it contributes to a better understanding of areas of research interest in the field of renewable energy. Bibliometric analysis serves to systematize knowledge and identify the main research trends – a valuable contribution to the development of this important field of science. As a research tool, it highlights the dynamics and evolution of the field of renewable energy research; this can support the further development of this important branch of science and serve as a platform for identifying potential areas for further research and practical activities. Through a detailed analysis of trends in the scientific literature, the article contributes to a deeper understanding of areas of interest in the field of renewable energy. The results are a valuable starting point for future scientific research and practical initiatives, supporting the development of this key field.

**Keywords:** bibliometric, renewable energy, CiteSpace.

### 1. INTRODUCTION

Renewable energy (RES) is one of the pillars of the contemporary social, economic, and environmental debate (Boubaker, Omri, 2022; Knuth et al., 2022; Uzar, 2020). As societies become increasingly aware of the need for sustainable development, the role of

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RE becomes a key element of the energy transition, shaping not only our environment, but also social and economic structures. In this context, this paper focuses on the analysis of the comprehensive impact of renewable energy on the scientific community from the social and economic perspectives (Akella et al., 2009; Gozgor et al., 2020; Jenniches, 2018).

Contemporary society increasingly recognizes RES as a source of not only sustainable energy, but also a powerful catalyst for social change (Eagle et al., 2017; Fraser et al., 2023). Technological progress in RES not only transforms traditional energy models, but also affects social structures and local communities (Kerr et al., 2014). The analysis of these interactions requires a detailed understanding of both the technological and social mechanisms that make up the process of RES adaptation in society (Sengupta et al., 2020). On the one hand, the development of photovoltaics, wind farms, and other forms of RES generates new jobs, supporting local communities and stimulating entrepreneurship. However, challenges related to the transformation of traditional sectors also arise, which requires a sustainable approach to labor market restructuring. Furthermore, the introduction of new RES technologies creates dynamic social relations by generating benefits such as improved air quality, reduced greenhouse gas emissions, and diversification of energy sources, which contributes to the increase in society's environmental awareness (Ahn et al., 2021; Mathews, 2014).

The evolution of an RES-based economy is an essential element of the contemporary economic transformation (Chou et al., 2023; Gagnon, 2013; Wang et al., 2023). Investments in the RES sector not only stimulate economic growth, but also shape new employment aspects and generate financial benefits (Lee, 2021; Liu et al., 2023). The transition to RES affects the structure of the economy, creating new opportunities for the development of sectors related to ecological technologies, while also forcing traditional sectors to reconsider their role in the new energy reality. RES also becomes a source of economic innovation (Su et al., 2022; Wan et al., 2022; X. Zhao, J. Zhao, 2023). The development of new technologies, such as energy storage or smart grids, drives the development of new markets and creates jobs in the research and development sector (Hossain et al., 2016; Kaygusuz et al., 2013; Tan et al., 2021; Zafirakis, 2010).

In this context, bibliometric analysis can be a valuable tool for systematizing and understanding the areas of research on RE from a social perspective (García-Lillo et al., 2023; Kut, Pietrucha-Urbanik, 2022). By using tools such as the Citespace program, it is possible to track the main trends, identify key authors, and determine the central themes in research on this topic.

The following three scientific hypotheses were proposed:

- First hypothesis: What are the key research trends and thematic clusters within the scientific literature related to renewable energy sources (RES)?
- Second hypothesis: Who are the most influential authors, institutions, and collaborative networks contributing to the field of renewable energy research?
- Third hypothesis: How can the findings derived from bibliometric analysis support evidence-based decision-making and strategic planning for the sustainable integration and expansion of renewable energy sources?

The conclusions of bibliometric analysis can be significant for understanding the role that RES plays in shaping society and the economy. The complex relationships between social and economic aspects require an interdisciplinary approach, and bibliometric analysis will allow for the identification of the main research trends, contributing to the further development of this important field of the humanities.

## **2. BIBLIOMETRIC ANALYSIS OF LITERATURE – MATERIALS AND METHODS**

Bibliometric analysis is a research method that uses statistical tools to collect, process and analyze bibliographic information from scientific publications (Chen, 2018; Ding, Yang, 2022; Moher et al., 2009). Its main goal is to assess the impact of these publications on the development of a specific field of science and to identify key authors, journals, topics and research institutions. To carry out the analysis, CiteSpace software was used. CiteSpace is a specialized software designed for bibliometric analysis, providing researchers with a robust platform to explore and visualize complex networks within scholarly literature. It operates by processing bibliographic data, extracting valuable insights, and generating graphical representations that reveal the interconnectedness among various elements of scientific research. This tool employs algorithms to identify key patterns, emerging trends, and influential nodes within citation networks. It facilitates the exploration of citation relationships between publications, authors, institutions, and keywords, offering a comprehensive understanding of the intellectual structure and evolution of a particular research domain. One of the notable features of CiteSpace is its ability to generate visual maps, such as co-citation networks and co-authorship networks. These maps aid in uncovering the central themes, pivotal contributors, and pivotal publications shaping the landscape of a specific field, enabling researchers to navigate through vast volumes of scholarly works and derive meaningful insights from the interconnected web of scientific literature.

In this study, data were taken from the Web of Science database using the search term “Renewable Energy”, “Social” and “Economics”. The total number of publications for bibliometric analysis is 3545.

## **3. QUANTITATIVE INSIGHTS INTO RENEWABLE ENERGY SCHOLARSHIP: A BIBLIOMETRIC APPROACH TO SOCIAL DIMENSIONS – RESULTS AND DISCUSSIONS**

Figure 1 shows the analysis of publications according to the authors' affiliation. Thanks to these results, we are able to identify which educational and scientific institutions significantly contribute to the development of research on renewable energy in social context.

Individual groups, marked with different colors, represent different research fields or thematic areas in which universities cooperate. The value of a node, expressed by its size, is related to the number of publications of a given university, which helps to identify institutions with a significant contribution to scientific research. Lines connecting different countries, marked in gray, reflect mutual citations between researchers from different regions. This is an important indicator of international cooperation and knowledge exchange.

Table 1 presents the 10 universities with the highest centrality index, which is a key aspect of the analysis. The centrality index allows for the identification of nodes that constitute key connections between different research groups. The node with the highest centrality index is usually an institution characterized by innovation and frequent citation by other scientists, which proves its importance in scientific research in a given area.

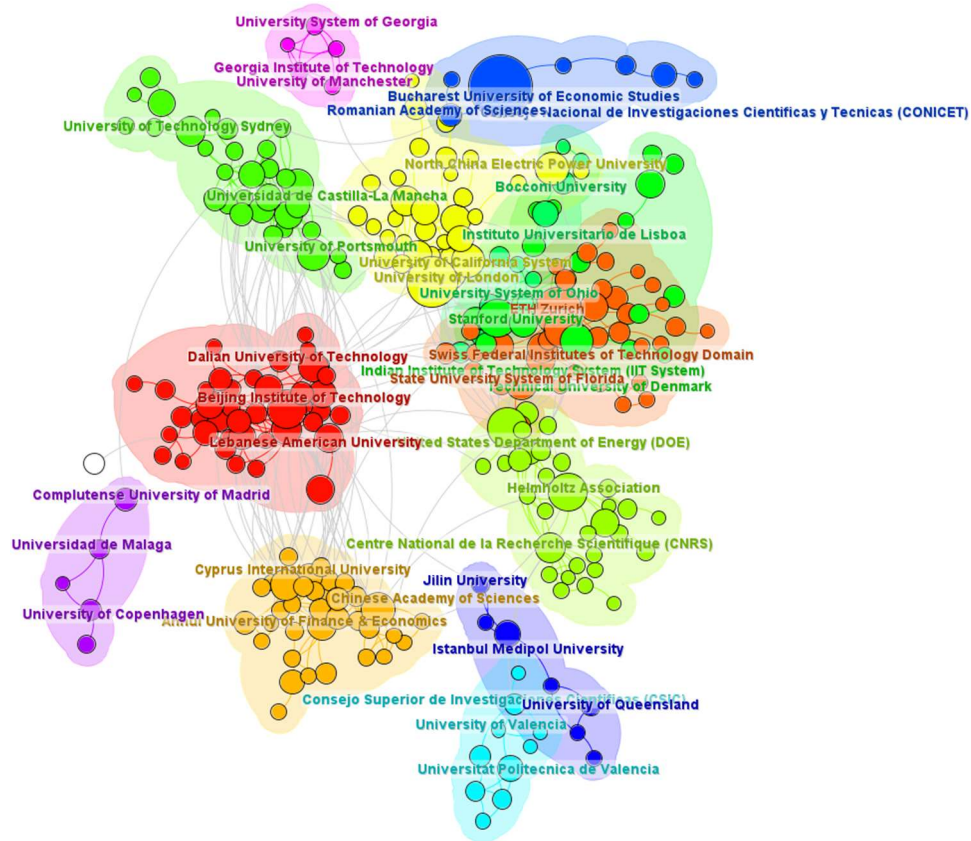


Figure 1. Cooperation between universities

Source: own development using the program CiteSpace 6.2.R6 Advanced.

Table 1. Top 10 institutions with highest centrality index

Institution	Number of publications	Centrality index
University of London	37	0.12
Swiss Federal Institutes of Technology Domain	32	0.07
United States Department of Energy	23	0.07
Centre National de la Recherche Scientifique	11	0.07
Nisantasi University	9	0.07
University of California	24	0.06
Helmholtz Association	21	0.06
Beijing Institute of Technology	21	0.06
Chinese Academy of Sciences	14	0.06
Technical University of Denmark	15	0.05

Source: own development using the program CiteSpace 6.2.R6 Advanced.

The analysis shows that the University of London play a key role in the field of renewable energy in social aspects research due to the high centrality index. This means that this institution are central player in the study of this topic and enjoy the highest respect in the scientific community. It follows that the works of scientists from this university are often cited in the scientific literature, which proves their importance in developing knowledge in the field of renewable energy sources. The number of publications does not always correlate with the level of citations. This suggests that there are certain factors, such as research quality and innovation, that influence whether research papers will be noticed and cited by other scientists. It is worth emphasizing that a high centrality index does not necessarily mean a large number of publications, but rather a significant impact on the development of knowledge in a given field.

The Swiss Federal Institutes of Technology Domain, along with the United States Department of Energy, Centre National de la Recherche Scientifique, and Nisantasi University, all demonstrate substantial centrality indices, signifying their pivotal roles as influential nodes in the network of renewable energy research within social aspects. Despite differences in the number of publications, these institutions exhibit a remarkable level of interconnectedness and importance within the scholarly landscape. The University of California, Helmholtz Association, Beijing Institute of Technology, Chinese Academy of Sciences, and Technical University of Denmark also display noteworthy centrality indices, indicating their significant contributions to the scholarly discourse on renewable energy research. The collective impact of these institutions underscores the diverse and multidimensional nature of global engagement in advancing knowledge and understanding within the field of renewable energy from social perspectives.

Universities with high centrality index in the field of research on renewable energy in a social context have achieved this status due to several key factors. Their production of high-quality research, focused on the social aspects of renewable energy, contributes to the elevation of their centrality index. Active interdisciplinary collaboration, uniting various research groups, fosters a more integrated scholarly network, further enhancing their centrality. Extensive international collaboration attests to their integration into the global research community, elevating their significance internationally. The impact of their research, demonstrated through frequent citations in scientific literature, plays a pivotal role in enhancing their centrality indices. The reputation and prestige of these institutions within the academic community attract attention, significantly contributing to their high centrality. Moreover, their research, with practical implications influencing policy in the field of renewable energy and social aspects, further fortifies their centrality in the scholarly network. These factors collectively underscore their substantial impact and significance in the realm of research on renewable energy from a social perspective.

Figure 2 shows the analysis of publications in terms of the countries the scientists come from.

The analysis shows that England has the highest centrality index. China, Australia, USA, Germany, India and Turkey also have a centrality index above 0.1, which means that these countries are also important centers in research on renewable energy in social aspects.

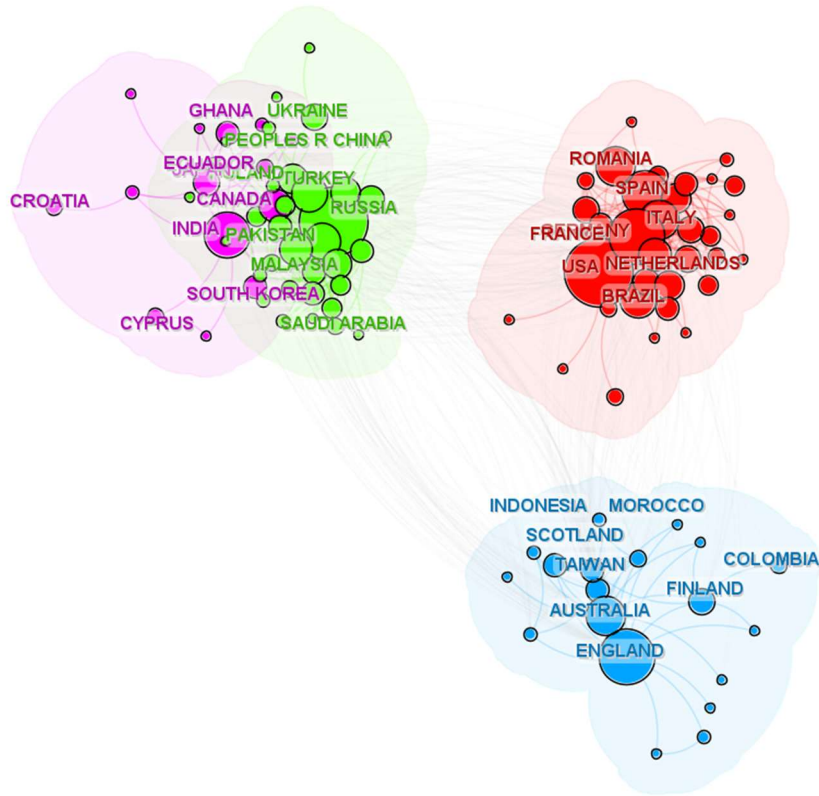


Figure 2. Cooperation between countries

Source: own development using the program CiteSpace 6.2.R6 Advanced.

Based on Figure 2, Table 2 was created, which presents the 10 countries with the highest centrality index.

Table 2. Top 10 countries with highest centrality index

Country	Number of publications	Centrality index
England	233	0.26
China	369	0.15
Australia	111	0.14
USA	391	0.13
Germany	237	0.11
India	148	0.11
Turkey	85	0.10
Spain	159	0.08
Italy	102	0.05
Japan	48	0.05

Source: own development using the program CiteSpace 6.2.R6 Advanced.



Figure 3 shows the citation analysis in the main areas of interest for researchers. Additionally, such analysis can help understand which research areas are particularly important or popular in a given field. This often reflects trends and priorities among scientists and indicates those issues that attract the most attention and interest in the scientific literature and, therefore, have the highest number of citations.

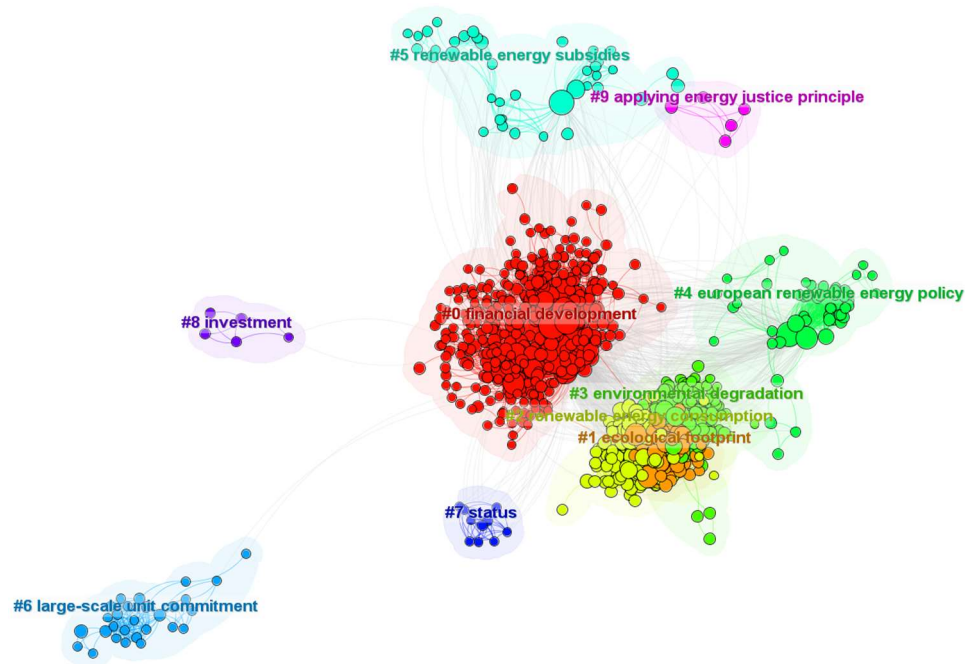


Figure 3. Major area of interest

Source: own development using the program CiteSpace 6.2.R6 Advanced.

Analyzing the graph, it can be concluded that the largest cluster is the cluster called “financial development”. This cluster includes 468 nodes. The major citing article of this cluster is (Edmondson et al., 2019). This paper explores the role of policymaking processes in influencing the rate and direction of socio-technical change towards sustainability. It argues that policy mixes, rather than individual policy instruments, are more effective in driving transitions. The paper proposes a new conceptual framework for understanding the co-evolutionary dynamics of policy mixes and socio-technical systems. It highlights the importance of designing policy mixes that create incentives for beneficiaries and overcome challenges to political support. The paper concludes with research and policy implications for analyzing and designing dynamic policy mixes for sustainability transitions. The most cited article of this cluster is (Johnstone et al., 2010). This paper investigates how environmental policies influence technological advancements in the renewable energy sector. The study utilizes patent data from 25 countries spanning 1978–2003. Results indicate that public policies significantly impact patent applications. Different policy instruments are effective for distinct renewable energy sources. Broad-based policies like tradable energy certificates are more likely to stimulate innovation in technologies nearing

fossil fuel competitiveness. More targeted subsidies, such as feed-in tariffs, are essential to promote innovation in more expensive energy technologies like solar power. The second largest cluster is the "ecological footprint" with 167 nodes. Ecological footprint is an indicator that measures the amount of land required to sustain an individual or a population. It is calculated by comparing the amount of resources that a population consumes to the amount of resources that the planet can sustainably provide. The ecological footprint is expressed in global hectares, which is a unit of land area that can sustainably generate the resources needed for one person. The major citing article of this cluster is (Yasin et al., 2020). This study examined how urbanization, financial development, political institutions, trade openness, and energy consumption influence the ecological footprints of 110 countries from 1996 to 2016, using the Environmental Kuznets Curve (EKC) framework. Countries were categorized into developed and less-developed groups, and ecological footprint served as a proxy for environmental impact. The study found robust relationships between variables in both groups, confirming the EKC hypothesis of an inverted-U shape relationship between ecological footprints and per capita income. Results highlighted the negative impact of energy consumption and the composition effect on ecological footprints. Financial development was identified as detrimental to environmental quality in developed countries, while trade openness, urbanization, and political institutions were beneficial. The study recommended further exploration of factors like renewable energy consumption, innovation, and tourism. It emphasized the need for economic and social policies to reduce human impact on nature, suggesting the establishment of robust institutional structures and environmental guidelines for sustainable growth. The most cited article is (Ahmad et al., 2022). This study investigates the impact of financial development, human capital, and institutional quality on the ecological footprint (EF) in emerging countries. Using panel data from 1984 to 2017 and employing the cross-sectional autoregressive distributed lag (CS-ARDL) technique, the research reveals that financial development increases the EF, while human capital and institutional quality mitigate its negative impact. Furthermore, financial development contributes to environmental sustainability through the channel of human capital, and institutional quality helps counteract the adverse ecological effects of financial development. The causality analysis suggests that policies related to financial development, human capital, and institutional quality influence the EF but not vice versa. The findings underscore the importance of promoting environmental sustainability in emerging economies through the enhancement of human capital and the effective use of financial resources. Third largest cluster is "renewable energy consumption" with 155 nodes. The major citing article is (Zhao et al., 2021). This study empirically investigates the relationship between financial risk and global carbon emissions, utilizing a global balanced panel dataset spanning 62 countries from 2003 to 2018. The research explores the mediation effect of technological innovation on this nexus, considering potential regional heterogeneity and asymmetry. The results reveal a mediation effect between financial risk and carbon emissions, indicating that increased financial risk not only directly reduces global carbon emissions but also indirectly mitigates emissions by promoting technological innovation. The impact of financial risk and technological innovation on carbon emissions exhibits significant regional heterogeneity, and there is asymmetry across different quantiles, with inhibitory effects observed only in the 10th quantile while promoting carbon emissions in other quantiles. The most cited article is (Tiwari et al., 2022). This study investigates the transmission of return patterns between green bonds, carbon prices, and renewable energy stocks from January 4, 2015, to September 22, 2020. Utilizing daily data and employing

the TVP-VAR approach, various portfolio techniques, and a LASSO dynamic connectedness model, the research analyzes return spillovers and connectedness. The results reveal that dynamic total connectedness across assets is heterogeneous over time and event-dependent. Clean energy emerges as the main net transmitter of shocks, with Green Bonds and Solactive Global Wind being major recipients. Bivariate and multivariate portfolios effectively reduce investment risk, except for Green Bonds. The minimum connectedness portfolio demonstrates the highest Sharpe ratio, emphasizing the significance of information in the return transmission process for portfolio creation, a pattern observed even during the COVID-19 pandemic. These nodes also have the highest number of connections and mutual citations. Other areas of interest are shown in Figure 3.

Figure 4 shows the top five references with stronger citation burst. This metric is useful for identifying articles that have received a significant number of citations in a relatively short period of time. The continued citation sequence can be used to identify articles of significant scientific importance and those that have had a significant impact on a developing field.

References	Year	Strength	Begin	End	2013 - 2023
Wüstenhagen R, 2007, ENER POLICY, V35, P2683, DOI 10.1016/j.enpol.2006.12.001, <a href="#">DOI</a>	2007	11.2	2014	2019	
Flanagan K, 2011, RES POLICY, V40, P702, DOI 10.1016/j.respol.2011.02.005, <a href="#">DOI</a>	2011	8.22	2016	2020	
Carley S, 2009, ENER POLICY, V37, P3071, DOI 10.1016/j.enpol.2009.03.062, <a href="#">DOI</a>	2009	8.17	2013	2019	
Bergek A, 2008, RES POLICY, V37, P407, DOI 10.1016/j.respol.2007.12.003, <a href="#">DOI</a>	2008	7.99	2014	2019	
Unruh GC, 2000, ENER POLICY, V28, P817, DOI 10.1016/S0301-4215(00)00070-7, <a href="#">DOI</a>	2000	7.94	2013	2020	

Figure 4. Top five references with the strongest citation burst

Source: own development using the program CiteSpace 6.2.R6 Advanced.

First article with stronger citation burst is (Wüstenhagen et al., 2007). The article notes that despite ambitious government goals to increase the share of renewable energy, the article highlights the growing recognition that public acceptance may pose an obstacle to achieving these goals, particularly in the case of wind energy, sparking contentious debates due to its visual impact on landscapes. The article identifies three dimensions of social acceptance - socio-political, social and market acceptance – shedding light on the factors influencing public support and the challenges faced in implementing specific projects, calling for more research, especially from management researchers, in less examined dimension of market acceptance. The second article is (Flanagan et al., 2011). The article discusses the topic of "policy mix", borrowed from discussions on economic policy. Despite its ambiguity, the concept highlights the interactions and interdependencies between different policies that influence intended outcomes. The authors argue that the widespread use of 'policy mixes' in innovation policy research provides an opportunity to reassess underlying assumptions and address the complex, multi-level and multi-actor nature of the field. Drawing on a diverse literature, they propose a reconceptualization that defines tensions and interactions within the "policy mix" along different dimensions, with implications for the future direction of innovation policy studies, both normative and analytical. Third article is (Carley, 2009). In this article, the authors examined the effectiveness of state energy programs, with particular emphasis on renewable portfolio standards (RPS), a policy instrument aimed at increasing the share of renewable energy in the electricity market. Analysis using a fixed-effects vector decomposition model with

state-level data from 1998 to 2006 suggests that although RPS implementation may not be a good predictor of the share of renewable energy in the total generation mix, states with RPS policies tend to increase the total amount of energy generated renewable over time. The study also identified various factors, including political institutions, natural resources, deregulation, economic indicators and regional RPS policies, significantly influencing the use of renewable energy. Fourth article is (Bergek et al., 2008). This paper addresses the challenge of translating empirical studies on innovation systems into actionable guidelines for policymakers. Building on a functional approach to analyzing innovation system dynamics, the authors provide a practical scheme for policymakers. The scheme draws from existing literature and the authors' own expertise, offering a tool to identify key policy issues and establish effective policy goals in the realm of innovation systems. The last article is (Unruh, 2000). This paper contends that industrial economies are entrenched in fossil fuel-based energy systems due to the co-evolution of technology and institutions, resulting in carbon lock-in. The concept of a Techno-Institutional Complex is introduced to emphasize the interconnectedness of technological systems and governing institutions in this lock-in process. While carbon lock-in poses challenges for the diffusion of carbon-saving technologies, the paper raises questions about traditional economic models that overlook the evolution of technology and institutions. The possibility of escaping carbon lock-in is deferred for future exploration.

Figure 5 shows the five largest clusters of scientists' interests in specific years. Thanks to this analysis, it is possible to observe which research topics are current and which were popular in previous years.

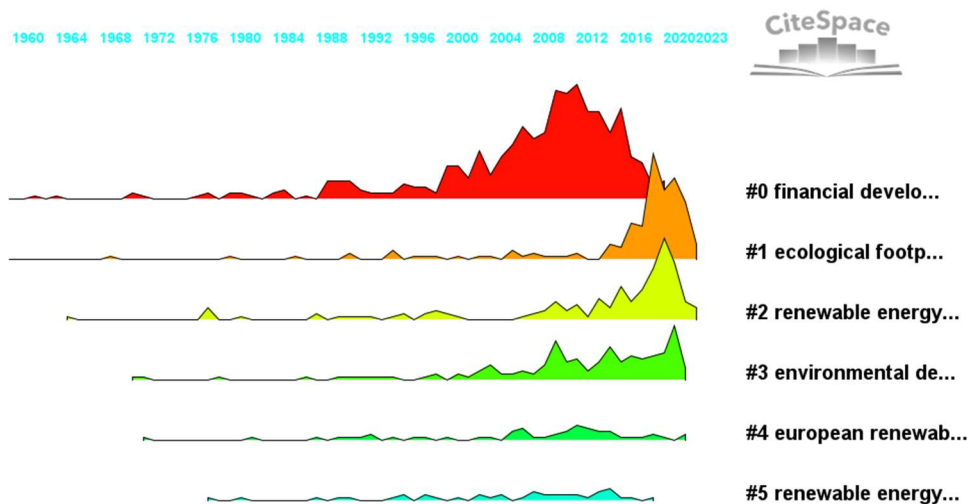


Figure 5. Timeline view of the 5 largest clusters

Source: own development using the program CiteSpace 6.2.R6 Advanced.

Analyzing the above figure, it can be seen that the current main research topics in the analyzed group of publications are “ecological footprint”, “renewable energy consumption” and “environmental degradation”.

The current main research topics within the analyzed group of publications, namely “ecological footprint”, “renewable energy consumption” and “environmental degradation”, represent critical areas of inquiry due to their significant impact on global sustainability and environmental stewardship. The focus on ecological footprint reflects a growing concern regarding the ecological resources consumed by human activities and their long-term implications for the biosphere. Additionally, the prominence of research on renewable energy consumption underscores the imperative to transition towards sustainable energy sources in the face of climate change and finite fossil fuel reserves. Furthermore, the emphasis on environmental degradation aligns with the pressing need to understand, mitigate, and reverse the detrimental effects of human-induced activities on the natural environment. These research topics have emerged as central areas of investigation due to their fundamental relevance to the preservation of planetary ecosystems and the well-being of present and future generations.

#### 4. CONCLUSIONS AND PERSPECTIVES

The article provides an in-depth analysis of the impact of renewable energy on the scientific community, with a particular focus on social and economic perspectives. The results presented in the article show that RE not only plays a crucial role in the energy revolution but also shapes society and the economy on multiple fronts.

The evolution toward an RES-based economy has significant economic consequences. Investments in the RES sector not only drive economic growth but also shape new employment aspects and generate financial benefits. The introduction of new RE technologies becomes a source of economic innovation, creating new markets and jobs in the research and development sector.

Bibliometric analysis, conducted using the CiteSpace tool, allowed for the systematization and understanding of research areas related to RES from a social perspective. The identification of dominant trends and central themes contributes significantly to the development of this social science field. Such an approach to the analysis of scientific literature can serve as a valuable starting point for further research, helping researchers better understand the changing social and economic landscapes associated with RES. The bibliometric analysis uncovered influential publications, key authors, and collaborative networks, thereby providing a comprehensive overview of knowledge dissemination and scholarly communication in the domain of renewable energy.

Bibliometric analysis also facilitates the identification of institutions and countries that play a crucial role in RES research. Understanding the structure of international collaboration and knowledge exchange becomes possible. The article demonstrates that the University of London plays a pivotal role in social-context RES research, reflected in its high centrality index. Similarly, the country analysis shows that England has the highest centrality index, indicating its significant role in RES research.

Research on the analysis of citation networks in sustainable development has focused on identifying key thematic clusters and their interrelations. The largest cluster, “financial development”, primarily encompasses studies on the impact of policy on socio-technical changes toward sustainable development. A pivotal article in this area is authored by Edmondson et al. (2019). These studies emphasize the role of policy mixes in accelerating transitions and the necessity of designing mixes that consider incentives for beneficiaries while overcoming challenges related to political support. Significant attention is given to

analyzing the interactions of various policy instruments on the development of sustainable technologies.

Another crucial area is the “ecological footprint”, covering research on the influence of urbanization, financial development, political institutions, trade openness, and energy consumption on the ecological footprint of 110 countries. Studies such as Yasin et al. (2020) confirm the Environmental Kuznets Curve hypothesis, indicating a U-shaped relationship between ecological footprints and per capita income. Moreover, the results point to the negative impact of energy consumption and compositional effects on the ecological footprint, while financial development may have detrimental effects on environmental quality in developed countries. These studies suggest the need to consider multiple factors in sustainable development policy analyses.

In the “renewable energy consumption” domain, the focus is on the relationship between financial risk and greenhouse gas emissions. Analyses, such as those by J. Zhao et al. (2021), indicate the mediating effect of technological innovation between financial risk and emissions. The results also highlight regional heterogeneity and asymmetry in the relationships between these variables. In the context of investment portfolios, the research demonstrates the effectiveness of bivariate and multivariate portfolios in reducing investment risk, although Green Bonds appear to be an exception. The significance of information in the return transmission process is emphasized by the lowest degree of connections and mutual citations in this cluster.

Conclusions from these studies suggest that the development of sustainable technologies, analyzed in the context of socio-technical changes, requires a holistic approach considering diverse policy aspects. Understanding the impact of policy mixes on the development of innovative technologies and identifying factors influencing ecological footprints and greenhouse gas emissions are crucial. These studies also yield practical insights, suggesting that sustainable development policy should address both financial and social aspects and engage various stakeholders. Ultimately, the research emphasizes the importance of a comprehensive and integrated approach to sustainable development policy.

In practical terms, bibliometric analysis becomes a supporting tool for decision-makers, researchers, and institutions in formulating energy policy and making decisions at the intersection of science, business, and public policy. It provides the opportunity to identify areas that require further investigation, helping to direct resources to the most critical aspects related to the development of RES. In this way, bibliometric analysis serves not only as a research tool but also as a practical instrument supporting decision-making in the field of sustainable development based on renewable energy.

The future work in the field of “Renewable Energy Sources in the Socio-Economic Context: Prospects for the Transformation of the Global Energy Landscape” could encompass several crucial perspectives. Firstly, the exploration of emerging renewable energy technologies and their integration into socio-economic frameworks will be essential. This could involve investigating the economic viability, social acceptance, and policy implications of transitioning towards renewable energy sources on a global scale. Additionally, further research into the environmental and socio-economic impacts of large-scale renewable energy deployment will be critical for understanding the broader implications of such transformations. Moreover, the analysis of global trends and regional disparities in renewable energy adoption within socio-economic contexts can provide valuable insights into the challenges and opportunities associated with transitioning to a more sustainable energy landscape. Furthermore, interdisciplinary studies that consider the intersection of renewable energy with fields such as economics, sociology, and public

policy could offer novel perspectives for advancing the understanding of the socio-economic dynamics underlying the global energy transition. Overall, future work in this area should aim to elucidate the multifaceted interactions between renewable energy deployment and socio-economic systems, thereby informing informed decision-making and policy development in the pursuit of a more sustainable global energy landscape.

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## SUPPORTING THE DEVELOPMENT OF EMPLOYEES' STRESS MANAGEMENT COMPETENCIES AS A CHALLENGE TO EMPLOYERS

Due to the unstable, turbulent socioeconomic and political environment in which organizations now operate, stress has become an inseparable companion of human beings in the work process. Psychosocial risks are among the most important challenges currently facing employers regarding human resources management and maintaining satisfactory organizational performance. In this context, this study aims to identify contemporarily relevant employee stress management competencies and the actions employers should take to support their development. To do so, it employs desk research and descriptive analysis, undertaking an analysis of the literature on the subject and available secondary data. It identifies three fundamental stress management challenges facing managers and employee teams. For each of these challenges, the article identifies employees' competencies that need to be improved and highlights related possible actions by employers.

**Keywords:** workplace stress, stress management, employee, organization, competencies.

### 1. INTRODUCTION

According to the definition established by the pioneer of research into this phenomenon, Hans Selye, stress is a biological reaction of the body, underpinned by physiological mechanisms. This dynamic adaptive response, triggered by the difference between human capabilities and demands of a specific situation, puts the body in a "state of readiness" to meet the challenges of the environment. The stressor prompts remedial behaviour to restore the state of equilibrium. Depending on the person's ability to cope with the demands, stress can take the beneficial form (eustress), activating one to act, or harmful (distress), exceeding the limits of the person's endurance and gradually leading to fatigue, exhaustion, illness and mental breakdown (Selye, 1960). Ultimately, however, in perceiving a situation as beneficial (challenge) or harmful (threat), it is the perception of the situation, a subjective assessment made by the person and the individual predisposition to tolerate the threat that is crucial (Łodzińska, 2013).

As a consequence of the unstable, turbulent socioeconomic and political environment in which organisations operate nowadays, stress – caused by psychosocial risks – has become an inseparable companion of human beings in the work process. The International

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Labour Organization defines psychosocial risks as a type of interaction between the content of work, work organisation, management systems, conditions and the competencies, needs and individual characteristics of the employee. Workplace stress occurs when employees experience psychological discomfort regarding the conditions and/or demands of work when, at any given time, these conditions and demands exceed their capabilities (International Labour Office, 1986). The following areas are highlighted where dysfunctions lead to psychosocial risks and are defined as sources of workplace stress (Sahoo, 2016, Kaszubska, 2021):

- work content;
- quantitative and qualitative workload;
- work schedule;
- control of the work;
- role in the company or team;
- role conflict (conflicting demands), including work-family life conflict;
- interpersonal relations at the workplace;
- career history (including form and stability of employment).

Managers, middle management, entrepreneurs and employers also experience what is known as “managerial stress”, related to responsibility for achieving the company's strategic and operational goals and managing human resources (Molek-Winiarska, 2010; Kaszubska, 2021).

The psychosocial environment at the workplace, in which the demands placed in front of employees are adapted to their capabilities, support from superiors and coworkers and the means to complete tasks are provided, is conducive to employees' personal development, good performance as well as mental and physical wellbeing (Gólcz, 2016). However, if this is not the case, stress arises. When sustained over the long term, it contributes to problems in the areas of mental and physical health – including cardiovascular diseases and musculoskeletal ailments. An organisation (enterprise, institution) with a working environment that generates employee stress also suffers from the negative effects of this situation: poorer performance as a result of reduced productivity and quality of work and even unproductive presence of employees at work (so-called presenteeism – employees coming to work sick or unable to perform effectively), increased levels of absenteeism, staff turnover and fluctuation, increased risk of accidents and injuries (EU-OSHA, 2023; Kaszubska, 2021). Stress at the workplace means increased costs for the employer due to increased illness incidence among the staff (costs of substitutions, overtime), but also a worse working atmosphere, employees' aversion to change and novelty, their low motivation to work, which may also result in a deterioration of relations with the company's business environment.

Effective stress management requires appropriate knowledge, skills and attitudes. The aim of the study was therefore to identify the competencies of employees relevant to stress management today, and the actions employers should take to support their development. In order to achieve this objective, desk research and descriptive analysis were used – an analysis of the literature on the subject and available secondary data was carried out. As a result of the analysis undertaken, three fundamental stress management challenges facing employee teams were identified. For each of these challenges, employees' competencies that need to be improved were identified and related possible actions by employers were highlighted.

## 2. COMPETENCIES AND PSYCHOSOCIAL RISKS AT THE WORKPLACE

There is no single, universally accepted definition of competency in the literature. Most often, however, the concept encompasses knowledge, skills and attitudes expressed in a person's actions and behaviour. "Competence implies the ability to transfer what people know and understand to different contexts, i.e. different aspects of work" (Armstrong 2002). In this perspective, in relation to the workplace, competencies mean dispositions in terms of knowledge, skills and attitudes that enable the performance of professional tasks at an appropriate level (Filipowicz, 2004, 2016), an employee's disposition to behave in a manner consistent with the employer's expectations, their ability to act efficiently and effectively on the job, which leads to specific outcomes, work results or even the ability to achieve high performance and other above-average achievements in a specific area and context of professional activity (Boyatzis, 1982, 2008; Poczowski, 2018). Competencies include general, life, occupational and specialist knowledge, life and occupational skills, as well as psychophysical characteristics such as talents, attitudes, personality, temperament, preferred goals, motives and values (Polanska, 2002; Poczowski 2018). Essentially, these can be viewed from two main perspectives. The American approach emphasises the link between competencies and the specific person, their knowledge, skills, motivation, perception of their social role and self-concepts. Here, competencies are viewed from the perspective of effectiveness in the performance of work related tasks, which depends on characteristics of the specific person performing them. In the British approach, on the other hand, competencies refer to the characteristics of the job rather than the person. They are linked to the job, in the context of task requirements and desired work outcomes, and are thus determined by job positions and roles (Kocór, 2019; Wisniewska, 2021).

In the holistic competency model, the following types are indicated (Le Deist, Winterton, 2005):

- cognitive (knowledge): ability to learn, understand, remember, curiosity about the world, openness, avoidance of stereotypical thinking;
- functional (skills): competent execution of the job, effective work on the job;
- social (behaviour and attitudes): concern the sphere of interaction with other people (empathy, cooperation, conflict resolution, etc.);
- meta-competencies (facilitating acquisition of the other competencies – mentioned above): ability to adapt to change, learn new things and adapt to changing realities, flexibility, coping with stress, recovery.

The aforementioned groups of competencies are currently gaining particular importance in the so-called New Economy, based on the labour market for talent, creativity, creation of innovations and their acceptance, skilful combination of technological and professional competencies, which implies a qualitative change of existing competencies and/or their significant intensification (Krzyminiewska, 2020).

Psychophysical, social (including ethical and civic), analytical and digital competencies should be considered essential in Economy 4.0 (Krzyminiewska, 2020). According to a report by the World Economic Forum, skill sets such as critical thinking and analysis, problem solving, self-management, technology use and development, as well as working with people are increasing in importance today. The demand for management and communication skills is also not falling (World Economic Forum, 2020). With regard to psychosocial risks at the workplace, self-management connected with working with people and problem solving, as identified in the aforementioned report, should be considered particularly relevant. Presenting a list of 15 key skills by 2025, among the skills related to

self-management, the authors of the World Economic Forum report listed active learning and learning strategies, mental resilience in the face of a changing environment, resilience to stress, flexibility and emotional intelligence. Among the skills related to working with people, the report points to the importance of leadership and social influence, as well as persuasion and negotiation. The competency of complex problem solving, included in the third place, would also be of considerable importance for the management of psychosocial risks, especially for managers (World Economic Forum, 2020, p. 36<sup>2</sup>).

### 3. WORKPLACE STRESS – SEVERITY AND CAUSES

The *Post-pandemic occupational health and safety* survey conducted in April/May 2022 in EU member states, including Poland<sup>3</sup> showed that in the last 12 months prior to the survey, 37% of Polish employees experienced work related stress, depression or anxiety (27% on average in the EU), while 62% of employees, almost twice as many as in the EU (37%) experienced general fatigue. A half of Polish employees reported headaches and eyestrain (EU: 34%), 43% of employees complained about pain or other problems related to bones, joints or muscles (EU: 30%), while another work related health problem was reported by 8% of Polish employees (EU: 6%) (EU-OSHA, 2022). Similar results regarding the severity of stress at Polish workplaces were shown by the *Workplace Safety in Poland 2019* survey, which showed that 36% of respondents experienced negative stress at the workplace, rated by them as discouraging and paralysing<sup>4</sup> (“Safe at Work” Coalition, 2019, p. 22).

The frequency of experiencing stress at workplaces in Poland has increased in recent years<sup>5</sup> (HRK, 2021) – see Table 1.

Table 1. Frequency of experiencing workplace stress in Poland in 2020–2021

No.	How often do you feel stressed at your current workplace?	Years (data in %)	
		2020	2021
1	never	7	2
2	several times a day	14	17
3	several times a week	31	25
4	several times a month	24	24
5	several times a year	20	12
6	continuously	4	19

Source: HRK, *Stress at Work. Report 2021*. Access on the internet: <https://hrk.pl/pl/grupa-hrk/aktualnosci/raport-stres-w-pracy-2021>.

The most important workplace stressors reported in 2021 included excessive responsibilities (54%), tight deadlines for tasks (48%), the behaviour of immediate superior (47%), unclear division of tasks (46%), unclear communication between management and

<sup>2</sup> The report is based on the forecasts of business leaders, typically heads of HR, individuals responsible for the strategy, representing almost 300 global companies with a combined workforce of 8 million employees.

<sup>3</sup> For the OSH Pulse 2022 survey in Poland, 1009 telephone interviews were conducted with employees.

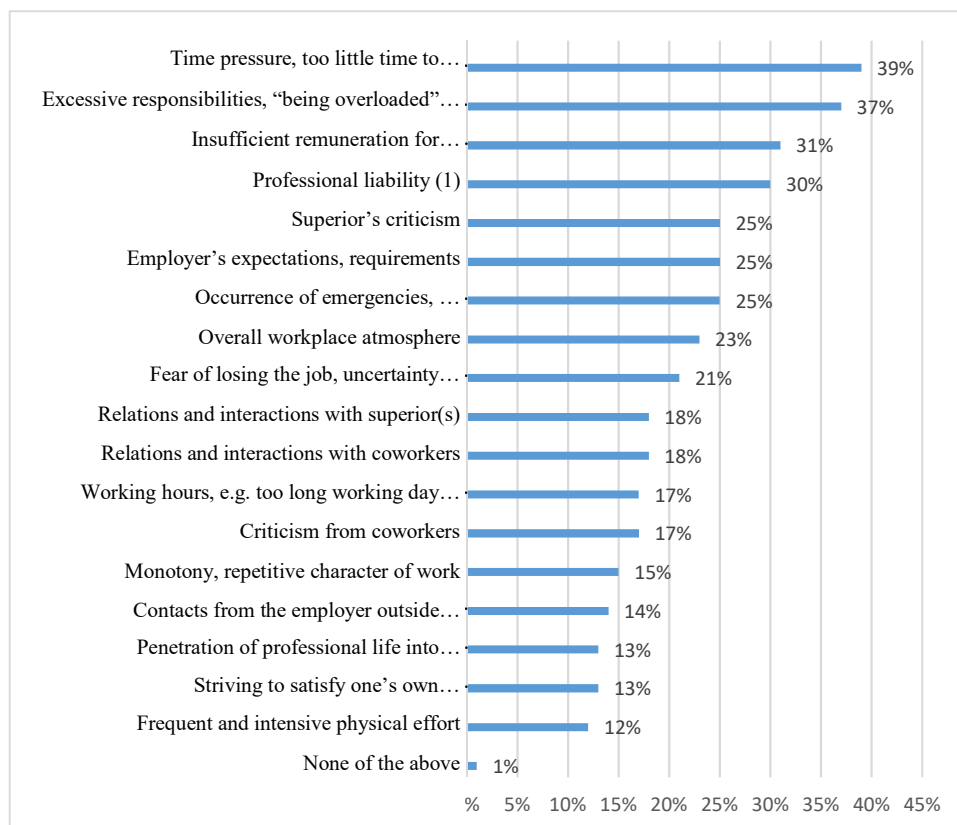
<sup>4</sup> The survey was carried out during the period of 29.07.–09.08.2019; 1517 interviews were conducted.

<sup>5</sup> For the HRK *Stress at Work. Report 2021* survey, 800 questionnaires were collected.

employees (33%), unsatisfactory levels of remuneration (30%) and a bad team atmosphere (28%). As many as 56% of the employees feared a sudden loss of their job and subsistence. The following fears (see HRK, 2021) were also cited among the stress factors for employees in 2021:

- sudden loss of work and subsistence;
- lack of sufficient competence to carry out tasks;
- making a mistake and resulting unpleasant consequences;
- lack of development;
- professional burnout.

The *Workplace Safety in Poland 2019* report identified similar causes of workplace stress: excessive responsibilities, time pressure, insufficient remuneration, behaviour of the immediate superior or professional liability (“Safe at Work” Coalition, 2019) – see Figure 1.



\* percentage of responses; N= 14/9; (1) – fear of causing harm, loss, damage; (2) – contact by employer, superior outside the working hours; (3) – penetration of professional into private, family life; (4) – e.g. desire for promotion.

Figure 1. Factors causing the highest workplace stress in Poland in 2019\*

Source: (“Safe at Work” Coalition, *Work safety in Poland 2019. Bullying, depression, stress at the workplace*, 2019).

A survey among European workplaces on new and emerging risks showed that psychosocial risks involve more challenges and are more difficult to manage than “traditional” OSH risks (EU-OSHA, 2019). Analysing the data presented in this section of the paper on the magnitude, intensity and determinants of workplace stress in Poland, one should be inclined towards similar conclusions. The challenges faced by managers are undoubtedly due to the complexity of the causes underpinning employee stress and the intensity of modern stressor impact.

#### 4. MANAGING EMPLOYEE STRESS AS A CHALLENGE TO EMPLOYERS

The survey on stress and mental health at the workplace showed – through the eyes of employees – the shortcomings of employers in the area of stress management in Poland compared to the European Union (see Table 2).

Table 2. Stress management as an element of OSH policy at workplaces in Poland compared to the European Union in 2022 – employers' actions as assessed by employees

No.	Questions	Respondents' answers: Poland/European Union
1	Are any of the following initiatives available at your workplace? (% of “YES” answers)	<ul style="list-style-type: none"> <li>– Awareness raising or other activities to present information on occupational health and safety: PL 71% / EU 59%;</li> <li>– Access to counselling or psychological support: PL 35% / EU 38%;</li> <li>– Information and training on wellbeing and stress management: PL 37% / EU 42%;</li> <li>– Consultation with employees on stressful aspects of work: PL 41% / EU 43%.</li> </ul>
2	Do you agree or disagree with the following statements? (% of “AGREE” answers)	<ul style="list-style-type: none"> <li>– Safety issues are dealt with efficiently at my workplace: PL 83% / EU 81%;</li> <li>– My workplace has good measures in place to protect the health of employees: PL 83% / EU 82%;</li> <li>– At my workplace, employees are encouraged to report health and safety issues: PL 76% / EU 79%.</li> </ul>

Source: (EU-OSHA, Poland: OSH Pulse 2022: OSH in post-pandemic workplaces, <https://osha.europa.eu/en/publications/poland-osh-pulse-2022-osh-post-pandemic-workplaces>).

Although the answers to the questions in section 2 of Table 2 may seem optimistic in relation to the Polish reality, the results of another survey may suggest that occupational safety and health was narrowly understood by employers and employees, at most workplaces without including so-called psychosocial risks. Indeed, issues related to psychosocial factors and risks were raised with employees by only 40% of employers or direct superiors and, moreover, not all of them referred to the topic of stress and pressure at work – only 15.6% of employers or direct superiors discussed it with employees (“Safe at Work” Coalition, 2019, p. 16). The HRK study *Stress at Work. Report 2021*, on the other hand, shows that – according to employees – in recent years (2020-2021), almost 40% of employers did not take any measures in the area of employee stress management, 27% took such initiatives to a minimal extent and only 19% of employers countered stress to a good and high level (see Table 3).



Table 3. Assessment of employers' actions in the area of employee stress management in Poland in 2020–2021

No.	Quality of action in the area of employee stress management	Years (data in %)	
		2020	2021
1	No action	37	39
2	Activities at a low level	25	27
3	Activities at medium level	18	15
4	Good performance	12	13
5	High-level activities	8	6

Source: (HRK, Stress at Work. Report 2021, <https://hrk.pl/pl/grupa-hrk/aktualnosci/raport-stres-w-pracy-2021>).

The types of stress management measures taken by employers in 2021 are presented in Table 4.

Table 4. Employers' actions in the area of employee stress management in Poland in 2021

No.	Activities in the area of employee stress management	2021 (data in %)
1	stress management training	24
2	a clear procedure for reporting unacceptable actions, e.g. bullying	21
3	a medical package including psychologist appointments	20
4	physical activities	15
5	adapting the responsibilities of specific staff to their knowledge, skills, physical, intellectual and emotional capacities	15
6	support in difficult life situations (e.g. interest-free or non-repayable loan)	14
7	clear and comprehensible communication between management and employees	12
8	providing employees with a support hotline	9

Source: (HRK, Stress at Work. Report 2021, <https://hrk.pl/pl/grupa-hrk/aktualnosci/raport-stres-w-pracy-2021>).

Due to a stressful atmosphere at work, 28% of employees surveyed in 2021 had used a psychologist at least once and 21% had considered doing so (HRK, 2021). In turn, the *Mental Health in the Work Environment*<sup>6</sup> report shows that the vast majority of employees surveyed in 2021 expressed the opinion that less stress at the company promotes more productive work (78.8% of *definitely yes* and 16.8% *rather yes* answers) and perceived a correlation between mental health and absence from work (87.5% of respondents). 77% of those surveyed said that employees were afraid to talk about mental health problems for fear of being rejected by colleagues or treated worse. At the same time, only 20.3% of

<sup>6</sup> The survey was conducted on a sample of 1,000 respondents in April 2021 in two research groups: 22.7% of employers and 77.3% of employees, as part of the national education and information campaign "Understand. Feel. Act!", organised by the Employers of the Republic of Poland organisation and Grupa ArteMis Sp. z o.o.

respondents felt that their employer provided psychological support to employees, while 59% of employees surveyed said they would like to receive guidance from their employer on how to cope with stress and take care of their mental condition (Employers of Poland, ArteMis, 2021).

To summarise the considerations in this part of the study, employers in Poland were far from tackling psychosocial risks in a sufficient way, while OSH issues were mainly understood in relation to physical working conditions. Stress management practices were predominantly absent or ineffective. An overwhelming share of employees did not have access to training and information on coping with workplace stress and did not receive ongoing support in stressful situations. Therefore, it appears that a significant share of employers did not analyse their employees' working conditions in terms of impact of occupational stressors on the company's functioning.

## 5. DEVELOPING COMPETENCIES TO SUPPORT EFFECTIVE MANAGEMENT OF WORK RELATED STRESS – CONCLUSIONS

Stress management consists of organized activities conducive to its reduction or elimination from the work environment, aimed at helping and improving employees' methods of coping with stress (Molek-Winiarska, 2010). It should include first, second and third degree prevention, i.e. removal of potential causes of stress, ongoing modification of employees' reactions to emerging stressful situations and reduction of the level of negative effects of stress (both at the individual and organizational level) that appeared as a result of ineffective control at the first and second stages (Quick J.C., Quick J.D., Nelson, Hurrell, 1997).

Based on the considerations undertaken on the competencies as well as magnitude, determinants and effects of workplace stress, the most important stress management challenges facing managers and work teams can be considered to be the following:

- the need to adapt to the requirements of a changing environment;
- coping with quantitative and qualitative work overload;
- care for interpersonal relations and employee health.

Readiness to meet these challenges implies the need to develop and strengthen relevant competencies (understood as knowledge, skills and attitudes) regarding stress management (see Table 5). The development of these competencies, both by managers and staff teams, should be embedded in the developing and existing workplace stress programmes.

Table 5. Stress management competencies useful for the challenges faced by work teams

Challenges	Knowledge	Skills	Attitudes
the need to adapt to the requirements of a changing environment (external and internal)	concerning: current condition of the company and its market position, requirements of the company's external environment which it must cope with, labour market, personality characteristics conducive to career success;	seeking and analysing information and drawing conclusions, critical thinking, ability to learn new things, independent decision making, creativity, innovation;	flexibility – adaptability, willingness to challenge one's previous knowledge and ways of doing things, initiative, proactivity, reflexivity – realistic assessment of the employee's (own) aspirations, capabilities, realistic optimism, hope, inner direction;

Table 5 (cont.). Stress management competencies useful for the challenges faced by work teams

Challenges	Knowledge	Skills	Attitudes
coping with quantitative and qualitative work overload	concerning: time management, work schedule, division of duties and responsibilities;	work organisation and time management (planning, meeting deadlines, taking on commitments);	reflexivity – realistic assessment of the employee's (own) abilities and skills, openness to finding integrative solutions to existing problems, assertiveness, self-motivation, responsibility;
care for interpersonal relations and staff health	concerning: stressors, symptoms and effects of stress at the workplace and methods of stress management, principles of interpersonal communication, cooperation, conflict resolution, health promotion, opportunities to obtain / ways to provide support in stressful situations, company anti-discrimination and anti-bullying policies, workaholism and burnout.	recognising sources and symptoms of stress, recognising the effects of stress, interpersonal communication, conflict resolution, dialogue skills, persuasion skills, negotiation skills, cooperation, giving and receiving support in stressful situations, using methods to overcome stress.	reflexivity – realistic assessment of the employee's (own) behaviour and capabilities, mental resilience, inner direction, emotional stability, empathy, sharing knowledge and experience, seeking/willingness to give advice and support, assertiveness, emotional intelligence, openness to intergenerational, cultural diversity, etc.

Source: own elaboration and reflections based on: ("Safe at Work" Coalition, *Work safety in Poland 2019. Bullying, depression, stress at the workplace*, 2019, Employers of the Republic of Poland, ArteMis, *Mental health in the work environment*, 2021; Krzyminiewska, 2020; HRK, *Stress at Work. Report 2021*, 2021, <https://hrk.pl/pl/grupa-hrk/aktualnosci/raport-stres-w-pracy-2021>).

The desired competencies may be shaped and improved as part of an employee stress management programme, through the following initiatives and activities:

- internal and external training (theory and practice) on employee stress management, management of emotions, principles of ethical negotiations; interpersonal communication (including – with difficult employees, customers, etc.), time management, team management, principles of teamwork;
- dialogue between superiors and employees, discussions, consultations on stressful aspects of work, teambuilding meetings;
- health education workshops (promoting healthy lifestyle), relaxation training, group workshops with a psychologist, sports events for employees;
- providing employees with access to support from a psychologist, psychiatrist (e.g. in case of depression).

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## ACTIVITIES OF A MUNICIPALITY IN THE FIELD OF LOCAL ENTREPRENEURSHIP DEVELOPMENT: A CASE STUDY OF THE RZESZÓW FUNCTIONAL URBAN AREA<sup>3</sup>

This article evaluates the actions of local authorities in the municipalities of the Rzeszów Functional Urban Area (Rzeszów FUA) in terms of development of entrepreneurship potential from 2010 to 2021. First, it describes local economic activity and the labor market; it then introduces the synthetic measure that presents the level of entrepreneurship potential in the municipalities of the Rzeszów FUA. The municipalities are then classified into several groups depending on their levels of entrepreneurship potential. Actions pursued by the authorities of individual municipalities in the field of entrepreneurship development are also analyzed. The research demonstrates that the development of entrepreneurship is very intensive; it also identifies disproportions in the development of entrepreneurship between various municipalities.

**Keywords:** Rzeszów Functional Urban Area, entrepreneurship potential, synthetic measure, development strategies, local authority.

### 1. INTRODUCTION

Over the past years, there has been a considerable weakening of the processes of economic, social and cultural development worldwide. Such a slowdown affects the economic activity which is demonstrated by disruptions to financial liquidity and leads to a decrease in production, reduced employment and investment activity, reduction in financial resources of enterprises and the population, and consequently to deterioration of living conditions (Zioło, 2011). This situation leads to lower incomes, threat of unemployment, and limited lending action by the banks, especially with regard to mortgage loans. The economic slowdown and its consequences are evident in all fields of life and

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also affect spatial systems of various scales, including suburbanisation processes (Adamczyk, 2012).

Entrepreneurship is an important factor contributing to the social and economic development of various regions, which improves competitiveness of the regions.

In the economic terms, entrepreneurship is treated as the fourth factor of production, manifested by actions in the area of streamlining and creative use of modern solutions that bring better results from applying other factors of economic development. It plays a crucial part in the effective allocation of existing resources, as well as creation of new, more perfect resources (Sheiko, Kolodii, 2020; Kochmańska, 2007).

Increasingly more often, economic affairs have been the focal point of the strategy implemented on a local and regional scale. Thus it is becoming necessary for the local authorities to take measures to stimulate and develop entrepreneurship. This is why the impact on the local entrepreneurship should be the priority of the local policy of regional development pursued by the local government authorities (Poźniak, 2013).

In the light of these premises, the purpose of this article is to evaluate actions of local authorities in the municipalities of the Rzeszów Functional Urban Area (Rzeszów FUA) in terms of development of entrepreneurship potential.

The goals of the article were achieved in the following stages:

- description of the economic activity and the labour market in the municipalities of Rzeszów FUA;
- determination of the value of the synthetic measure that defines the level of development of entrepreneurship in municipalities of Rzeszów FUA from 2010 to 2021;
- classification of municipalities in Rzeszów FUA into groups with the similar level of performance of the phenomenon being examined;
- evaluation of the policy pursued by authorities of individual municipalities in the field of entrepreneurship.

The analysed area is the Rzeszów Functional Urban Area. It was delimited as part of the work carried out by the Board of the Podkarpackie Voivodship in agreement with the then Ministry of Regional Development. As a result, territorial limits of the functional urban area covering 13 municipalities in the poviats of Rzeszów, Łańcut and Strzyżów were delineated. These municipalities signed the agreement in 2014, and in 2015 became members of the Association of the Rzeszów Functional Urban Area. On 17 December 2021, with the decision of Delegates of the Association, two more municipalities became members of the Rzeszów Functional Urban Area, namely Błażowa and Hyżne<sup>4</sup>. At present, Rzeszów FUA consists of the City of Rzeszów as its core and 14 municipalities (Statute of the Rzeszów FUA Association of 17 December 2021). Given the analysed time-frame (2010-2021) the municipalities which became members of the Rzeszów FUA in December 2021 are not considered in the research. The analysed municipalities which are members of the Rzeszów FUA are shown in Figure 1.

The research was also based on the quantitative and qualitative evaluation, and the Local Data Bank of the Central Statistical Office was the main source of data.

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<sup>4</sup> Statute of the Rzeszów FUA Association of 17 December 2021. Access on the internet: <https://rof.org.pl/dokumenty-rof/>



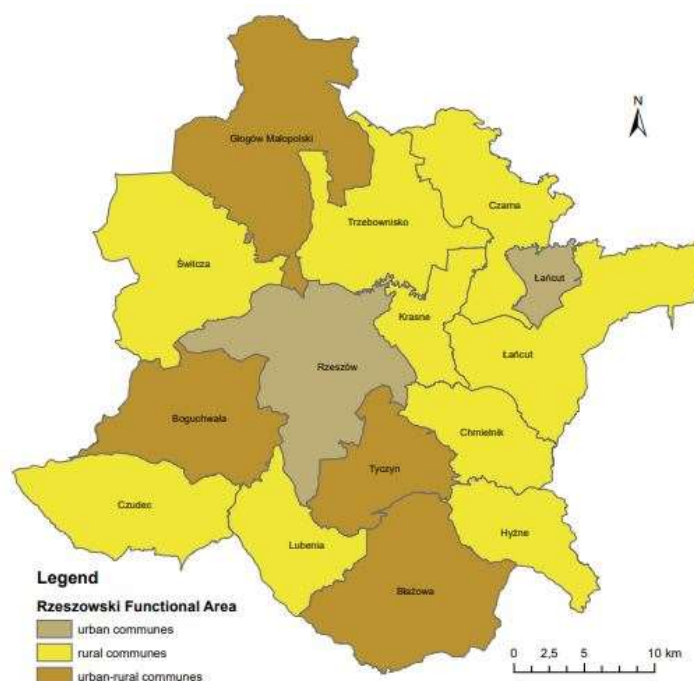


Figure 1. Municipalities of the Rzeszów Functional Urban Area

Source: own study.

## 2. ECONOMIC ACTIVITY AND LABOUR MARKET IN THE AREA OF THE RZESZÓW FUNCTIONAL URBAN AREA

Entrepreneurship is an essential factor that hinders unfavourable social and economic processes, such as unemployment, exclusion and marginalization (Barwińska-Małajowicz, Ślusarczyk, 2020).

The establishment and development of various enterprises which carry on economic activities constitutes the institutional dimension of entrepreneurship. Economic entities operating in the municipalities offer employment to residents and provide positive stimuli for the economic development (Musiał-Malago, 2017).

At the end of 2021 there were 49,481 national economy entities registered in the entire Rzeszów FUA (16,203 entities more compared to 2010, i.e. nearly 49% more). The highest increase was recorded in the rural municipality of Trzebowńsko (69%). Just as high increase of 50-55% was recorded in Boguchwała, Rzeszów and Chmielnik. The lowest increase in the number of economic entities among Rzeszów FUA municipalities was recorded in Łańcut.

The degree of entrepreneurship development in the municipalities was presented with the entrepreneurship indicator expressed as the number of economic entities registered per 10,000 inhabitants at production age (Kałuża, 2011). This indicator is diversified in the analysed area. In 2021, Rzeszów had the highest entrepreneurship indicator (2773). Out of suburban municipalities which belonged to the Rzeszów FUA, the urban municipality of Łańcut also had a high indicator value (2,342). In other municipalities, the indicator ranged

from 1,200 to 1,700 entities per 10,000 inhabitants at production age. The lowest entrepreneurship indicator on the scale of the entire functional urban area was recorded for the municipality of Lubenia (1,019).

Thus, it can be concluded that the entrepreneurship indicator gradually increased in the Rzeszów FUA over the analysed years. The greatest growth rate for this indicator was recorded in Rzeszów (55.4%), and the municipality of Trzebowńsko (49.2%) and Tyczyn (47.6%). This demonstrates the high potential of such municipalities and the changes in functions performed by these areas. In the remaining municipalities, the indicator ranged from 35% to 48%. The lowest increase in the analysed period, i.e. 17%, was recorded in the municipality of Krasne. The growth rate of changes in the number of entities of the national economy in the REGON register shows an increase in the economic activity of inhabitants living in the Rzeszów functional urban area and their growing entrepreneurship.

In 2021, there were 8,165 companies in the analysed area. Companies accounted for approx. 17% of all entities operating in the Rzeszów FUA. Among companies operating in the Rzeszów FUA, 12.4% were companies with foreign capital. In 2021, besides Rzeszów (6,691), companies were most frequently established in the municipality of Trzebowńsko (349), Głogów Małopolski (233) and the urban municipality of Łańcut (221). The lowest number of companies was registered in the municipality of Lubenia (26). In the remaining municipalities of the Rzeszów FUA the number of companies ranged from 32 in the municipality of Chmielnik to 124 companies in Boguchwała. In the analysed period, the highest increase in the number of companies was recorded in Rzeszów (more than 150%).

Another indicator which demonstrates the economic activity and development of entrepreneurship of the municipality is the level of local entrepreneurship expressed with the number of natural persons who carry on economic activities per 1,000 inhabitants. This indicator demonstrates entrepreneurship of inhabitants, their activity and creativity. In 2021 natural persons who carried on economic activities accounted for 15% of the total population at production age in the Rzeszów FUA. When analysing relations of entrepreneurship of inhabitants compared to their number, in 2021 the most favourable situation was in Rzeszów and Łańcut (respectively 103 and 99 persons per 1,000 inhabitants carried on their own economic activities). A substantial number of people carried on their own economic activities in municipalities of Trzebowńsko, Czarna, Boguchwała, Głogów Małopolski, Tyczyn and Krasne (74 to 86 persons). The lowest indicator was recorded for the municipalities of Świlcza (68), Łańcut (rural municipality) (66), Czudec (65), Chmielnik (61) and Lubenia (49 persons per 1,000 inhabitants).

The industry structure of entities of the national economy is quite interesting. Despite the fact that the group of enterprises in the municipalities of the Rzeszów FUA is diverse, there are some dominant operating areas. The most frequent type of activities in the area of the Rzeszów FUA is wholesale and retail, repair of cars and motorcycles. In 2021, approx. 20% of companies operated in this sector. It is a form of services that dominated in each locality of the analysed area. The highest number of economic entities registered in this section was found in Rzeszów, Łańcut and the urban municipality of Trzebowńsko. Services are one of the most dynamic sectors of the economy that adjusts quite quickly to the surrounding changes and responds quickly to new trends by adopting technological innovations and new knowledge (Kuciński, 2010). Nearly 14% of entities registered in the Rzeszów FUA fell into M section that accounted for professional scientific and technical activities, while more than 11% of the total number of entities carried on activities in the construction industry. These sectors were followed by industrial processing, information

and communication, transport and warehouse management. Entities registered in other sections of the Polish Classification of Economic Activities in 2021 accounted for 34%.

SMEs account for the vast majority of economic entities entered into the REGON system and operating in the Rzeszów FUA municipalities. An SME is defined as an economic entity employing up to 250 employees. SMEs are regularly mentioned as the main driving force of the economic growth and a sign of healthy competition in the economy. A balanced development of this sector is essential for the social and economic development of any state, since a group of SMEs creates the most workplaces in the market, is innovative and involved, and this often leads to development of new, advanced technologies. The SME sector has been growing and has been prosperous in Poland; it is one of the key sectors that stimulate the development of the Polish economy and its processes (Nesterowicz, 2020). Table 1 presents the structure of enterprises by size in Rzeszów FUA municipalities.

Table 1. The structure of enterprises by size in Rzeszów FUA municipalities in 2021

Municipality in Rzeszów FUA (RFUA)	0–9		10–49		50–249		SME Sector		More than 250	
	Nr*	%	Nr*	%	Nr*	%	Nr*	%	Nr*	%
Boguchwała	1947	97,5	44	2,2	4	0,2	1995	99,9	2	0,10
Chmielnik	514	96,4	16	3,0	3	0,6	533	100,0	0	0,00
Czarna	1059	97,1	30	2,7	2	0,2	1091	100,0	0	0,0
Czudec	889	96,6	27	2,9	4	0,4	920	100,0	0	0,00
Głogów Młp.	1874	96,0	53	2,7	22	1,1	1949	99,85	3	0,15
Krasne	1253	97,1	32	2,5	4	0,3	1289	99,92	1	0,08
Lubenia	384	95,8	16	4,0	1	0,2	401	100,0	0	0,00
Łańcut**	2279	96,2	67	2,8	23	1,0	2369	99,96	1	0,04
Łańcut	1631	97,3	39	2,3	6	0,4	1676	99,94	1	0,06
Świlcza	1315	96,6	40	2,9	6	0,4	1361	100,0	0	0,00
Trzebownisko	2218	96,1	72	3,1	13	0,6	2303	99,83	4	0,17
Tyczyn	1060	96,4	33	3,0	7	0,6	1100	100,0	0	0,00
Rzeszów	31426	96,7	802	2,5	206	0,6	4134	99,85	48	0,15
<b>RFUA</b>	<b>47 849</b>	<b>96,7</b>	<b>1271</b>	<b>2,6</b>	<b>301</b>	<b>0,6</b>	<b>49 421</b>	<b>99,88</b>	<b>60</b>	<b>0,12</b>

Nr\* Number of employees

\*\* Urban municipality

Source: own work based on data from the Central Statistical Office and the Local Data Bank.

The data in Table 1 show that the smallest entities, including micro-companies which employ up to 9 employees, account for the majority of enterprises. They account for 95.8% (Lubenia) to 97.5% (Boguchwała) of all enterprises. Small enterprises that employ from 10 to 49 persons account for 2.2% (Boguchwała) to 4% (Lubenia) of all economic entities operating in municipalities of the Rzeszów FUA. The share of medium-sized enterprises ranges from 0.2% (Boguchwała, Czarna, Lubenia) to 1.1% (Głogów Małopolski). Individual large enterprises are located in selected municipalities of the Rzeszów FUA. Most of them operate in the Rzeszów area. This means that the SME sector accounts basically for 100% of all economic entities operating in the Rzeszów Functional Urban Area. A 'good' entrepreneurship climate in a region is a factor that stimulates the

population to be active in launching new projects that contribute to the improvement in the living standard and conditions for the entire local community.

The size and structure of the labour market is a major determinant of the economic development as it conditions local entrepreneurship and contributes to investment attractiveness of the spatial unit for third parties. Key parameters of the labour market include the employment size and unemployment scale.

The unemployment occurs when demand for the workforce is lower than supply. Rzeszów is the centre that offers the most jobs in the Rzeszów FUA. In 2021, it accounted for approx. 71% of all employed. In three municipalities of Trzebownisko, Łańcut (urban municipality) and Głogów Małopolski, the employed accounted for 5 to 8% of all employed in the Rzeszów FUA. The remaining municipalities accounted for less than 2% of the employed.

From 2010 to 2021 the number of the employed in Rzeszów FUA municipalities increased by 24,302 persons. In 2021, there were 346 employed per each 1,000 persons in the Rzeszów FUA. Compared to 2010, the number of the employed per 1,000 inhabitants increased by 40 persons (i.e. 13%) and fell in the range from 43 to 471.

Based on the analyses conducted, the highest number of the employed compared to the number of inhabitants was in Rzeszów. The municipalities of Trzebownisko and Łańcut (urban municipality) had equally strong developing labour market with respectively 445 and 401 of the employed per 1,000 inhabitants. The municipality of Głogów Małopolski (348) also stood out in terms of this indicator.

When analysing the level of unemployment registered in the Rzeszów FUA from 2010 to 2021 it should be noted that the situation in the labour market improved considerably in all municipalities. At the end of 2021, there were 12,489 unemployed registered in the Rzeszów FUA municipalities, i.e. approx. 29% fewer than in 2010. The drop in the number of the unemployed compared to the base year can be seen in all municipalities of the functional urban area in the analysed area. The largest drop in the number of the unemployed, more than 40%, was recorded for the municipality of Chmielnik (approx. 45%) and urban municipality of Łańcut (42%), while the smallest drop was recorded for the municipality of Krasne (18.3%).

The situation in the labour market is very clearly reflected by the unemployment rate defined as the share of the registered unemployed in the population at the production age (Madras-Kobus, Rogowski, 2013). In 2021, the lowest rate was in the municipalities of Chmielnik, Trzebownisko, Głogów Małopolski and Boguchwała (below 5%). The municipality of Czudec (10.1%) had the highest rate of the unemployed in the population at the production age. Such a high indicator was also recorded in the municipality of Czarna (7.6%). In other municipalities, the share of the registered unemployed in the population at the production age. ranged from 5% in the municipality of Świlcza to 6.4% in the municipality of Łańcut.

Suburbanisation has considerably affected the situation in the labour market in the functional urban area. This intensifying phenomenon and the spontaneous growth of the city generates excessive commute times. A change of the place of domicile does not always involve a change of the place of employment. Inhabitants of municipalities that directly neighbour with the city or who live in its immediate neighbourhood increase the group of the commuting people from outside their place of domicile. This increases the number of daily commutes of multiple inhabitants of municipalities that are close to the city. This proves strong relations between the urban centre and the areas located nearby. There is also

an evident growth in communities from the cities to the suburban zone (Palak 2013; Musiał-Malago', 2015).

### 3. METHODOLOGICAL FOUNDATIONS OF THE TESTS CONDUCTED

In order to assess the potential of entrepreneurship of municipalities in the Rzeszów FUA, a synthetic indicator was developed and calculated on the basis of the linear ordering method, the so-called standardized sums method. The test methodology consisted of the following steps:

- Selection of diagnostic variables – the comparative analysis was based on variables  $X_j$  ( $j = 1, 2, \dots, m$ ) that describe entrepreneurship and the labour market
- Variable standardization – ensures comparability and allows to calculate indices for Rzeszów FUA municipalities being analysed (Zeliaś, 2000).

$$t_{ij} = \frac{x_{ij} - x_{min}}{x_{max} - x_{min}} \quad \text{for the stimulant}$$

$$t_{ij} = \frac{x_{max} - x_{ij}}{x_{max} - x_{min}} \quad \text{for the destimulant}$$

where:  $t_{ij}$  – the standardized value of a  $j$ th variable for the  $i$ th object,  $x_{ij}$  – the value of a  $j$ th variable for the  $i$ th object,  $x_{min}$  – minimum value of variable  $j$ ,  $x_{max}$  – maximum value of variable  $j$ .

Standardization was carried out for “object-periods”, i.e.  $\min_i\{x_{ij}\}$ ,  $\max_i\{x_{ij}\}$ , and  $t_{ij}$  values were identified for all studied years.

- Calculation of the synthetic indicator (standardized sums method)

$$p_i = \sum_{j=1}^m t_{ij} \quad (\text{formula 1})$$

where:  $p_i$  – synthetic measure,  $t_{ij}$  – the standardized value of a  $j$ th variable for the  $i$ th object.

The synthetic measure takes values from the [0,1] range. The higher the general synthetic measure value, the higher the level of entrepreneurship potential development

- Determination of the level class for the development of the entrepreneurship potential in Rzeszów FUA municipalities, according to the following formulas (Nowak, 1990):

Group 1: $p_i \geq \bar{p}_i + S_i$	high level
Group 2: $\bar{p}_i + S_i > p_i \geq \bar{p}_i$	medium-high level
Group 3: $\bar{p}_i > p_i \geq \bar{p}_i - S_i$	medium-low level
Group 4: $p_i < \bar{p}_i - S_i$	low level

where:  $\bar{p}_i$  – the mean value of the synthetic measure,  $S_i$  – standard deviation of the synthetic measure.

#### 4. RESEARCH RESULTS

Based on the analysis of available data from the Central Statistical Office at the level of municipalities, a starting set of variables describing entrepreneurship and labour market was determined for entities in the Rzeszów FUA. The set of diagnostic variables presented in Table 2 was used for the test. Among indicators selected, the share of registered unemployed in the population at the production age was deemed a destimulant, while all other variables were deemed stimulants.

Table 2. Diagnostic variables that describe entrepreneurship and labour market in the Rzeszów FUA

Diagnostic variables	$X_j$	Minimum value		Maximum value	
		2010	2021	2010	2021
Economic entities per 10,000 inhabitants at the production age	$X_1$	723.9	1,018.5	1,784.8	2,772.8
Companies including companies with foreign capital	$X_2$	0.0	0.0	287.0	913.0
Natural persons who carry on economic activities per 1,000 inhabitants	$X_3$	38.0	49.0	8.0	103.0
Employed per 1,000 of the total population	$X_4$	44.0	43.0	449.0	471.0
Share of the registered unemployed in the population at the production age	$X_5$	6.9	4.2	15	10.1

Source: own work based on data from the Central Statistical Office and the Local Data Bank.

In order to ensure comparability of data in the analysed period, the calculations were based on object-periods. Based on the synthetic indicators calculated (formula 1), the municipalities were classified by the level of the analysed phenomenon into four typological groups. Group I includes municipalities with the highest synthetic indicator, while group IV includes entities with the lowest indicator. Groups II and III point to municipalities with low and medium level of development of the entrepreneurship potential.

Table 3 presents the value of calculated synthetic indicator, assigned to the relevant group for municipalities in the Rzeszów Functional Urban Area.

The spatial analysis of the analysed municipalities demonstrated that municipalities in the Rzeszów FUA could be divided into four groups in 2010. Rzeszów definitely ranked the highest in terms of entrepreneurship development. The five lowest rated municipalities in the ranking (class IV) include: Czudec, Lubenia, Czarna, rural municipality of Łańcut and Chmielnik. In 2021 the situation improved. None of Rzeszów FUA municipalities fell into the lowest group. Rzeszów also ranked the highest in terms of the entrepreneurship potential. It was followed by the urban municipality of Łańcut and Trzebowńsko. Group II included four municipalities, i.e. Głogów Małopolski, Krasne, Tyczyn and Boguchwała. Group III was made up of six municipalities, with the lowest indicator assigned to the municipality of Lubenia. The synthetic indicator increased for all the municipalities of the Rzeszów functional urban area from 2010 to 2021.

Table 3. Classification of municipalities in the Rzeszów FUA in 2010 and 2021

Municipality in Rzeszów FUA	value of the synthetic indicator in 2010	group	Municipality in Rzeszów FUA	value of the synthetic indicator in 2021	group
Rzeszów	0,65	I	Rzeszów	0,98	I
Łańcut**	0,48	II	Łańcut**	0,68	
Krasne	0,40		Trzebowńsko	0,59	
Głogów Młp.	0,36	III	Głogów Młp.	0,55	II
Tyczyn	0,30		Krasne	0,49	
Boguchwała	0,29		Tyczyn	0,44	
Trzebowńsko	0,29		Boguchwała	0,42	
Świlcza	0,24		Świlcza	0,37	
Chmielnik	0,19	IV	Czarna	0,37	III
Łańcut*	0,18		Chmielnik	0,36	
Czarna	0,18		Łańcut*	0,33	
Lubenia	0,10		Czudec	0,28	
Czudec	0,07		Lubenia	0,23	

\* Rural municipality.

\*\* Urban municipality.

Source: own work based on data from the Central Statistical Office and the Local Data Bank.

## 5. MUNICIPALITY POLICY ON ENTREPRENEURSHIP SUPPORT

A proper policy of the municipality is essential for the development of entrepreneurship. Entrepreneurship must be properly stimulated with conditions that promote the intention to take up economic activities, and then to foster commencement and carrying on economic activities (Kuciński, 2010). Thus it is necessary to take necessary steps to develop favourable conditions for taking up and carrying on economic activities, as well as actions that promote development of the existing enterprises. It is mostly local government authorities that are responsible for taking such steps (Grzebyk, Pierścieniak, 2021; Płaziak, Rachwał, 2015).

Each Polish municipality has a certain economic potential, with the growing workforce base and smaller or larger group of entrepreneurial people who may utilize the existing potential given favourable circumstances. The use of this potential may result in reversal of unfavourable economic trends in the operating area of the local government unit. It may be said that the local authority should perform a vital role in shaping the economic plane of local development since, in accordance with the idea of local government, it is tasked with controlling the development of local economy. Actions of local government municipalities in this area intend to alleviate shortcomings of local markets and improve their relations with supra-local markets and correct negative structural adjustments in local markets so that the municipality enters the long-term path of restructuring and dynamic economic growth (Michałowski, Pawłowski, 2004; Grzebyk, 2012).

The economic development of the Rzeszów FUA is related to acquisition of investors, thus the local authorities, in order to support entrepreneurship, seek to provide service infrastructure and prepare areas for investments, by creating Economic Activity Zones

(SAG)<sup>5</sup>. In addition, local government authorities create or support establishment and operation of units which make up business-related infrastructure<sup>6</sup>, whose activities contribute to investment attractiveness and thus the economic potential, such as training centres, technology transfer centres, technology parks, entrepreneurship incubators, clusters, agencies, economic chambers, career offices, etc. The effective use of the synergy between local authorities, the science sector and business-related institutions is an important factor that contributes to the economic potential. Most of the institutions operating in the business support area are established in Rzeszów, such as the Business Promotion Centre, Business Support Center at the Association for the Promotion of Entrepreneurship, Chamber of Industry and Commerce, Chamber of Crafts, Rzeszów Regional Development Agency, Aviation Valley Association of the Group of Aviation Industry Enterprises, KOMCAST Eastern Foundry Cluster, etc. There are also entities which support the entrepreneurship sector in the remaining area of the Rzeszów FUA, such as the "Trygon – Development and Innovation" Local Action Group Association in the municipality of Boguchwała, Lubenia and Świlcza, Podkarpackie Centre for Agricultural Consulting in Boguchwała, LGD "C.K. Podkarpacie" in Czudec or the Technological Incubator with the Support Centre for the Podkarpackie Science and Technology Park and AEROPOLIS Podkarpackie Science and Technology Park in the municipality of Trzebownisko and Głogów Małopolski.

The development strategy is an important instrument used for current decisions and actions of local authorities and for informing the local entities about the plans of a given local government unit (Grzebyk, Hedesz, 2022). It is the foundation of entrepreneurship growth.

In order to examine if the local authorities address the issue of entrepreneurship support in their development strategies, such documents were analysed. Municipality development strategies were analysed in terms of clauses related to entrepreneurship support. The analysed element was:

- whether factors related to entrepreneurship were identified in the strengths or weaknesses,
- identification if the vision and mission formulated in the strategy provide for entrepreneurship support,
- checking if the strategy provides for operationalization of development directions defined in the strategy, i.e. key tasks, directions of intervention, tasks to be performed, etc.

Results of analysis of municipality development strategy are presented in table 4. If individual elements of the strategy that were analysed featured provisions on entrepreneurship support, '+' was assigned, otherwise '-' was assigned.

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<sup>5</sup> SAGs are areas established and functioning on the basis of the act, delineated and prepared for investments, which meet demand from the potential investors (Stanienda, 2011).

<sup>6</sup> Business-related institutions include entities with material and technical resources, human resources and competencies necessary to provide services to the SME sector. Tasks of business-related institutions include supporting the entrepreneurship, actions in favour of persons who are starting their economic activities or help provided to newly established enterprises.



Table 4. Evaluation of the strategy of local development of municipalities which are part of Rzeszów FUA in terms of entrepreneurship support

Municipality	type of municipality	strengths/weaknesses	vision	mission	development directions/objectives
Boguchwała	urban-rural	+	-	-	+
Chmielnik	rural	+	+	-	+
Czarna	rural	+	lack	+	+
Czudec	rural	+	+	+	+
Głogów Młp.*	urban-rural	lack of valid development strategy			
Krasne	rural	+	-	+	+
Lubenia	rural	+	+	-	+
Łańcut	rural	+	+	-	+
Łańcut	rural	-	-	-	+
Świlcza	rural	+	+	-	+
Trzebownik	rural	+	-	-	+
Tyczyn	urban-rural	+	-	-	+
Rzeszów	urban	+	+	+	+
<b>Rzeszów FUA</b>		+	+	-	+

\* In 2022 work was started on a new development strategy for the municipality of Głogów Małopolski for 2022–2032, therefore this work uses the municipality development strategy for 2014–2020.

Source: own work based on the data from the municipality development strategies (see in references).

Having analysed the municipality development strategy, it should be concluded that entrepreneurship support is an essential issue of interest to local authorities. The planned directions of actions related to strategy development include provisions on entrepreneurship support in all strategies that were analysed.

It should be noted that in addition to development strategies, municipalities also prepare other documents related to supporting local entrepreneurship, such as the Municipal Revitalisation Programme, Environmental Protection Programme, Monument Maintenance Programme or the NGO Co-operation Programme.

## 6. CONCLUSIONS

The entrepreneurship potential is one of the key factors of the social and economic development of each local government unit.

Today, local development cannot be addressed without taking entrepreneurship category into account. It can be said that the local economic development consists in fostering private entrepreneurship as well as the entrepreneurship created by local authorities and by local residents (Bieńkowska-Gołasa, 2015).

Opportunities for the development of entrepreneurship in various regions of the country and for creating regional development based on that entrepreneurship should be sought in a policy that is properly pursued by local and regional authorities, in particular with regard

to SMEs. The policy should be pursued with special instruments for supporting regional entrepreneurship and with investments that improve operating conditions for the SME sector. The priority investment task that supports development of economic activity in the given municipality is providing modern infrastructural services (Kamińska, 2011) that will facilitate taking up, carrying on and expanding economic activities; business development by stimulating growth in demand for the workforce, attracting business from outside, development of the existing business, promotion of innovations; development of human resources by improving qualifications of the local workforce to make it more attractive to projects that require highly skilled staff (Szewczuk, 2011).

The analysis conducted in the municipalities of the Rzeszów Functional Urban Area from 2010 to 2021 demonstrated that development of entrepreneurship is very intensive, and revealed disproportions in the development of entrepreneurship among various municipalities. Every year the number of economic entities, especially SMEs, has been growing in the analysed municipalities. This translates to an increase in the value of the synthetic indicator in the analysed time-frame. The high level of development of entrepreneurship potential is related to creation of new workplaces by the new enterprises, which considerably contributes to economic development, and thus increases the living standard of the residents.

The highest indicator of entrepreneurship development in 2010 and 2021 was demonstrated by Rzeszów and urban-rural municipalities (Boguchwała, Głogów Małopolski and Tyczyn). Low level of entrepreneurship development in the analysed years was recorded for rural municipalities, such as: Świlcza, Czarna, Łańcut, Czudec and Lubenia. The nature of economy in these municipalities differs from other municipalities that are directly adjacent to the city.

Test results demonstrate dominance of Rzeszów, since that city is characterised by high values of all variables tested.

As part of the extended analysis, it should be concluded that entrepreneurship support is an essential and important issue of interest to local authorities of the municipalities. Provisions on entrepreneurship support by local authorities are included in all strategies that were analysed.

The analyses are important in practical terms and provide the overall view of the situation regarding the issue being analysed. The analyses may be used to draw preliminary conclusions on the policy pursued by local authorities of municipalities which belong to the Rzeszów FUA, and to prepare directions of changes necessary for taking additional, effective measures. Results of the analyses will allow the authorities or other decision-makers to take necessary steps to develop favourable conditions for taking up and carrying on economic activities, as well as actions that promote development of the existing enterprises.

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## WHERE ARE THE CHANGES IN EU CYBERSECURITY LEGISLATION LEADING?

Cybersecurity policy is a response to the growing instability of the virtual world and the threats emanating from this area. This article tries to show how changes in legislative and strategic provisions can affect the EU's cybersecurity policy. The analysis of the field of cybersecurity in the European Union, the subject of which is the union itself, allows the authors to demonstrate the existence of such a policy in the EU. The subject of the analysis is the phenomenon of cyberterrorism as a threat and its specificity as a form of violence. The article shows how policy and strategy are interrelated, paying particular attention to the security concept of the European Union. The starting point of the research is the analysis of issues related to the specific nature of EU cyberterrorism policy and the most important legal bases in this field, on which EU cybersecurity policy is built. The preliminary study defines the concepts of cyberterrorism, cybercrime, and cyberwar, showing their impacts on the national security policy of the information society and, thus, also on the cybersecurity policy of the EU.

**Keywords:** cybersecurity strategy, European Union, security, threat.

### 1. THE CONCEPT OF CYBERSECURITY POLICY

After the end of the Cold War and the collapse of the bipolar system, the scale, scope, and intensity of traditional military threats decreased significantly (primarily in the transatlantic area) (Zięba, 2010). On the other hand, reducing the risk of a global war did not translate into mitigation of regional or local conflicts – they even intensified. Even today, asymmetric threats have developed or acquired new forms, the best example of which is the terrorist attacks that are taking place on the eastern border between Ukraine and Russia. Further evidence of such an asymmetric threat in recent years has been the so-called COVID-19 crisis, the effects of which we are still experiencing today and the more recent migration crisis of the EU (Ryan [ed.], 2022).

The subject matter of security policy depends primarily on many actors and conditions that fall within security theory. As a rule, it is divided into internal and external, and

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objective and subjective (Majer, 2012; Jałoszyński, 2008). The structure of security policy is also important, especially when we consider all three areas – national, regional, and global. It should be stated that global and local security depends upon many factors, including political ones. The internal and external policies pursued by a given entity affect the sense of security of citizens and condition its place in international reality. An immediate threat is related to the possibility of war, to the state of being at war or to the official conduct of a military conflict (Tomaszyk [ed.], 2017). A political, economic, social, or cultural crisis can also affect a country's international situation. Potential threats and challenges to shaping the security of a given country have its relations with its neighbors.

The cybersecurity policy defines how user accounts and data stored in the system are used, ensuring that the institution's information is properly protected (Andersson, Biscop, Giegerich, Mölling, 2017). In every organization, there is protected information, e.g., personal data, financial information, and non-confidential information, e.g., marketing information (Wawrzyniak, 2019). The policy of protecting the cyberspace of the state is addressed to all users of cyberspace within a given state and outside its territory, in places where representatives operate. Its task is to oblige government administration bodies to create a system of protection of the cyberspace of the state, which will both react quickly and prevent the occurrence of a cyber attack and, in the event of this, will be able to efficiently defeat the cyber attack.

Defining cyberterrorism as a combination of cyberspace and terrorism means that such activity involves not only hostile use of Internet Technology (IT) and virtual activities, but also has all the elements constituting terrorist activity. The term refers to unlawful attacks and threats against computers, networks, and information stored in them with the purpose of intimidating or coercing the government or its people in order to obtain certain political or social benefits. In addition, to qualify as cyberterrorism, an attack should be perpetrated as a result of violence against persons or property, or at least cause significant damage to create fear. Examples of such attacks could be those that lead to death or injury, cause explosions, or economic damage. According to D. Denning, attacks that disrupt non-essential services or are primarily costly are not among them (Denning, 2023).

Thus, it must be concluded that the term “cyberterrorism” is used in the context of a politically motivated attack on computers, networks, or information systems to destroy infrastructure and intimidate or coerce far-reaching political and social objectives in the broad sense of the word (Manzano, 2018). These definitions prove that cyberterrorism (Daniluk, 2019) can be understood in two ways around the world. According to one concept, it differs from classical terrorism only by the use of information technology to carry out an attack, while the other emphasizes computer systems as a target for attacks, not a tool to carry them out. It seems that a true definition arises only after the combination of these two approaches.

In the literature, in addition to the concept of cybercrime, one can use such terms as: “computer crime”, “computer-related crime”, and “Internet crime”. These terms often used interchangeably, have not been precisely defined due to the lack of general agreement on their scope of meaning. As A. Adamski emphasizes, computer crimes are discussed both in substantive and procedural aspects. In the light of substantive criminal law, two types of computer crimes can be distinguished. The first group includes all attacks directed at systems, data processed and maintained in them, and computer programs. Computer systems and networks are, in this case, the object or environment of attack. The second group includes crimes committed with the use of a computer to infringe on goods traditionally protected by criminal law.



The term 'cybercrime' refers to forms of use of telecommunications networks, computer networks, and the Internet, the purpose of which is to infringe any interest protected by law (Suchorzewska, 2010). What distinguishes cybercrime from classic crime is primarily its operation in a computer technology environment and the use of computer networks for committing a crime (*Cyberbezpieczeństwo*, 2018). Its distinguishing feature, on the other hand, is not the protection of a single common good. Today, almost every illegal activity is reflected on the Internet. The global nature of the Internet has enabled extremely fast communication and the transfer of most forms of human activity to the network, including those negatively perceived. There is more and more talk about cyberspace as a new social space in which the same problems are reflected as in the real world. Cybercrime is, therefore, a modern form of crime, exploiting the possibilities of digital technologies and the environment of computer networks (Carrapico, Barrinha, 2017).

The concept of cybercrime appears more and more often in the literature on the subject, although it should be noted that it has not yet had its normative determination. Cybercrime is defined as a sub-category of computer crime, covering all types of crimes that have been committed using the Internet or other computer networks. At the same time, computers and computer networks can be used to commit crimes in several ways: as a tool of crime, as a target of a crime, or for other additional tasks (e.g., storing data obtained as a result of a crime) (Krztoń, 2017). It, therefore, includes all attacks directed against interconnected computer systems and aimed at preventing them from working properly, either data stored in electronic form on a single computer, or several connected by a common network. The most characteristic feature of cybercrime is that individual acts can be carried out using a computer connected to the Internet or internal intranets (Davis, Fisher, Merry [ed.], 2012).

The purpose is to infringe any interest protected by law (Wojciechowski 2017 [za:] Sroka, Castro-Rial Garrone, Torres Kumbrian [ed.], 2017). Cybercrime is distinguished from classic crime primarily by operating in a computer technology environment and using computer networks to commit a crime (Bossong, 2018). Its distinguishing feature, on the other hand, is not the protection of a single common good (Oleksiewicz, 2020). Today, almost every illegal activity is reflected on the Internet. The global nature of the Internet has enabled extremely fast communication and the transfer of most forms of human activity to the network, including those negatively perceived. There is more and more talk about cyberspace as a new social space in which the same problems are reflected as in the real world. Cybercrime is, therefore, a modern form of crime, exploiting the possibilities of digital technologies and the environment of computer networks.

Cybercrime is a relatively new phenomenon, spreading at a dizzying pace in well-computerized and highly networked societies. It poses a very serious threat and is difficult to combat. This is determined by the special properties that characterize this phenomenon. The first feature – obligations – means that the activities of cybercriminals easily penetrate the barriers that are national borders. Very often, cybercriminals conduct their activities in one place, and their effects are revealed completely elsewhere, in a place hundreds of kilometers away, often in another country, on another continent. This makes it impossible to define the legal system according to which such offenses are to be prosecuted, while at the same time making it much more difficult to designate the entities responsible for taking protective and preventive measures. Another feature – anonymity – certainly does not make it easier to quickly identify the perpetrators of crimes and detect the ways in which they operate. However, this is not entirely impossible but requires a tedious search and the implementation of well-thought-out planned activities. Convenience and the speed

provided by the use of modern computer techniques and networking foster a huge increase in this form of crime in most developed countries (Banasiński, Rojszczak, 2020).

Cyberterrorism and its threats are asymmetric and transnational (Dela 2020: Oleksiewicz, 2020). Counteracting the phenomenon is not a simple issue, because it is necessary to carry out systemic activities on many levels. There are many reasons that countering cyberterrorism faces many obstacles, including non-state character, indirectness of the attack, conducting an attack at a distance, the possibility of spreading it over time, the ease of carrying out an attack, and the need to constantly refine formal and legal solutions to counteract cyberterrorism. Acts of cyberterrorism can be carried out at a relatively low cost, all you need is a laptop and Internet access (Weimann, 2014).

All this makes the policy of protection against threats related to cybercrime extremely difficult and requires numerous undertakings, including those requiring multifaceted and wide-ranging international cooperation (Gross, Canetti, Vashdi, 2017). For this protection to be effective, individual countries must work together to establish a common cybercrime policy, and then concretize it by defining the necessary priorities and uniform rules for joint action. The general principles thus identified require implementation into the domestic law of States, becoming the basis for an institutional and functional system of instruments for combating the obligations of animity (Hoffman, 2018, za Dębski, 2018). Creating an effective system for counteracting cybercrime is not easy, it requires an in-depth analysis of the phenomenon in the long term, and when creating such a system, there may be numerous problems with the adaptation of general guidelines of international or EU law to internal law.

## **2. CYBERSECURITY STRATEGY OF THE EU**

Policy and strategy determine the state's existence and development. The reason for this lies mainly in the strategy, i.e., in the methods, ways and tools of execution. Simplifying the answer, we can say that strategy is a "tool" of policy, and if so, in my opinion, the definition of strategy can be expressed as: "Security strategy is the means of creating and applying effective systems to respond to all threats to achieve long-term goals". Answering the question of what place strategy occupies in politics, we can say that it occupies a significant, or essential place. At the same time, policy and strategy tend to be volatile, dynamic, and constantly updated (most often as part of the so-called strategic review, which periodically revises the assumptions of the strategy). The relationship between policy and strategy, that is, the long-term concept of political action and the practical methods of their implementation in time and space with the use of available, potential, and created forces and means, is at the same time a fundamental factor in shaping the existence and development of the state (Oleksiewicz, 2022).

In the model functioning of the national or international security system, policy determines long-term goals in a given area, while strategy determines specific ways and methods and means of their implementation. These relations are particularly close at the design stage, that is, at the layer of goals. This is based on the fact that the objectives of the polystrategy, which should be a tool for the implementation of the general policy of the state in matters of national security, to a large extent, should be an expression of those objectives of state policy that relate to the external activity of the state. Precisely because of this, there is a need to ensure that the most important bodies of the state have a coordinated influence on the operation of strategies that are responsible for security, in response to contemporary threats. All of this supports the need for increasingly deep

research analysis that will take into account the phenomenon of linking politics with strategy and strategy with politics in the areas of national, regional, and global security (Biscop, 2019).

Peace-building strategy aims to prevent the emergence of disputes, armed conflicts, and other serious security crises, and peacekeeping strategy to resolve or reduce individual disputes and certain potential threats to prevent armed conflict for political or other reasons. The essence of a peacemaking strategy is to respond to conflicts or other serious security crises when there is no agreement. The peacemaking strategy, on the other hand, is used after an armed conflict if the parties to the conflict agree to peace cooperation.

The role of the strategic review as a tool for analyzing strategy internally and externally, identifying strengths and weaknesses, verifying potential (actual capabilities), and formulating the basis for future strategic actions (political, economic, socio-cultural, military) is crucial in this regard. This is because it allows policy and strategy to be adjusted, making them two complementary elements. In this way, the chosen direction of policy and strategy, expressed in the form of goals derived from the interests, needs, and values of society, is constantly maintained, although the forms and methods of its implementation may change. In addition, the use of a strategic review as a tool for verifying assumptions, and ways of implementing policies and strategies makes it possible to carry out: constant analysis of the strategy in the external and internal dimensions of the entity, recognition of its strengths and weaknesses, verification of potential (real opportunities) and verification of the basis for future strategic actions.

Referring to the state policy and strategy implemented in the external dimension will essentially be the result of the interaction between the entity and the environment in the context of existing or potential opportunities, challenges, and threats (Hua, Chen, Xin Luo, 2018). Speaking of the importance of policy and strategy for the state in the context of its formulation, it is necessary to point to the categories of scientific cognition that define the mutual relationship. These are the previously mentioned challenges, threats, and opportunities, fulfilling the functions of criteria for assessing the essence, scope, and nature of state policy and strategy, both externally and internally. At the same time, these criteria in the context of state policy and strategy do not occur on their own but are usually related to the vision, mission, and purpose of the entity's activities. In this regard, it should be noted that the entity's vision expresses the conceptual readiness to meet challenges, threats, and opportunities, usually defining its actions to ensure existence and development in the medium and long term. The entity's mission determines the way of its current activities to ensure the existence and development of existing (identified) challenges, threats, and opportunities. The entity's objectives, on the other hand, determine the direction of activities (implemented or undertaken) with existing (recognized) and projected challenges, threats, and opportunities. As already mentioned, strategy is a policy tool that can exist without a strategy or polystrategy, the goals set may be far-reaching, only they will not be realized. The reason for this lies mainly in the strategy, i.e., in the methods, ways and tools of execution. Security strategy is the way to create and apply effective systems to respond to any threat to achieve long-term goals.

In its communication i2010 on 1<sup>st</sup> June 2005 – A European Information Society for Growth and Employment (Communication from the Commission, 2005), the Commission identified three policy priorities in this area: completing the Single European Information Space, strengthening innovation and investment in ICT research, and creating an inclusive European information society. According to the Commission, one of the goals of European policy should be the creation of a Single European Information Space that provides secure

and affordable broadband connectivity, rich and diverse content, and digital services. Actions taken to achieve this should address four key elements: speed (spreading high-speed broadband services), multimedia content (improving economic and legal completeness to foster the emergence of new online services and content), interoperability (ensuring communication between different platforms and devices) and security (increasing consumer confidence in new technologies by protecting the Internet from fraud, harmful content, and technological failures). The Commission stressed the need to review the regulatory framework for electronic communications and develop and implement a strategy for the security of the European information society. Attention was also drawn to the need to create a coherent framework for the internal market in audiovisual services, including modernizing the legal framework and supporting the implementation of the existing *acquis* on services in this area.

Another priority identified by the Commission is innovation and investment in research. The Commission's goal in this area is to achieve a world-class level of research and innovation in the field of information and communications technology by putting it on par with Europe's main competitors. Measures taken by the Commission in this area include supporting strategic research on ICT, encouraging private investment in this area, and removing technological, organizational, and legal barriers to ICT implementation, thus negatively impacting better research results for economic gain. The measures applied in this area are intended to encourage the translation of technological advances into innovative applications in the public and private sectors. Strategic research focuses on technologies for knowledge, content, and creativity, open communications networks, secure and reliable software, embedded systems, and nanoelectronics.

The next priority area, as described in the i2010 strategy, is social inclusion, better services and higher quality. Particular attention has been paid here to the need to spread ICT products and services, including in less developed regions. The Commission pledged to provide policy guidance on e-accessibility and broadband coverage, adopt an e-government action plan, and establish model ICT initiatives in the field of quality of life.

The summary of the i2010 strategy emphasized that its implementation would make Europe a more attractive place for investment and innovation in knowledge-based goods and services. The important role of each of the entities responsible for its implementation was emphasized: The European Commission – carrying out the tasks presented, the Member States – introducing the new regulatory framework and taking their own initiatives in this area, and the other actors responsible for conducting an open and constructive dialogue.

The Communication from the Commission to the European Parliament, the Council, and the Committee of the Regions Towards a General Strategy to Combat Cybercrime, adopted on the 22<sup>nd</sup> of May 2007 (*{SEC(2007) 641}*, *{SEC(2007) 642}*), is very important from the point of view of singling out from a series of activities broadly defined as 'preventing threats to common security' issues directly related to the fight against cybercrime and cyberterrorism. It emphasizes the fundamental importance of the ICT critical infrastructure for the security of EU states - the first time in strategic documents that this system is so clearly identified as one of the most important. The communiqué also indicates the need for EU institutions to develop a unified strategy to combat cybercrime. It defines the main operational tasks of combating cybercrime at the EU level, but also signals the need to harmonize definitions of crimes and state criminal laws in this area, although at the same time, "due to the wide variety of types of crimes covered by the concept of cybercrime [it stated that] it is not yet appropriate to harmonize definitions

across the board. In the years that followed, the European Union developed a series of strategic documents that were also a development of the findings of the 22<sup>nd</sup> of May 2007 Communication. On the one hand, these actions appear as a reaction to the 2008 financial crisis, fostering the destabilization of the global banking system, and on the other hand, they are the result of work undertaken by EU agencies to unify provisions for preventing threats to critical infrastructure in cyberspace. On the 31<sup>st</sup> of March 2011, the communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, and the Committee of the Regions was adopted on Critical Infrastructure Protection “Achievements and next steps: towards global cybersecurity” (COM(2011) 163 final).

### 3. CHANGES IN THE EU CYBERSECURITY STRATEGY

Given the dynamically evolving threats and in connection with the fact that cyberterrorism had been recognized as another important challenge for the European Union in 2013, the EU cybersecurity strategy (*Joint Communication...*, 2013) was adopted, the main objectives of which were to promote both the improvement of cybersecurity throughout the EU and beyond, as well as international cybersecurity cooperation.

The first key area described in the 2013 strategy is the prosperity of the digital single market and highlighting the importance of the EU’s latest information and communication technology (ICT) and the ICT security sector in relation to strengthening cybersecurity. It stresses that legislation should support innovation and economic growth, research and should focus on infrastructure protection, as the digital economy is a major driver of growth, innovation and employment, and cybersecurity is key to protecting the digital economy.

The second identified area is the achievement of cyber resilience through measures improving network and information security across the EU at the Member State level, and cooperation between Member States and across the EU. It emphasizes the role of the Computer Emergency Response Team (CERT)<sup>3</sup> and the European Network and Information Security Agency (ENISA) (Rozporządzenie (UE) 2019/881 w sprawie ENISA (Agencji Unii Europejskiej ds. Cyberbezpieczeństwa) oraz certyfikacji cyberbezpieczeństwa w zakresie technologii informacyjno-komunikacyjnych (akt o cyberbezpieczeństwie) and encourages ENISA to cooperate with state institutions.

It was noted that the EU’s resilience of critical infrastructures should be increased and strengthened through close cooperation and coordination between the relevant actors, including between civilian and European military actors. There is also a need to strengthen close cooperation and coordination in responding to cyber incidents by defense actors, law enforcement agencies, the private sector, and cybersecurity authorities to successfully tackle cyber challenges (Oleksiewicz, 2021).

The third priority was combating cybercrime, although it was also emphasized that it is of the greatest importance in the area of Internet security protection policy. Therefore, upon request, Member States should be assisted in identifying gaps and strengthening their capacity to pursue a preventive policy and combat cybercrime, use the Internal Security Fund (ISF) within its budget limit to support relevant anti-cybercrime authorities, take

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<sup>3</sup> The organization was created in November 1988 by DARPA, after the Morris Worm Incident. The main CERT’s task is to supervise Internet traffic 24/7 and takes immediate action in the event of threats. CERT-EU was created in 2011 and it is a part of European Commission. Its legal basis is Interinstitutional Agreement (Dz. Urz. UE C 12, 13.01.2018).

advantage of Instrument for Stability (IfS) to develop the fight against cybercrime, develop capacity-building initiatives, including police and judicial cooperation in third countries from where cybercrime organizations operate.

The fourth area is the Common Security and Defence Policy (CSDP). In this case, the main task is to develop a cyber defense framework and identify specific measures on security and defense by enhancing Member States' cybersecurity capabilities, leveraging existing pooling and sharing mechanisms, and exploiting synergies with wider EU policies to build the necessary cyber defense capabilities in a Member State. In this situation, it was necessary to adopt a new EU external security strategy<sup>4</sup>.

From today's additional perspective, it could be assessed that it was adopted too late concerning the actual needs and threats, but this does not change the fact that it remains relevant, as well as a basis for further legislative and programmatic work. The provisions of the adopted strategy have also led to the establishment of the European Center for Combating Cybercrime. This centralizing and coordinating institution, which began operations on the 11<sup>th</sup> of January 2013, mainly provides information exchange between police authorities of member states, supports operations against organized crime, and organizes training and exercises on cybersecurity and critical infrastructure for both government agencies and the private sector.

The Directive of the European Parliament and of the Council of 12<sup>th</sup> August 2013 on attacks against information systems (Dz.Urz.UE L 218/8 z 14.08.2013) and replacing Council Framework Decision was aimed at correlating the laws of member states in preventing, combating, and criminalizing crimes related to information and communication systems. The directive first pointed to the need to develop common definitions and correlations of typologies of these crimes. Another demand was to bring about effective, close, and proper cooperation between law enforcement agencies in individual countries, as well as between them and European institutions (Eurojust, Europol, ENISA, and the European Cybercrime Center). According to the Directive, cybercrimes include:

- illegal access to a system,
- illegal integration into a system,
- illegal integration into data,
- illegal interception of data, and illegal tools for committing cybercrimes.

Not only individuals, but also legal entities can be held liable.

In September 2017, the European Commission launched a review of the 2013 European Cybersecurity Strategy with a working document presenting its assessment (European Commission, 2017a). According to it, the strategy had been only partially successful due to insufficient resources and limited involvement of key actors. In addition, the opportunities and threats in cyberspace have expanded significantly since then. Therefore, these factors justified taking an important step, i.e., renewing the cyber security strategy. This situation changed with the introduction of the Directive on the security of network and information systems (the NIS Directive) (Dyrektywa..., 2016). This act formally

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<sup>4</sup> Soldiers, like most people, use smartphones and social networks. Thus, they can become a potential target of an attack aimed at weakening their will to fight. It is only necessary to recognize the first and last names of crew members, determine the place of service and residence, link them with accounts on social networks, identify family ties, beliefs, values, prepare an attack and execute it. It is even more possible because we are too reckless about the use of smartphones by soldiers and their activity on social networks. Often even the personal data of soldiers and their images are publicly available on official websites.

created a network of Member States' Computer Security Incident Response Teams (CSIRTs), and the secretariat of this network is provided by ENISA.

On the 13<sup>th</sup> of September 2017, Jean-Claude Juncker said: "We have made progress in keeping Europeans safe online in the last three years. However, Europe is still not well equipped when it comes to cyber-attacks, which is why the Commission has adopted the cybersecurity package" (COM (2017) 477). It builds on existing instruments and presents new initiatives to further improve the EU's cyber resilience and response. This document identifies, for the first time, the need for the EU to maintain and develop essential capabilities to ensure the security of the digital economy, society, and democracy (European Commission, 2017b). The aim of EU policy has been to reduce market fragmentation, as well as develop economic capacity, and improve the response to cyber incidents. Specific political actions took place in 2017. In this context, EU action on public-private partnerships for research and innovation should be mentioned. As part of this policy, the need for a new European certification system was identified to ensure that products and services in the digital world are safe to use.

To equip the EU with the right tools to fight cyber attacks, the European Commission and the High Representative have proposed a wide range of measures to strengthen cybersecurity. To this end, an updated strategy has been introduced to improve the common approach of Member States to the phenomenon of cyber threats. So far, the role of the Network and Information Security Agency has been mainly to provide knowledge and advice, without operational activities in the area of cyber security. The new regulations in 2017 relate primarily to the strengthening of this agency, transforming it into an entity with a strong advisory role in the development and implementation of cybersecurity activities. Guidelines have been defined for its next mandate, which will start in 2020 and will be aligned with the new European digital security framework.

The reform was based on the actions envisaged in the cybersecurity strategy and the main pillar of the strategy – the Network and Information Security Directive (NIS Directive). In addition, the reform stipulates the following:

- establishment of the European Cybersecurity Competence Centre (ECCC) (pilot project launched in 2018). Working with Member States, it will help develop and implement the tools and technologies needed to meet the ever-changing threats and ensure that defense is as modern as the weapons used by cybercriminals. ECCC will complement capacity-building activities in this field at EU and national levels (Ilves, Evans, Cilluffo, Nadeau, 2016).
- development of a Member States' rapid response plan for an immediate, effective, and coordinated response in the event of large-scale cyber attacks. In addition, Member States and EU institutions are called upon to establish a cyber crisis response framework so that this plan can be implemented. It will be tested on a regular basis as part of cyber and other crisis management exercises.
- greater solidarity – in the future, the possibility of establishing a new emergency response fund for cybersecurity could be considered for those Member States that will responsibly implement all cybersecurity measures required under EU law. The fund could be used to provide emergency support to Member States, just as the EU Civil Protection Mechanism is used to improve response to fires or natural disasters.
- strengthening cyber defense capabilities – Member States are encouraged to integrate cyber defense into the Permanent Structured Cooperation (PESCO) framework and the European Defense Fund to support cyber defense projects. Cyber

defense could also be extended to the scope of the European Cybersecurity Competence Centre. To address the shortage of qualified staff in this area, in 2018 the EU created a cyber defense training and education platform. The EU and NATO support cooperation in cyber defense research and innovation. Cooperation with NATO will be strengthened through participation in parallel and coordinated exercises

- deepening international cooperation – the EU will strengthen its capacity to respond to cyber attacks by introducing a framework for a joint EU diplomatic response to malicious cyber activities in support of a strategic framework for conflict prevention and stabilization in cyberspace. This will be combined with efforts to build new capabilities to support third countries in the fight against cyber threats (European Commission, n.d.).

An important legal act is the General Data Protection Regulation (GDPR) (Regulation..., 2013), which introduced a set of consistent and uniform regulations for all companies operating in the EU that process the personal data of EU citizens. The purpose of this regulation was to protect the rights of individuals with regard to the processing of personal data. The regulation defines the right of access to information, regulates the collection of information, the processing and transfer of data between public entities, and gives citizens the right to 'be forgotten', requiring companies to delete certain personal data at the request of the citizen. It is worth noting that the NIS Directive only applies to critical operators and the GDPR – to anyone dealing with personal data. Another difference is that the GDPR potentially imposes high fines for breaches of personal data protection, however, so far, the fines related to network and information security appear to be smaller (Garrison, Hamilton, 2019).

On 9<sup>th</sup> April 2019, the Council adopted a regulation known as the Cybersecurity Act (Rozporządzenie Parlamentu Europejskiego..., 2019), which established a certification system at the EU level and a modernized EU cybersecurity agency replacing ENISA. It has also enacted rules that allow for the imposition of EU-targeted restrictive measures and sanctions to prevent and respond to cyber attacks that pose an external threat to the EU or its Member States. As part of the same reform, the EU also introduced legislation to establish a European Cybersecurity Competence Centre, supported by a network of National Coordination Centers. These structures will help to secure the digital single market and increase the EU's autonomy in the field of cybersecurity. In addition, the EU may impose sanctions against EU persons or entities, as well as against non-EU countries or international organizations, if it deems it necessary to achieve the objectives of the common foreign and security policy (Parlament Europejski i Rada Unii Europejskiej, 2019).

An important move in cybersecurity policy was the publication of the White Paper of 2020 on artificial intelligence (AI) and digitization, which is to be the key to combating cyberterrorism and achieving climate order by improving AI (Komisja Europejska, 2020). This is a necessary element to maintain the EU's single market through research, innovation, and the implementation by December 2020 of a coordinated action plan under the Digital Europe and Horizon Europe 2021-2027 programs. The latest move as part of the above-mentioned program is the establishment of the Joint Cyber Unit (European Commission, 2021) on 4th August 2021 (*Cybersecurity...*, 2023). Its role is to develop, by 31<sup>st</sup> December 2021, an EU cybersecurity incident and crisis response plan based on national cybersecurity incident and crisis response plans. The assumption is that the EU cybersecurity incident and crisis response plan is to set out the procedure and information



exchange, as well as the criteria for activating the mutual assistance mechanism based on the agreed incident classification and the list of available EU capabilities (Konkluzje Rady..., 2021).

In December 2020, the EU released its second Cybersecurity Strategy (EUCSS)<sup>5</sup>. This new strategy aims to guarantee a global and open Internet with strong safeguards in the event of risks to the security and fundamental rights of citizens in Europe. It is a major update to the first one, and its main goal is to implement and promote the main areas of EU action:

- resilience, technological sovereignty and leadership,
- building operational capacity to prevent, deter and respond,
- advancing a global and open cyberspace through increased cooperation.

The most commonly known change mentioned in the 2020 EUCSS was the announcement of the upgrade and update of the NIS Directive. The EU Cybersecurity Strategy answers the challenges of geopolitical competition in cyberspace, and the increased cyber threat landscape, especially following the COVID-19 pandemic. It allows the EU to increase its resilience and show leadership in cyberspace; build capacities to prevent, deter, and respond to cyber-attacks; and strengthen its partnerships in favor of a global and open cyberspace.

The Commission proposal expands the scope of the current NIS Directive by adding new sectors based on their criticality for the economy and society, and by introducing a clear size cap – meaning that all medium and large companies in selected sectors will be included in the scope. At the same time, it leaves some flexibility for Member States to identify smaller entities with a high-security risk profile.

On the 21<sup>st</sup> of April 2021, the European Commission published a draft Regulation of the European Parliament and the EU Council concerning the creation and adoption of harmonized legal standards for artificial intelligence systems in the European Union (Proposal..., 2021) (hereinafter the Regulation). The horizontal nature of this proposal is intended to ensure consistency with existing Union regulations applicable to sectors where artificial intelligence systems are already being used or are likely to be used in the near future. From the content of the draft, we can learn that AI, as a rapidly developing technology that can bring a number of economic and social benefits, can also give rise to risks for humans or society. In this situation, the EU simultaneously wants new technologies to be created and used in accordance with the supreme values of human rights and the fundamental principles of the organization. It was these elements that guided the Commission's work in drafting the Regulation. This project was intended to implement a political commitment made by President Ursula von der Leyen - in the policy guidelines for the Commission for 2019–2024.

Cyber Resilience Act (Proposal..., 2019), adopted on 15<sup>th</sup> September 2022, contains two main objectives aims to ensure the proper functioning of the internal market the first one is creating conditions for the development of secure products with digital elements by ensuring that hardware and software products are placed on the market with fewer vulnerabilities and ensure that manufacturers take security seriously throughout a product's life cycle and creating conditions allowing users to take cybersecurity into account when selecting and using products with digital elements. Four specific objectives were set out:

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<sup>5</sup> <https://www.headmind.com/en/cybersecurity-in-the-eu-european-commissions-strategy-and-legislation> [access: 20.04.2023].

- ensuring that manufacturers improve the security of products with digital elements from the design and development phase and throughout the whole life cycle.
- ensuring a coherent cybersecurity framework, facilitating compliance for hardware and software producers.
- enhancing the transparency of security properties of products with digital elements, and enabling businesses and consumers to use products securely.

The NIS 2 Directive (Directive..., 2022) eliminates the distinction between operators of essential services and digital service providers. Entities are classified based on their importance and divided respectively into essential categories with the consequence of being subjected to different supervisory regimes. In that regard, due account should be taken of any relevant sectoral risk assessments or guidance by the competent authorities, where applicable. The supervisory and enforcement regimes for those two categories of entities should be differentiated to ensure a fair balance between risk-based requirements and obligations on the one hand, and the administrative burden stemming from the supervision of compliance on the other. Given the intensification and increased sophistication of cyber threats, Member States should strive to ensure that entities that are excluded from the scope of this Directive achieve a high level of cybersecurity and support the implementation of equivalent cybersecurity risk-management measures that reflect the sensitive nature of those entities. It introduced more precise provisions on the process for incident reporting, content of the reports and timelines, more stringent supervisory measures for national authorities, stricter enforcement requirements, and aims at harmonizing sanctions regimes across Member States. It also enhanced operational cooperation, including cyber crisis management.

#### 4. CONCLUSION

The scope of changes in EU law in the area of protecting cyberspace policy and combating cybercrime is closely related to the European Commission's program "Safer Internet". The program was run from 1999–2014 and aimed at promoting the safer use of the Internet and new online technologies, particularly for children. Starting in 2005, the program also covered all new online technologies, including mobile and broadband content, online games, peer-to-peer file transfer, and all forms of real-time communication (chat rooms and instant messaging). The scope of the program for 2009–2013 was to include emerging online technologies and cover harmful conduct, like grooming and cyberbullying. In 2015–2021, a "Safer Internet" project was amended to "Connecting Europe Facility" (CEF), and since 2022, it has been funded under the "Digital Europe" Program". Cyberattacks and cybercrime are becoming more frequent and more sophisticated across Europe, according to recent research. This trend will intensify in the future, as it is predicted that in 2025, as many as 41 billion devices will be connected to the Internet of things worldwide. An important role in this process, in the conditions of widespread digitization of Europe and the growing use of modern technologies, is to ensure security in cyberspace and prevent financial losses as a result of cybercrime.

The EU is trying to identify the reasons resulting from the development of the integration process, institutional, legal, and economic factors. Cybersecurity provisions under the policy of the area of freedom, security, and justice mainly concern the prevention and mitigation of cybercrime and the way the EU decides. Thanks to the so-called Under the qualified majority system, Member States try to regulate in a very detailed way the provisions on the protection of cyberspace. The EU is fighting cybercrime and stepping up

cyber defense while promoting cyber resilience. One can still ask the question of whether the actions taken are sufficient to meet the existing needs. This is evidenced by the results – an increase in the number of attacks in cyberspace. As you can see, the EU goes further in its activities, entering the sphere of defense, despite the fact that these competences are generally reserved for the member states. The EU cybersecurity policy is beginning to go beyond its “typical” nature, by creating more and more advanced forms of cooperation between EU Member States. It should be emphasized that the EU makes every effort to achieve the assumed economic, climate and political goals thanks to the cyberspace protection policy, and thus reduce the number of successfully carried out attacks in cyberspace, as, for example, the Belgians did. It is worth emphasizing that in the current institutional and legal conditions, it is difficult to talk about the creation of a fully independent cybersecurity system that would cover aspects of cybercrime and cyber defense.

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## A STUDY OF STATE-SOCIETY-CITIZEN RELATIONS: A VOSVIEWER BIBLIOMETRIC ANALYSIS (2000–2023)

**Objectives:** The purpose of this study is to facilitate the understanding of the theoretical and analytical foundations of state-society-citizen relations by addressing the concepts of “social security,” “social behavior,” and “civic engagement” within recent integrative approaches. **Methods:** The article uses a two-step research method: (a) a conceptual analysis, and (b) a VOSviewer bibliometric analysis using the PubMed database to test applicative-analytical individualizations regarding the three terms and related keywords over the last two decades, as well as the impact of the COVID-19 pandemic within the applied social research. **Results:** The study provides a pluralistic epistemology of conceptual and relational representations, together with the radical transformation of the researched concepts during the COVID-19 pandemic. **Conclusions:** The study contributes to the multidimensional analysis of the state-society-citizen nexus. It integrates recent implications of social security, social behavior, and civic engagement to facilitate good governance and social integration.

**Keywords:** social behavior, social security, civic engagement, social integration, good governance.

### 1. INTRODUCTION

In the last two decades, the approach to state-society-citizen relations through analyzing social security, social behavior and civic engagement included a new generation of pluralistic and innovative evaluations (Liu, Lapinski, 2022; Gustison, Phelps, 2022; Dang, Seemann, Lindenmeier, Saliterer, 2022; Stoecker, Witkovsky, 2022; Vega-Tinoco, Gil-Lacruz, A.I., Gil-Lacruz, M. 2022). Thus, the research emphasis is placed in a *first* approach (i) on norms, values, expectations and in a second approach (ii) on social behavior motivation, voluntary activity and social transformation. Consequently, the current study will engage a research framework focusing on: (i) the analysis of the topics; (ii) the theory of normative social behavior (Rimal, Real, 2005; Liu, Lapinski, 2022; Lapinski, Rimal, 2005); (iii) the social and behavioural constructs and theories and recent integrative

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approaches on state-society-citizen relations; (iv) other integrative approaches enhancing social security and civic engagement; (v) the civic participatory norms and good governance (Saurugger, 2010, Kotzian, 2014); (vi) civic engagement and citizen participation; (vii) the individual participation and civic engagement in the context of social functioning; (viii) the role of individual human action exploring social behaviour motivation and social behaviour intention.

Therefore, the main goal of the paper is to analyze how the scientific literature evolved in the period 2000–2023 and how the international research focused and accessed the conceptual and analytical trends of the state-society-citizen relations. To achieve this goal, we will operationalize the answer to the following research questions: (1) What are the key features of normative social behavior? (2) What are the key approaches to social security, social behavior and civic engagement during the COVID-19 pandemic? (3) What is the role of the recent integrative approaches linking good governance, social normativity and social functioning? The answer to these research questions will also frame and explain the contextual influences related to social norms, citizen participation, human action and social functioning to analyze and monitor the worldwide research trends in the period 2000–2023 as the selected period highlights complex phenomena and processes with obvious intensity, social and political changes of particular significance for social security, human behavior as well as civic commitment, associating various sources and resources specific to the social, cognitive and participatory space. Consequently, the research profiles the subject categories of “social behavior” and “social security” displayed by the PubMed database associated with the bibliometric review. The research data and topics were obtained from PubMed using the VOSviewer software tool extracted from the worldwide scientific literature in the mentioned period. The topics displayed by the analysis are important due to two complementary reasons: (1) the topics address main social, participatory and community problems for the linkage state-society-citizen linkages in the last two decades; (2) the topics assign important impact on the scientific knowledge in the area of social sciences, humanities and related field. Moreover, selected topics are mainly focus on the normative and behavioural consequence of the state-society-citizen relations.

In this sense, we formulate a hypothesis for our research: “The more social phenomena and processes know periods of intense evolution, the more the production of scientific literature in the field intensifies”. Further, in this paper, we set a five steps framework to construct the research area of the state-society-citizen relations in the period 2000–2023: (1) the methodology of the research offering based features of the VOSviewer for data downloaded from PubMed database; (2) the empirical research and conceptual screening of the recent relevant scientific addressing the following trending three nexus: (a) state-society-citizen; (b) social behaviour motivation and social behaviour intention; (c) sources of social security and civic engagement; (3) results and discussion of the VOSviewer bibliometric analysis; (4) conclusions and future research directions.

## 2. METHODOLOGY

The concept analysis identifies recent theoretical developments and key systemic features aimed to identify how social behavior types civic engagement and how social security and social behaviour are assessed within the state-society-citizen nexus. The research is conducted using the VOSviewer bibliometric analysis for PubMed database approaching two keywords: “social behavior” and “social security”. Bibliographic data was downloaded for all selected journals listed and indexed by PubMed between between



January 1, 2000 and January 23, 2023 using the PubMed format to save citation to file filtering the selection for “all results”. The results of the VOSviewer analysis use relational techniques of the links attribute and total link strength attribute. The results highlight the scientific production research and trends, most used topics and top contributing areas of study. The documents retrieved from the PubMed database included various document types: articles, reviews and book reviews etc. The selection of the PubMed database is because the research period includes also the pandemic of COVID-19 and during this period it was relevant for the research to monitor and analyze also relevant sources of the period, emerging keywords and trending topics aimed to stimulate the interdisciplinary research and monitoring of the state-society-citizen relations in the last two decades.

### **3. STATE-SOCIETY-CITIZEN: BASED MODERATORS**

In recent literature, there is an evolving contribution to the resourcing and researching of social security, social behavior and civic engagement theories related to state-society-citizen relations. Many studies often develop an integrative linkage between the three concepts (Lapinski, Rimal, 2005; Hsu, Chang, 2007; Olimid, D.A., Olimid, A. P., 2019; Pavlova, Silbereisen, 2015; Supportive Dang, Seemann, Lindenmeier, Saliterer, 2022; Gustison, Phelps, 2022; Liu, Lapinski, 2022). As a result, Lapinski and Rimal (2005) usefully involve the valid knowledge of the theory of social normativity by focusing the social experiment at the level of mass communication. Through their concern to identify the role of collective norms and the most important “moderators” (namely citizen and involvement), other studies develop a research framework to examine the key drivers of the state-society nexus, here including social influence, participatory governance and political behavior (Kotzian, 2014; Waheduzzaman, As-Saber, 2015; Pavlova, Silbereisen, 2015). However, using the theory of normative social behavior as a framework, Rimal and Real (2005) formulate an integrative approach to the results of three mechanisms: injunctive norms, outcome expectations and group identity. The injunctive norms are determined using the complex social standards regarding the social behavior of people given a certain social condition or situation.

These factors are based on social norms considering the difference between the perceived and community norms and between descriptive and injunctive factors and norms within state-society-citizen nexus. With an analysis towards fostering the role of social behavioral features, Lapinski and Rimal (2005) apply a logical nexus of the state-society-community relationship collecting novel information and approaches related to normative influences (Lapinski, Rimal, 2005). However, Lapinski and Rimal (2005) describe the added value of the theory of normative social behavior by involving the assessment of (a) the social and normative constructs defined by norms and social behavior; (b) the role of social moderators and “social network” requiring the input of communication and social norms; (c) the contribution of collective norms and expectations and (d) the engagement of evaluation in the process of the valid knowledge involving normative influences, behavioral features and cognitive influences.

### **4. SOCIAL BEHAVIOR MOTIVATION AND SOCIAL BEHAVIOR INTENTION**

Although Lapinski and Rimel's theory is prominent for the theory of normative social behavior of the 2000s, since 2010, other contextual effects included a type of rational-analytical evaluation and research aimed to adapt the theory of “human social behaviour”

to new social phenomena (Gantt, Lindstrom, Williams, 2017) and state-to-citizen engagement assets (Ofoeda, Boateng, Asmah, 2018).

Therefore, research carried out by Lapinsky and Rimal (2005) on personal and mass communication drivers should be advanced to facilitate social integration and voluntary activity (Marcus, Echeverria, Holland, Abraido-Lanza, Passannante, 2015; Jung, Thompson, Byun, 2022). Furthermore, proper identification of the communication drivers and an assessment of social integration lead to sources of social behavior conceived as balance between voluntary actions and social transformation. However, research studies in the last two decades provide a phasing-in focus on “social phenomena” enabling social behavior motivation and social behavior intention (Hsu, Chang, 2007) and advancing new resources (e.g. “potential transgenerational inheritance” and new opportunities (e.g. attitudes, values and goals nexus) (Brenman-Suttner, Yost, Frame, Robinson, Moehring, Simon, 2020).

Although “social attachment” stands out as an inner factor of social behavior, other studies encompass the social attachment biases and individual assets to target social behavior integrative bonds (Gustison, Phelps, 2022) and social motivation and community capacity to address social phenomena. As a consequence, the concepts of social behavior and social phenomena trace a theoretical and analytical variety ranging from “high-order” social constructs (e. g. values and ideologies) to human behaviour and aging (Brenman-Suttner, Yost, Frame, Robinson, Moehring, Simon, 2020), social factors, social world, motivation, attitudes and social security (Moczuk, Delekta, Stecko, Polakiewicz, 2021).

## 5. SOURCES OF SOCIAL SECURITY AND CIVIC ENGAGEMENT

Common to the analysis of social behavior and social security is the influencing role of civic engagement and civic participatory norms having wide consequences on civil activities and civic responsibility (Dang, Seemann, Lindenmeier, Saliterer, 2022; Donoghue, Tranter, 2010; Olimid, 2014). Another consideration is the linkage between norms and decision-making processes (case study European Union) (Saurugger, 2010). By compounding the “strategic-constructivist” theory, participatory norms engage political and administrative actors by creating “continued activism” Saurugger (2010). For example, Saurugger (2010) explores the increase evidence that civil society engagement in European Union decision-making mechanisms provide a useful model of approaching citizen participation. In addition, there is a linkage between good governance and norms of citizenship (Kotzian, 2014).

In that context, the case for increasing social security, the quality of governance and citizens’ attachment to civic participatory norms and social prosperity (Woźniak, M., Woźniak, L., Chrzanowski, Ostasz, 2015) can be argued by assessing three contributions. (1) First, related to the linkage between social context and civic participation, recent studies point political participation depending on socio-demographic factors and social networks (Pavlova, Silbereisen, 2015). (2) Second, the influencing role of social security and civic engagement within the “participatory governance” (Waheduzzaman, As-Saber, 2015) and the participation of citizens in local-level programmes and initiatives. (3) Third, from a wider perspective, Stoecker and Witkovsky (2022) focus on rural areas relating civic engagement to the local-community-based support experience and development strategies by posing a double challenge for the sources of social behavior and social security: (a) the local civic potential in addition to organizational long-term perspective and (b) the COVID-19 social and health biases focusing an engagement-based relation to the social

and community benefits. In this context, the research of Topazian et al. evidences the relationship between civic association participation and the social factors during COVID-19 (Topazian, Levine, McGinty, Barry, Han, 2022).

Clearly, this research of Topazian et al. is crucial for assessing interpersonal interactions, social integration and civic engagement by underlying the multidimensional views of involvement during the pandemic period. Therefore, civic engagement extends beyond the interpersonal interactions and contributions directly to the state-society-citizen nexus (Lyeonov, Bilan, Yarovenko, Ostasz, Kolotilina, 2021). Although Topazian *et al.* view civic engagement as a subset of the social integration, Vega-Tinoco, Gil-Lacruz and Gil-Lacruz (2022) rate the linkage between well-being and civic participation depending on health, social happiness and life conditions. Vega-Tinoco et al. conclude the need to expand the research of civic participation and social security by underpinning the debate on state-community-citizen synergies (Vega-Tinoco, Gil-Lacruz, Gil-Lacruz, 2022).

## 6. VOSVIEWER BIBLIOMETRIC ANALYSIS: RESULTS AND DISCUSSION

This research uses the VOSviewer bibliometric analysis (Van Eck, Waltman, 2009; Van Eck, Watman, 2010; Augustyn, 2022; Samadbeik, Bastani, Fatehi, 2022; Akturk, 2022) of the concepts of “social security” and “social behavior”. The VOSviewer software program facilitates the construction of a co-occurrence matrix aimed to visualize a based map functionally displayed in various dimensions due to the visualization tools (e.g. zooming and searching). Additionally, the VOSviewer software tool provides data and results using tables (Table 1 and Table 2) graphs (Graph 1 and Graph 2) and figures (Figure 1, Figure 2, Figure 3 and Figure 4). Figure 1 to Figure 4 display a label view provided by the VOSviewer tool visualizing the items following their label and also by indicating a circle. For a better understanding and visualisation of the results, the font size of the selected topics and also, the size of the items are directly dependent on the weight of the item and the total strength of all links established for the selected item. Overall, the selection of the items of Figure 1 to Figure 4 focuses on the major concept displayed by the data extracted using the VOSviewer tool, namely: “humans” (Figure 1), “COVID-19” (Figure 2), “social behavior” (Figure 3) and “social behavior-social cognition-cooperation” nexus (Figure 4). The network visualization (Figure 1 and Figure 3) and the overlay visualization (Figure 3 and Figure 4) are two types of visualization provided by VOSviewer computer program due to its dual functionality, namely the zooming functionality and the scrolling functionality. Consequently, the limitations of the research refer to the amount of information and data retrieved for the selected period and permitted for data export by PubMed using the VOSviewer tool. Moreover, for better visualisation of the results, the research will display the same results in Table 1 and Graph 1, and also Table 2 and Graph to individualize the increasing trends of topics in some year. Therefore, the research provides a systematic review of the specialized literature developing a five-step process as follows: (1) the research concepts are focused in the area of “social security” (10160 results) and “social behavior” (123.361 results); (2) the research filters the results provided by PubMed for the period between January 1, 2000 and January 23, 2023 by exploring all types of scientific literature as provided by PubMed database produced by National Library of Medicine (United States of America) for the last two decades; (3) data were collected directly from PubMed database (accessed on January 23, 2023); (4) the corpus of articles was extracted from the PubMed database as follows: the results were saved for each targeted concept by applying the filters of “Free full text” and “Full Text”; (5) the last step

of the systematic review processes the data collected providing: (1) information and results on the relationship among key terms (key terms occurrence for “social security” search (Figure 1) and relationship among key terms for “social security” search relating all author’s selected keywords (Figure 2); (2) information and results on the relationship among key terms occurrence for “social behavior” (Figure 3) and relationship among key terms for “social behavior” search relating all author’s selected keywords (Figure 4); (3) Table 1 and Graph 1 illustrate the distribution of results in the field of “social security” and the associated number of citations and publications within the period January 1, 2000-January 23, 2023, while Table 2 and Graph 2 illustrates the distribution of results in the researched field of “social behavior” for the same period; (4) results on the relationship among key terms for “social security” search relating all author’s selected keywords (Figure 3 and Figure 4).

The research applied uniformly for all years (January 1, 2000-January, 23, 2023) reveals convergent approaches for the search of the concept of “social security” for the period 2000–2005 (between 56 and 84 results annually) (Table 1). In the case of the period 2006–2019, the number of results for the “social security” search (Table 1) proves a more complex evaluation, quantified between 109 and 833 results. The importance of research in the “social security” field is gradually amplified in the period 2006-2019 and the trend of increasing interest in the field can be translated into the study of the experience of the state-society-citizen relationship, as well as for the modeling of a new approach aimed at improving the classical theoretical approach. The new research tendency developed after 2010 centred on the social security-civic engagement relationship and emphasizes the interdependencies of the thematic positions between good governance, social security reform and citizen participation (Goldman, Orsza, 2014; Jaccoud, Mesquita, Paiva, 2017).

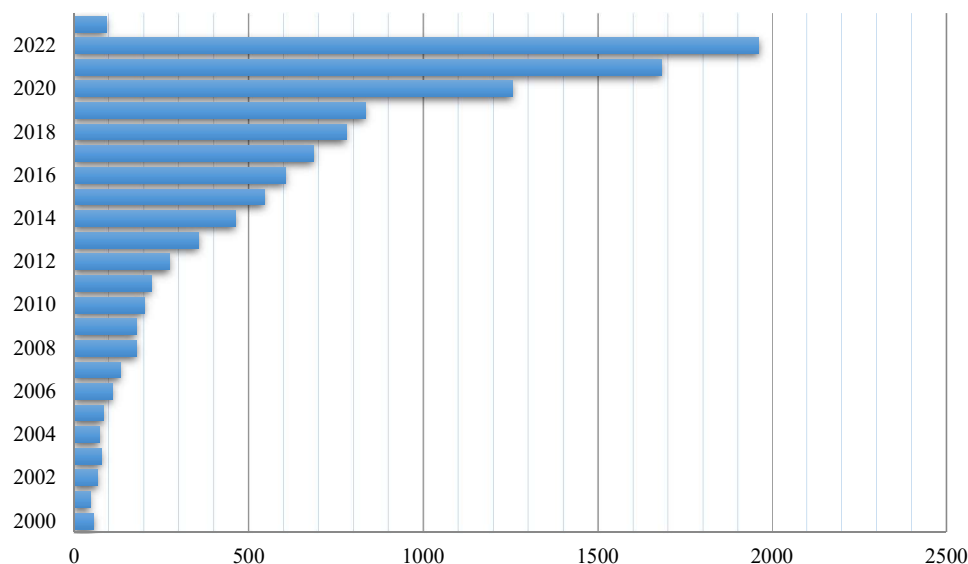
Table 1. Number of results (citations and publications) on “social security”

Year (2012–2023)	Count	Year (2000–2011)	Count
2023	92	2011	220
2022	1961	2010	200
2021	1683	2009	178
2020	1256	2008	179
2019	833	2007	131
2018	779	2006	109
2017	686	2005	84
2016	605	2004	73
2015	545	2003	78
2014	462	2002	67
2013	357	2001	45
2012	273	2000	56

Source: Authors’ own compilation based on Pubmed search results on “social security” (01.01.2000-23.01.2023).

A retrospective overview of the last three years (from January 1, 2020 to January 23, 2023) on the search results for the key term “social security” marks a clear distinctiveness

of the COVID-19 pandemic period at the level of the years 2020, 2021 and 2022 (Graph 1). Results for these years gravitate between 1256 and 1961 recorded annually and ranging from 833 results (2019) before the pandemic period to more than 1961 results (2022), an increase of at least two times in last three years (Graph 1). Approximately one-half of the results for the whole period were registered during the COVID-19 pandemic (4992 results). Over the last two years, the results for the “social security” research almost double ranging from 1256 results (2020) to 1961 (2022). As an overall focus, Graph 1 and Graph 2 are merely intended to visualize and explore the advances registered in the last years (ranging from 2018 to 2022) compared to the first years of the selected period (ranging from 2000 to 2010).



Graph 1. Number of results (citations and publications) on “social security”

Source: Authors’ own compilation based on Pubmed search results on “social security” (01.01.2000-23.01.2023).

The consequences of the increasing trend focusing on the pandemic period are also the result of the debate that focuses the social security system and good governance (Li, Huang, Xiang, Dou, 2021; Ullah, Harrigan, 2022; Zhi,Tan, Chen, Chen, Wu, Xue, Song, 2022). Human behavior and social security experienced during COVID-19 have the strongest links emphasizing the social and health impact of the pandemic period (Figure 1).

Similarly, two other significant sources of social security (“health status” and “health care costs”) are also correlated with the COVID-19 pandemic (Figure 1). Other three concepts (“policy”, “social behavior” and “social capital”) can be identified as sources for the “social security” increased occurrence during the researched period.

Therefore, the focus on “social security” poses a double challenge (“quality of life” and “health care costs”) by enhancing the role of the relationship state-society-citizen. The presence of concepts of “social adjustment”, “policy”, “family relations” and “adaptation” follows the trajectory of the relationship between state-society-citizen and the linkage good governance-social normativity-social functioning raised by the first research question of

the paper. This approach is rooted in “time factors” and “quality of life” (Figure 1). The results of the research encompass other key terms including “food supply” and “social capital” as vital elements of social development in the last two decades (Figure 1). In particular, researching “family characteristics” and preserving “adaptation” is essential for the “social security” search exposing external and internal benchmarks for policy formulation.

While the VOSviewer framework largely releases the use of the concept of “social security” related to “humans” and “COVID-19”, it also noted that the analytical scrutiny of “social adjustment” and “quality of life” to be concerned with other policy references related to “health education”, “prevention” and “prognosis” (Figure 1).

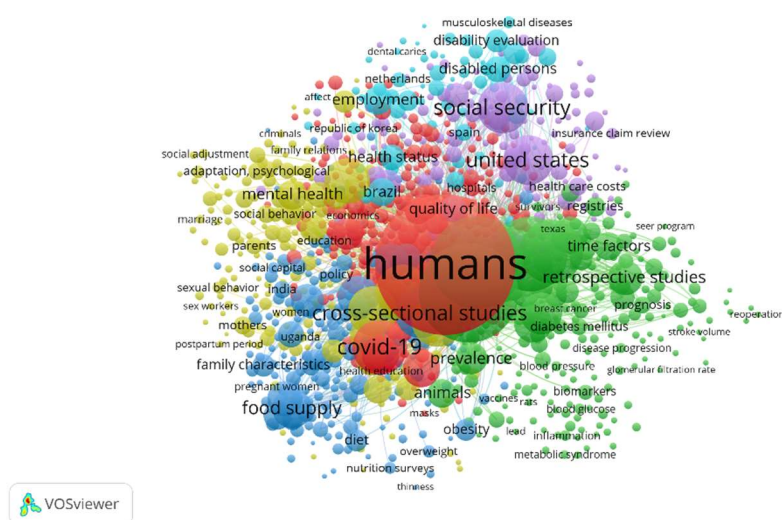


Figure 1. Network visualization of the relationship among key terms occurrence for “social security” search (01.01.2000–23.01.2023)

Source: Authors’ own processing based on VOSviewer software.

The concept of COVID-19 can be found in most of the studies analyzed during this period considering the polarization of research on the social security and civic engagement relationship during the pandemic period. In addition, most research launched in the period 2020–2022 had to find a balance between state responsibility and individual participation.

Furthermore, social integration, public health and social attachment are pivotal factors of the studies released in the period 2020–2022 (Lyeonov, Bilan, Yarovenko, Ostasz, Kolotilina, 2021; Gustison, Phelps, 2022; Jung, Thompson, Byun, 2022) (Figure 2). Thus, Figure 2 considers the overlay visualization of the keywords of the selected articles releasing the concept of “COVID-19” as particularly focused due to the high level of dependency on other concepts (e.g. “social medicine”, “public health”, “corporate social responsibility”, “health inequalities” and “food policy”) (Figure 2).

According to the overlay visualization provided by Figure 2, “social security” has become a benchmark for state-society-citizen relationship guiding the attributes of social development and community-scale “public health” and targeting four levels of social-related dependencies: “primary care”, “health inequalities”, “aging” and “privacy”. Figu-

re 2 also highlights the importance of health policies during the COVID-19 period toward social security regarding the IoT (Internet of Things) development and sustainability providing the key features of the social security-social behavior-civic engagement nexus during the COVID-19 pandemic as launched by the research question (2) in the Introduction section of the paper.

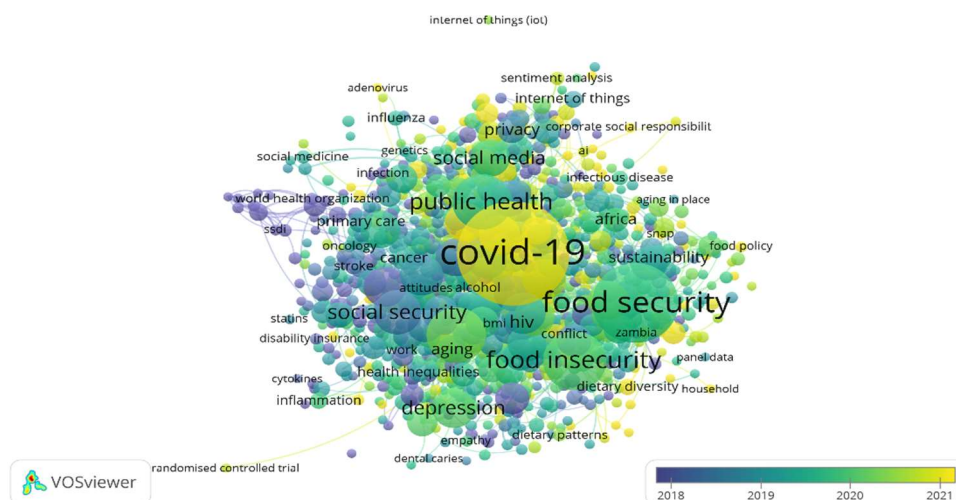


Figure 2. Overlay visualization of keywords of journals articles (authors selected keywords) among key terms for “social security” search (01.01.2000–23.01.2023)

Source: Authors’ own processing based on VOSviewer software.

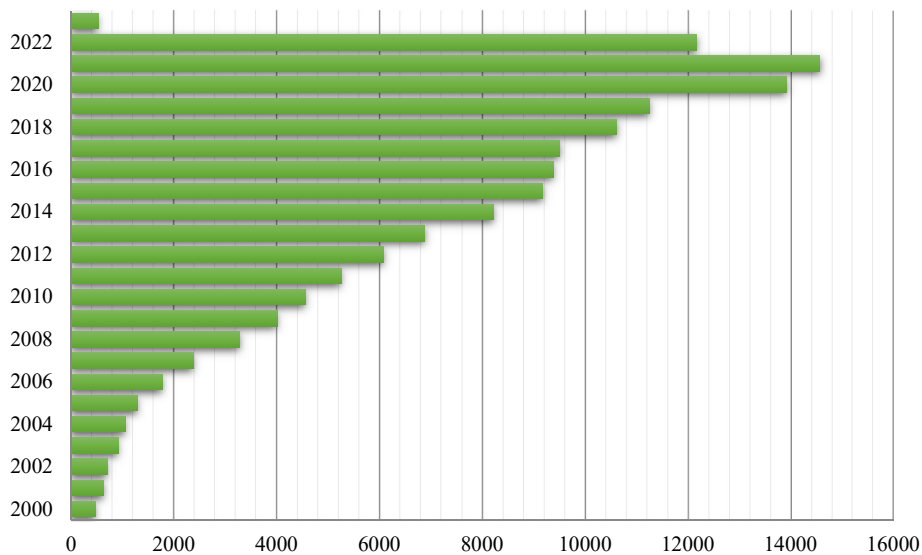
Table 2 highlights the number of results for the search on “social behavior” focusing on the increase of results for the period (pre)pandemic ranging from 470 results (2000), 634 (2001), 695 (2002), 4564 (2010), 6078 (2012), 9176 (2015), 9505 (2017), 10 610 (2018), 14573 (2021) to 12 173 results (2022). The recorded data shows a thirtyfold increase in the number of recorded results considering a comparison of the records extracted for the years 2000 (470 results) and 2021 (14 573 results). The table focuses on three periods of research-based approach to “social behavior” within PubMed database: (i) the first period (2000–2010) ranging from 470 results (2000) to 4564 results (2010); (ii) the second period (2011–2017) ranging from 5262 (2011) to 9505 (2017); (iii) the third period (2018–2022) ranging from 10610 (2018) to 12173 (2022).

Nevertheless, the results estimated for the pandemic period (a total of 40 668 results for the period 2020–2022) lie at the core of “social behavior” search centring related concepts to “social support”, “population dynamics” and “social dominance”. The last three terms represent central themes of research for the studies listed by PubMed database during the period 2000–2023. To do so, Graph 2 undertakes an integrated approach of the period of research placing “social behavior” as the central theme of research for social policies by relying on the “cooperative behavior” and “choice behavior” approaches (Figure 3).

Table 2. Number of results (citations and publications) on “social behavior”

Year (2012–2023)	Count	Year (2000–2011)	Count
2023	521	2011	5262
2022	12173	2010	4564
2021	14573	2009	4009
2020	13922	2008	3285
2019	11251	2007	2378
2018	10610	2006	1773
2017	9505	2005	1289
2016	9384	2004	1050
2015	9176	2003	913
2014	8220	2002	695
2013	6886	2001	634
2012	6078	2000	470

Source: Authors’ own compilation based on Pubmed search results on “social behavior” (01.01.2000-23.01.2023)



Graph 2. Number of results (citations and publications) on “social behavior” (01.01.2000–23.01.2023)

Source: Authors’ own compilation based on Pubmed search results on “social behavior”.

Therefore, the data presented in Table 1 and Table 2 highlight the number of citations and publications for “social security” and “social behavior” expressing the increased attention of the scientific literature for the two topics and the growth trends especially during the COVID-19 pandemic.





inside (“emotions” and “reputation”) and outside sources (“group processes”, “cooperation”, “social learning”) (Figure 4).

For most of the studies the priority given to “social behavior” targets a consensus to advance new cross-sectoral perspectives on “social cognition” and “sociality” (Figure 4). This view is reinforced both by the organizational spectrum (“spectrum” and “disorder”) and an individual dimension underlying “adaption” and “cooperation”. The overlay visualization displayed by Figure 4 illustrates the key features of the normative normative social behaviour, such as “adaption” and “cooperation”.

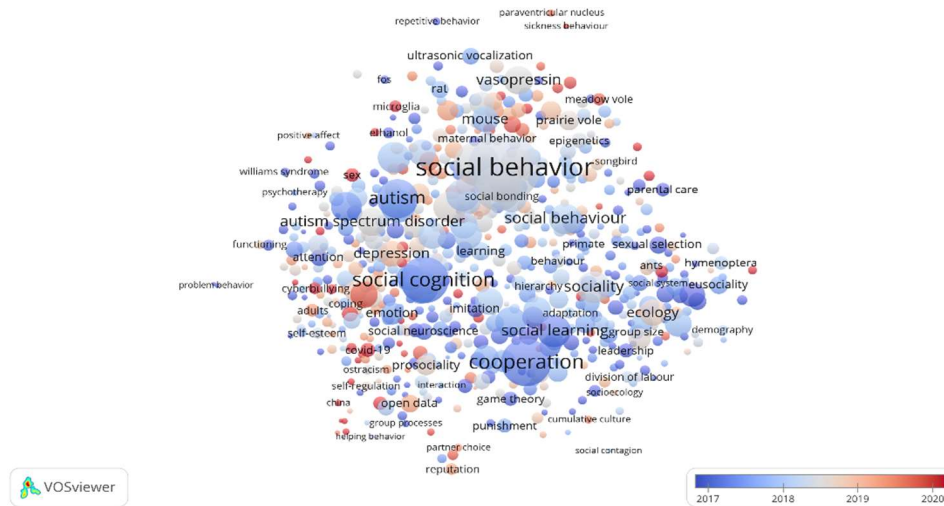


Figure 4. Overlay visualization of keywords of journals articles (authors selected keywords) among key terms for “social behavior” search (01.01.2000–23.01.2023)

Source: Authors’ own processing based on VOSviewer software.

The research hypothesis established proposing a linkage between the intensity of the social phenomena and processes and the production of scientific literature in the field is validated by the quantitative and qualitative data exposed and the results registered. Thus, this approach labels the two analytical dimensions of the research, social phenomena and scientific literature suggesting three additional directions needed to be reported.

First, several new dimensions were assessed to explore the complex paths of good governance, social normativity and social functionality. Second, the hypothesized linkage between social relations and scientific research has been consistently highlighted finding the strong influence and consequences of the pandemic COVID-19 on the state-society-citizen relations. Third, there are several other particular relationships influencing the hypothesized path here including: social behavior, adaption, cooperation, emotion, social cognition

## 6. CONCLUSIONS

Using the VOSviewer software analysis, the research process the results of the research of the concepts of “social security” and “social behavior” by revisiting the state-society-

citizen relationship and other key terms covered by the PubMed database during the period January 01, 2000 – January 23, 2023. As proposed by the research goals framework research exposed in the first part of the paper, the analysis used for analysis the following concepts: “civic engagement”, “social cognition”, “cooperation”, “social evolution”, “social functioning”, “social behavior”, “social capital”, “social security”, “quality of life” and “health care costs”, “social adjustment”, “family relations” etc. (Figure 1 – Figure 4).

First, the research results focus on the strong social underpinnings and conceptual biases during the research period. Second, addressing a specific period of research (2000-2023), the results explore the direct dependencies between key terms using network and overlay visualization of terms. Third, the study also addresses the social biases during COVID-19. This context is related to an institutional and individual spectrum focusing on “social integration” and “cooperation”. Thus, the research identifies a strong link between social security, social behavior and civic engagement rooted in the concepts of “social support” (Figure 3) and “sociality” (Figure 4).

As possible directions for further study, future research is needed in order to analyze and monitor how the state-society-citizen evolved in the post-pandemic period, to scrutinize the constructive role of the relationship between social motivation and social intention and the new sources of social security and civic engagement.

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## TAX MORALITY AND THE INTENTIONS OF HOUSEHOLDS AND BUSINESS ENTITIES TO PARTICIPATE IN THE SHADOW ECONOMY

*Purpose:* The purpose of this paper is to assess the tax morality of households and business entities in the context of the shadow economy. *Methodology:* The implementation of the objective requires the use of the direct-questionnaire method. The article presents the results of empirical research for 2009–2023, carried out in the Podkarpackie Province. *Results:* The publication describes tax morality. It also presents parts of the author's own survey research on the issue for 2009–2023. This research, and data taken from the reports of other research centers, seem to indicate considerable social acceptance of tax fraud. At the same time, low tax morality significantly affects the scale of the shadow economy. This also seems to be confirmed by the participants in the study, who believe that tax morality has a large or small impact on the shadow economy activity of households and business entities.

**Keywords:** personal finance, tax evasion, tax morality, tax fraud.

### 1. INTRODUCTION

Modern tax systems consist of many different fiscal burdens, shaped by historical development and socio-economic policy. It is commonly assumed that taxpayers, acting as “Homo economicus”, aim to maximize their fiscal benefits and avoid taxes if the profitability of such actions exceeds the risk of potential financial losses. Nevertheless, despite relatively low penal and fiscal sanctions, along with a low risk of inspection in many countries, most taxpayers honestly fulfill their tax obligations toward the state, refraining from attempting tax evasion. This behavior is elucidated by the concept of tax morality, which refers to an individual citizen's reaction to tax obligations or his internal motivation (or lack thereof) to pay taxes.

Among the reactions aimed at reducing fiscal liabilities, tax avoidance and evasion are the most prevalent (Szafoni, T., Szafoni, M., 2020). In a broader sense, at least five types of taxpayer behavior are identified: tax saving, planning (tax optimization), avoidance, and circumvention of tax law (Jankowski, 2019). From the perspective of the legislator, advanced tax planning, tax optimization, and tax avoidance are considered acceptable forms of behavior to reduce tax burdens. Conversely, tax evasion takes forms such as

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avoidance, abuse, evasion, and fraud (Klonowska, 2017). Tax law doctrine distinguishes six reactions to levies: the so-called normal reaction (paying tax in the due amount), tax shifting, tax optimization (legal action), tax catching up (lowering operating costs), and tax fraud (Pietrasz, 2007). In the literature, the shadow economy is emphasized as an activity that fundamentally involves tax evasion, leading many financiers to term the informal economy as “tax dexterity” or an abuse of tax law (Martinez, 2001).

The paper deals with the subject of tax morality in relation to the shadow economy. The first part of the paper describes the essence of tax morality, showcasing Polish and foreign research on the issue. Additionally, parts of the author’s survey research conducted in the Podkarpackie Province from 2009–2023 are presented. The paper’s objective is to assess the tax morality of households and business entities in the context of the shadow economy based on original research. This objective was pursued using the direct-questionnaire method.

## 2. THE CONCEPT OF TAX MORALITY

The concept of tax morality was introduced in 1960 by Schmöders, who defined it as “the attitudes of a group or the entire population of taxpayers regarding the issue of meeting or neglecting tax obligations, embedded in the tax mentality and civic awareness” (Kichler, 2007). Currently, tax morality is understood as an internal motivation to pay taxes (Alm, 2006). It is an internal acceptance of fiscal obligation and the recognition of the tax supremacy of the state (Gomułowicz, 2008). The intrinsic motivation to pay tribute and settle tax liabilities may result from pressure from the environment, family, or the need for social acceptance. This motivation may also reflect tradition, culture, and norms adopted in the place of upbringing (Luttmer, 2014).

In turn, the morality of the taxpayer consists of the individual reaction of a given person to tax burdens (Bogacka-Kisiel, 2012). It is influenced by ethical factors (moral values) or psychological factors (reaction to the environment, legal provisions) (Pest, 2010). It requires that the taxpayer’s action aligns with their internal conviction; thus, it can be considered an internal acceptance of the tax obligation and recognition of the fiscal sovereignty of the state (Gomułowicz, 2013). Tax morality, namely the willingness to pay taxes, also determines the degree of citizens’ trust in the government, influencing whether taxes are paid in the right amount (Kędrzyński, 2020).

In the literature, tax morality is also referred to as the taxpayer’s ethics, which is defined as a set of moral norms adopted in a given community concerning the taxpayer’s attitude toward paying mandatory fees to the state budget (Szulc, 2013). Tax morality is based on ethical principles and indicates standards of conduct. It results from the sense of duty toward society and the citizen’s tax awareness (Florek, 2021). In colloquial language, the terms “ethics” and “morality” are sometimes equated and used interchangeably, but they are not synonymous terms. Both refer to the observance of established and binding norms of conduct in a given society, with ethics being the science of morality.

Tax morality refers to individual reactions to taxation, which may take the form of legal or illegal tax evasion (Komar, 1996). There is a difference between morality and tax evasion. Tax evasion represents an individual’s behavior, while tax morality is an attitude (Schneider, 2007). Nevertheless, the level of tax morality significantly impacts the behavior of taxpayers, including the scale of tax fraud (Torgler, 2007). It is indicated that individuals with low tax morality are more likely to engage in tax evasion through the unethical use of tax havens (Kemme, 2020). It has been estimated that reducing tax



morality by one unit leads to an increase in the size of the shadow economy by over 20% (Torgler, 2007).

The tax morality of households is influenced by elements such as the structure of the tax system (Szczodrowski, 2007), the application of law enforcement (Skolimowska, 2021), the conduct of the administration (corruption of state officials lowers tax morale) (Jahnke, 2019), the effectiveness of control (Gomułowicz, 1996), the manner of managing public funds (Lotko, 2017), and religiousness. For instance, in the doctrine of the Catholic Church, paying taxes is considered a civic duty (Król, 2018).

Tax evasion sometimes results from the perception of fiscal burdens as a form of robbery associated with the tyranny of power. The socio-psychological aspect of tax evasion involves the problem of assessing priority. Many entrepreneurs assert that economic activity in society has only an economic dimension. Hence, in their opinion, ethics is not the primary motive for action, especially because it very often becomes an obstacle to achieving goals (Taranow, 2001). Tax evasion is often morally justified by the belief that no specific individual will suffer as a result of the act because the state is perceived as such an abstract concept that commonly understood honesty and decency cannot apply to (Kuzińska, 2018). Crimes that violate impersonal goods, such as those of an organization or the state, are often judged more leniently than crimes that violate the good of an individual (Jasińska-Kania, 2002; Stecko, 2018; Stecko, 2015). In public opinion, individuals committing burglaries and car thefts are often deemed more deserving of severe punishment than tax fraudsters (Niesiołowska, 2013).

### 3. TAX MORALITY IN RESEARCH WORLDWIDE

Initially, research on tax morality was based primarily on the assumption that the factors influencing the level of morality include the income of individuals, the level of tax rates, the chance of detecting tax fraud, and the severity of possible sanctions (Allingham, 1972). The resistance utility models that dominated for many years assumed that paying taxes depended on the above-mentioned determinants, and these models were based on the conviction that the goal of an individual was to maximize their own benefits, achieved, among other ways, by tax evasion. The taxpayer acts as a player who chooses between a certain loss (tax payment), a potential profit (tax fraud), or a potential high loss (detecting the fraud and imposing a penalty). Taxpayers calculate the risks and benefits and choose the option that brings the best results.

Over time, it became apparent that such models do not fully capture the phenomenon, and the threat of a penalty does not explain the high levels of tax morality in countries with relatively small fiscal penalties (Torgler, 2003). According to Bruno Frey, an individual's behavior is guided not only by concern for their own good but also by a sense of civic duty (Frey 1997). The dynamic growth of tax regulations has also been observed. Hence, Joseph Stiglitz argued that reliable tax payment results primarily from taxpayers' insufficient knowledge of legal tax optimization (Stiglitz, 1985).

Research on the problem of tax morality in the empirical aspect is an extremely difficult and complex issue. In the countries where the research was conducted, taxpayers' responses indicated that the assessment of tax fraud was neutral or quite mild in social perception. Respondents believed that when calculating taxes, measures on the borderline of the law should be used to minimize the tax burden (Klein, 1997).

A study conducted in 2005 showed that the tax morality of households in the United States was significantly higher than in Spain, as well as in 14 other European countries

surveyed. This analysis also showed a strong negative correlation between the size of the shadow economy and the level of tax morality – the higher the tax morality, the lower the scope of the shadow economy (Alm, 2006). Although it is emphasized that Americans are traditionally honest taxpayers, tax morality has suffered as a result of the declining economy, restrictive fiscal regulations, and growing doubts about the fairness of the tax system. Citizens paying taxes stopped believing that, in return, they would receive benefits from the state in the form of infrastructure development, health care, and retirement security (Jacob, 1995). Direct links between tax evasion and tax morality are demonstrated by the work of Grant Richardson based on data collected by the World Economic Forum. According to them, tax morality, alongside the complexity and fairness of taxes, was the main factor in tax evasion (Richardson, 2006). Friedrich Schneider attributes the importance of tax morality as a determinant of the shadow economy to 22–25% (Schneider, 2012).

Research conducted in Switzerland shows that taxpayers and public authorities are linked by a kind of “psychological tax contract” that induces the general public to pay taxes. This is the result of the close bond between society and the state, facilitated by a well-developed system of direct democracy and a small area of the country’s regions, which are cantons (Feld, 2006). Similarly, in Sweden, despite the high tax burden, the scope of the shadow economy is small. Swedes are characterized by a high level of social awareness and attitude to civic duties.

Recent studies on tax morality highlight the impact of the quality of governance on tax liability. The literature on the subject states that tax morale shapes tax compliance behavior and is significantly correlated with tax effort strategies in different countries. In addition, the quality of governance affects the fair fulfillment of citizens’ fiscal obligations. In Sub-Saharan Africa and Zimbabwe, for example, better enforcement by the tax administration must be coupled with tax reforms that enhance transparency in the utilization of tax revenues to boost tax morale (Sebele-Mpofu, 2020). In Malaysia, tax knowledge, legal complexity, and morality significantly impact tax compliance among a group of salaried employees (Jusoh, 2022).

In Nigeria, it has been proven that tax morality is higher when more people believe that other citizens pay taxes, less corruption occurs, and there is more trust in tax officials (McCulloch, 2021). Asian research, in turn, showed that the level of religiosity has a positive effect on tax morale and compliance with tax regulations (Nurani, 2020).

Moreover, the pivotal role of trust in democracy and public services is confirmed, which directly affects tax morality. In addition, women exhibit higher tax morale than men (Fotiadis, 2021). Subsequent studies conducted in 48 countries have confirmed that citizens’ compliance with tax regulations depends not only on the quality of formal institutions but may also be culturally determined (Andriani, 2022).

A social experiment demonstrates that individuals are more likely to pay taxes if they believe that government services funded by those taxes will bring them greater personal benefits. In this case, households with children attending public schools, having learned that a greater proportion of property tax revenues fund educational institutions, were less likely to engage in tax evasion (Giaccobasso, 2023). Tax morality refers to the intrinsic motivation of taxpayers in relation to paying taxes. A study was conducted to identify the factors determining the tax morale of micro, small, and medium-sized enterprises. In Indonesia, SMEs generate 60% of GDP while contributing only 0.67% of tax revenue. One reason for such a small level of fiscal receipts is low tax morale. The results of structural

equation modeling (SEM) analysis showed that tax attitudes, trust in the tax authority, and perception of public goods have a significant impact on tax morality (Irawan, 2021).

#### 4. POLISH RESEARCH ON TAX MORALITY

The attitudes of Polish taxpayers are indicated by the results of a survey conducted by the Pentor Institute, covering a representative group of a thousand people. According to the findings, 28% of respondents, mainly young individuals (over 30 years of age and private entrepreneurs, stated that tax evaders behaved similarly to the majority of the population, deeming such behavior as commonplace. Remarkably, every tenth respondent considered such individuals to be courageous and entrepreneurial. Furthermore, less than half of the respondents (48%) classified entities hiding their income and evading taxes as fraudsters and criminals (Kruszewski, 1992).

The violation of the common good through tax evasion does not elicit negative sentiments among Poles. A significant part of society regards tax evasion as a widely accepted phenomenon and approves of it. The decline in sensitivity is evident across all social groups, with the level of education being the fundamental determinant (Świecka, 2008). The youngest Poles are the least sensitive to reprehensible tax behavior, whereas individuals close to retirement age (45–64) are the most sensitive. Those least sensitive to neglecting tax obligations are individuals residing in rural areas, the economically disadvantaged, and those with the lowest education levels (Czapiński, 2009). It is indicated that women are characterized by higher tax morality than men (Florek, 2021; Szarek, 2016). The low level of tax morality among company managers was substantiated by Dagmara Nikulin's research. Non-economic factors, such as the strictness of legal regulations, dissatisfaction with cooperation with public administration, low tax morality, and a low assessment of the quality of government, were found to be influential in the increase in tax fraud (Nikulin, 2020).

The moral assessment of tax evasion does not always have to be unambiguous. In the Catechism of the Catholic Church, although tax fraud is deemed morally reprehensible, the circumstances in which the wrongful act takes place are more important. These conditions impact the absence of a negative evaluation. A. Bernal's questionnaire surveys indicate that the moral assessment of tax evasion is closely related to the reasons inducing the taxpayer to commit fraud. According to the respondents, the circumstances in which taxes are imposed, measured, and collected may absolve taxpayers from the moral obligation to pay taxes (Bernal, 2008). Tax morality also changes in the event of difficulties in finding a job – over 72% of respondents would then opt to work without a contract (Szarek, 2016).

The influence of tax fairness on tax morality is discussed in many publications. The results of research by Małgorzata Niesiobędzka indicate that the tax morality of Poles depends primarily on the subjective assessment of procedural fairness. Taxpayers' conviction that the applicable tax rates enable the correct distribution of tax burdens among different tax groups and that tax offices are friendly and honest makes taxpayers less accepting of tax fraud. The tendency to evade taxes increases as the sense of justice decreases. Evasion in such circumstances may be perceived as the right action for the wrong cause (Niesiobędzka, 2009). Research also shows that taxpayers' reactions are influenced by their perspective – whether they expect a refund of overpayment or have to pay underpaid tax advances. In light of the results, it can be concluded that the tightening of penal and fiscal sanctions and the frequency of inspections were effective in the group of people with low tax morality. Among honest citizens, it could have the opposite effect

– emphasizing factors demonstrating the power of the tax authorities could be considered a sign of suspicion and placing taxpayers in the role of “fraud” (Niesobędzka, 2016; Niesobędzka, 2014).

Simultaneously, the inefficiency of tax offices may reduce tax morality. Wojciech Leoński points out that individuals who have managed to deceive the tax authorities without suffering consequences may gain recognition from the environment. The consequence of such behavior may be the dissemination of views related to the profitability of not paying taxes. Such practices will result in increased social acceptance of tax fraud and a decline in morality (Leoński, 2013).

Dominika Florek assessed the factors affecting the motivation to pay taxes among Generation Z<sup>2</sup> (i.e., individuals who have just entered the labor market or are preparing to start it). Respondents were categorized into groups with low and high tax morality. The study confirmed the higher tax morality of women (82.14% would pay taxes if they had a choice). In light of these studies, it was indicated that the factors motivating non-payment of taxes include high taxes, which are also perceived as a barrier to starting a business, a high level of complexity of tax regulations, as well as tax injustice (Florek, 2021).

Factors shaping tax morality were also identified by Ewa Lotko and Urszula Zawadzka-Pąk based on research conducted in the Podlaskie and Mazowieckie Provinces. Psychological and ethical factors that lower the level of tax morality include the amount of taxes relative to the income obtained, ineffective management of public funds, wasteful spending on extensive administration, an unfriendly attitude of tax authorities, and treating the taxpayer as a potential fraudster. Among the factors positively influencing tax morality, only the fact that taxes are a source of state revenue, enabling the financing of public needs, was indicated (Lotko, 2017).

## **5. MORALITY AS A CONDITIONAL TAX EVASION IN THE LIGHT OF OWN RESEARCH**

In this section of the paper, the findings from the author’s research on tax morality concerning the shadow economy and tax fraud are presented. The survey targeted 686 households and 218 companies in May 2009, 1084 households and 250 companies in April and May 2010, 1201 households and 281 companies in May 2011, 1230 households and 232 companies in January 2012, 1,128 households and 237 companies in January 2013, 857 households and 188 companies in January 2014, 852 households and 244 companies in January 2015, 1,103 households and 325 companies in January 2016, 1,038 households and 289 companies in January 2017, 883 households and 225 companies in January 2018, 975 households and 268 businesses in January 2019, 758 households and 265 companies in January 2020, 673 households and 225 companies in January 2022, and 647 households and 248 companies in January 2023. The interviews were conducted in the Podkarpackie Province, targeting individuals over 20 years old with varying income levels and standards of living, as well as entrepreneurs from the small and medium-sized enterprise sector.

In social perception, the state is viewed as anonymous, leading to the belief that not paying the due amount of taxes will not cause harm to anyone. Taxes represent a non-equivalent benefit, which means that the taxpayer does not receive any direct benefit in return. Within the social consciousness, avoiding tax payment is not necessarily frowned upon, and successfully evading it can evoke a sense of satisfaction. In addition, taxes are

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<sup>2</sup> Generation Z is defined as people born after 1990 (i.e., growing up in the years 2000–2010).

often perceived as excessively high and unfair, and tax laws are perceived as unclear and unstable. These circumstances reduce the feeling of guilt associated with tax evasion and engagement in the shadow economy.

Table 1. Structure of answers to the question: What do you think about cases where people conceal part of their earnings in order to reduce the taxes they pay?

Opinion about concealing earnings	Percentage structure in 2009–2015						
	2009	2010	2011	2012	2013	2014	2015
This should be condemned as it is cheating the state	28.5	28.6	28.8	26.9	24.9	26.6	23.4
This is to be forgiven as taxes are too high	39.6	47.5	45.6	43.2	47.7	43.4	46.0
This should be commended as a sign of resourcefulness	4.8	4.8	7.5	5.5	6.6	7.7	5.2
Hard to say	24.4	17.8	17.3	23.5	20.2	21.8	25.4
No answer	2.7	1.4	0.7	1.0	0.6	0.5	0.1

Opinion about concealing earnings	Percentage structure in 2016–2023						
	2016	2017	2018	2019	2020	2022	2023
This should be condemned as it is cheating the state	27.9	30.4	27.7	39.4	33.6	24.52	28.1
This is to be forgiven as taxes are too high	41.1	40.2	39.3	31.9	34.7	38.63	36.6
This should be commended as a sign of resourcefulness	10.1	6.8	6.0	3.5	4.1	5.05	8.0
Hard to say	20.9	22.0	26.8	25.1	27.6	31.80	27.0
No answer	0.2	0.6	0.1	0.1	0	0	0.2

Source: Own calculations based on data from surveys conducted in 2009–2023 in the Podkarpackie Province.

The author's own research conducted from 2009 to 2023 confirmed that a large part of the population did not assess tax fraud negatively. Table 1 presents the structure of households' responses to the question regarding their opinion on concealing their income. Over the years 2009–2023, almost 30% of people believed that such conduct should be condemned. In 2013 and 2022, every fourth person held this opinion. Each year, nearly half of the respondents justified tax fraud by citing high taxes, although the growing tax awareness may be evidenced by the decreasing social acceptance of tax fraud in recent years – 34.7% in 2020 or 36.6% in 2023. There is also a noticeable percentage of people (from 3.5% in 2019 to 8.0% in 2023) who approve of concealing income, considering it a sign of resourcefulness.

By the end of 2019, the shadow economy in Poland decreased to 13.55%. However, due to the pandemic and the war in Ukraine, it grew to 20.65% of GDP by the end of 2022, as reported in February 2023 "Counteracting the Shadow Economy in 2014–2022" (*Przeciwdziałanie...*, 2023). Simultaneously, Poles are characterized by low tax morality and relatively high social acceptance of tax crimes. Tables 2 and 3 present the responses of households and business entities regarding the impact of tax morality on the scale of

activity in the shadow economy. In almost every year of the survey, nearly half of the respondents expressed the opinion that low tax morality significantly affected the scope of the shadow economy (in 2023, 45.9% of households and 48.8% of entities chose this answer option). Given that almost every third respondent (in 2023, 35.7% of households and 35.1% of companies) believed that this impact existed, but was small, it can be assumed that most respondents were aware of the influence of tax morality on informal economic activity in our society.

Table 2. Structure of household answers to the question: Does the low tax morality of Poles affect the scale of the shadow economy?

Opinion	Percentage structure						
	2016	2017	2018	2019	2020	2022	2023
Yes, to a large extent	42.1	44.7	46.5	51.8	52.9	57.95	45.9
Yes, to a small extent	41.4	40.2	37.4	33.3	33.4	32.10	35.7
No, it doesn't affect	14.8	12.7	14.5	12.3	12.3	9.51	16.7
Others	1.0	1.6	1.5	1.4	0.7	0.45	1.5
No answer	0.8	0.8	0.1	1.1	0.8	0	0.2

Source: Own calculations based on data from surveys conducted in the Podkarpackie Province.

Table 3. Structure of answers of business entities to the question: Does the low tax morality of the Poles affect the scale of the shadow economy?

Opinion	Percentage structure						
	2016	2017	2018	2019	2020	2022	2023
Yes, to a large extent	38.8	47.4	45.3	41.8	48.7	48.00	48.8
Yes, to a small extent	39.3	36.7	40.0	41.0	38.1	36.44	35.1
No, it doesn't affect	19.7	11.1	12.0	15.3	10.6	12.89	13.3
Others	0.6	1.7	0	0.7	1.1	2.67	1.6
No answer	1.5	3.1	2.7	1.1	1.6	0	1.2

Source: Own calculations based on data from surveys conducted in the Podkarpackie Province.

## 6. CONCLUSIONS

Research on tax morality suggests that citizens' income, tax rates, the likelihood of tax audits, and the number of sanctions can affect taxpayers' honesty. In addition, a democratic system of power, particularly direct democracy, strong local governments that manage public funds transparently, and citizens' trust in state institutions have a positive impact on tax morality. Religious beliefs can also have a similarly significant impact, with believers being more willing to fulfill their tax obligations.

Polish research on tax morality aligns with global observations. Low tax morality in Polish society is the result of economic and non-economic factors such as high fiscalism, unclear tax laws, poor enforcement, high social support for violations of penal fiscal law, and a sense of injustice in the tax system.

Surveys conducted in the Podkarpackie Province from 2009 to 2023 seem to confirm the impact of tax morality on the scope of activity in the shadow economy. The vast majority of respondents expressed the opinion that the low tax morality of Poles affects the

scale of the informal economy to a large extent (nearly half of the surveyed households and business entities) or to a small extent (nearly every third household and entrepreneur choosing this answer option).

Particularly alarming is the growing conviction every year that tax fraud is a manifestation of resourcefulness, for which at least 40% of respondents look for an explanation, either in the amount of fiscal burdens or a lack of means of subsistence. Research indicates that a situation in which there is a tax depletion is a sufficient justification for tax evasion and that tax morality changes depending on personal circumstances, such as difficulties in finding a job or deterioration of the household's financial situation. It can be seen that the growing legal and civic awareness, as well as the educational impact on taxpayers, had little effect before the pandemic. Nevertheless, the deterioration of living conditions resulting from COVID-19 may have influenced tax morality and increased public favor for fiscal fraud.

Taxpayer behavior is influenced by social, cultural, psychological, and economic conditions. Honesty toward both the state and other taxpayers is a value in itself. It is indicated that citizens are more willing to pay taxes honestly, the more honest the state is toward them. Among the actions limiting the scale of tax fraud, prevention, repression, and educational impact on taxpayers are of fundamental importance.

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## THE SECURITY OF A MINOR IN MEDIATION PROCEEDINGS ON FAMILY MATTERS

This article attempts to scientifically examine issues related to the safety of a minor participating in family mediation. The main part aims to present the benefits of a minor's participation in mediation, and to analyze the arguments against this. The study also aims to assess whether Polish regulations regarding family mediation are appropriate and sufficient for adequate protection of the safety and rights of minors in mediation proceedings. Is it necessary and justified for a minor to participate in mediation proceedings to end a family dispute? When making decisions in this regard, not only is the age of the minor important, but also the fact that minors, due to their physical, mental, emotional, and intellectual immaturity, require special protection and treatment. For this reason, the article also describes the role the mediator should play in guaranteeing the minor's rights, while satisfying their need for security in the family.

**Keywords:** individual safety, minors, family mediation, mediation proceedings.

### 1. THE CONCEPT OF SECURITY OF A MINOR AND MEDIATION

According to the United Nations Development Program (UNDP) and the Human Development Reports published in 1994, the security of the individual means protection against constant threats such as disease, hunger, or oppression and protection against violent and harmful shocks in everyday life. This document was among the first to put the individual at the center of the science of security, highlighting that the concept of individual security refers to the protection of people against old and new security threats. It recognizes the links and interdependencies between human rights and national security. The concept of individual security is the protection of everyday life and human dignity, focusing primarily on protection against threats (Woźniak, 2018). It is a broader concept than human rights because, alongside rights, it also includes freedom from threats. This concept definitely goes beyond the traditional concept of national security and also includes the development and respect for human rights as well as the need to satisfy basic needs and freedoms, such as survival, identity, independence, peace, possession, certainty of development, freedom from fear, the right to live in dignity, and guarantees of functioning and belonging to the family (Rychły-Lipińska, 2017). Thus, today, security is not only a matter of politics, military, society, or economy; it represents a certain state that assures

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the individual's existence and potential for development, in the sphere of basic human needs, which rank high in the hierarchy of existential values (Tryboń, Grabowska-Lepczak, Kwiatkowski, 2011). It concerns an individual (i.e., an adult or a minor) functioning in a given environment (e.g., within a family).

For this reason, this study aims to investigate whether Polish regulations on family mediation are appropriate and sufficient for ensuring the adequate protection of the safety and rights of a minor in mediation proceedings. Is the participation of a minor in such mediation proceedings necessary and justified for the resolution of a family dispute?

Undoubtedly, family mediation is the best method for communication and conflict prevention, while satisfying the minor's need for safety, primarily in terms of self-acceptance and self-esteem. Consequently, conducting mediation with the participation of minors is necessary, taking into account their needs and ensuring the protection of minors' best interests and welfare, as stated in Council of Europe Recommendation No. R(98)1<sup>2</sup>. Unfortunately, the Polish legislator has not established specific regulations regarding the youngest participants in mediation proceedings, even though they have already been established in substantive and procedural civil law. Therefore, it should always be borne in mind that when dealing with a minor in mediation, we are dealing with an individual who, due to physical, mental, emotional, and intellectual immaturity, requires special protection and treatment (Sitarz, Bek, 2014).

## 2. THE CONCEPT OF A MINOR IN CIVIL LAW

The Civil Code of April 23, 1964, defines a minor as a person under the age of 18 years<sup>3</sup>. The age requirement as a condition for reaching the age of majority is objective, although it is not absolute (Jaros, 2015). It should be noted that not every person under the age of 18 is a minor because a person under 18 who is married becomes an adult. Article 10 § 1 of the Civil Code provides a statutory definition of the term "adult"; however, this definition does not fully encompass the meaning adopted by the legislator. This is evident in Article 10 § 2 c.c., where the first sentence does not raise any doubts that he understands this term in a broader sense (the term "adult" used in Art. 10 § 1 of the Civil Code aligns with the concept of "adult" used in Art. 43 k.p.a.). It follows from the above provisions that the legislator's understanding of the term "adult" includes two categories of persons: those who have turned 18 and those who, despite being under 18, have entered into marriage. The quoted provision does not define the concept of the age of majority or indicate the legal consequences associated with its attainment; however, the undoubted legal consequence of attaining the age of majority is the acquisition of full legal capacity. However, the meaning of the age of majority goes beyond legal capacity and even beyond the sphere of civil law. By law, a natural person becomes an adult at the age of 18, acquiring both biological and mental maturity formally at this designated moment. From this point, a natural person becomes capable of independently shaping his legal situation and gains the ability to understand both the meaning of the actions taken and declarations of will made by other entities (Serwach, 2014).

The legislator decided that a person who has turned 18 is mature enough, in terms of psychophysicality, to grant him or her the status of an adult. This legislative conviction forms the ratio legis of the adopted solution because exceeding the above age limit results

<sup>2</sup> Human Development Report from 1994 [Access: 1.03.2023]. Access on the internet: <https://hdr.undp.org/content/human-development-report-1994>.

<sup>3</sup> Article 10 of the Act of April 23, 1964. Civil Code, Journal Laws of 2022, 1360, i.e.

in reaching the age of majority, irrespective of the psychophysical maturity level of the individual (Gudowski, 2021). While the process of reaching maturity varies among individuals, the establishment of a uniform age limit for all natural persons is justified by the fact that this solution facilitates legal transactions (Książak, 2014).

Colloquially, a minor is considered to be a young person, often of school age, until he or she meets the criteria for adulthood. Due to their age, limited experience, and incomplete mental or physical development, minors do not possess the full rights of adult members of the community in which they live. For this reason, special protection is necessary, which, among others, is provided by the provisions of civil or family law, including in mediation proceedings.

### **3. PROVISIONS CONCERNING A MINOR IN A CIVIL PROCESS USED IN FAMILY MEDIATION**

According to Art. 573 § 2 c.c.p., the court may limit or exclude the minor's personal participation in the proceedings if justified by educational reasons. In turn, Art. 152 § 2 provides that the chairman may allow minors to attend an open session. Article 430 c.c.p. states that minors under the age of 13 and descendants of the parties under the age of 17 may not be questioned as witnesses. This implies that the same principles apply in family mediation. If a minor is not emotionally mature enough to participate in mediation proceedings, his or her participation is not recommended. The provisions of the Code of Civil Procedure expressly state that minors under the age of 13 cannot be interrogated as witnesses, and, thus, should not participate in family mediation. The final decision in this regard rests with the minor's parents and the mediator conducting the proceedings, as there is no direct prohibition. However, it should be noted that it is the parents' responsibility to listen to the minor, and the mediator is responsible for ensuring that the minor is heard during mediation by the parents or other adults, or by the mediator. A minor has the right to express his or her own opinion, but such an obligation cannot be imposed on the minor (Nordhelle, 2010). It seems reasonable to apply the principle specified in Art. 216<sup>1</sup> CCP, from which it is clear that in cases concerning a minor child, the court will hear them if their mental development, health, and degree of maturity allow it. In addition, the hearing of a minor should take place outside the courtroom, and pursuant to § 2 of the quoted provision, the court, depending on the circumstances, mental development, health, and maturity of the child, should take into account his or her opinion and reasonable wishes. The mediator should use the same procedure toward a minor during family mediation if he decides to hear the minor in a given case. The mediator should indicate to the parents of the minor the purpose and reasonable grounds for hearing the minor because it is ultimately the parents who are responsible for the obligation to listen and, if possible, to take into account the opinion of the child. However, regarding taking into account the views of the child, the mediator, as well as the court, must consider the circumstances of the case in relation to the child and the extent to which the reasonable wishes of the minor can be taken into account. Purpose-based interpretation, therefore, requires relativizing the application of Art. 216<sup>1</sup> c.c.p. only to the facts for which the child's opinion is legally relevant<sup>4</sup>.

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<sup>4</sup> See: judgment of the Court of Appeal in Gdańsk of January 20, 2016, V ACa 607/15, LEX No. 2052629.

#### 4. FOR AND AGAINST THE PARTICIPATION OF A MINOR IN FAMILY MEDIATION

An important argument against a minor's participation in family mediation, especially regarding alimony, determining residence, or regulating contacts, is the lack of control the minor has over the implementation of such an agreement. In addition, even though the legislator has imposed the obligation on the mediator to check the fulfillment of the parties' obligations, the mediator lacks the tools to do so. A minor caught in the middle of an adult conflict often continues to live with the two parties until the case concludes in a concrete settlement. However, supporters of involving minors in family mediation highlight the beneficial effects of properly conducted mediation on the relationship between conflicting parties, as well as their psychological well-being, including "calming down" the minor (Gójska, Huryn, 2007). The dangers associated with mediation in family matters are no greater than those associated with participation in court proceedings. However, the key issue in this case is the mediator's ability to conduct negotiations while maintaining the balance of the parties and providing some kind of protection for the minor (Święcicka, 2021). Therefore, mediation involving minors requires significant effort and skills from the mediator and should involve a psychologist or a mediator who has such education. Otherwise, it may lead to destabilization of family life and frustration due to the inability to actively participate in everyday family matters (Fiałkowski, 2017). The mediator conducting mediation with the participation of a minor should ensure, above all, the safety of the parties involved in the conflict, maintaining their balance and considering the interests and needs of the child participating in such mediation (Przybyła-Basista, 2006). According to Art. 436 k.p.c., if there are prospects for maintaining the marriage, the court may refer the parties to mediation. If the parties have not agreed on a mediator, the court directs them to a permanent mediator with theoretical knowledge or education, particularly in psychology, pedagogy, sociology, or law, and practical skills in mediation in family matters<sup>5</sup>. This means that such a mediator should have the necessary knowledge and practical skills in family mediation. Unfortunately, the regulations lack specific guidelines on the skills and qualifications a family mediator should possess. The knowledge acquired during studies in the aforementioned disciplines may be helpful in conducting family mediation with the participation of a minor, but it does not guarantee the proper protection of his or her interests and needs (Wybrańczyk, 2022).

Why should one consider involving a minor in family mediation if it is not necessary? From both procedural and family mediation perspectives, the most important aspect seems to be reaching a settlement as a necessity (Kaszczyszyn, 2015). Family mediation with the participation of a minor should primarily aim at meeting his or her psychological needs. This enables the minor to present his or her point of view on the matter, relieve tension, express anger, and, most importantly, understand why the parents are separating and the reasons behind the residence arrangements with one parent while the other has to pay child support. Such mediation often allows one of the parents to admit guilt or offer an apology. It enables forgiveness, which leads to the signing of an agreement. Although this does not always completely resolve the conflict, it is only an externalized manifestation of the emotional state (Wilejczyk, 2013). Sometimes, this mediation allows the minor to have initial contact with one of the parents. For these reasons, family mediation requires the ability to work with the emotions of both parties, including the minor, and with the

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<sup>5</sup> Article 436 § 1 and 4 of the Act of November 17, 1964. Code of Civil Procedure, Journal of Laws 2021, 1805, i.e.

mediator's own emotions (Helios, Jedlecka, 2019). It is necessary for the mediator to be very self-aware and to work through his own attitudes and conflicts so that they do not block an open approach to the parties in mediation. A family mediator inviting a minor to participate in mediation should be able to recognize and cope with situations of violence and addictions in the family. In such cases, the actual lack of control over the implementation of the settlement by the mediator poses a high risk of the minor returning to the previous situation, being a victim of various types of violence and often still living with the perpetrator (Gójska, Huryn, 2007). Throughout the entire mediation process, a well-trained mediator can support a minor, who is the weakest party to the proceedings, and provide them with a free opportunity to disclose their needs in a fear-free manner and motivate all parties in the conflict to reach a fair agreement, considering the interests and needs of the minor involved in adult conflict. Therefore, it is important for the mediator to have a basic understanding of the minor's developmental psychology and consider the expected future development of the situation. The family is a dynamic system that evolves through various phases, each with its own specificities and more or less typical problems. An experienced and properly prepared family mediator should assist the family in anticipating the development of their situation and finding at least basic protection in the event of basic problems. Besides knowledge of psychology or sociology, the mediator must possess knowledge of the law. The mere development of an agreement by the parties, without the possibility of its approval by the court, is not sufficient. The mediator should have detailed knowledge of applicable family law, especially in resolving contentious issues regarding divorce, separation, alimony, contacts regulating, exercising parental authority, or meeting family needs. Only then can the mediator construct an agreement subject to approval or transposition into a judicial decision. Failure to approve the settlement in these matters may lead to the disregard of arrangements previously worked out jointly by the parties, including the minor, with the mediator's participation. This can become a source of further conflicts that arouse intense emotions and have a destructive effect on the minor's relationship with one of the parents. Often, quarreling spouses accuse each other of manipulating the child and turning him or her against the other parent (Czayka-Chelmińska, Glegoła-Szczap, 2015).

Family mediation with the participation of a minor should be a procedure designed to assist the conflicting parties, particularly the most vulnerable individual in the conflict (Kaźmierczak, Kaźmierczak, 2015). Primarily, such mediation should avoid the escalation of the conflict (Purc-Kurowicka, 2019). This is a dispute resolution method intended to mitigate intense emotions between parents and stabilize the minor's situation (Seroka, 2014). The mediator's role is to safeguard the child's interests and establish a list of his or her most important current and future needs, which are the criteria for evaluating the proposed solutions. Repeated references to this list during discussions will allow the minor's perspective to be included in the arrangements. Encouraging parents to focus on parental duties and their responsibility for the child's well-being, rather than on parental rights, will highlight the minor's needs and the importance of caring for his or her present and future. The mediator's continuous emphasis on these aspects is likely to result in an improvement in the minor's family situation, a calmer atmosphere at home, and a greater sense of security for the minor within the family.

Therefore, one should question whether excluding a minor from mediation proceedings can be detrimental to him or her. The answer to this question may be in the affirmative because a lack of mediation would cause further harm to the child due to a failure to resolve the conflict between the parents. However, a minor's participation in mediation should not

be conditioned by fear or greater parental conflict. Therefore, while indirect or remote mediation is possible, with the minor actively participating from a distance without direct involvement in the parents' conflict, where the parents can at most communicate the minor's decision, the strictly personal and individual participation of the minor in mediation is not advisable and poses risks to his or her mental health (Purc-Kurowicka, 2020). In mediations where the minor does not participate directly, parents can consult potential solutions with the child through the mediator. The manner in which such consultation is carried out should be discussed in advance, primarily to avoid creating a situation where the minor must choose between parents, potentially putting him or her in a situation of danger. Parents can also, between mediation sessions, test specific ideas or temporary arrangements while observing and asking the minor about his or her satisfaction with them. It is also possible to involve a person in the family mediation process who will represent the interests of the child, such as a psychologist. Based on an earlier interview with the child about his or her feelings, fears, preferences, and opinions, this person can neutrally assess which of the solutions proposed by the parents will be most beneficial for the minor and not pose a threat to his or her interests (Czayka-Chełmińska, Glegoła-Szczap, 2015).

## 5. SUMMARY

In conclusion, one should inquire whether a minor, previously residing in a conflicted family, full of tension and negative emotions, can effectively participate in mediation as an equal partner in the discussion. In such situations, would it not be reasonable to refer the parties to family therapy, possibly preceded by mediation meetings? What is certain is that family mediation cannot replace working with a psychologist. In addition, the focus on the future in family mediation, while aiding conflict resolution, may lead to underestimating the minor's needs. Improperly conducted mediation may also exacerbate negative consequences for the minor (Gójska, Huryn, 2007). Given the above, there is no definitive answer on whether a minor's participation in mediation proceedings concerning family matters is necessary and guarantees the protection of his or her basic rights as mandated by law. This is influenced by many factors independent of the parties or the mediator. When considering the direct participation of a minor in family mediation, not only the minor's age but also his or her level of emotional development and the degree of physical, mental, and intellectual maturity are important. Hence, only a well-trained, educated, and experienced family mediator can minimize the risk of concluding an agreement that is harmful or does not take into account the interest of a minor in mediation. Such a mediator can easily interpret the symptoms of a "violent family" and evaluate the extent to which mediation proceedings provide safety guarantees for the parties, especially the minor, ensuring he or she does not feel anxious or threatened.

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## CIVIC PLATFORM'S CONCEPT OF EUROPEAN SECURITY

Recent unprecedented changes in the international arena, such as Russia's full-scale invasion of Ukraine in February 2022, sparked a political debate over Europe's security, prompting politicians to diagnose the reality and look for solutions to ensure the security of European states. This paper focuses on the Polish political party Civic Platform, which represents the liberal strain in Polish political thought. The study is concerned with the 21st century, which has brought at least three turning points: (1) the Russian Federation's questioning of the post-Cold-War order; (2) The compromising of Central and Eastern Europe's security after Western European politicians proved to be weak-willed, a notable example of which was their "soft" position after the Russian attack on Georgia in 2008; and (3) the emergence of new challenges for Poland, primarily after Russia launched its war against Ukraine.

**Keywords:** European security, political thought, Civic Platform.

### 1. INTRODUCTION

Russia's full-scale invasion of Ukraine in February 2022 was intended to overturn the current political and security order in Europe and to fundamentally revise the existing global order in which Western states, led by the US, play an important role. Security experts emphasize that it has already been safe in Europe. We have received this dividend of years of peace. Today, in the face of the aggression of the Russian Federation against a sovereign state, the security order has collapsed. These unprecedented changes in the international arena sparked a political debate on Europe's security and prompted politicians to diagnose the reality and look for solutions to ensure the security of European states.

This study focuses on the Polish political party Civic Platform (Polish: Platforma Obywatelska Rzeczypospolitej Polskiej – PO), which represented the liberal strain in Polish political thought. It was established as an association on 24 January 2001 and became a registered political party in 2002. Between 2007 and 2015, the Civic Platform (CP) was the dominant political force in the Polish Parliament and Senate. It had formed a coalition with the Polish Peoples' Party (Polish: Polskie Stronnictwo Ludowe – PSL/PPP) to gain parliamentary support for the Government<sup>2</sup>. One of CP's notable politicians was

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<sup>2</sup> Support for Civic Platform in parliamentary elections: 2001 (12.7%), 2005 (24.14%), 2007 (41.51%), 2011 (39.18%), 2015 (24.09%), 2019 (27.4%). Since 2015, CP has been part of the parliamentary opposition.

Bronisław Komorowski – the President of the Republic of Poland in 2010–2015. The study is concerned with the 21st century since it brought at least three turning points: (1) the Russian Federation questioned the post-Cold-War order; (2) Central and Eastern Europe's security was compromised, and Western European politicians proved to be weak-willed, a notable example of which was their "soft" position after the Russian attack against Georgia in 2008; (3) new challenges emerged for Poland, primarily after Russia had launched a full-scale war against Ukraine. This paper aims to explore Polish liberals' outlook on the international community and their views on European security. Like other political circles, CP had to take an international stance on security and answer the key question: what pillars should Poland's and, more broadly, Europe's security rest on? Our research procedure relied on methods and techniques specific to studies on the history of ideas. To solve the research problem, we conducted desk research and content analysis of source documents. In addition, the examined literature provided us with helpful insights into the political thought related to European security.

## 2. PERCEPTION OF SECURITY AND INTERNATIONAL ORDER

Liberal theories of international security rested on the assumption that security was one of the state's objectives – not always the primary one – and that since states are interdependent, it would be unprofitable for any party involved to resort to force and undermine the international order. Unlike realists, liberals defined the state's power as primarily stemming from relational unevenness rather than from military potential. They believed it was vital for Polish interests to maintain a strategic Polish-American partnership and ensure a US presence in Europe. Poland considered this to be its "insurance policy".

The liberal outlook – in which internal considerations determined external factors, and collectively established rules and laws governed the international order – was the central reference point for appraising Poland's international position in the early 21st century. There was the realisation that globalisation and growing interdependence had blurred the lines between internal and external state policies and between the military and non-military dimensions of international security. International relations came to be regarded as a positive-sum game – a win-win arrangement. In line with the liberal paradigm, geographic determinism and categories specific to realism and geopolitics – such as power, force, influence and dominance – were marginalised in international relations.

In its appraisal of Poland's security environment, CP recognised the information revolution and globalisation while being cognisant that traditional threats became less significant instead of the asymmetrical ones involving non-state, transnational and sub-national actors. However, conventional crises and conflicts – spurred by military, economic or energy blackmail – continued to be considered a possibility (*vide* Czaputowicz, 2007; Halizak, 2005; Lewandowski, 2018).

In 2017, Donald Tusk defined the three major European and global security threats: 1) the new geopolitical situation in the world (increasingly assertive China, especially on the seas, Russia's aggressive policy towards Ukraine and its neighbours, wars, terror and anarchy in the Middle East and Africa, with radical Islam playing a major role); 2) the rise in anti-EU, nationalist and xenophobic sentiment in the EU itself; and 3) "the state of mind" of the pro-European elites (doubt in the fundamental values of liberal democracy). Tusk also warned against national egoism as a dangerous alternative to integration and the tendency to favour ideology over the interests and emotions of the people (Tusk, 2017; *vide* Applebaum, Tusk, 2021).

### 3. EU'S MAINSTREAM

European integration was the key driver of CP's regional and subregional policies. The party's prevailing view was that a gradual integration of Poland's closest neighbours with the European Union would act in favour of the Polish *raison d'état* (Platforma Obywatelska RP, 2011). Drawing on historical analogies, Radosław Sikorski compared the Community to the Roman Empire, calling it "an organism that [...] established a pattern of settlement, a road network and a legal legacy we use to this day". The boundaries of European integration were decisive for the security and power of Western civilisation. They extended along with European law – "after German reunification, this line shifted to the Oder. In 2004, it moved further to the Bug" (Sikorski, 2013).

CP's foreign policy between 2007 and 2015 was to reduce Poland's Central European and US alliance efforts to the bare minimum and instead enter the political mainstream of the EU. In practice, this meant abandoning any objectives and pursuits not approved by Germany. In 2011, Radosław Sikorski expressed his unequivocal approval for a strong German leadership in Europe in the face of the economic crisis.

CP's politicians were committed to strengthening Poland's bilateral ties with EU partners – Germany and France. They believed that among the members of "a family of nations with which we have the closest civilisational affinity (Tusk, 2007), Germany was the most important partner despite the burden of its history with Poland and some ongoing political disputes (activities of the Centre Against Expulsions, claims from Germans displaced from Poland and the anti-American policy of the German Chancellor Gerhard Schröder).

A strategic alliance with the Federal Republic of Germany was considered the Polish *raison d'état*, as it elevated Poland's status in the European Union and beyond, including its relations with Russia. And accordingly, it was reasonable to stop "fuelling a spiral of mutual claims and pretences" (Komorowski, 2006; Klich, 2003). Liberals saw Polish-German cooperation as furthering Polish national interests in three ways: by helping Poland to become a NATO and EU member, and later to enter the Union's decision-making centre; allowing Poland to exert influence on Russia; and by providing Poland with opportunities to derive considerable economic benefits from its growing trade with EU Member States (Sikorski, 2011a).

The party in question advocated for the Polish-German community of interests – an idea devised between 1989 and 1991 by Tadeusz Mazowiecki and Krzysztof Skubiszewski. It opposed the counternarrative to this, most notably promulgated by the Law and Justice party (Polish: Prawo i Sprawiedliwość – PiS), according to which such a community of interests would, in fact, cause Poland to be dependent on Germany instead of empowering it. The prevailing liberal opinion was that, despite the clear differences, attributable to demographic and economic potentials, as well as to the geographic location, the two countries had similar views on the Union's eastern neighbourhood policy, shared common democratic values, engaged in joint efforts for the democratisation of southern and eastern Europe (Sikorski, 2011a), supported a common strategic vision of the Union's future, and were in agreement on the solutions for overcoming the economic crisis (Sikorski, 2013). It was opined that "a perfect groundwork – strong economic ties – has been laid to build the Polish-German community of interests, making the success of both nations increasingly interrelated" (Olechowski, 2007).

As regards the notion of Germany's regional role, CP differed considerably from the League of Polish Families (Polish: Liga Polskich Rodzin – LPR) and Law and Justice

(LaJ). Where LaJ and the League of Polish Families (LPF) expressed concerns about a strong German leadership in Europe, CP saw Germany – a political and economic powerhouse – as “essential” to Europe. Formidable as it was, Germany’s power seemed less threatening than inertia, especially amidst the ongoing crisis. The idea was that Germany’s potential should be directly proportional to its responsibility for the European order. Germany was expected to assume the role of a regional leader and the EU’s “major stakeholder”, one that is guided by a consultative approach towards other Member States rather than following a policy of dominance, hegemony and supremacy enforced by conventional military methods (Sikorski, 2011b). There was a common agreement that, on the one hand, Germany was too big to be a *primus inter pares*, but on the other, it was also not large enough to assume dominance in Europe. This meant that to bear the heavy burden of responsibility for the region, it needed political support from other EU Member States (Sikorski, 2012).

CP advocated for the Polish-German community of interests – an idea devised between 1989 and 1991 by Tadeusz Mazowiecki and Krzysztof Skubiszewski. CP opposed the counternarrative to this, most notably promulgated by LaJ, according to which such a community of interests would, in fact, cause Poland to be dependent on Germany instead of empowering it. It was claimed that, despite the clear differences, attributable to demographic and economic potentials, as well as to the geographic location, the two countries had similar views on the Union’s eastern neighbourhood policy, shared common democratic values, engaged in joint efforts for the democratisation of southern and eastern Europe and supported a common strategic vision of the Union’s future.

Germany’s regional role was seen by CP as important for the Community’s future. Germany – a political and economic powerhouse – was “essential” to Europe, and Germany’s power seemed less threatening than inertia, especially amidst the ongoing crisis. The idea was that Germany’s potential should be directly proportional to its responsibility for the European order. Germany was expected to assume the role of a regional leader and the EU’s “major stakeholder”, one that is guided by a consultative approach towards other Member States rather than following a policy of dominance, hegemony and supremacy enforced by conventional military methods. There was a common agreement that, on the one hand, Germany was too big to be a *primus inter pares*, but on the other, it was also not large enough to assume dominance in Europe. This meant that to bear the heavy burden of responsibility for the region it needed political support from other EU Member States. The idea was that Germany’s potential should be directly proportional to its responsibility for the European order. Germany was expected to assume the role of a regional leader and the EU’s “major stakeholder”, one that is guided by a consultative approach towards other Member States rather than following a policy of dominance, hegemony and supremacy enforced by conventional military methods. CP’s actions coalesced into what seemed a bandwagoning strategy towards Germany. This strategy assumed that Poland should “align with” the strong German partner. On the one hand, its purpose was to avoid rivalry between the two states (defensive alignment). On the other, its aim was also to help gain considerable benefits (defensive alignment) by being part of the European political mainstream.

#### 4. REGIONAL AFFILIATIONS

The Civic Platform considered Europe the core area of Polish foreign activities, a place where “vital Polish political, economic and civilisational” interests played out

(Komorowski, 2006). The party highlighted “the historical modernisation process” that took place in European states. This process ultimately led them to economic power and prosperity, fostering a flourishing democracy, the rule of law and civil society. CP's politicians were aware of the historically determined divisions in Europe. One the one hand, the region included EU states. On the other, it also comprised countries that were “spiritually and culturally” part of the continent but did not belong to the European Union. Until 2004, Western Europe was the dominant subregion, with its Romano-Germanic identity arising from cultural ties and shared historical experiences. The entry of Central and Eastern European states became the first step towards unifying Europe despite their “different historical experience”. “A Europe without divisions” was the ideal model, and CP advocated for the political and economic unification of the continent to avoid “another Berlin wall, “another Iron Curtain” (Schetyna, 2014).

CP's political thought related to regional policy prioritised the East-West axis, i.e., relations between Poland and Western Europe. Conversely, for Law and Justice, the focus was directed on North-South – cooperation within Central and Eastern Europe. “Europeanness” was associated with EU Member States, with CEE states expected to enter the European political mainstream and advance towards the civilisational standards of their Western partners. This was a way of “escaping to the West” and breaking “the circle of Eastern dependencies” (Platforma Obywatelska RP, 2007). Western Europe – the region's core – was meant to emanate systemic values and principles, the Westernisation of the rest of the continent.

The Central and Eastern European region was perceived as a geographically close group of countries that constituted an integral part of the continent. Europe was supposed to “breathe with two lungs – one in the west and one in the east”. This could be achieved by allowing the “Eastern Slavic Orthodox world” to embrace the legal and institutional legacy of the European Union. As a result, the European boundaries would extend “past the Dnieper, reaching the borders with China and Korea”. CP had no doubts that the complete unification of the continent according to the EU pattern would, on the one hand, strengthen Poland's international position, putting the country in a secure central location and allowing it to shed its long-time peripheral role. On the other hand, by gaining an extended reach, Russian resources, the EU's economic power and US military capabilities, the West would be in a stronger position to assert its international influence.

From CP's perspective, the EU made Central Europe a free and affluent region, not “a place of historic tragedies”. It was predicted that the civilisational affiliation of Eastern European nations would be critical for the future of Poland and entire Europe – hence the strong emphasis on promoting the EU policy of partnership. At the same time, CP was aware that democratisation, the rule of law and modernisation largely depended on Eastern states. These states faced the dilemma between aiming for modernity and democracy and embracing “a different civilisational model” (Platforma Obywatelska RP, 2007).

On the one hand, CP highlighted that Central and Eastern European states pursued common goals. The key objectives were to solidify their position in European politics and develop European cohesion policy, preserve NATO as a military alliance as opposed to “a political club”, as well as to increase the subregion's presence in international organisations to balance Western Europe's continued “overrepresentation” (Sikorski, 2012b; Sikorski, 2012a). On the other hand – despite being aware that the subregion had common interests – in 2014, Donald Tusk, Poland's Prime Minister at the time, argued that “Poles and Europeans from this part of Europe should not be led on to believe in the vision of an *intermarium*”, “a fictitious alliance of states”, claiming it was “a myth from the past”.

In his opinion, the idea of a common sub-regional policy promulgated by LaJ was a daydream because “a Poland stuck between Germany and Russia, between the East and West” was at risk of losing its independent existence. Only a pro-Western orientation towards the European Union and NATO could guarantee Polish sovereignty (Sikorski, 2012b). Poland’s only chance to advance towards modernisation and make a civilisational leap forward was through EU membership. This should be combined with close cooperation between Central and Eastern Europe and Western Europe – a vision that ran counter to the concept of a bloc of states positioning themselves, in a way, in opposition to the powerful EU Member States and Russia.

In other words, Europe could only achieve full integration through political and economic unity within the EU, and not by strengthening cooperation in Central and Eastern Europe. There were no plans to establish a confederacy in the subregion. For one important reason – such sub-regional integration would represent a competitive project, leading Europe, as a whole, to disintegrate, for European policy was shaped in the EU – the region’s core. The emphasis was placed on bilateral relations with subregional states or *ad hoc* alliances in the EU. Cooperation within subregional alliances, such as the Visegrad Group, was seen as an extension of EU policy, the underlying thinking being that a stronger Poland in the European Union would mean a stronger Visegrad Group (Sikorski, 2013).

The liberal programme rested on the premise that Poland could not influence policy in the *Intermarium* region without succumbing to illusions around the pace and quality of transformation in Poland’s neighbours to the east. Regarding eastern policy, CP branded itself as a continuator of the Mazowiecki-Skubiszewski line (the so-called small realism). It reflected the precept that Poland must strengthen its ties either with Russia or Germany or preferably with both since it is too weak to remain independent.

## 5. RUSSIA’S ROLE IN THE EUROPEAN SECURITY SYSTEM

Three premises guided CP’s views on Russia. The first was that Russia followed two conflicting lines of thinking about its future: on the one hand, there was a drive towards economic modernisation and democratisation – the willingness to “open up to the world”, albeit according to a non-Western cultural code; on the other, there was a nostalgia for “the superpower glory and the iron fist of authority”. From a European perspective, Russian democratisation would be the preferable course. The second premise argued in favour of abandoning the binary thinking that “what is bad for Russia must be good for Poland”. Instead, it would be more reasonable to assume that Poland could alleviate its fears of the Russian threat by bolstering its economic potential, strengthening its alliances and building a modern defence system. The third one posited that a conflict-less relationship with Russia would strengthen Poland’s position in Europe without necessarily entailing dependency on its eastern neighbour. A two-pronged approach was necessary: Poland should treat Russia with respect and seek friendly relations with it, all the while keeping the Polish *raison d’état* in mind and making sure that Russia fulfils its international obligations, observes human rights and complies with disarmament and energy agreements (Platforma Obywatelska, 2011; Sikorski, 2011a).

It is worth stressing that, unlike LaJ conservatives, CP’s politicians were oblivious to the Russian threat for a long time. They believed that it was possible to cooperate with Russia on partnership terms and disregard any historical and ideological baggage. While it was clear that Russia would seek to reclaim its superpower status, there was no way for it



to rebuild its empire. Liberals believed that Russia would permanently lose its former international role after the collapse of the USSR.

There was a conviction that Polish-Russian policy should be mediated by the European Union, the rationale being that the stronger Poland's position in the EU, the more regard Russians would have for Poland. An eastern policy guided by EU membership would help Poland be more effective by providing it with "attractive instruments" and reasonable influence in the East. By extension, Poland could become a leader in shaping European-Russian policy (Platforma Obywatelska RP, 2011; Tusk, 2005; Komorowski, 2006). Liberals were certain that the EU, as a whole, had a greater influence over Russia than any of its Member States on its own. Accordingly, CP's leader Donald Tusk proposed a reset policy towards Poland's eastern neighbour. He argued for abandoning the confrontational rhetoric of his predecessors and seeking to build a joint EU-US stance on Russia in security and energy matters.

CP's standpoint was that Poland's geopolitical location in the 21st century, coupled with its international anchoring in the EU and NATO, represented "a historic chance" to strengthen the ties between the entire West and Russia – a prospect that "not long ago could be threatening" for Poland. The liberal approach to Poland's eastern neighbour was reflected in the belief that Russia could embrace democracy and act as a stabilising force in the post-Soviet area while discarding the concept of "multipolar spheres of influence". When Donald Tusk visited Moscow in February 2008, he hoped to "turn over a new leaf" by showing that Poland had been undeservedly labelled "Russophobic".

Foreign policy was to rest on two fundamental objectives – to depart from the balance of power principle and to shun efforts to build a coalition against the most powerful state (the Russian Federation). The East served Poland as a tool to build its image in the EU and NATO arena as an important "Ambassador of the West in the East and of the East in the West" – a country that had risen above its Russophobia to become a reliable partner in international relations. Moreover, under CP-PPP Coalition Government, Prometheism gave way to positivism. This could be seen in CP's belief that Poland could not do more for its eastern neighbours than they themselves could do.

A consistent theme running through CP's communication, reiterated on numerous occasions by Radosław Sikorski, was that "Tusk's Government does not want a confrontation with Russia", nor does it want a new "Cold War". Nevertheless, during his US visit in 2008, Sikorski stressed that Poland could not afford to ignore a replay of the Georgian scenario in Ukraine. He made it clear that any further attempts by Russia to overstep boundaries should be considered a threat to European security and should meet with a NATO response. This stance, however, did not translate into political practice, as the CP-PPP Government did not support President Lech Kaczyński's policy of building a coalition between the Baltic States, Poland, Ukraine and Georgia ("Gazeta Wyborcza", 2008).

Although Polish-Russian relations had become slightly colder after Russia's annexation of Crimea in 2014, the policy of improving relations with the eastern neighbour would be continued. CP's response to what happened in Georgia and later in Ukraine aligned with the soft liberal position of Western political elites. CP's political thinking had long operated on the assumption that it was Poland's obligation to recognise Russian interests. The party had been adhering to this mindset despite Russia revealing its true foreign policy goals on numerous occasions. Russia's actions were underplayed as a consequence of adopting the liberal version of the international order, enshrined in the "end of history" myth as a dictum for how to describe reality.

It is important to note that the eastern policy implemented by Donald Tusk's Government had been notably coordinated with German policy. CP's eastern policy concept, on the one hand, drew on the positive legacy of the Third Polish Republic (except for the time when LaJ was in power), but on the other, reflected a critical evaluation of LaJ's eastern policy. Putting Poland's policy towards Russia into a broad European context and promoting Poland into the role of an EU expert on eastern matters was a core element of the party's agenda. The prevailing liberal opinion was that Russia followed two conflicting lines of thinking about its future: on the one hand, there was a drive towards economic modernisation and democratisation – the willingness to “open up to the world”, albeit according to a non-Western cultural code; on the other a nostalgia for “the superpower glory and the iron fist of authority”. Among CP's politicians there was a consensus that Russian democratisation would be the preferable course from a European perspective (Sikorski, 2011a).

CP renounced the binary thinking that “what is bad for Russia must be good for Poland”. Instead, it would be more reasonable to assume that Poland could alleviate its fears of the Russian threat by bolstering its economic potential, strengthening its alliances and building a modern defence system. The party's prevailing view was that a conflict-less relationship with Russia would strengthen Poland's position in Europe without necessarily entailing dependency on its eastern neighbour. A two-pronged approach was necessary: Poland should treat Russia with respect and seek friendly relations with it, all the while keeping the Polish *raison d'état* in mind and making sure that Russia fulfils its international obligations, observes human rights and complies with disarmament and energy agreements (Sikorski, 2010a; Sikorski, 2010b). It is worth mentioning here that liberals considered remembrance policy (they avoided the term “historical policy” on purpose) in international relations to be of marginal importance. This attitude also informed Poland's relationship with Russia. The marriage of liberalism and positivism led to an attitude of indifference towards historical issues. CP's politicians were largely in favour of an academic approach to history that left little room for debating the meaning of past events. In this way, they hoped to minimise political disputes on historical subjects.

## 6. CONCLUSIONS

The above discussion of the European security concept as defined by liberal political thought has led us to four conclusions.

First, liberals attached profound significance to European integration while recognising that Europe would not be safe without American (NATO) guarantees. Accordingly, the Old Continent's security was to rest on two pillars: the European Union and NATO.

Second, by entering the European political mainstream, Poland would have a chance at bolstering its security. Liberals hoped to ensure this by forming a strategic alliance with Germany and by cooperating with France. A core element of Civic Platform's agenda was to align Poland's eastern policy with mainstream European (*vide* German) politics and, consequently, to discontinue efforts to form a coalition of Central and Eastern European states around a common energy policy geared towards reducing dependence on Russian resources.

Third, the Civic Platform believed that Central and Eastern Europe could achieve empowerment on the primary condition that CEE states enter mainstream Western European politics and align with the Western European value system. Any ideas involving “deals” outside the EU framework were considered attempts at disintegrating Europe.

Accordingly, the United Right's (Polish: Zjednoczona Prawica) theories that the empowerment of Poland's neighbours in CEE should be sought primarily through broad regional arrangements were dismissed as daydreaming. Liberals refused to subscribe to the idea that forming a bloc of states based on their shared history, cultural heritage, and economic interests would strengthen Poland's position in the EU and at the same time thwart Russia's imperial ambitions.

Fourth, between 2007 and 2010, CP saw the Russian Federation as an indispensable part of the European security system. The pulling of Russia to the West and establishing trade ties with the country, with liberals' tacit permission for Germany's break with European solidarity (the Nord Stream II project) and Russian violations of international law. The liberal agenda aimed at making Russia a predictable and cooperative state that would eventually embrace democracy. All hopes in this regard were definitively abandoned on 24 February 2022 after the Russian Federation attacked Ukraine.

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## CHANGES IN THE STRUCTURE OF INCOME OF POLISH MUNICIPALITIES, 2019–2021

This article is devoted to studying the detailed income structure of Polish municipalities in the years 2019–2021. The general structure of municipalities' income is examined in a broader time horizon (2004–2021). The theoretical section focuses on the characteristics of municipalities' income, with particular emphasis on tax income, the level of which depends to a large extent on the financial situation of enterprises. The research section is based on data from the Central Statistical Office. The article concludes that in the years 2019–2021, the income situation of municipalities did not deteriorate as much as was predicted. However, it is noted that the income structure of municipalities is changing, and the share of their own income is decreasing; this may lead to a significant reduction in their financial independence.

**Keywords:** municipality, municipalities' income, taxes.

### 1. INTRODUCTION

The recession caused by the spread of the SARS-CoV-2 virus was a factor strongly affecting the finances of entrepreneurs and local governments. Local governments, as direct providers of public services, have struggled to respond to the COVID-19 pandemic on an unprecedented scale, despite sometimes immediate and severe disruptions to their budgets (Dzigbede, Gehl, Willoughby, 2020; Dutta, Fischer, 2020).

It forced the need for dynamic changes and adaptation of local government units to new circumstances, especially in terms of their income. The decrease in the income of entrepreneurs translates directly into the decrease in the tax income of local government units, especially municipalities. The COVID-19 pandemic posed new challenges for local government units and made it necessary for them to adapt quickly to the new reality in connection with the implementation of the tasks imposed on local governments, as the activity at the local government level affects the economy of the entire country (Łubina, 2021). Pandemic preventive measures included, among others: suspending classes in schools, temporarily limiting various ways of moving around, temporarily limiting the functioning of certain institutions and workplaces, banning public gatherings, etc. The implemented limitations caused reorganization of various branches of economy, and some entrepreneurs suspended their business activities. This situation affected directly the financial situation of local governments, especially of Polish municipalities.

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The subject of this study is an attempt to estimate the changes in the structure of Polish municipalities' income between 2019 and 2021, as well as identifying the changes in the level of income from municipal taxes. Moreover, when estimating the structure of total income, a wider time horizon was used to illustrate better the trend of change, not only caused by the pandemic. Municipalities were selected for the study because they have the largest catalog of sources of their own income, among all local government units.

## 2. CHANGES IN THE STRUCTURE OF MUNICIPALITIES' INCOME

The fundamental factors specifying the conditions of functioning of the local government are financial resources and an adequately planned budget which constitutes the basic instrument in the process of efficient management and planning (Dylewski, 2007).

The system of financing municipalities should guarantee them the amount of funds appropriate to their tasks, the possibility to use them freely, and above all, it should ensure the stability of income (Wankiewicz, 2009). Unfortunately, in recent years a drastic decline of their own income has been observed in the case of municipalities, which, in connection with a simultaneous transfer of additional tasks or broadening the range of the already existing ones, has led to a financial imbalance of numerous municipalities. The COVID-19 pandemic, accompanied by legal changes in taxation system, undoubtedly contributed to the reduction of own income of municipalities, which share in the structure of the total income is decreasing.

Municipalities' income consists of three parts. Basically, these are their own incomes, subsidies and grants, which results directly from the provisions of the Act on Income of Local Government Units (Act 2003, Article 3(1)). All indicated groups of income can be of both current and property nature. Although municipal self-governments should derive the majority of their income from their own sources, it would be difficult not to notice the need to supply their budgets with a subsidy from the state budget. Large disproportions in income, with similar or sometimes even identical tasks imposed on them, mean that municipalities are often unable to carry out all these tasks from their own income. In the absence of funds, state intervention is necessary to equalize the financial situation of individual municipalities. The problem of inequality related to, for example, an uneven local tax base, means that various types of transfers from the state budget usually constitute a significant part of municipalities' budgets. The European Charter of Local Self-Government postulates that, if possible, transfers should take a general, non-target form.

The subsidy is a public benefit provided by the state to local government units. In the doctrine of public finance law, it is customary to define subsidies as a non-repayable, general, unconditional and gratuitous benefit. The generality of the subsidy means that it does not have a specific purpose, it is defined by the municipality's constitutive body. The subsidy is non-repayable because the funds transferred under it are not refundable (except for the amounts unduly collected). The free-of-charge subsidy means that the municipality, receiving public funds from the state budget, is not obliged to provide consideration to the state treasury (Kwiatkowski, Tyszkiewicz, Wójcik, 2021).

According to the provisions of the Act of 13 November 2003 on the income of local government units (Act 2003, Article 7(1)), the general subsidy for communes consists of:

- compensating part,
- educational part,
- balancing part.

Subsidy is a form of external support for the municipality's finances guaranteed by the constitution. As a result, local government authorities have a kind of sovereignty in terms of using the subsidy. The only type of subsidy that does not give municipal authorities full freedom to dispose of it, is the education subsidy. The funds transferred to municipalities under this subsidy must be allocated to the implementation of educational tasks. The subsidies are intended to reduce the effects of unequal access to sources of income or a different burden of expenditure incurred by municipalities (Hanusz, 2015), being a permanent element supplying their budgets.

Grants are a special form of financial support for municipalities, which are subject to legal rigor and strictly defined settlement rules (they are funds for the implementation of a specific task). Grants are a permanent element of the income structure of municipalities. The essence of grants is their close connection with a specific task to be performed, after which the funds received must be accounted for. Therefore, the targeted nature of the grant significantly limits the freedom to perform activities financed in this form (Hanusz, 2015). The grant is a marked transfer. Municipalities may receive grants from many sources, in addition to the state budget, from earmarked funds, other local government units, and from foreign sources. Grants received by municipalities from various sources are subordinated to the appropriate sections of the budget classification, depending on the area of activities for which they were granted.

External transfer relocated to municipalities (subsidies and grants) are not very susceptible to the economic situation and other phenomena such as a pandemic. The most variable group of municipality's income is their own income.

Own revenues recognized in a broader context (*sensu largo*) are those that do not constitute subsidies or grants. The amount of own income determines the upper limit of the budget constraint, determining the municipality's ability to implement investment expenditures (Zioło, 2012). Taking into account the economic importance of individual sources of own income, they are clearly divided into four basic segments (Guziejewska, 2008):

- tax income, including income from taxes and local fees,
- income from the property of the municipality and revenues from the economic activity conducted by it,
- income from shares in the proceeds from state taxes, which cannot be classified as tax due to the complete lack of authority of the local government in their scope,
- other income which is not earmarked grant or general subsidy, automatically included in municipality's own income.

Own revenues of municipalities, due to the fact that they are not earmarked, can be spent in any way, i.e. both for current expenses necessary to ensure the continuity of financing the unit and for investment expenses. They determine the degree and scope of financial independence of municipalities, as they determine the level of this independence. Own revenues are collected from sources located in the area of operation of a given local government, they are made available to municipalities indefinitely by virtue of law, some of them come from sources that local government bodies can influence by deciding on their introduction or at least specifying the legal structure of these income.

An important source of own revenues of municipalities are revenues from income taxes, both from natural persons and from legal persons. The main advantages of shares based on PIT (personal income tax) are the ease of collection and cheap administration (Govinda, 2007). This is where the financial condition of enterprises and the finances of

municipalities come together. The higher the income taxes paid by natural and legal persons to the state budget, the higher the own income from the shares in these taxes is received by the municipality. Thus, the better the financial situation of enterprises in a given municipality, the higher its income.

The adoption of legal acts related to COVID-19 resulted in a decrease in revenues from personal income tax, corporate income tax, and tax on civil law transactions (Golaszewski, 2020), in the income of municipalities, a periodic decrease in outflows from stamp duty was also noticeable, as the aftermath of limiting the activities of institutions and offices. On the other hand, in the area of local taxes, the decrease in revenues was the result of the decisions of the executive authorities of the municipalities to grant exemptions, reliefs and deferrals in tax payments on the basis of applicable ordinary regulations and special acts related to the pandemic.

The structure of own revenues of municipalities in 2014–2021 is presented in Figure 1.

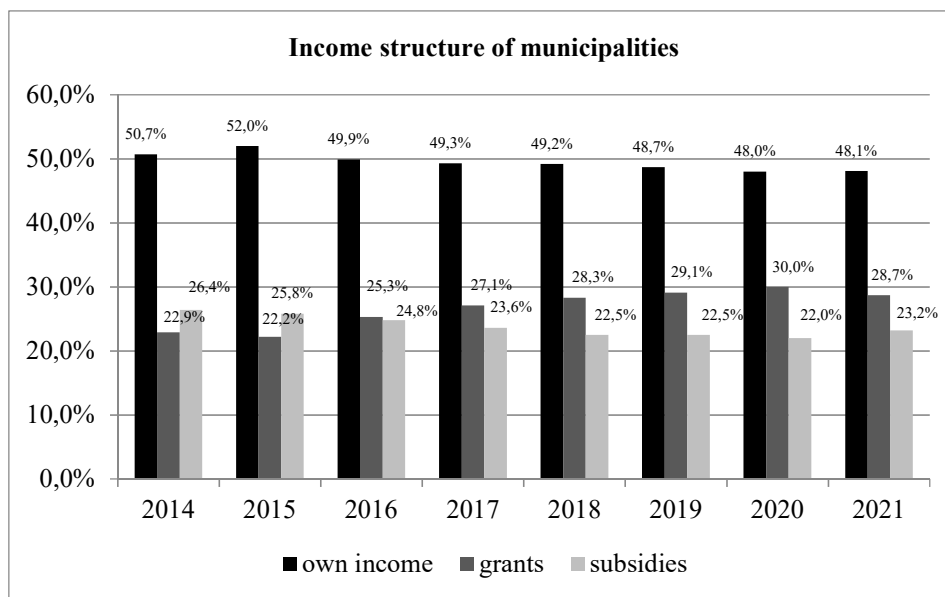


Figure 1. Structure of income of Polish communes in 2014–2021

Source: own elaboration based on Central Statistical Office.

The structure of total income shows that funds transferred from the state budget to the budgets of local government units accounted for almost 52% of their income in 2021 (compared to 2014, the share of grants and subsidies in total income increased by as much as 2.6 percentage points, the share of grants in the corresponding period increased by 5.8 p.p., and subsidies decreased by 3.2 p.p.). Characteristic for the presented years is the phenomenon of a systematic increase in the share of grants in the income structure of municipalities and a decrease in the share of own income in this structure. This proves the progressing serious limitation of the financial independence of local government units (Kwiatkowski, Tyszkiewicz, Wójcik, 2021).



The chart below presents the shaping of municipalities' income independence in 2019–2021.

Specification	Years		
	2019	2020	2021
Total income	229 128	249 413	274 527
Own income	113 329	121 294	132 149
Shares in PIT and CIT	51 750	50 935	57 878
Income independence index (own income/total income)	49,46%	48,63%	48,14%
Income independence ratio adjusted for shares in state taxes (own income - shares in PIT and CIT/total income)	27%	28%	27%

Chart 1. Municipality income independence index in 2019–2021

Source: own elaboration based on data from the Central Statistical Office.

The analysis of the data presented in Chart 1 regarding the index of income independence of municipalities shows that throughout the period under review, this index had a downward trend (a general decrease by 1.32 percentage point), which is the result of decreasing own income in the structure of total income of municipalities (data from Figure 2). On the other hand, the ratio of income independence of municipalities adjusted for outflows from shares in state taxes remains at a relatively constant level (in the analyzed period, its increase was recorded by 1 percentage point in 2020 compared to 2019, and a decrease by 1 percentage point in 2021 compared to 2020 ).

The situation becomes even more unfavorable for the local government when we look at the structure of own income, which also includes transferred income, even though it is classified as own income.

### 2.1. The structure of municipalities' own income

As previously mentioned, all those that are not grants and subsidies should be considered as own income. Thus, the catalog of own income is very extensive. According to the budget classification, own income can be divided into:

1. a share in state tax revenues
  - a) a share in personal income tax (PIT),
  - b) a share in corporate income tax (CIT).
2. taxes and fees
  - a) property tax,
  - b) agricultural tax,
  - c) forest tax,
  - d) tax on means of transport,
  - e) inheritance and gift tax,
  - f) tax on civil law transactions,
  - g) stamp charge,

- h) service charges,
  - i) other taxes and fees.
3. other own income

Figure 2 presents the structure of own income of municipalities in 2019–2021.

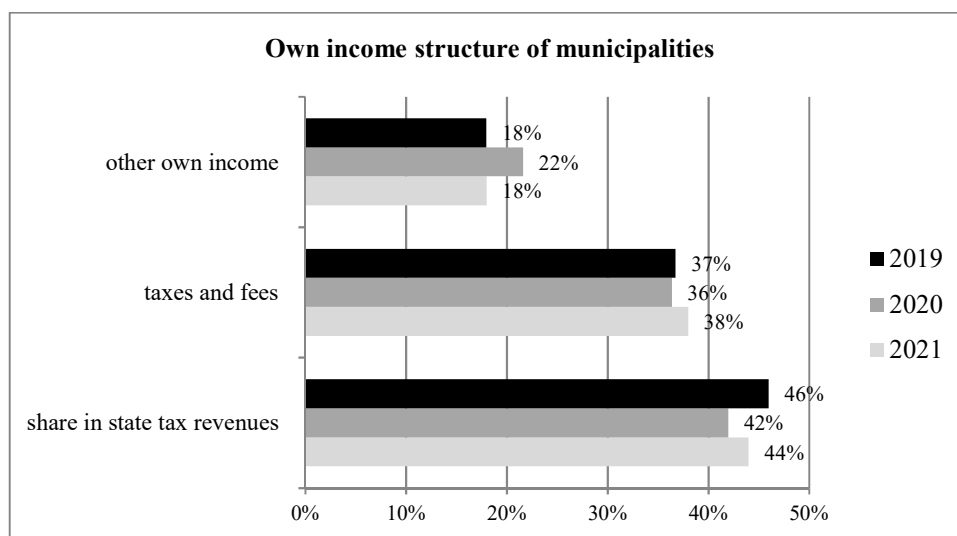


Figure 2. The structure of own income of municipalities in 2019–2021

Source: own elaboration based on data from the Central Statistical Office.

A detailed analysis of the data presented in Figure 2 allows to conclude that in the structure of own revenues of municipalities, the largest part is represented by shares in state taxes (PIT and CIT), i.e. those revenues that are transferred to municipalities' budgets from the state budget, and municipalities do not have any tax jurisdiction over them. Shares in the proceeds from state taxes constitute a group of income that is very sensitive to changes in the economic situation, moreover, the efficiency of this instrument depends on the policy of the central authorities.

The structure of own income of municipalities in the analyzed years did not change significantly. It was dominated by shares in state tax revenues (42%–46%) throughout the analyzed period, the second largest group of own revenues were taxes and fees (36%–38%), and the smallest share was held by other own revenues (18%–22%). Due to the fact that tax revenues (both direct and transferred) constitute the largest share in the own revenues of municipalities, they were analyzed in the next chapter.

### 3. TAXES AS A SOURCE SUPPLYING MUNICIPALITIES' BUDGETS

The tax system in Poland grants local government units a portion of tax revenue, which is a key source of financing public tasks. The performance of public tasks by municipalities depends on the availability of public funds obtained e.g. from taxes collected from households and entrepreneurs in a compulsory, non-refundable and non-equivalent manner. Tax revenues as the basic source of financing public tasks in the conditions of economic downturn are decreasing, which adversely affects the functioning of all levels of

local government, especially municipalities, which are the largest beneficiaries of shares in central taxes (Dworakowska-Raj, 2020).

The source of tax income in municipalities are local government taxes (including local taxes), as well as the shares in central taxes.

Local government taxes include:

1. Local taxes:
  - a) property tax,
  - b) agricultural tax,
  - c) forest tax,
  - d) tax on means of transport.
2. Taxes transferred to the budgets of municipalities:
  - a) personal income tax paid in the form of a tax card,
  - b) inheritance and gift tax,
  - c) tax on civil law transactions.

Shares in central taxes include:

1. shares in the income tax revenues from natural persons residing in the area of the municipality,
2. shares in income tax revenues from legal persons having their headquarters in the commune.

The tax authority in the field of local taxes is vested in the municipalities. They can freely, within the limits of applicable law, set the tax assessment and introduce reliefs and exemptions. Local taxes are less dependent on the economic situation than common income (shares in central taxes). On the other hand, the economic situation in the country has a strong impact on the amount of income of communes from shares in income taxes. The economic downturn has a negative impact on the state's finances, and this directly contributes to lower incomes of municipalities due to declining tax revenues. The instability of income from shares in central taxes makes it difficult for municipalities to pursue an effective financial policy. The effectiveness of this source of income for municipalities depends on the policy of the central authorities.

High tax revenues guarantee that municipalities strengthen their financial situation by increasing their own budgetary revenues. As a consequence, they contribute to the implementation of various budget expenditures as part of a wide catalog of public tasks performed in municipalities (Dworakowska-Raj, 2020).

Local taxes constitute the group of income over which municipalities have full tax authority. The structure and amount of revenues from local taxes are presented in Figure 3. The forest tax was deliberately omitted from the list because its share in the structure of local taxes is insignificant.

In the structure of local taxes, property tax remains dominant, with a share in local taxes of 90% in total, in each examined year. The amount of income from property tax has increased throughout the whole examined period. The dynamics of the real estate tax, assuming that the previous year = 100, was respectively in 2020 – 104% and in 2021 – 108%, in the tax on means of transport in 2020 – 100% and in 2021 – 106%, and in the agricultural tax in 2020 – 105% and in 2021 – 102%.

Another tax group that supplies the budgets of municipalities are taxes transferred to them in full. This group includes inheritance and donation tax, tax on civil law transactions and personal income tax paid in the form of a tax card. A summary of the amount of proceeds on this account is presented in Figure 4. Personal income tax paid in the form of a tax card has not been included in the chart for its relatively low value.

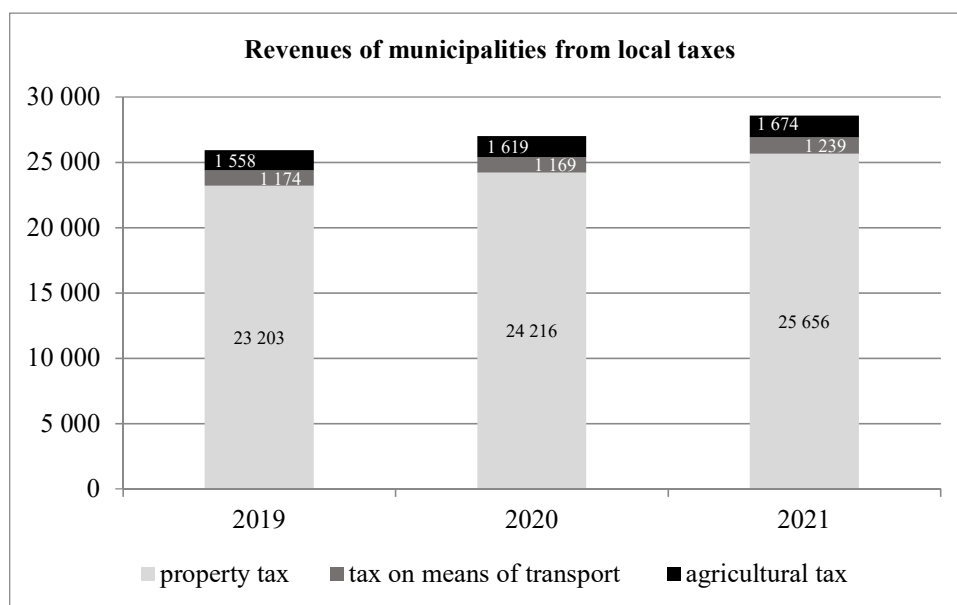


Figure 3. Income of municipalities from local taxes in 2019–2021 in PLN million

Source: own elaboration based on data from the Central Statistical Office.

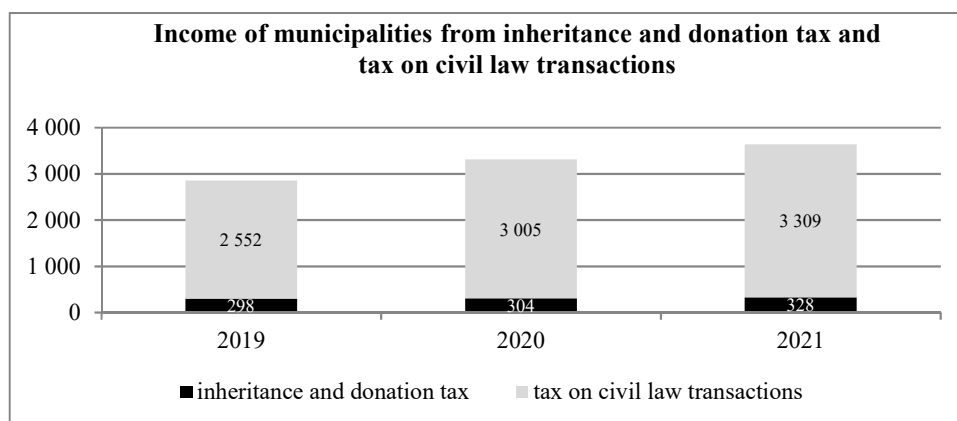


Figure 4. Income of municipalities from inheritance and donation tax and tax on civil law transactions in 2019–2021 in PLN million

Source: own elaboration based on data from the Central Statistical Office.

Budget revenues from the above-mentioned taxes in the analyzed period showed a large increase in 2021, however, their structure in 2019–2021 was very similar, and the share of the tax on civil law transactions was 90–91%. The dynamics in the inheritance and gift tax, assuming that the previous year = 100, was 93% and 138% in 2020, respectively, in the civil law transaction tax in 2020 – 103% and 149% in 2021, respectively. As a rule,

municipalities have no influence on the amount of outflows to the budget from this tax group. The analyzed taxes concern phenomena not related to local governments, and municipalities do not have the tax authority to determine the amount of tax rates. The share of these taxes in their income is not significant.

The last tax group contributing to the budgets of municipalities are shares in personal and corporate income taxes. As indicated in Figure 2, they constitute the largest part of the own income of municipalities. The amount of income and the structure of shares in PIT and CIT are presented in Figure 5.

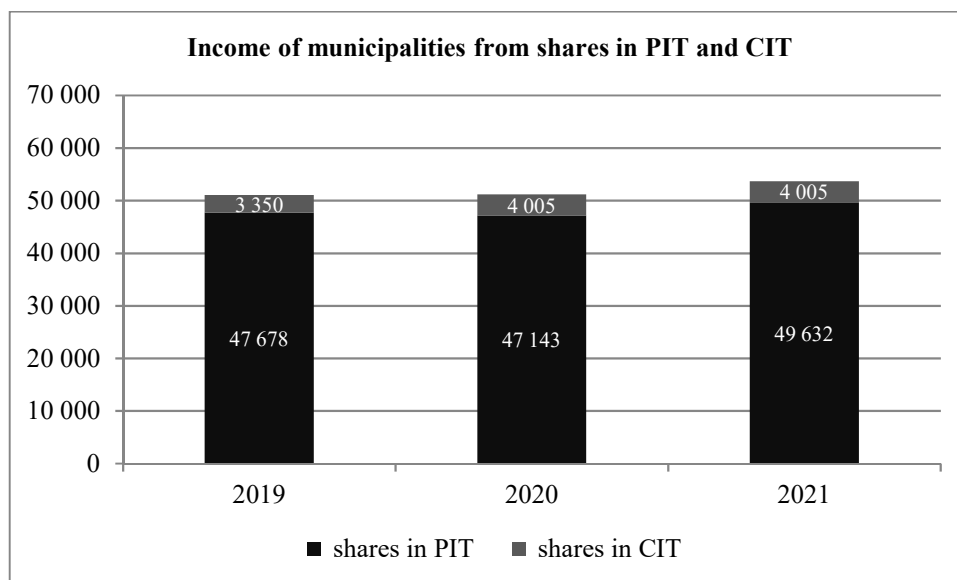


Figure 5. Income of municipalities from shares in PIT and CIT in 2019–2021 in PLN million

Source: own elaboration based on data from the Central Statistical Office

As can be seen, the structure of revenues to the budget of communes in 2019–2021 from shares in state taxes did not show significant differences, shares in PIT in the entire period under review accounted for over 91% of the total income from the shares.

The dynamics of shares in income taxes, assuming that the previous year = 100, was respectively for shares in PIT in 2020 – 98% and 2021 – 113%, and for shares in CIT in 2020 – 104% and in 2021 – 124%.

#### 4. SUMMARY

The conducted research showed an increase in the share of grants in the income structure of municipalities and a decrease in the share of own income in this structure. This proves the progressing serious limitation of the financial independence of local government units, even though the scale of financial problems of local governments during the pandemic turned out to be smaller than expected (a large decrease in the income of municipalities was assumed). The research in this article was conducted on the basis of aggregate data for all municipalities in Poland, however, it should be remembered that the

pandemic crisis affected all local governments to an unequal extent. It had the most negative impact on the largest cities, where a significant decrease in revenues from shares in central taxes was recorded. On the basis of the presented data, apart from the decrease in the share of own income in the structure of the total income, it was indicated that a significant part of the structure of own income is represented by shares in central taxes, over which municipalities do not have any tax authority. That is why the years 2019–2020 were characterized by a high uncertainty in local governments as to the amount of possible income (mainly tax), both due to the pandemic and legislative changes in the tax law. In addition, the aggregate data is slightly distorted because the structure of own (other) income includes funds from the Government Local Investment Fund and from the Government Fund of Polish Order transferred to communes for investment tasks, although in fact they have all the characteristics of a grant. The carried out research provides the basis for formulating a postulate regarding the improvement of the income situation of local governments by providing municipalities with their own, stable income, the use of which they will be able to decide for themselves.

During the deliberations, it was confirmed that a major problem for municipalities and communes is the constantly decreasing own revenues and a very high share of funds transferred from the state budget, which requires urgent intervention to restore the income independence of municipalities.

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## A PATTERN FOR ASSESSMENT OF THE ECONOMIC SITUATION BY ENTERPRISES IN AN UNSTABLE ENVIRONMENT

This article presents the results of a study that aimed to assess whether entrepreneurs have changed their patterns of assessment of the economic situation amid the unprecedented instability and uncertainty in the business environment during the last few years. An econometric analysis was carried out using qualitative indicators from the GUS business cycle survey. We distinguished two periods of analysis: relatively stable (from January 2000 to February 2020) and unstable (from March 2020 to January 2023). Our results show that, regardless of the type of indicator and subperiod of analysis, the phenomenon of inertia was the main factor influencing diagnosis indicators. In all analyzed areas of companies' activity (general situation, financial situation, production) we noted a change in the pattern of impact of forecast indicators on diagnosis indicators; this was the result of a change in the conditions of the external environment (expectations effect).

**Keywords:** business tendency survey, manufacturing industry, inertia phenomenon, expectation effect, economic instability.

### 1. INTRODUCTION

The subject of the study is in some measure part of the research on qualitative indicators of economic activity and their usefulness for describing and forecasting short-term changes in economic activity<sup>3</sup>. The basis for constructing qualitative indicators of the economic situation are the results of research using a survey conducted among participants of

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<sup>3</sup> There are two main fields of studies assessing the diagnostic and prognostic usefulness of qualitative economic indicators: works in which series of selected economic indicators are confronted with the results of relevant quantitative research and works that assess the ability of enterprises to correctly predict their future situation. In the second of them, two types of analyzes are carried out: comparing the forecast indicators with the relevant quantitative indicators and comparing of forecast indicators with diagnosis indicators from previous editions of the business cycle survey ("Zeszyt Metodologiczny" 2018, p. 23).

economic life to determine current and future trends in the national economy or in its individual sectors or industries (Byrt, Kowalczyk, Rekowski, 1982). Answering the questions included in the business cycle survey, respondents express their opinions on the direction of changes in various economic categories describing their current economic situation (diagnosis) and expectations regarding its changes in the near future, usually within the next three months (forecast) (Bieć, 1996). Qualitative economic indicators (diagnoses and forecasts) are therefore a numerical, synthetic carrier of immeasurable information about the moods, beliefs, and expectations of entities regarding the development of specific economic phenomena.

The theoretical background of the business cycle survey is the assumption that short-term changes in the level of economic activity depend not only on objective factors, but also to a large extent on the moods and expectations of participants of economic life (Gaweł, 1997; Tomczyk, 2002). According to J.M. Keynes and other representatives of the psychological approach to business cycle analysis, the decisions of individual economic entities are determined by subjective reasons (Przybylska-Kapuścińska, 1990; Estey, 1959). Waves of optimism and pessimism arising among business entities affect their behavior regardless of the objective reasons. What's more, these subjective feelings may turn out to be much stronger than objective factors and may play a decisive role in the economic decisions of entrepreneurs and consumers. In this context, the subjectivity of the information collected in the business cycle survey is widely recognized as one of the advantages of qualitative indicators (Hubner, Lubiński, Małecki, Matkowski, 1994). On the other hand, this feature raises doubts as to the quality of opinions formulated by the surveyed entities, and thus the usefulness of qualitative indicators in economic analyses. It is emphasized that respondents are not always able to properly recognize market reactions (uncertainty as to the competence of respondents), and their opinions may be influenced by temporary emotions (unjustified optimism or pessimism). This may significantly distort the picture of economic reality illustrated by qualitative indicators, causing an incorrect description of the studied phenomenon (Adamowicz, Walczyk, 2012; Gruszczyński, Kotłowski, 2008).

The results of the studies on economies in which business cycle survey has a long tradition basically confirm that the qualitative indicators reflect the actual course of economic processes (it is consistent with the description obtained from quantitative data) and allow for formulating short-term forecasts whose quality is sometimes better than those formulated based on naive models or quantitative time series<sup>4</sup>. Similar conclusions are provided by the results of research conducted for the Polish economy<sup>5</sup>. An improvement in the diagnostic and prognostic properties of qualitative indicators was observed along with the ongoing transformation process (with the extension of the time of system changes), the adjustment of Polish entities to the rules of the market economy, and the rationalization of their expectations (Adamowicz et.al., 2002b; Zatoń 2015). On the other hand, some authors indicate that respondents cannot correctly assess neither the current nor the future economic situation due to the volatility of business conditions and the accumulation of

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<sup>4</sup> Vide: (Tomczyk, 2002; Kalinowski 2015).

<sup>5</sup> It should be noted that the authors' conclusions as to the usefulness of qualitative indicators in diagnosing and forecasting the economic activity differ due to different temporal, subjective and spatial scopes of research, as well as the methods of analysis and indicators used (Adamowicz, Dudek, Walczyk, 2002a; Adamowicz, Dudek, Walczyk, 2002b; Mocek, 2002; Matkowski, Nilsson, 1997; Włodarczyk, Małczęć, Pala, 2021; Guzik, Bosacki, 2009; Guzik, 2009).

random events in the environment (Adamowicz, Walczyk, 2017; Adamowicz et.al., 2002b; Włodarczyk et.al., 2021; Dudek, 2001). This view is confirmed by the results of a study conducted by E. Adamowicz and K. Walczyk for the Polish economy in 2013–2017 (Adamowicz, Walczyk, 2017). Based on the analysis of qualitative data from the IRG SGH business cycle survey, the authors noted a change in the established pattern of the cyclical fluctuations – the emergence of a sideways trend. The authors stated that although risk and uncertainty were inherent in running a business, their spectacular increase translated into the moods of market participants and their performance, causing disturbances in the pattern of behavior observed so far – at the macroeconomic level. In the light of the events of recent years, caused by the COVID-19 pandemic and the war in Ukraine, the results of the study raise the question of whether the unusual situation in business entities described by E. Adamowicz and K. Walczyk as “a state of constant tremors, expecting the unexpected, and fear of making a serious mistake” (Adamowicz Walczyk, 2017) is reflected by the qualitative indicators.

In our opinion, one cannot ignore the possibility that enterprises follow established patterns when the economic system is unstable. Such a behavior is the essence the phenomenon of inertia. The phenomenon of inertia is some invariability of the process despite changes in the environment in which the process takes place. The condition for flexible adaptation of the process on a macro scale to changes in external factors is the ideal behavior of entities on a micro scale (precise forecasting, full rationality). The lack of these ideal behaviors means that the process follows common patterns, and the effects of external factors are visible with a certain delay (Łyko, 1992).

We assume that the pattern of entrepreneurs' assessment of their economic situation is the resultant of the phenomenon of inertia in economic processes and the expectations of entities indirectly expressing the impact of external factors on their economic situation (expectations effect). We find interesting to recognize whether the entrepreneurs changed the pattern in the conditions of unprecedented instability and uncertainty of the business environment observed during last years. Although the objective of our research formulated in this way omits the issue of comparing the forecast indicators with the diagnosis indicators, our study may create a new context for interpreting the results of other authors' research in this area.

To achieve the goal of the research the econometric analysis was conducted. The study used data from the GUS business cycle survey for the manufacturing industry in Poland in the period from January 2000 to January 2023. The conclusions were based on a multiplier analysis based on the results of ARDL models estimated for two sub-periods, in which business environment conditions were defined as relatively stable (from January 2000 to February 2020) and unstable (from March 2020 to January 2023). The results of the analyzes and their interpretation were preceded by a discussion of the qualitative indicators used and the research method.

## **2. DATA**

In the study we used monthly, seasonally unadjusted data series (from January 2000 to January 2023) from the business cycle survey conducted in the manufacturing industry by the Central Statistical Office. The study used indicators expressing the opinions of entrepreneurs on their current (diagnosis) and expected (forecast): general economic situation of the enterprise, financial situation of the enterprise, and production of the

enterprise. Diagnostic and prognostic questions are single-choice questions with three answer options:

- positive (+), meaning an improvement of the situation from the point of view of the economic entity,
- neutral (=), meaning no change in the economic situation of the entity,
- negative (–), identical to the deterioration of the situation.

In the diagnostic questions, the respondents evaluate the current situation in a given area by comparing it with the previous period or the state considered normal by the respondents<sup>6</sup>, while in the prognostic questions they indicate the expected direction of changes in the next three months<sup>7</sup>. The respondents' answers are the basis for constructing simple economic indicators, which are calculated as the differences between the percentage share of positive indications (+) and the percentage share of negative indications (–). It should be noted that the neutral answers are not considered in estimation of simple indicators. The values of simple economic indicators range from –100 to +100. A positive value of the simple indicator is information about the prevalence of positive opinions over negative ones, a negative value indicates that the percentage of negative answers was higher than positive ones. An increase in the value of the indicator means an improvement in the situation of entrepreneurs and is interpreted as an improvement in the national economic situation, while a decrease in the value of the indicator means a deterioration of the situation of entrepreneurs, and thus a deterioration in the national economic situation.

Three pairs of qualitative indicators were used in the study:

- current and expected general economic situation of the enterprise – *GESD* and *GESP* respectively;
- current and expected financial situation of the enterprise – *FSD* and *FSP* respectively;
- current and expected production of the enterprise – *QD* and *QP* respectively.

The time series were seasonally adjusted using the X-12-ARIMA in EViews 11.

### 3. METHOD

We modeled diagnosis indicators (*GESD*, *FSD*, *QD*) as a function of their values in previous periods and simultaneous and delayed values of forecast indicators (*GESP*, *FSP*, *QP* respectively). This implied the use of the ARDL(3, 3) econometric model:

$$y_t = C + \alpha_1 y_{t-1} + \alpha_2 y_{t-2} + \alpha_3 y_{t-3} + \beta_0 x_t + \beta_1 x_{t-1} + \beta_2 x_{t-2} + \beta_3 x_{t-3} + \varepsilon_t \quad (1)$$

where: *C* – constant;

*y* – endogenous variable;

*x* – exogenous variable;

$\alpha_1, \alpha_2, \alpha_3, \beta_0, \beta_1, \beta_2, \beta_3$  – regression parameters;

$\varepsilon_t$  – error term.

<sup>6</sup> Variants of answers in the diagnostic questions: in relation to the current general economic situation – good/satisfactory/bad; in relation to the current financial situation – improving/staying the same/deteriorating; in relation to the current production – increases/is unchanged/decreases. It should be noted that there is no precisely defined reference period for the formulated assessment.

<sup>7</sup> Variants of answers in forecasting questions: in relation to the general economic and financial situation – it will improve/be unchanged/deteriorate; in relation to production – will increase/be unchanged/decrease.

It was assumed that the autoregressive part of the model (AR part) reflects the influence of the phenomenon of inertia on the dependent variable. The impact of inertia is reflected by the sum of the regression parameters with lagged values of dependent variable  $\sum \alpha$ . The distributed lags part of the model (part DL) describes the impact of the expectation effect, which strength is expressed by the cumulative multiplier calculated as  $\sum \beta$ .

In addition, the use of the ARDL model enables the estimation of the long-term multiplier describing the impact of a permanent change in  $x$  on the variable  $y$  (Verbeek, 2004; Hill, Griffiths, Lim, 2011; Davidson, MacKinnon, 1999; Johnston, DiNardo, 1997):

$$m_d = \frac{\sum \beta}{1 - \sum \alpha} \quad (2)$$

If the estimated parameters of the model described by equation (1) meet the following conditions: the absolute value of the sum of parameter estimates  $\alpha_1 + \dots + \alpha_p$  is less than unity ( $|\sum \alpha| < 1$ ) and the long-term multiplier is statistically significant, then the model has a long-term equilibrium described by the formula:

$$y^* = C + m_d x^* \quad (3)$$

where:  $y^*$  – long-term level of the endogenous variable;

$x^*$  – long-term level of the exogenous variable;

$C = \frac{c}{1 - \sum \alpha}$  – long-term constant.

The econometric study was conducted by distinguishing two sub-periods of the analysis: the period of relative stability from January 2000 to February 2020 (the period before the COVID-19 pandemic and the war in Ukraine) and the period of instability from March 2020 to January 2023 (the period of the COVID-19 pandemic and the war in Ukraine).

The estimation of the regression equations was preceded by ADF unit root tests. The test results showed that all variables in our study were stationary<sup>8</sup>. The regression equations were estimated using ordinary least squares with the heteroscedasticity and autocorrelation consistent Newey-West estimator of the variance-covariance matrix (HAC) (Greene 2012)<sup>9</sup>. The normality assumption was tested using the Jarque-Bera test (Baltagi 2011). The statistical significance of the parameters of the long-term equilibrium equation was tested using the Wald test (Baltagi, 2011). The statistical significance of the regression parameter estimates was determined at the level of  $\alpha = 0,05$ . Istotność statystyczną parametrów równania równowagi długookresowej testowano za pomocą testu Walda (Baltagi, 2011). The statistical significance of the parameters of the long-term equilibrium equation was tested using the Wald test (Baltagi, 2011).

The results and their interpretation are presented in the next part of the study focusing on the results significant from the point of view of the implementation of the research objective<sup>10</sup>.

<sup>8</sup> ADF test results available on request.

<sup>9</sup> Bartlett weights were used in the estimation (Greene, 2012).

<sup>10</sup> Complete documentation of the study authors will provide upon request.

#### 4. RESULTS

The results of the estimation of the regression for the dependent variable *GESD* (Table 1) showed that in both distinguished subperiods the parameters in the autoregressive part of the equation (part AR) and their sums ( $\sum \alpha$ ) met the condition of statistical significance. It can therefore be concluded that both in the period of relative stability (Jan. 2000–Feb. 2020) and during instability of the environment (March 2020–Jan. 2023), the phenomenon of inertia had a statistically significant impact on the diagnosis of the current economic situation of entities, although the strength of this impact in the second of the distinguished periods was slightly weaker<sup>11</sup>.

Table 1. Estimation results – dependent variable *GESD*

Variable	Jan. 2000–Feb. 2020	March 2020–Jan. 2023
	Coefficient [Std. Error]	Coefficient [Std. Error]
<i>C</i>	<b>-0,1091</b> [0,0343]	0,1775 [0,1001]
<i>GESD<sub>t-1</sub></i>	<b>2,5658</b> [0,0507]	<b>1,8964</b> [0,1744]
<i>GESD<sub>t-2</sub></i>	<b>-2,3809</b> [0,0924]	<b>-1,4476</b> [0,2536]
<i>GESD<sub>t-3</sub></i>	<b>0,8115</b> [0,0479]	<b>0,4416</b> [0,1250]
<i>GESP</i>	<b>0,4375</b> [0,1632]	-0,2503 [0,2406]
<i>GESP<sub>t-1</sub></i>	<b>-0,9871</b> [0,4554]	1,1386 [0,6539]
<i>GESP<sub>t-2</sub></i>	0,8595 [0,4474]	-1,2457 [0,6192]
<i>GESP<sub>t-3</sub></i>	-0,2932 [0,1554]	0,4359 [0,2512]
	R-squared 0,999; Adjusted R-squared 0,999; F-statistic 100966,6; Prob(F-statistic) 0,00; normality J-B test 3,638815; Prob(J-B-statistic) 0,162122	R-squared 0,999; Adjusted R-squared 0,999; F-statistic 189120,3; Prob(F-statistic) 0,00; normality J-B test 0,748401; Prob(J-B-statistic) 0,687839

\* Statistically significant estimates of regression parameters are shown in bold.

Source: own calculations.

Significant differences between the sub-periods of the analysis are visible in terms of the role of expectations effect in determining the diagnosis of the general economic situation of entities (DL part). During period of relative stability, the expectations of entities were an important factor influencing the *GESD* indicator. This statement applies to

<sup>11</sup> The sum of the coefficients was 0.99 in the period of relative stability of the environment [Wald test:  $\chi^2 = 211155,0$ ;  $p = 0,00$ ], and 0.89 during the period of environmental instability [Wald test:  $\chi^2 = 262,8585$ ;  $p = 0,00$ ].

the impact described by both the cumulative multiplier and the long-term multiplier<sup>12</sup>. The long-term equilibrium relationship between the *GESD* and *GESP* variables is described by the equation<sup>13</sup>:

$$GESD^* = -29,4 + 4,51 * GESP^* \quad (4)$$

The relationship between diagnoses and forecasts of the general economic situation of enterprises in the long-term equilibrium implies that in the period of relative economic stability, a unit sustained increase/decrease in the expectations of entities (wave of optimism/wave of pessimism) resulted in a multiplied increase/decrease in the value of diagnosis indicators in the long term.

During the unstable period *GESD* values depended only on the phenomenon of inertia, and the expectations effect played a passive role in this process: the regression parameters in the DL part of the equation were not statistically significant, therefore neither the cumulative multiplier nor the long-term multiplier could be estimated.

The results of the estimation of the regression equations for the dependent variables *FSD* and *QD* are presented in Tables 2 and 3 respectively. Regarding the phenomenon of inertia, the results obtained for *FSD* and *QD* – concerning the financial situation and production of the enterprise – lead to similar conclusions as those derived for the variable *GESD*. The impact of inertia on the diagnosis indicators *FSD* and *QD* in the distinguished sub-periods was similar<sup>14</sup>.

Table 2. Estimation results – dependent variable *FSD*

Variable	Jan. 2000–Feb. 2020	March 2020–Jan. 2023
	Coefficient [Std. Error]	Coefficient [Std. Error]
<i>C</i>	-0,0260 [0,0211]	0,1741 [0,1048]
<i>FSD<sub>t-1</sub></i>	<b>2,6577</b> <b>[0,0350]</b>	<b>2,4211</b> <b>[0,1349]</b>
<i>FSD<sub>t-2</sub></i>	<b>-2,5234</b> <b>[0,0702]</b>	<b>-2,1963</b> <b>[0,2579]</b>
<i>FSD<sub>t-3</sub></i>	<b>0,8615</b> <b>[0,0382]</b>	<b>0,7554</b> <b>[0,1369]</b>
<i>FSP</i>	<b>0,6597</b> <b>[0,0580]</b>	<b>0,8204</b> <b>[0,0669]</b>

<sup>12</sup> The value of the cumulative multiplier was 0,017 [Wald test:  $\chi^2 = 14,71849$ ;  $p = 0,00$ ], and the value of the long-term multiplier was 4,51 [Wald test:  $\chi^2 = 4,399392$ ;  $p = 0,04$ ].

<sup>13</sup> Wald test for constant:  $\chi^2 = 4,79838$ ;  $p = 0,03$ .

<sup>14</sup> In the case of the model for the dependent variable *FSD*, in the period of relative stability of the environment  $\sum \alpha = 0,99$  [Wald test:  $\chi^2 = 163311,2$ ;  $p = 0,00$ ], and in the period of instability of the environment  $\sum \alpha = 0,98$  [Wald test:  $\chi^2 = 4124,725$ ;  $p = 0,00$ ].

In the case of the model for the dependent variable *QD*, in the period of relative stability of the environment  $\sum \alpha = 0,99$  [Wald test:  $\chi^2 = 169267,5$ ;  $p = 0,00$ ], and in the period of instability of the environment  $\sum \alpha = 0,98$  [Wald test:  $\chi^2 = 4735,102$ ;  $p = 0,00$ ].

Table 2 (cont.). Estimation results – dependent variable *FSD*

Variable	Jan. 2000–Feb. 2020	March 2020–Jan. 2023
	Coefficient [Std. Error]	Coefficient [Std. Error]
<i>FSP</i> <sub><i>t</i>-1</sub>	<b>-1,6319</b> <b>[0,1771]</b>	<b>-1,8443</b> <b>[0,2692]</b>
<i>FSP</i> <sub><i>t</i>-2</sub>	<b>1,4476</b> <b>[0,1944]</b>	<b>1,5696</b> <b>[0,3485]</b>
<i>FSP</i> <sub><i>t</i>-3</sub>	<b>-0,4703</b> <b>[0,0754]</b>	<b>-0,5170</b> <b>[0,1521]</b>
	R-squared 0,999; Adjusted R-squared 0,999; F-statistic 189120,3; Prob(F-statistic) 0,00; normality test J-B 1,442012; Prob(J-B-statistic) 0,486263	R-squared 0,999; Adjusted R-squared 0,999; F-statistic 189120,3; Prob(F-statistic) 0,00; normality test J-B 0,748401; Prob(J-B-statistic) 0,687839

\* Statistically significant estimates of regression parameters are shown in bold.

Source: own calculations.

The analysis of the parameters estimated in the DL part of both models leads to different conclusions. In the period of relative stability, all regression parameters in the DL part of the models met the criteria of statistical significance, however the cumulative multipliers did not meet the condition of statistical significance, what excluded the possibility of determining long-term multipliers and long-term equilibrium equations<sup>15</sup>.

Table 3. Estimation results – dependent variable *QD*.

Variable	Jan. 2000–Feb. 2020	March 2020–Jan. 2023
	Coefficient [Std. Error]	Coefficient [Std. Error]
<i>C</i>	-0,0088 [0,0197]	0,1686 [0,1095]
<i>QD</i> <sub><i>t</i>-1</sub>	<b>2,5573</b> <b>[0,0434]</b>	<b>2,4251</b> <b>[0,0902]</b>
<i>QD</i> <sub><i>t</i>-2</sub>	<b>-2,3790</b> <b>[0,0764]</b>	<b>-2,2171</b> <b>[0,1713]</b>
<i>QD</i> <sub><i>t</i>-3</sub>	<b>0,8189</b> <b>[0,0365]</b>	<b>0,7704</b> <b>[0,0935]</b>
<i>QP</i>	<b>0,8096</b> <b>[0,0902]</b>	<b>0,7634</b> <b>[0,0844]</b>
<i>QP</i> <sub><i>t</i>-1</sub>	<b>-1,8942</b> <b>[0,2596]</b>	<b>-1,6290</b> <b>[0,2423]</b>

<sup>15</sup> In the case of the model for the dependent variable *FSD*, in the period of relative stability of the environment  $\sum \beta = 0,005$  [Wald test:  $\chi^2 = 2,993753$ ;  $p = 0,08$ ]. In the case of the model for the dependent variable *QD*, in the period of relative stability of the environment  $\sum \beta = 0,003$  [Wald test:  $\chi^2 = 1,634645$ ;  $p = 0,2$ ].



Table 3 (cont.). Estimation results – dependent variable *QD*.

Variable	Jan. 2000–Feb. 2020	March 2020–Jan. 2023
	Coefficient [Std. Error]	Coefficient [Std. Error]
$QP_{t-2}$	<b>1,6443</b> <b>[0,2714]</b>	<b>1,3585</b> <b>[0,2703]</b>
$QP_{t-3}$	<b>-0,5569</b> <b>[0,1002]</b>	<b>-0,4531</b> <b>[0,1171]</b>
	R-squared 0,999; Adjusted R-squared 0,999; F-statistic 98356,7; Prob(F-statistic) 0,00; normality test J-B 29,35978; Prob(J-B-statistic) 0,000	R-squared 0,999; Adjusted R-squared 0,999; F-statistic 9028,372; Prob(F-statistic) 0,00; normality test J-B 1,592867; Prob(J-B-statistic) 0,450934

\* Statistically significant estimates of regression parameters are shown in bold. Residuals of the model estimated for the period of relative economic stability did not meet the assumption of normal distribution, therefore the results should be interpreted with caution.

Source: own calculations.

A long-term relationship between the diagnosis indicators and the corresponding forecast indicators was noted only in the period of economic instability. Relationships described by long-term equilibrium equations<sup>16</sup>:

$$FSD^* = 1,45 * FSP^* \quad (5)$$

$$QD^* = 1,84 * QP^* \quad (6)$$

indicate a positive relationship between the analyzed variables, stronger in the case of a diagnosis concerning the production volume. A comparison of the values of the cumulative multipliers resulting from the DL part of both models ( $\sum \beta$ ) leads to an analogous conclusion<sup>17</sup>. It can therefore be concluded that the expectations effect which played a passive role in the period of relative stability became an important factor determining enterprises' diagnoses of their financial situation and production in the period of instability.

Summarizing the results of the econometric research, it can be stated that:

- regardless of the type of indicator and subperiod of analysis, the phenomenon of inertia was the main factor influencing diagnosis indicators;
- in all analyzed areas of companies' activity (general situation, financial situation, production) we noted a change in the pattern of impact of forecast indicators on diagnosis indicators, which was the result of a change in the conditions of the external environment (expectations effect).

<sup>16</sup> Constants in both long-term equilibrium equations did not meet the condition of statistical significance.

<sup>17</sup> In the case of the model for the dependent variable FSD  $\sum \beta = 0,03$  [Wald test:  $\chi^2 = 4,952419$ ;  $p = 0,03$ ], and in the case of the model for the dependent variable QD  $\sum \beta = 0,04$  [Wald test:  $\chi^2 = 4,869111$ ;  $p = 0,03$ ].

## 5. CONCLUSIONS

The common point of studies on qualitative indicators is the search for answer to the question whether the assessments of entrepreneurs in the business cycle surveys adequately reflect changes in business conditions. It is assumed that, unlike other entities, entrepreneurs do not succumb to the emotions of the moment so easily, but rather coldly calculate (Adamowicz, Walczyk, 2012, p. 47). Enterprises change their behavior only under the influence of a sufficiently strong stimulus – small changes in business conditions do not affect their behavior. There is a range of indifference in which changes in the business environment do not affect the economic entity (Byrt, Kowalczyk, Rekowski, 1982, p. 412). These statements were confirmed by the results of our study regarding the variables concerning the financial situation and production volume of enterprises. In the period of relative stability, only a short-term impact of forecasts on diagnoses formulated by companies was recorded. This means that changes in the environment in this sub-period were absorbed only by short-term reactions, which did not create permanent long-term patterns. Such patterns, on the other hand, were recorded during the period of instability of the economic system caused by the COVID-19 pandemic and the war in Ukraine.

We assumed that the diagnoses are a function of the phenomenon of inertia and the expectation effect. The phenomenon of inertia, by definition, means the lack of immediate reaction of entities to changes taking place in their environment. Our results indicate that inertia played an important role in formulating diagnoses in both distinguished periods, and in each of them its essence seems to be different. While in the period of relative stability the processes proceed in a normal mode, according to established rules, in the period of instability inertia becomes a kind of protection against making a mistake in an unpredictable environment, creating a model of long-term equilibrium together with the expectations effect.

It seems reasonable to ask why the results regarding the assessment of the general economic situation differ from this scenario. In the case of the *GESD*, the long-term pattern was identified only in the period of relative stability of the economic system. The reason for this difference may lie in the substantive content of the indicators. While the *FSD* and *QD* indices relate to narrower, measurable spheres of economic activity, the general economic situation is a broader and imprecise concept in the business cycle survey. Assessing the general economic situation in relatively stable conditions, entrepreneurs rely both on forecasts formulated in the past and on diagnoses that may turn out to be wrong in a period of instability, and thus cease to be the basis for formulating assessments.

The reported results may seem paradoxical, but this apparent paradox encourages us to continue research, and especially to seek an answer to the question why the instability of the economic system may be conducive to the creation of a long-term equilibrium relationship between diagnosis and forecast indicators in the study of the economic situation using the business cycle survey.

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## EMPLOYEE CONTROL AND OCCUPATIONAL FRAUD IN REMOTE WORK

The main problem addressed in this article is the identification of occupational fraud risks in remote work, and their impact on control solutions implemented by managers. The article is based on desk research (including the analysis of available reports and their findings) and structured interviews with managers and experts. In addition to the systematization of occupational frauds during remote work, and methods of controlling fraud, the main result is the identification of key variables that managers should take into account when minimizing occupational fraud. These include the level (and form) of control, levels of job satisfaction and trust, and the skills of employees and managers. This project, therefore, also poses terminological challenges related to the definitions of occupational fraud and counter-productive work behavior, and further identification of the phenomenon of fictitious human capital. These may be relevant from the perspective of further research on the problem of management and effectiveness of remote work.

**Keywords:** employee control, fraud risk, methods of control, remote work, occupational fraud.

### 1. INTRODUCTION

Employee control is one of the principal management functions and a relatively well studied and constantly developed area. The recent Covid-19 pandemic has enforced significant changes in working environments, including a shift to remote and hybrid work models and organisational changes in terms of working shifts, time and methods. These factors have contributed to risks related to employee expectations, determinants of effective work and occupational fraud. As a result, a need has arisen to modify both the scope of control and the manner in which it is conducted. The primary problem addressed in this article is the identification of occupational fraud risks in remote work and their impact on control solutions implemented by managers. The article was prepared based on desk-research analysis (including the analysis of available reports and their findings) and structured interviews with managers and experts.

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## 2. CONTROL AND PREVENTION OF FRAUD

In addition to planning, organising and motivating, controlling emerges as another fundamental function of management. It is most frequently defined as setting a system of processes that allows the organisation to achieve effects consistent with its aims and objectives, as well as revise plans to adjust for possible deviations (Cyfert, Krzakiewicz, 2020).

The use of control mechanisms is intended to promote behaviour that complies with the organisation's policies. Control can serve employees as an indication of what is expected from them, support in the identification of their development path and motivation. At the same time, employees might perceive control activities as a threat, a hindrance and an interference with the working conditions. As a result, an important aspect in the use of control and supervision is to apply a positive approach to control activities, emphasise the importance of tasks and objectives, ensure that the latter are understood and, if necessary, verify the reasons why they have not been achieved (Marciniak, 2015). Miscomprehension of control principles and the implementation of excessive or inadequate control activities (abusive supervision) can generate tension among employees, managers and employers and contribute to organisational misconduct and unethical behaviour (Liu C., Yang, Liu J., Zhu, 2018).

Effective control (audits, inspections) must therefore have a clearly defined purpose (e.g. to ensure compliance with the applicable procedures and legal regulations) and area (e.g. organisational processes, systems and employees' actions and conduct), it must use the adequate control methods and must be conducted at the right time by people of high competence, morale and personal ethics (Szejniuk, 2018).

Proper control has a positive impact on performance and deters negative behaviour – including frauds defined as employee actions that have a negative effect on the organisation and its elements, and recognised as morally reprehensible (Maciejewska, 2016; Association of Certified Fraud Examiners, n.d.). It also determines other processes and principles – for example, by enforcing the need to secure and protect company assets, identify the rules of conduct for employees (Huang, Lin, Chiu, Yen, 2017) and draw consequences in case of deviant workplace behaviour (DWB).

Based on the general deterrence theory, when faced with possible sanctions and penalties for engaging in negative behaviour (an infringement, a fraud, a criminal offence), that is when effective control systems are in place, employees are less likely to succumb to unethical behaviour (Johnston, Warkentin, McBride, Carter, 2016; Huang et al., 2017). As a result, it seems advisable to pay attention to the forms and framework of control. For example, *ad hoc* internal inspections for the safeguarding of assets do not provide effective protection against corruption risks and are less effective in combating occupational fraud (Maulidi, Ansell, 2022).

Another important issue is also the selection of appropriate tools. They can be dedicated to the protection of assets (including cash) and information, as well as work supervision. They include tools used for the monitoring of working time, employee presence, tasks and activities, tracking the use of the internet, e-mail and business phones, and geolocation (Kot, 2021).

### 3. CONTROL CHALLENGES AND FRAUD IN REMOTE WORK

The effectiveness of control activities and their role in fraud detection and prevention changes with the evolution of work processes. The introduction of remote work, enforced by the pandemic, proved to be a significant change that was sudden and difficult to predict.

While the pandemic period saw cases of fraud where employees pretended to have Covid-19 or reported fake symptoms (Tajvar, Hosseini, Fakherpour, 2021; Balkhi, Nasir, Zehra, Riaz, 2020), they were not recognised as a significant challenge of remote work. At the same time, many studies of forced remote working reveal that employees' burnout during remote work caused lower identification with the employer and reduced engagement in work (Volini, Schwartz, Denny, Mallon, Van Durme, Hauptman, Yan, Poynton, 2020; Drela, 2022). It is suggested that agreeing on clear rules that establish the times when people must be available and help with workload management may provide an answer to this challenge (PwC, 2020; Łukasik-Stachowiak, 2022). Similarly, in studies where respondents were asked the question: *How did HR technology enable HR to respond to the COVID-19 pandemic?*, 'monitoring performance, productivity and engagement' were indicated as the principal HR solutions (Cadigan, Card, Will, 2021). Some researchers also highlight that the actual changes in employee performance (effectiveness) could be related to the characteristics of specific departments (Raźniewski, Fierla-Jakubowicz, Oleksiuk, 2021).

Effectiveness is supported by the ability to use data analytics and shift to an evidence-based approach (KPMG, 2020). Direct indications are made regarding the creation of a digital mindset and the implementation of real-time analytics to connect people and data with business outcomes. It is also argued that one of the largest barriers is building models to integrate humans with technologies (to create new habits and management practices for how people adapt, behave and work in partnership with the available technology). Similar observations were raised by specialists working remotely in the United States, who identified communication, collaboration and time management with colleagues via technology as the most significant challenges of remote work (Hayes, Priestley, Moore, Ray, 2021). It is argued that the system of communication with employees is one of the fundamental elements for the preservation of employee motivation during remote work (Krugielka, Kostrzewa-Demczuk, 2021).

In the context of remote work, enterprise information security is emerging as an issue of high importance (Raźniewski et al., 2021). Despite increased investments in information security, many organisations around the world have not managed to avoid related risks and frauds due to employee non-compliance (AlGhamdi, Win, Vlahu-Gjorgievska, 2022). Moreover, employees are considered to be the weakest link of cyber systems (Sulaiman, Fauzi, Wider, Rajadural, Hussain, Harun, 2022).

### 4. RESEARCH RESULTS (IDENTIFIED FRAUDS AND CONTROL METHODS)

Seeking to learn more about challenges related to employee control during remote work, particularly with regards to fraud prevention, we used the results of our original research conducted as part of the project *Tools for managing teams of employees in conditions of forced remote working based on technological solutions of economy 4.0*. The project financed within the Regional Initiative for Excellence programme of the Minister of Education and Science of Poland, years 2019-2023, grant no. 004/RID/2018/19, financing 3,000,000 PLN.

Computer-Assisted Web Interviews (CAWI) were conducted with 500 respondents (employees of companies with international capital) who worked in the office (on-site in the company) before March 2020, i.e. before the COVID-19 pandemic, and then remotely between March 2020 and May 2021, as instructed by the employer. Non-probability sampling was applied, with factors such as company size and gender taken into account. Respondents were asked to assess remote work, its impact on the broadly defined performance and the impact of IT tools and organisational solutions on workflow. To confront employees' assessments with those of managers', interviews were conducted with 14 middle or senior managers in companies with international capital, responsible for the management of teams working remotely. The results of employees' assessments were presented to the interviewees who were asked to share their opinions on the survey results and their own experience and practices.

The content of the interviews was organised by the corresponding survey questions and categorised as: confirmation of the survey results, critical opinions (when a survey result was contrary to a manager's opinion), extended remarks (opinions extending beyond the commented results) and solutions (tools) applied for employee behaviour support or prevention. In parallel, statement tagging was conducted. This article focuses on managers' comments and solutions related to the following categories: employee control and fraud prevention and identification.

Fraud identification: According to managers, remote work made it possible to simulate work, which includes pretending to be busy and extending the execution time of certain tasks (whose performance under remote work conditions was hindered according to employees). Satisfaction with work flexibility (rated very high by employees) could be related to the fact that remote work provided employees with an opportunity to simultaneously address private matters and organise family life (for which employees cannot be blamed but only during the periods of forced remote working and lockdowns).

An important disruption was the non-performance of work due to the need to work remotely (refusal, delayed response to tasks received from colleagues and internal or external clients) or the transfer of responsibilities to people working on-site at that time (although one manager saw it as a positive manifestation of work flexibility). In particular, the following were indicated based on managers' experience:

- Inability to reach the employee on the phone, random breaks from work;
- No response to e-mails or instant messages;
- Passive approach at meetings, persistent and questionable 'technical problems';
- Leaving the remote workplace, e.g. city sounds heard in the background during a telephone conversation;
- Work outside working hours, e.g. sending correspondence well past regular working hours (while not responding during regular working hours).

Among the results of these disruptions, the respondents listed the following: extended time of processes, disrupted work and workflow (affecting the work of others) and in some cases also reduced quality (work performed within minimum acceptable standards). Such behaviour contributed to a higher number and escalation of conflicts. However, the latter were also said to have been caused by communication problems (not always resulting from the employee's reluctance or fault but also generated by remote work conditions).

Another issue that was highlighted were overtime pay requests supposedly due to task performance outside working hours and without considering downtime or employee's lack of activity during working hours.



While the interviewed managers did not link employees' behaviour with direct financial consequences, damage and losses, their observations seem to have influenced their personnel decisions, both at the time and afterwards.

Control performance: According to managers, employee control was much more limited particularly in the initial periods of remote work compared to work performed on site. However, this assessment largely depended on managers' individual experience. Not everyone postulated the need to increase control, and some interviewees even talked about the liberalisation of the company's approach to *ad hoc* inspections in favour of greater focus on the verification of results.

In parallel, a common conclusion and a condition for the efficient operation of the organisation was the implementation of the principles of work accountability (assessment of work results rather than work input/effort), with the division of responsibilities into smaller assignments or the development of measurement methods for tasks that had previously not been subject to control or parameterisation. Some managers observed that the introduction of greater verification of tasks during remote work enabled a more effective employee evaluation.

Increased work accountability (improved measurability) began to be reflected in making the payment of salary conditional on the effects of work, with the indication for some employees to work part-time.

Another important issue was the development, identification and dissemination of rules of remote work, and writing them down together with instructions. This applied to the organisation of working time (also in terms of agreeing work with private life during working hours) and the ability to prioritise tasks and task reporting methods. Interviewees also talked about relatively simple rules such as completion of work schedules and participation in meetings with cameras on.

A common recommendation indicated as key to efficient employee management (in terms of control and performance) was the use of IT tools and their implementation method, with instant messaging systems, virtual co-working spaces and other dedicated solutions (particularly in the reporting and workflow categories) featuring as frequent proposals.

## 5. DISCUSSION

Our interviewees did not identify typical acts of fraud leading to the depletion of the company's assets or other deliberate actions to the detriment of the employer which could be linked specifically to remote work (and had never been observed before). However, our study revealed an area of fraudulent behaviour and control related to the broadly defined effectiveness (employee performance, efficiency) and working time (employee availability). Therefore, the frauds identified by our respondents can be classified as counterproductive work behaviour (CWB) (Baka, 2017) rather than deviant workplace behaviour (DWB) (Rasic Jelavic, Glamuzina, 2021; Robinson, Bennett, 1995; Liu et al., 2018).

An important area for discussion, emerging from the interviews with managers, (but also visible in the context of HR trends for 2023 as a human approach to the employee-manager relationships ('HR trends 2023: Melding humanity and hybrid work to retain top talent', 2022)) is the need of trust in employees depending on their maturity and responsibility for tasks and skills (co-determined by employees). The key challenge is to find the balance between the necessary level of control with its possible consequences (which can have a negative effect on employees), freedom and trust (as well as the risk of

overcontrol (Lloyd, 2015; Manroop, Petrovski, 2022; Yang, Kim, Hong, 2023)). This dilemma can be illustrated with the ‘pressure’ exercised by managers, for example, on employees caring for children. On the one hand, the lack of control and certain rigour may lead to non-performance of tasks, but on the other, it may result in employee fatigue, lower commitment levels, reduced innovation, excessive use of childcare leaves and, in extreme cases, resignation from work. Similarly, it is also challenging to show trust while ensuring information security, which is facilitated by the certainty and perceived severity of penalties and the awareness of being monitored (Raddatz, Marett, Trinkle, 2020). It is also worth highlighting the relationship between higher levels of dissatisfaction with organisational IT systems and a greater probability to engage in computer fraud. Moreover, this relationship appears to be significantly stronger in employees who consider themselves technologically literate (Amo, Cichocki, 2019).

On the one hand, managers are facing the challenge of ensuring effectiveness in a difficult period, but on the other, they must support the team, adapt to changing work models (particularly, regarding the working time and ensuring the right to disconnect outside working hours) and ensure good atmosphere of work (for example, by providing space for informal interactions), while making time and space for employee control and monitoring.

Having lost the possibility of direct control, managers are the ones that must demonstrate the skill in the use of remote work tools and the ability to adapt to them to properly formulate employees’ tasks and the organisation’s aims and objectives (rather than focus exclusively on work control) (cf. Sahadev, Purani, Kumar, 2013). Our interviewees provided examples of communication tools (as well as communication and data exchange systems), many of whose functionalities (according to our respondents) were never used.

While extending beyond the fraud-control relationship, another interesting finding regarding effectiveness in remote work emerges from our study: the reduction of waste. Remote work has reduced many bureaucratic requirements and enforced a better organisation of administrative processes (e.g. collaborative editing of documents, document archiving and sharing). Similarly, less time is spent on small-talk and chatting; however, the lack of the latter may have contributed to the deterioration of relationships<sup>3</sup>.

## 6. CONCLUSION

Systematising our discussion, Figure 1 presents the key variables that managers should consider so as to minimise occupational fraud. They take into account the levels (and forms) of control, satisfaction with work, trust and employees’ skills. Certain paradoxes emerging from relationships between these variables can prove challenging – for example, the risk of the negative impact of controls on employees’ satisfaction. Therefore, managers’ competencies in the use of control tools and control implementation remain an important issue (Andrew, 2010).

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<sup>3</sup> Interesting and disturbing at the same time data in this regard is presented by the Capterra report, according to which relations with co-workers are now the least important factor in job satisfaction (Westfall, 2022).

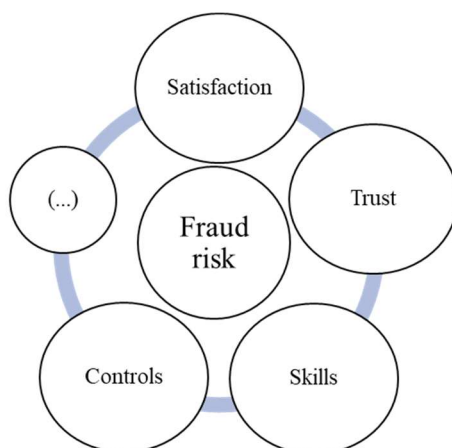


Figure 1. Factors reducing the risk of fraud in remote work

Source: Own study.

This article has some limitations. One of them is related to the fact that our study revealed no cases of typical fraud involving, for example, asset misappropriation, data theft, etc., whose intensity may have changed due to remote work. This interdependence should be the subject of separate research.

A challenge in our study was to combine managers' assessments of and reflections on remote work with the concept of occupational fraud. Not every definition includes slowing down work and the lack of commitment among typical examples of fraud. This raises a certain linguistic and terminological challenge regarding undesired forms of workplace behaviour. Although the latter have a negative effect on performance and work quality, causing distortions and slowing down work processes, they are not considered to be frauds and cannot be addressed with the use of the same tools as those applied for fraud identification, prevention and sanctions. It is our intention to attempt to resolve this problem in the future studies by exploring said types of behaviour as categories of fictitious human capital.

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## THREATS FROM THE WEB AND CYBERSECURITY ISSUES FROM THE PERSPECTIVE OF PUBLIC RELATIONS PROFESSIONALS

This article aims to evaluate the approach of the public relations (PR) industry to cybersecurity-related topics. The article is based on research results conducted by a team under the authors' supervision. In 2022, we conducted quantitative research using the Computer-Assisted Web Interviewing technique (CAWI), and its purpose was to acquire knowledge in the field of perception and understanding of the cybersecurity topic by specialists in the public relations industry in Poland. The research results revealed several previously unexplored areas, highlighting gaps in current understanding. This research contributes new insights into the cybersecurity perceptions of PR professionals, enriching the existing body of scientific knowledge.

**Keywords:** cybersecurity, public relations, communication management, ChatGPT.

### 1. CYBERSECURITY. PROBLEMS AND CHALLENGES

As business and personal activities move online and the number of devices connected to the Internet and data stored and shared electronically grows exponentially, cybersecurity is becoming increasingly important, and protection against cyber threats is becoming an essential problem (Mijwil, Aljanabi, Hussein, 2023). For these and other reasons, the topic of cybersecurity is often discussed and raised in various areas of socioeconomic life. The dangers coming from the Web make it necessary not only to increase knowledge in this area, but also to constantly monitor the environment. This applies not only to individuals whose data are at risk, but also to companies. For criminals who undertake data theft, it is

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clear that nowadays the value lies not only in company data, but also in the information stored on servers or computer disks. Not just bank access data anymore, but confidential information in particular is their area of interest. The mere fact of obtaining such content can be the basis, for example, for an attempt to extort a ransom under the threat of publishing the data on the TOR (The Onion Router) network. From the criminals' perspective, it is therefore an easier form of access to funds, which the victims often decide to pay to regain control over lost data. Companies that conduct cyberattacks are becoming more proficient and effective in avoiding detection. They have increasingly effective tools based on encryption using strong algorithms and advanced tactics, such as using legitimate Internet services to hide their actions and weaken existing cybersecurity techniques (Janczewski, 2022).

Safety can be defined as the objective state of not being threatened, which is subjectively perceived by individuals and groups. Therefore, security consists of two elements, objective and subjective. The first is external to the individual, the social group, and the collective. The second is subjective and concerns the feeling of being safe (Korzeniowska, 2004). Li (Li, 2011) presented the study on information privacy, referring to the competency to control information and the role of organisations, industries, and government in protecting online information and privacy of clients. Security is an expected state, while its absence causes discomfort and is a component of threat, which affects the functioning of both individuals and societies. Cybersecurity concerns the increasing possibilities of IS in collecting and using personal information of people without their knowledge (Hu, Wang, Chih, Yang 2018). Even collecting data for marketing or advertising purposes is often viewed as an action bordering on the 'almost criminal', as it undermines the autonomy of users and raises concerns about privacy intrusion (Nguyen, 2023). A threat violates the expected positive state (Kaczmarczyk, Dobrowolski, Dąbrowska, 2018). Cybersecurity is a specific type of response to threats coming from cyberspace (Chałubińska-Jentkiewicz, 2019) and it can be defined as the organisation and collection of resources, processes, and structures that are used for the protection of cyberspace and cyberspace-enabled systems from events that de jure noncompliance with de facto property rights (Craigen, Diakun-Thibault, Purse, 2014). Covers areas related to information and data sets that are only accessible to certain groups in a limited manner. Therefore, cybersecurity involves the resources, processes and structures used to protect cyberspace and the systems that support it from incidents that violate proprietary rights (Craigen et al., 2014). Cover a wide range of technical, organisational, and managerial issues that need to be considered to protect networked information systems from accidental and intentional threats (Veale, Brown, 2020). When defining cybersecurity, it is essential to take into account the supporting concepts of information security and cybercrime (Chałubińska-Jentkiewicz, 2019). The first of these concepts refers to the protection of information data first and the carriers of such data such as computers or external drives second. On the contrary, cybercrime is defined as unlawful acts undertaken with the intent to cause harm by using a computer or accessing ICT networks and it can have different forms within virtual, hybrid, or offline operations using Internet technology and cyberspace (Radhi, Hussien, Mohialden, 2023). Cybercrime manifests itself through illicit data theft, online vandalism, extortion, and various criminal endeavours seeking financial gain through coercion or deception (Nguyen, 2023). The threat of cyber-attacks is all the greater because technology changes rapidly and can be difficult to predict. The current problem is the ever-increasing sophistication of cyber-attacks. Attackers use advanced technologies, such as social engineering, malware, zero-day attacks (Ahmad, Alsmadi, Alhamdani,



Tawalbeh, 2023), which allow bypassing traditional security defences (Aji, Widod, Aji, Aji, Prawitasari, 2023). In addition, this complexity is increased by the interconnection of digital systems and the rapid adaptation of new technologies such as cloud computing and the Internet of Things (IoT). For example, banks are constantly under attack mainly due to their digital transformation and use of cloud computing, and according to the research presented at [commetric.com](https://www.commetric.com) (2023), in banks, there is the highest share of phishing, social engineering fraud, ransomware, and the use of trojan horses. However, cyberattacks cause a loss of reputation. Clients may doubt the organization's ability to protect their sensitive data, which reduces the credibility of the organisation on the client side.

The issue of cybersecurity currently affects everyone who uses the network or devices connected to it. Particularly at risk are those who are in possession of a range of data that are potentially valuable to criminals, i.e., data that may represent trade or business secrets. Data that, once stolen, could be the basis for extortion actions or inducing the payment of a ransom for its recovery or nonpublication. This is therefore the case not only for critical infrastructure entities but also for companies such as law firms and consultancies, including those specialising in public relations. And these are the ones that often have confidential information that customers share with them. Hu proposed a research model based on comparing the benefits of using co-created value in social networks and the risk of leaking sensitive data and loss of privacy. However, they point to the paradox that despite growing concerns about cybersecurity, the number of social media users is on the rise. This paradox illustrates the interactive process of cognitive/behavioural balance between cybersecurity consideration and co-creation of value through the use of social networks (Hu et al., 2018). When examining perceived cybersecurity concerns, they distinguished two dimensions, namely information security in the sense of protecting personal data and privacy, in the sense of the extent of user control over their personal data (Bansal, 2017).

The loss of a substantial amount of personal or sensitive data can have severe consequences for organisations due to its significant impact: damage to organisations can take the form of physical, digital, economic, psychological, social, and societal harm, as well as reputational damage (Agrafiotis, Nurse, Goldsmith, Creese, Upton, 2018). Part of reputational damage is, for example, damaged public perception, loss of key staff, loss of certifications, or damaged relationships with stakeholders. However, each interested subject can perceive damage differently, and therefore risk management, including cyber insurance within the context of cyberspace, is an integral part of an organisation's processes (McGregor, Reaiche, Boyle, de Zunielqui, 2023).

An important aspect when researching cybersecurity is also awareness of the risk of reputation damage in the event of information leakage, which is especially important when building the brand of PR agencies. Information leaks can be insidious and intentional, but sometimes leaks of an unintentional nature can also occur. Regardless of the type of breach, Knight and Nurse (Knight and Nurse, 2020) provide a framework for effective communication and rebuilding trust after a security incident. This consists of framing the message, deciding when to disclose, how to disclose, and preparing for reaction. It also contains the guidelines for delivering the message. The biggest problem of cyberattacks is the potential for reputational damage. PR agencies must try to prevent cyberattacks, e.g. consider what types of information they will publish as part of PR, i.e. to avoid publishing internal emails, avoid phishing, etc. In the event that an attack occurs, it is important to answer basic questions, but the information should come from one source. Official communication also reflects the cultural dimension, in terms of preferences for

individualism or collectivism, power distance, and also communication style in terms of preference for low-context or high-context communication (Kim, Lee, 2018).

A significant threat in addition to attacks conducted online is lack of knowledge or ignorance, as well as lack of awareness of threats (Hoffmann, 2018). Therefore, the implementation of solutions to secure the organisation should be part of the management processes of modern companies.

Franco et al. (Franco, Lacerda, Stiller, 2022) emphasise the necessity of investments in cybersecurity and offer a six-phase framework for the creation, implementation, and operation of a cybersecurity strategy in small and medium-sized enterprises. Training of employees is an important part of the implementation of the cybersecurity project. PR agencies could also follow these steps to support and manage cybersecurity projects effectively.

Krawczyk-Sokołowska and Caputa (Krawczyk-Sokołowska, Caputa, 2023), using the example of the analysis of the purchasing process in the electrical trade in Poland, point out that it is necessary to consider not only the benefits of social networks for interested parties, but also the threats that online relationships bring. Cybersecurity in this context can be based on the triad: (i) perception, defined as the ability to recognise potential risks from online relationships and assess their likelihood of occurrence; (ii) action, defined as the capability to implement protective measures and utilise safeguarding technologies; and (iii) knowledge, defined as the proficiency in using technological means to ensure the security of such relationships. Increasing awareness of the potential of networks and identifying risk factors associated with them is important nowadays. Digital activities should not revolve solely around acquiring IT skills or building relationships (Krawczyk-Sokołowska and Caputa, 2023). Enterprises must establish a culture of network security and also educate employees in this field. The example of banks that educate not only employees but also clients can be an inspiration. Banks constantly draw attention to cyber risks, thus essentially they educate clients.

Sarabi et al. (Sarabi, Naghizadeh, Liu, Y., Liu M., 2016) aimed to determine the extent to which details about an organisation help assess the risk of information leakage. They claim that it is possible to predict incidents with relatively high accuracy, but it is not possible to predict the type of incident unequivocally. However, they focused on the types of incidents by action, actor, and asset type, whilst not taking into account e.g. region or industry.

Security is not only about protecting data, knowledge, and information resources. It is also financial security. The authors of the IBM report indicate that the construction of incident response structures or the regularly conducting tests of the effectiveness of the information security management system has an impact on the fact that the level of losses between an enterprise that has implemented such measures and an enterprise that has not decided to introduce them is, on average, USD 2 million (Piecuch, 2020). With this in mind, it is important to note that the effectiveness of security measures must manifest itself in proactivity. Security must be proactive. This means that systems must be designed and tested with security in mind from the outset (Kemmerer, 2003).

The topic of cybersecurity is also gaining particular importance for another reason, namely the growing discussion of technologies used within the framework of artificial intelligence. The problem of phishing seems to be becoming even more serious, as even solutions such as ChatGPT can be involved in the creation of manipulative, persuasive content, the kind that can ultimately influence the awareness of recipients in order to obtain data from them, which can then be used to steal or extort data necessary for further criminal

activities. Increased vigilance and a reinforced commitment to thorough fact-checking become imperative when using ChatGPT to create content based on web searchers (Gaule, 2023). But on the other hand, also ChatGPT has the capability to generate cybersecurity scripts, so it can be a tool to help strengthen security (Mijwil et al., 2023). In general, artificial intelligence tools (e.g. CrowdStrike) used in cybersecurity are complex to adopt as their implementation require specialist knowledge. The output accuracy is high, although it depends on the threats and sophistication of the systems. AI tools definitely enhance security efforts, but there are still limitations due to evolving threats (Gaule, 2023). Building protection systems is a basic principle to gain clients' trust (Aji et al., 2023). For example, the introduction of chatbots can raise concerns about privacy, security reliability, as well as potentially inaccurate and misleading information.

The issue of cybersecurity is significant in various types of organisations, including municipalities (Vestad, Yang, 2023). Several challenges related to cybersecurity are also faced by the public relations industry today, because they work with the data of other people. This applies both to executive areas, the actions taken by practitioners and academics in this field, and also to the people who work in PR. The first issue mainly refers to problems related to content creation and its appropriate security, while the second, among others, refers to awareness, understanding of the challenges, and the need to secure the value that data and information can and do represent.

## **2. KNOWLEDGE AND EXPERIENCE IN CYBERSECURITY AMONG PUBLIC RELATIONS PROFESSIONALS IN POLAND**

The survey on the perception of cybersecurity by public relations professionals in Poland was carried out by the Polish Press Agency and a team of analysts from the Information Society Development Institute. The project was carried out using a quantitative method, using the CAWI technique in 2022 on a sample of 119 professionals, mainly specialists and experts in the databases of the Information Society Development Institute. The survey questionnaire asked questions about knowledge of types of cyberattacks and on-line activities, experiences of cyberattack, the topic of securing data, participation in data security training, sources of knowledge on cyberattack threats or frequency of cybersecurity activities. The structure of the questions was mainly based on rank-order scales. The analyses performed are based on frequency distributions and the procedure of comparing averages in independent groups. The set of factors on the basis of which statistical diversification procedures were carried out is composed of variables such as gender, age, recommendation of PR work to friends and family, education, completed PR studies or courses, years in the industry, position in the organisation, main workplace, size of the main workplace organisation and experience of a crisis situation by the organisation in the last 12 months.

Surveys conducted among public relations professionals in Poland indicate that they have all heard of hacking, as an unlawful activity by which an unauthorised person gains access to information and data or gains access to information network systems. 98.3% of the respondents know about phishing and pharming, while 87.4% of the respondents know about malware. A similarly large group of respondents (73.1%) have heard of sniffing, while concepts such as ransomware or DoS/DDoS are known to a relatively smallest percentage of respondents – 63.9% and 54.6% of affirmative indications, respectively.

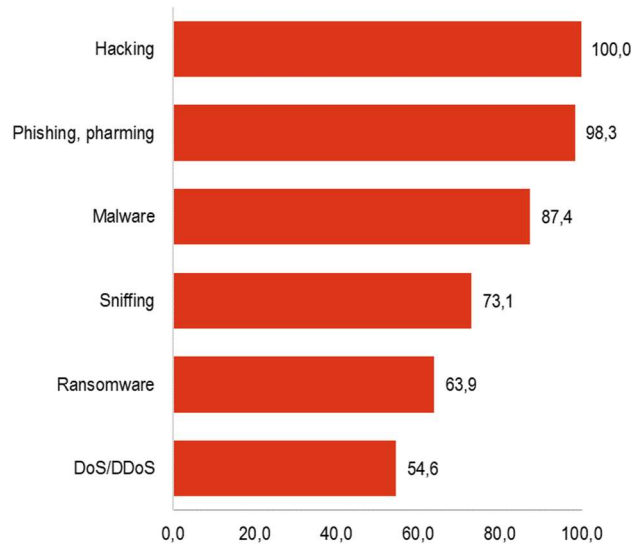


Figure 1. Have you heard of the following types of cyber-attacks online? N=119 (in % of affirmative answers)

Source: own research.

When making intergroup comparisons, it can be observed that persons with seniority of more than 3 years were significantly more likely to declare knowledge of the terms phishing, pharming – 100% compared to 93.3% among persons with seniority of up to 3 years. Knowledge of the term malware was significantly more frequently indicated by persons up to 35 years (94.8% vs. 80.3% among older persons), while knowledge of (distributed) denial-of-service attack was indicated by men (69.8% vs. 46.1% among women). Male respondents (88.4% vs 50% of females), those 35+ years of age (73.8% vs 53.4% of younger respondents), those with more than 10 years of industry experience (78.3% vs 36.7% of those with up to 3 years of experience) and those in management positions (88% vs 45.7% of those in executive positions) were significantly more likely to be familiar with the concept of ransomware.

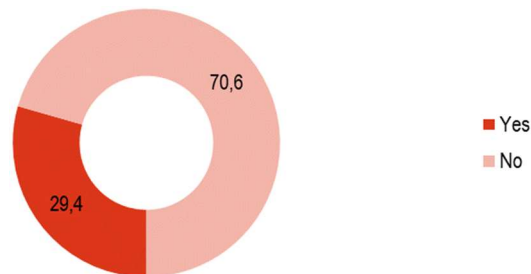


Figure 2. In the last month, have you encountered an attack aimed at deleting or intercepting data that directly affected you? N = 119 (%). The values in the graph have been rounded, so they may not be 100%

Source: own research.

Almost one in three respondents had experienced a direct attack aimed at deleting or intercepting their data in the month preceding the survey, 29.4%. Comparing the experience of a direct attack mentioned above with the profile of the respondents, we observe that it was significantly more often experienced by the male respondents (44.2% against 21.1% female) and those working in companies with 250 or more employees (52.4% against 10.5% in companies with up to 9 employees).

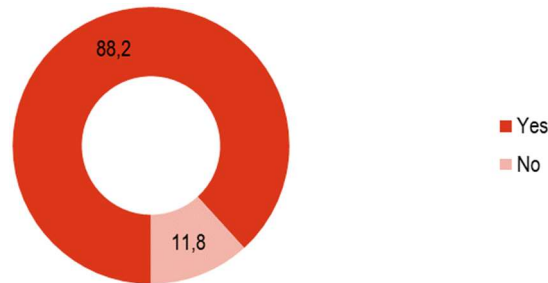


Figure 3. Do you protect/secure your data on the Internet/stored on your private/service computer? N=119 (in %). The values in the graph have been rounded, so they may not be 100%

Source: own research.

Almost nine out of ten public relations professionals surveyed declared that they protect their data. This applies to their own data located on the Internet (e.g. access data) as well as that located on a private/service computer, 88.2%. 11.8% of the respondents do not use security. The issue of data protection/security was not differentiated by any of the variables characterising the profile of the public relations professionals surveyed.

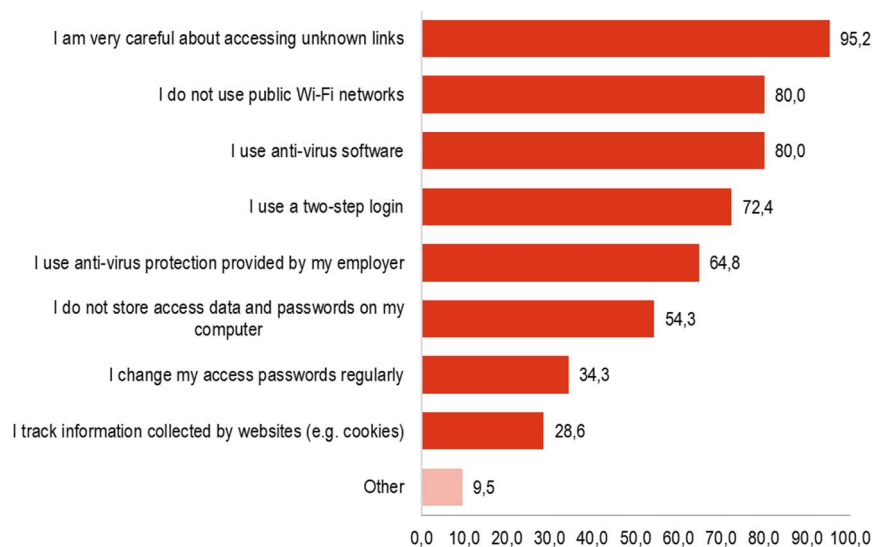


Figure 4. How do you protect/secure your data? N=105 (in %, multiple choice)

Source: own research.

In terms of data security methods used by respondents, almost all PRs declared that they are cautious when accessing unknown links, 95.2%. Four out of five respondents also admitted that they do not use public Wi-Fi networks and use anti-virus software. It was relatively less common for respondents to indicate that they monitor the information collected by websites, 28.6% of affirmative indications. Those with tertiary education were significantly more likely to declare that they are cautious when accessing unknown links – 97.7% compared to 75% among those with secondary education. The monitoring of the information collected on the websites was significantly more often declared by respondents aged 35+ (38.2% vs 18% among younger respondents), with more than 10 years of experience (38.1% vs 7.1% among those with up to 3 years of experience) and in management positions (41.7% vs 14.6% among those in executive positions). Significantly more likely to change their passwords regularly were those over 35 years of age (43.6% vs 24% among younger people), those with a degree in PR, courses, etc. (42.6% vs 21.4% among those without), with 4-10 years of experience (42.9% vs 14.3% among those with up to 3 years of experience), working in a place other than PR agencies (51.1% vs 21.7% in PR agencies) and in companies with 250 or more employees (66.7% vs 16.4% in companies with 10-49 employees).

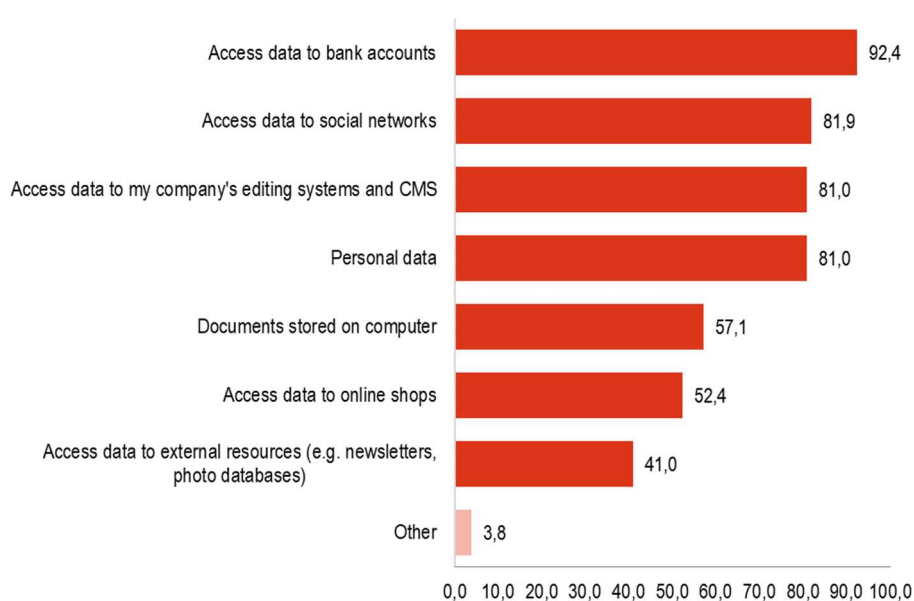


Figure 5. What data do you protect/secure? N = 105% (% , multiple choice)

Source: own research.

When analysing the declarations regarding the data that the surveyed public relations professionals protect/secure online, it can be seen that the highest percentage of indications concerned access data to bank accounts, 92.4%. More than four in five respondents secure access data to social networks (81.9%), to the company's editing and CMS systems (81%) and personal data (81%). The relatively smallest percentage of indications concerned the protection of access data to external resources, 41%. Securing access data to online stores was declared significantly more often by men (65% vs 44.6% among women), and by those

who would not recommend working in PR to their family/friends (72% vs 41.1% among those recommending this profession), with more than 10 years of experience in the industry (69% vs 32.1% among those with up to 3 years of experience), in executive/management positions (65% vs 36.6% in executive positions) and working elsewhere than in a PR agency (64.4% vs 43.3% in PR agencies).

Further analysis showed that access data to external resources is significantly more likely to be protected by men (55% vs 32.3% among women), those aged 35+ (50.9% vs 30% among younger people), those with more than 10 years of industry experience (57.1% vs 17.9% among those with up to 3 years of experience) and those in executive/management positions (55% vs 22% in executive positions).

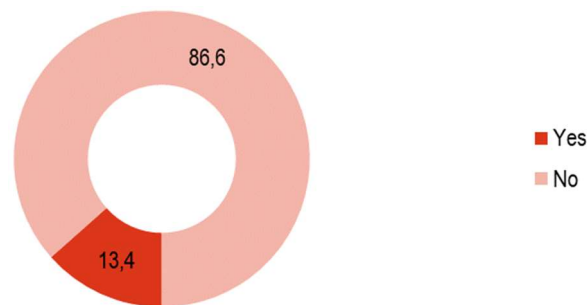


Figure 6. Have you ever lost important data? N=119 (in %). The values in the graph have been rounded, so they may not be 100%

Source: own research.

The vast majority of public relations professionals declared that by the time of the survey they had never experienced the loss of important data, 86.6%. 13.4% of the respondents had such experiences. None of the independent variables describing the profile of PR professionals surveyed statistically significantly differentiated issues related to the loss of important data.

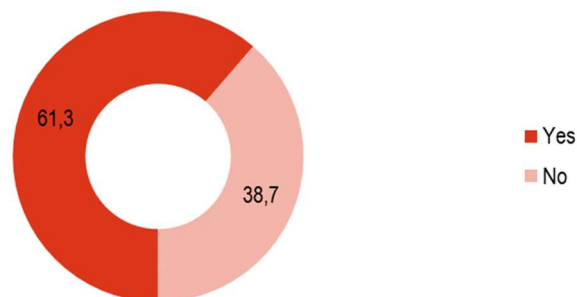


Figure 7. Does your company keep employees informed about threats and instructs them how to protect themselves? N=119 (in %). The values in the graph have been rounded, so they may not be 100%

Source: own research.

Three out of five respondents said that their company keeps employees informed about risks and instructs them on how to protect themselves, 61.3%. We note that those over the age of 35 (77% vs 44.8% among younger respondents), not recommending working in PR to their family/friends (73.7% vs 42.1% among those ambivalent), working in companies with 250 or more employees (85.7% vs 47, 4% in companies with up to 9 employees) and those who had not experienced an image crisis in the year preceding the survey (68.8% vs 23.1% in companies with no knowledge of the subject) were significantly more likely to declare that the entity they work for keeps them informed of threats and instructs them on how to protect themselves.

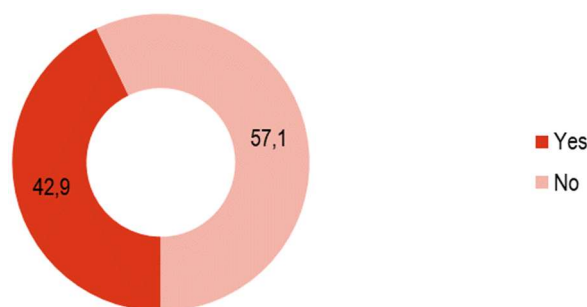


Figure 8. Have you attended any data security training? N=119 (in %). The values in the graph have been rounded, so they may not be 100%

Source: own research.

More than two in five respondents declared that they had attended a data security training course – 42.9%. This was significantly more often declared by respondents over 35 years of age (59% vs 25.9% among younger respondents), those employed elsewhere than in PR agencies (53.8% vs 34.3% in PR agencies) and employees of companies with 250 or more employees (71.4% vs 26.3% in companies with up to 9 employees).

When analysing and identifying the sources of knowledge from which respondents obtain their knowledge on cyber threats, it can be observed that the highest percentage of indications concerned the Internet – 89.1%. Almost half of the respondents seek knowledge in this area through social media – 47.9. They rarely obtain knowledge about cybersecurity from television and radio – 6.7% and 0.8% of indications, respectively.

It should be noted that women are significantly more likely to learn about cyber threats from family members (14.5% vs. 2.3% among men). Acquaintances were significantly more often indicated by women (28.9% vs 11.6% among men), people up to 35 years of age (34.5% vs 11.5% among older people), with up to three years of work experience in the industry (43.3% vs 10.9% among those with more than 10 years of experience) and in executive positions (34.8% vs 12.5% in management positions). Those employed in PR agencies are significantly more likely to derive knowledge in this aspect from their colleagues – 28.4% vs. 11.5% of those employed in other jobs. Those with seniority in the PR industry of more than 10 years (19.6% vs. 0% among those with seniority of up to 3 years) and those not working in PR agencies (17.3% vs. 6% in PR agencies) are significantly more likely to use the press in this regard. General knowledge was significantly more often indicated by those without PR degrees, courses, etc. (41.3% vs 22.5% among those with them). Respondents over 35 years of age (29.5% vs 10.3% among



younger respondents), those with a PR degree (26.8% vs 10.9% among those without one), those employed in places other than a PR agency (34.6% vs 9% in PR agencies) and in companies with at least 250 employees (47.6% vs 8.2% in companies with 10–49 employees) are significantly more likely to derive their knowledge from training.

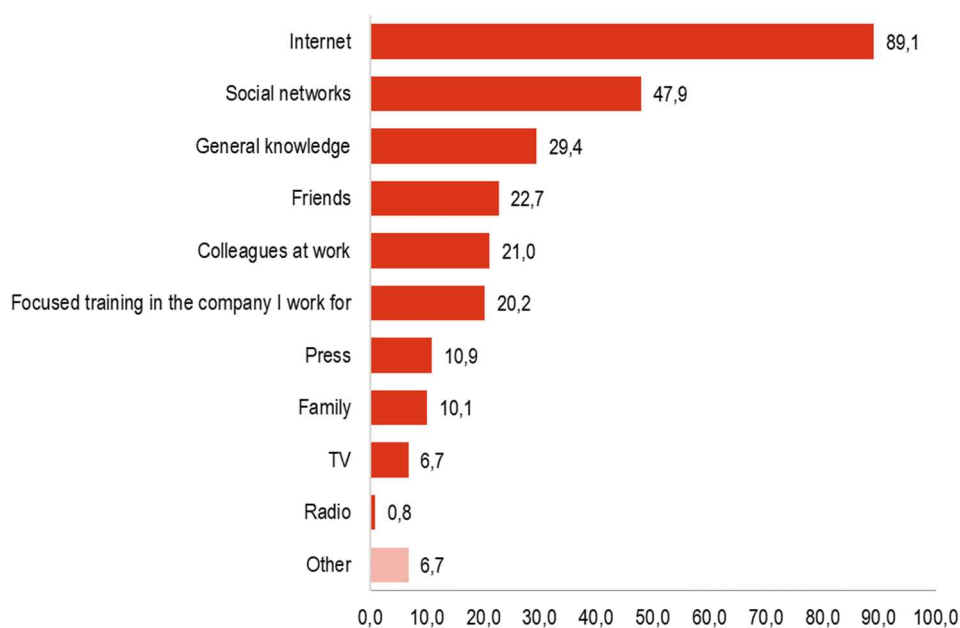


Figure 9. From what sources do you most often draw your knowledge of cyberattack threats? N=119 (% , multiple choice)

Source: own research.

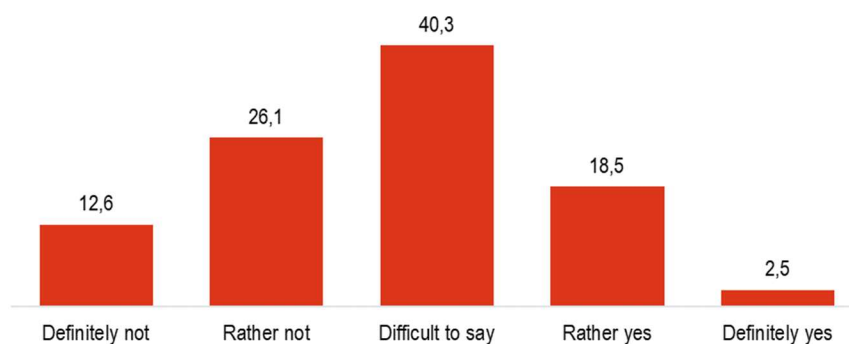


Figure 10. In your opinion, are the companies in your industry in Poland well protected against cyber attacks? N=119 (in %). The values in the graph have been rounded, so they may not be 100%.

Source: own research.

More than a fifth of the respondents were of the opinion that PR firms in Poland are well protected against online attacks – 21%. 38.7% of the respondents expressed the opposite opinion, while 40.3% of the respondents were unable to clearly state their opinion on this issue. None of the independent variables statistically significantly differentiated the question of whether PR firms in Poland are well protected against cyber attacks.

Referring to individual situations related to cybersecurity, respondents declared that they have observed an increase in online threats related to data loss or takeover in recent years, with a mean of 4.44 on a scale of 1–5 (Figure 11). Respondents were just as often of the opinion that they knew how to recognise threatening emails – mean 4.21. Against this backdrop, respondents were far less likely to say that they use the same login password everywhere and to agree that cybersecurity is more of a fashionable topic than a real necessity – means of 1.82 and 1.61 respectively.

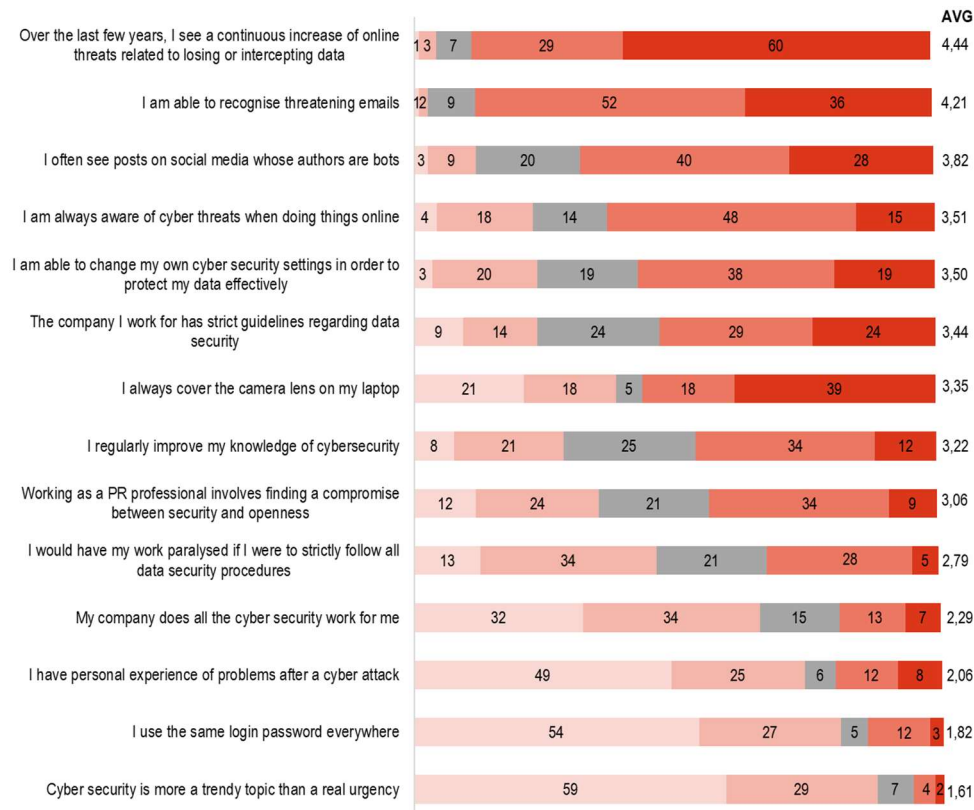


Figure 11. Comment on the following situations, N=119 (in %). The values in the graph have been rounded, so they may not be 100%

Source: own research.

When making cross-group comparisons, it can be observed that those 35 and under were significantly more likely to say that if they were to strictly apply all data security procedures, their work would be paralysed, 3.05 vs 2.54 among older people). The ability

to recognise emails at risk was significantly more often indicated by respondents with 4-10 years' seniority in the industry, 4.42 versus 3.93 among those with up to 3 years' seniority. Men (3.84 vs 3.30 among women) and those who did not recommend PR work to family/friends (4.00 vs 3.05 among those ambivalent) were significantly more likely to declare that they were able to change their own Internet security settings to effectively protect their data.

Those recommending PR work to family/acquaintances were significantly more likely to believe that they have seen a steady increase in online threats related to data loss or interception over recent years - 4.65 against 4.13 among those who were ambivalent. Respondents over the age of 35 years (3.79 vs. 3.07 among younger respondents) and those working in companies with 250 or more employees (4.14 vs. 3.00 in companies with 0-9 employees) were relatively more likely to admit that their companies have strict guidelines regarding data security. PR professionals with more than 10 years' seniority in the industry were significantly more likely to say that they often see posts on social media that are authored by bots, 4.09 compared to 3.47 among those with up to three years' seniority.

Those who recommended PR jobs to family/friends were significantly more likely to say that they always cover the camera lens on their laptop, 3.81 vs 2.74 among those who did not recommend PR jobs. Having personal experience of problems after a cyber attack was relatively more often indicated by respondents aged 35+ (2.30 vs 1.81 among younger respondents) and those with a degree in PR, courses, etc. (2.30 vs. 1.72 among those without them). Men (3.51 vs 3.05 among women), those over 35 years of age (3.51 vs 2.91 among younger people) and those with at least a doctorate (4.27 vs 2.78 among those with secondary education) were significantly more likely to declare that they regularly expand their knowledge of cybersecurity.

Respondents with up to three years of work experience in the industry admitted the use of the same login password significantly more frequently – 2.20 vs. 1.48 among those with more than 10 years of experience. On the contrary, women (2.54 vs 1.84 among men), those with secondary education (2.67 vs 1.36 among those with at least a PhD) and those in executive positions (2.59 vs 1.60 among those in management positions) were significantly more likely to admit that their company does all the cybersecurity work for them.

### 3. SUMMARY

Cybersecurity is one of the critical elements for maintaining the continuity of a company's operations, its ability to generate revenue, and often maintaining its level of competitiveness in the market, e.g. financial (Piecuch, 2020).

Surveys conducted among public relations professionals in Poland indicate that this is a topic they already recognise and are largely involved in securing data and information. The respondents are aware. They indicate that they have heard of hacking, to a lesser extent of phishing, pharming, malware, and sniffing. They are less aware of topics such as ransomware or DoS/DDoS. The vast majority of the public relations professionals surveyed declared that they secure data on the Internet and on their private/service computer, and in terms of the methods used to secure data, almost all declared that they are cautious and do not access unknown links. The same is true for the data that respondents secure online, such as bank accounts, social media access data, the company's editing and CMS systems, or personal data.

An important part of the overall process of building awareness and skills related to cybersecurity is training and information. Most of the respondents indicated that their employers inform them about the risks and instruct them on how to protect themselves. In addition to this, the respondents do their own further training. They obtain their knowledge about risks on the Internet, including social networks, and general knowledge.

In view of a number of findings from the survey of public relations professionals, it can be concluded that awareness of threats and cybersecurity is high. It can also be assumed that the respondents representing this environment have knowledge and, above all, understand the need for various types of security measures for themselves, as well as their employers and the clients they work with. However, this topic requires further exploration because of the dynamically changing reality in this area.

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