# ZARZĄDZANIE PUBLICZNE PUBLIC GOVERNANCE

# **4** (58) **/ 2021**





Publishing partner



#### **Editorial Board**

Editor-in-Chief Stanisław Mazur

Thematic Editors Marek Ćwiklicki – management science Tomasz Geodecki – political economy, economics John E. Jackson – economics, political science Łukasz Mamica – economics Stanisław Mazur – political science Michał Możdzeń – political economy Karol Olejniczak – management science Steven Saxonberg – political science, economics Dawid Sześciło – law Pasquale Tridico – economics Mariusz Trojak – economics Marcin Zawicki – policy science

Language Editor Marta Olasik

Statistical Editor Andrzej Sokołowski

Managing Editor Anna Chrabaszcz

Database Editors Urszula Cieraszewska Marek Oramus

Online Content Editor Marcin Kukiełka

#### **Programme Board**

Alain Alcouffe – Université Toulouse 1, France Ash Amin – University of Cambridge, United Kingdom Andrzej Bukowski – Jagiellonian University, Poland John L. Campbell – Dartmouth College, USA Bernard Chavance – University of Paris Diderot, France Christoph Demmke – University of Vasaa, Finland Kaja Gadowska – Jagiellonian University, Poland Jaroslaw Górniak – Jagiellonian University, Poland Hubert Izdebski – University of Warsaw, Poland Dag Ingvar Jacobsen – University of Agder, Norway Marek Naczyk – University of Pittsburgh, USA Frits M. van der Meer – Leiden University, The Netherlands Arnošt Veselý – Charles University, United Kingdom

Content in this issue is licensed under a Creative Commons Attribution 4.0 License



Copyright © by Malopolska School of Public Administration, Cracow University of Economics, 2021

The original version of the magazine is its printed version. The magazine is available in the following databases: CEEOL, CEJSH, BazEkon, BazHum, EBSCO (Business Source Corporate Plus, Ultimate Business Source), ERIH Plus, ICI World of Journals/ICI Journals Master List, ProQuest

> ISSN 1898-3529 e-ISSN 2658-1116

#### http://publicgovernance.pl

Cover Design - Agata Łankowska

Publisher Malopolska School of Public Administration Cracow University of Economics ul. Rakowicka 27, 31-510 Kraków phone: + (48) 122 937 560 www.msap.pl

Publishing Partner Scholar Scientific Publishing Company ul. Oboźna 1, 00-340 Warsaw phone: + (48) 22 692 41 18, 22 826 59 21, 22 828 93 91; Sales Department: ext. 108 e-mail: info@scholar.com.pl; www.scholar.com.pl

> Typesetting: WN Scholar (*Jerzy Łazarski*) Printing and binding: Totem, Inowrocław Circulation: 110 copies

# **Table of Contents**

Frits M. van der Meer, Gerrit S. A. Dijkstra	
Incentives and Obstacles to the Public Sector and Civil Service Reform: A Conceptual Analysis	5
Paulina Kubera	
Mechanism-Based Explanations in the Impact Evaluation of Public Interventions: Digging Deeper into Why and How Programmes Worked or Failed to Work	17
Seweryn Krupnik, Anna Szczucka, Katarzyna Lisek	
The Effects of Supporting Business Innovation and R&D Activities	
from European Union Funds in Poland: A Review of Evaluation Studies	27
Stanisław Wieteska, Maria Węgrzyn, Małgorzata Jeziorska	
Sleep Disorders as a Safety Issue in Transport and Communication Largely	
Not Appraised by National Health Policies	38
Katarzyna Obłąkowska, Artur Bartoszewicz	
Policy Towards the 'Auditorium Culture Sector' in Poland in the First Year	
of the COVID-19 Pandemic: Mechanisms of Restrictions and Support	
with Public Funds, Including State Aid	51

# Frits M. van der Meer, Gerrit S. A. Dijkstra

# Incentives and Obstacles to the Public Sector and Civil Service Reform: A Conceptual Analysis

#### Abstract

*Objectives*: In this paper, the nature of incentives and obstacles to public sector and civil service reform is analysed. We will critically examine the popular idea that rationally-conceived reform plans can contribute to reform success. In particular, we will examine the assumption that reform failures can be attributed to a political 'distortion' of rationally-conceived reform plans. We will illustrate our analysis with an examination of the (top) civil service reform in the EU27, especially with regard to Eastern European member states.

*Research Design & Methods*: This paper is a conceptual paper. The central question is addressed through a systematic examination of crucial concepts using the civil service reform in the EU27 as an illustration.

*Findings*: The argument that political and bureaucratic obstructions thwart the good intentions of rationally-operating reformers is too one-sided and is not helpful in explaining the reform successes and failures developments in the EU27, and in particular in Eastern European countries. Decisions on these reform issues are highly political, as they involve making binding choices about the future and about the existing problems on behalf of both society and government. This is not a technical and unbiased exercise to be completed by neutral internal or external experts.

*Implications / Recommendations*: Reforms are essentially the product of a long-lasting process of political, administrative, and societal changes. For reforms to be successful, they must match these changes.

*Contribution / Value Added*: Only a corresponding and incremental societal, political, and bureaucratic reform process can offer a solution. Complaints over irrational reform obstacles are thus not only inconducive to successful reforms, but they may actually hinder them.

Keywords: reforms, political vs. bureaucratic point of view, doctrine of reform neutrality, historic institutional reform foundations

Article classification: conceptual paper

**Frits M. van der Meer** – professor, Leiden University, Faculty Governance and Global Affairs, Instituut Bestuurskunde; Wijnhaven, Turfmarkt 99, 2511 DP, the Hague; e-mail: f.m.van.der.meer@fgga.leidenuniv.nl. **Gerrit S. A. Dijkstra** – associate professor, Leiden University, Faculty Governance and Global Affairs, Instituut Bestuurskunde; Wijnhaven, Turfmarkt 99, 2511 DP, the Hague; e-mail: g.s.a.dijkstra@fgga.leidenuniv.nl.

### Introduction

Despite a steadfast enthusiasm for public sector reforms, results can be disappointing (Aberbach & Christensen, 2014; Van der Meer et al., 2015; Meyer-Sahling, 2018). The rate of success diverges between political-administrative systems across Europe (Verheijen, 2015). The variation involves not only the extent and pace of reforms, but also the level of success and failure. Reform outcomes can be disappointing if they appear too slowly or fail to materialise at all (Gajduschek & Staronova, 2021). Reforms can even be reversed over time. The latter phenomenon has been reported in the Eastern European Union member states (EEU11; for explanation of this term, see Kovač & Bileišis, 2017; Dimitrova, 2010; Meyer-Sahling, 2009, 2011). The reasons and consequences of such reform failures or potential reversals will be discussed below. Reform failures are commonly attributed to a political 'distortion' of rationallyconceived reform plans. The fundamental problem is perceived to be a tension between 'rational' and 'political' reform perspectives, where the latter takes priority over the former. The imprecise use and multiple connotations of concepts such as 'politics' and 'rationality' in the public discourse on reform do not facilitate a proper understanding of the reasons behind a reform's success or failure.

Our research question involves an inquiry about to what extent this view of a political 'distortion' of rationally-conceived reform plans holds true, or whether it is a misreading of the actual causes of reform failures within the context of the EU27. This paper is conceptual. The central question is addressed through a systematic examination of crucial concepts, using the empirical example of the civil service reform in the EU27.

Although not entirely correct, popular opinion in the so-called fast-reforming nations tends to specifically point to the Eastern and Southern rims of the EU as the ones which demonstrate this conflict. Though we will concentrate on the CEE cases, such a conflict is, however, noticeable in all EU member states (Van der Meer et al., 2015). Since reforms never start from scratch, as the prefix re- makes clear, we will also use the historical institutional reform context (Avis, 2015; Painter & Peters, 2010; Raadschelders, 1998).

We shall start with a conceptual analysis of 'public sector reform' and in the following section we will provide an outline of the relevance, meaning, and content of the reform for public services. In subsequent sections, the rational, political, and historical-institutional perspectives on reform will be explored in depth so that we can assess their effects on reforms in Central and Eastern European countries compared with those in the whole of the EU27. We will illustrate our analysis and points by looking at the examples of the (top) civil service reform in these states.

# The public sector reform – rationality and politics

# *The relevance, meaning, and content of reform*

Reduced to its essentials, reform refers to plans and efforts to amend a perceived unsatisfactory situation, here applied to reforming the government, the political-administrative system, and society (Pollitt & Bouckaert, 2017; Van der Meer et al., 2015). Raadschelders and Bemelmans (2015) argue that 'reform is the conscious attempt to plan and implement change in (components of) an existing (political-administrative) system'. This and similar descriptions (Pollitt & Bouckaert, 2017) overemphasise the formal and deliberate aspects of a reform while ignoring the relevance of incremental (reform) change processes in practice. The formal approach to reform implies larger, all-embracing, and rationally-construed change processes. It is seen as partly strategic management process aiming to overhaul the state and society. However, the rational dimension of reform provides little or no clues as to either the content or effects of the intended reforms. Aberbach and Christensen (2014) argue that these kinds of non-incremental reforms have disappointing results. Moreover, the effects of reform tend to be perceived by observers as almost 'mechanistic' process outcomes, i.e. the effects and outcomes are determined by a rationally-designed planned reform process. When examining contentrelated issues, we have to look at the origins and ideas behind the adopted objectives, and take their durability into account as well. What is considered (un)satisfactory unavoidably depends on the original choice.

The success or failure of a reform is dependent on authoritative choices made between alternatives. This authoritative choice component makes reforms political by definition. This is a more neutral definition of politics along the lines of the definitions of, for instance, Lasswell (1958) or Easton (1993). However, there is another meaning of politics that contains a more negative nature. Reform failures are blamed on party politics, political arbitrariness, self-interest, and the misuse of power, or, in other words, a failing system of democratic governance (Meyer-Sahling & Toth, 2020). That blame can be similarly attributed to the so-called self-serving (and politicised) bureaucratic elites suspected of shying away from 'genuine' reform. Such a position is adopted by the press, societal, and academic discussions on the EEU11 reform transgressions regarding, for instance, the judiciary or the limitation of social and academic freedoms. The definition of 'genuine' is open to debate. A conflict exists between the (instrumental) rational and political reform perspectives. However, this line of reasoning is too simplistic. The origin of the problem can be found in a conceptual confusion or even a simplification of the concepts of what is *rational* and what is political. Furthermore, both the rational and the political perspectives on reform processes tend to disregard the historical importance of institutional settings, which influence the available room for manoeuvre as well as the scope and direction of reform.

Public sector reforms originate from the fact that societal transformations demand a governmental change. The latter, in turn, leads to the civil service

reform; we will return to this further in the paper (Van der Meer et al., 2015). Pollitt and Bouckaert (2017) add that reform strategies and trajectories should include an idea (vision) of the desired future, an analysis of the current situation, and the measures necessary to reach the desired situation. The verb 'demand' and the reform strategies mentioned by the authors seem to suggest that these interconnections tend to be mechanical. Nevertheless, a mechanical interpretation is not without its caveats; the interconnections do not invariably suggest a single direction of travel. For example, civil service system reform may be intended to lead to the institution of a transformed public service delivery by government. Societal changes occur. A large number of public sector reforms in the EEC directly after the fall of communism and during the EU accession process – as well as those undertaken in other member states after the year 1980 - were designed with this intention. From this vantage point, they can be considered government-centric, technocratic, and overtly (instrumental) rational in nature. Nevertheless, from the analytical point of view, examining the dynamic interconnections between the political, administrative, and societal systems more in depth is a useful starting point.

# 'Rational' and 'political' approaches to reform

Notwithstanding its popularity, the rationale for a reform is taken for granted. Using the word 'rationale' instead of 'justification' goes beyond a mere wordplay. Reforms are not only justified by rational terms, but also articulated in them. Political considerations are presented as secondary, less valuable, and more biased. What factors explain the prominence of the rational take on a reform? Even though the adjective 'rational' and the noun 'rationality' are popular, they include a wide range of contested meanings and manifestations. For our purposes, it is sufficient to remark that the concept of rationality as used in the practical reform discourse is of an instrumental, goal-oriented, formal-deliberational, and value-neutral nature. The root 'ratio' denotes that acting and thinking are based on reason and intent, and 'rationality' suggests a degree of objectivity. Problems and solutions are defined and analysed in a rational manner. Objective knowledge applies scientific reasoning to the exclusion of subjective opinions and emotions, specifically those pertaining to a political choice. Finally, only the best (politically-neutral) solution is to be found and applied. Such a neutrality doctrine as applicable to a reform can be called reform with the politics left out.

The rational, unidimensional, and apolitical vision of the direction of economic and technological reforms has been open to criticism. Though presented as neutral, it contains implicit value assumptions. To give but one example, the preferred solution of most governments and the majority within the academic community to tackling the economic crises of the 1980s was based on the resurgence of the neo-classical and pro-market economic thought aimed at transforming government. It gradually became the dominant vision as the New Public Management (NPM) and led to, among other effects, cutbacks, privatisation, the contracting out of public services, and the adoption of private sector methods in the public sector. The same recipe was applied during the postcommunist transformation in Central and Eastern Europe. In contrast, in the wake of the 2008-2009 financial crisis, a difference of opinion could be seen between government approaches to dealing with the consequences of the worldwide banking crisis. Although in the USA during the Obama presidency an expansionist policy was pursued, in most European countries, an austerity approach typical of the 1980s was promoted, with particular pressure from the German economic leadership. The word 'promoted' is perhaps inapposite, since it implies a voluntary choice in all cases, even though the reforms were clearly enforced in Greece, in Italy, and in the majority of the EEU11. This disparity of responses between governments was not merely generated or dictated by the formal and

restricted instrumental, rational reform approach, but it was the outcome of political and societal choice processes.

For a better understanding of the uses and limitations of the rational perspective, we must remember that in almost all the countries under discussion, external reform pressures and an examination of the best practices pursued by other countries were instrumental in putting reform programmes on the political agenda. The sustainability of these reforms once these external pressures have subsided remains a major issue (Dimitrova, 2010; Meyer-Sahling, 2009, 2017; Verheijen & Rabrenovic, 2015). The importance of these external pressures does not diminish the significance of the internal dimensions of a reform. Reforms, which stemmed from the need for a political and socio-economic reconstruction after the fall of communism in the EEU11, were necessary, given the economic crisis and the threat of a societal system breakdown. In addition, the consequences of the societal reawakening and public dissatisfaction with the world of politics and government constituted equally important internal reform triggers. Nevertheless, external pressures by international reform sponsors determined the very core of the contents of a string of reform programmes. The NPM inspired early reforms in post-communist countries, with a focus on the business-style managerial approach. The popular dislike of the preceding Soviet politics triggered the denial of the essential role of the state in bringing about fundamental reforms. 'Neutral' market forces were preferred instead. This can be seen as another manifestation of the neutrality doctrine. The institutional capacity of the state to reform was underappreciated at first, although the effects of the hard-core NPM and neo-liberal economic reforms attracted a substantial amount of criticism (Randma-Liiv, 2008).

From the 1990s onwards, with an eye on the EU accession, the European Administrative Space principles were formulated and promoted. The Copenhagen (1993) and Madrid (1995) criteria provided guidance for administrative reform

processes (Cardona, 2009; Meyer-Sahling, 2009, 2011). They provided criteria for a meritocratic, competent, transparent, accountable, and politicallyneutral administration. Still, these criteria are basic to, for instance, current OECD-SIGMA reports, toolkits, and advice. Unlike the NPM approach preferred in the early stages of the reform, this framework reveals close similarities to the Weberian Rule of Law (Nl. Rechtsstaat), good governance, and institutional capacity doctrines. From a more negative perspective, these principles are abstract and open to interpretation, while their ability for operationalisation is disputed. Moreover, while designing public sector reforms, a predominantly positivist legal approach was preferred. Legal provisions were almost directly and automatically translated into practice in target countries. Political and societal institutional considerations were disregarded. This positivist legal approach was rooted in the aversion to the discredited political system (and social science) of the old communist regime. The positivist legal approach is an example of the neutrality doctrine as applied to a reform a reform with politics left out. The success of this formal legal approach has been criticised for its lack of success (Gajduschek & Staronova, 2021).

Furthermore, the idea of rational, all-embracing reforms has been criticised as being too monolithic and hierarchically-imposed. It can undermine the perceived legitimacy of - and support for reforms among relevant stakeholders. This explains the recent dissatisfaction with - and resistance to - reforms across Europe. Such a blueprint approach sharply contrasts with the incremental approach to a reform. Abundant inconsistencies and limitations are evident in the instrumental, rationality-based perspective on reform. To provide an illustration, in the discussion of factors that induce reform efforts, economic causes are considered as primary and objective triggers. Naturally, a reform can be triggered by the need to adapt the society to a new economic, technological, and political order. However, financial and technological reform programmes contain certain assumptions about how to properly run the economy, society, and

government, and what mix of coherent goals and instruments should be applied. These economic and technological drivers inspire a rational answer, which is derived from economics and built on administrative and technical considerations. These considerations are then touted as being based on objective and non-contestable scientific knowledge, which society and politicians simply have to accept. Answers and reforms are presented as technical and, as was argued above, purely legal solutions, with limited room for a political and societal choice. When done deliberately by bureaucrats and/or politicians, this amounts to a political attempt to defuse value-loaded issues, even though the depoliticising of issues is itself a highly political act. A motivation for the technical approach can thus also be found in the desire to avoid potentially acrimonious political and societal debates, which may endanger the political and societal status quo.

The last observation invokes the political dimensions of reform more specifically. The adjective 'political' is, as we said above, used in a variety of ways. A neutral interpretation of the meaning of 'politics' reflects the definition of the concept as the authoritative allocation of values and making choices for and on behalf of the society. Seen from this perspective, deciding on reforms is always intrinsically political inasmuch as it pertains to choices on the contents, direction, and approach to a reform. However, in common usage, 'political' often has negative connotations, as is the case, for instance, in the discussion of reform failures (Gajduschek & Staronova, 2021). The effects of this perception have certainly been felt in numerous reform projects and reported by academics and investigative journalists, as well as in the EU's, OECD's, SIGMA's, and World Bank's reports.

Even though it is subject to a negative popular perception, the role of politics with regard to the reach, results, and outcomes of reforms in the EU member states is never understood in a single and uniform manner, but tends to reveal several distinct layers. Issues of the private use of public resources, the abuse of power, the disregard of basic democratic principles, and the rule of national and EU laws have all been discussed in relation to political office-holders and bureaucratic elites in some of (though not only) the new Eastern European EU member states. In their cases, reforms have produced results, but they are viewed negatively from the perspectives of good governance principles as formulated and enforced by the EU, or from the viewpoint of standards set by international organisations and the wider academic community. The latter observation by academics pertains to recent reform reversals and disappointments in, for instance, the Visegrád area (Randma-Liiv & Drechsler, 2017; Nemec, 2018).

Even when devoid of negative associations, the role of politics can be considered problematic when trying to deliver durable and tangible reforms. Not only does the short-term time perspective depend on the timing of elections, but it also includes factors associated with public service delivery. For both politicians and top bureaucrats (in this negative perspective, the government elite), the attractiveness of the technical, procedural, and content-poor approach to reform may stem from the lack of substantive ideas and vision. While the intentional eschewal of 'vision' can potentially be either beneficial in terms of avoiding large-scale conflicts or detrimental in terms of a possible erosion of power, Pollitt and Bouckaert (2017) argue that a vision is essential for any robust reform strategy.

Perhaps less intentionally, across parts of Europe, a change has taken place, with states moving from a policy-oriented to a managerial processoriented senior civil service. The latter approach includes managing the business of government, managing the survival of political appointees, managing policy processes, and managing reorganisations. It does not include or preclude a party's (de)politicisation of the civil service. The managerial approach does not necessarily provide the contentspecific knowledge or expertise needed to appraise reforms or even to generate substantive ideas for reform. Here, 'appraisal' refers to civil servants prioritising issues and consulting office-holders on policy alternatives. It includes the idea of loyal contradiction (Van der Meer & Dijkstra, 2021), which is an essential part of the idea of a politically-neutral (not politically-bound) civil servant, and has historically been considered as a bureaucratic virtue. In addition to the pure managerial approach to civil service, party and patronage politicisation can also reduce this bureaucratic benefit (Dijkstra & Van der Meer, 2022).

The lack of vision holds equally true for political and bureaucratic office-holders. Detached from reform digressions originating in political, bureaucratic, and dysfunctional behaviour, a substantive vision on the direction of reform grounded in a choice between alternatives (the core of the political dimension) is wanted in both political and bureaucratic quarters, which hampers actual reforms that are capable of being sustained. This applies not only to the Eastern European countries, but also more widely to the EU27. Perhaps confusingly, a vision can be anathematic to the supporters of a 'genuine' reform.

# The lasting effects of the politicalinstitutional design

We now must examine the effects of the political-institutional system design and its associated administrative models and traditions of reform, which will offer a better understanding of the extent, methods, and durability of reforms with respect to the existing political-administrative system. When discussing the ubiquity of reforms and pointing to reform revolutions over time (and concentrated in time), attention is usually focused on the present or the recent past (cf., e.g., Pollitt & Bouckaert, 2017), with an emphasis on the 1980s and the subsequent decades. Moreover, a great deal of attention has been given to the cross-national nature and scale of a reform (Thijs et al., 2018). From the 1980s onwards, systems were exposed to a large range of external and internal change pressures (Van der Meer et al., 2015), and as such had to respond accordingly. The degree of the uniqueness or similarity of their responses has been discussed in depth (Painter & Peters, 2010; Van der Meer et al., 2008). The idea of convergence in these responses was reinforced by the European integration process, the rise of the influence of international organisations other than the EUsuch as the IMF, the OECD, and the World Bank and the globalisation of the academic community and consultancy in the areas in question (Pollitt & Bouckaert, 2004, 2017; Van der Meer, 2009). Isomorphism and mimicry were familiar features in political-administrative reform processes in both the recent and more distant past. The copying of city charters by local governments in the Middle Ages is a well-known example. The same principle applies to the bureaucratic revolution in 19<sup>th</sup>-century Europe (Van der Meer, 2009). To use the modern concept, 'best practices' were always sought, but they were invariably adapted to local needs and circumstances. The word 'adapted' is important, since the emphasis on isomorphism and mimicry departs too far from the relevance of the singular and unique aspects of the reform implementation process over time and across geographical areas.

The promise and actual results of both rationallyand politically-stimulated reforms overemphasise the novelty of the current circumstances. There are limits on any system's amenability to change through a reform. The rational approach (in technocratic terms) to redesigning government is thwarted when particular historical and institutional contexts of political-administrative and societal systems are disregarded. These systems have evolved over time as products of historical events and decisions. To what extent and how reforms are designed - and how they fit in with a certain political-administrative and societal system and culture - depends on the specific course of events in a particular political-administrative and societal historical period.

History matters. It is almost impossible to start from scratch; hence, if we attempt to do so, we encounter 'a blast from the past' (Painter & Peters, 2010). What are the history's impacts on the specificity, identity, and continuity of both government and political-administrative systems

as well as on efforts to reform them? Though it is a risky area given the shifting connotations surrounding historical legacies (e.g. Van der Meer et al., 2008), we enter the area of administrative traditions and models as viewed in a historical institutional analysis. Institutions do matter, since they impose order on the functioning of any political-administrative system. Here, the concept of path dependence, so popular in a historical institutional analysis, becomes relevant. Historical institutionalism is considered rather deterministic by nature (Peters, 2010). Systems do change, but the question remains in what way and by which mechanism (Painter & Peters, 2010). Without delving too deeply into the growing body of literature on this topic, we should note that Raadschelders (1998) sees path dependence as a way out of the traps of historical determinism and the unchangeable institutional order. Path dependence prescribes the route for change. Over time, political-administrative systems are changing slowly or more rapidly, but surely, and the process follows a specific route. Internal and external pressures can duly influence and put pressure on reforms, but those reforms are still likely to take their manifestations and forms from the structure and culture of the system handed down over time.

We must be careful in how we talk about the impacts of the past, administrative traditions, and path dependence (Meyer-Sahling, 2010; Yesilkagit, 2010; Meyer-Sahling & Yesilkagit, 2011; Van der Meer, et al., 2008, 2015; Thijs et al., 2018). Traditions and models are utilised as last-resort explanations and they overemphasise certain common features; furthermore, their construction is ahistorical and artificial in nature. We refer not only to the habit of blending different EU models and traditions (Verheijen, 2010), but also to an attempt to return to an idealised or preferred past (Hobsbawm & Ranger, 1983). Such a reconstruction – or even a genuine return to a political-administrative past - is rarely feasible, because time passes and new experiences accumulate. Reconstructed administrative models and traditional approaches tend to involve a misjudgement of the level of historical experience and dissimilarity among countries, as reformers try to focus on or recreate a common past which never actually occurred. When applied deliberately, this approach constitutes a political act, as can be seen in the traditions rediscovered or reinvented during the Yugoslav Wars and the Kosovo conflicts (Painter & Peters, 2010; Van der Meer, 2021). However, the post-communist transition and accession to the EU have all had huge effects on these states' economies, societies, and governments, and have presented challenges to the reform of political institutional systems and their associated administrative models, as well as traditions embedded in those systems. This explains the failure of the attempts to resurrect the administrative models and practices in existence before the communist takeover and World War II.

# *The case of the (top) civil service reform in CEE member states – an illustration*

We can illustrate the argument made above by going into the case of the (top) civil service reform. We concentrate on reforms in the CEE member states, but what is argued here for these states also implies, to an extent, to other member states. The formulation and adoption of a wideranging and all-encompassing civil service reform was made mandatory for new accession states in Central and Eastern Europe when they prepared to enter the European Union. In contrast, these reform requirements were not compulsory for the older member states. In the new member states, they were believed to be necessary in order to implement the Acquit Communautaire. Through a civil service reform, the (democratic) Rule of Law could also be enhanced. That support for the Rule of Law is one of the central tenets of the European Union. Central to the European Union accession requirements - but also visible in the reform principles as formulated by the OECD-Sigma and in the academic public administration body of knowledge - is the belief that prerequisite

reforms are intended to create a professional service. Civil service reform programmes in the accession states have thus focused on establishing a reliable, neutral, meritocratic, proficient (top) civil service system - a civil service system that is capable of meeting the present and future challenges faced by the public sector. This presumes the creation of a (top) civil service system in which members are pro-active and open to the needs and demands from both societal and political quarters. In many of these countries during their accession periods, civil service legislation was planned and announced in order to for this objective to be accomplished. However, legislative procedures have been rather laborious, and comprehensive results have been slow to materialise and/or to be retained (see, for instance, Verheijen & Rabrenovic, 2015; Nemec, 2018). There are some exceptions, as seen, for instance, in the case of Estonia (see the EU28 EUPACK country studies in Thijs & Hammerschmid, 2018; Gajduschek & Staronova, 2021). In addition, civil service legislation has, in some cases, remained a dead letter. Deficient reform results can be explained by a decreasing sense of urgency in these new member states after their EU accession had been completed (Dimitrova, 2010). In addition, the second explanation can be found in a changing political composition at the central government level in these member states over time (Thijs & Hammerschmid, 2018). This political change was accompanied and reinforced by reform fatigue in both society and government. Meyer-Sahling and Toth (2020) have pointed to a democratic backsliding as a cause of an increasing politicisation of top-level Hungarian officials. The third explanatory factor is that a change in the ruling political office-holders after elections often prompted a turnover of staff, particularly in the top echelons of the service (senior public servants) (see Gajduschek & Staronova, 2021).

As we have mentioned, formal and informal civil service legislation and rules could be considered as a political translation of what is considered necessary for a high-quality and responsive public service delivery, and, sometimes, for the interest of the ruling political and bureaucratic class. This 'translation' might take the character of formal and informal politicisation procedures and practices. When it takes the form of, for instance, a politicallyinstigated turnover of top civil service positions, this has usually been instigated by distrust in the officials appointed by the previous government (Van der Meer & Dijkstra, 2021; Steen et al., 2015). Formal politicisation might manifest as the introduction and employment of a spoils system particularly for top officials, or the exclusion of top rank officials from the (permanent) tenured ranks in a given civil service system. In addition, recruitment and appointment to the top positions in bureaucracy have, in some countries, long found their base in patrimonialism or clientele relationships. The roots of these customs originate in the perceived need by political and bureaucratic office-holders for the exchange of (appointment) favours for political and bureaucratic support. This powerful incentive makes formal laws and other regulations containing meritocratic and neutral recruitment criteria in everyday life a dead letter (Gajduschek & Staronova, 2021). Rather, patrimonial, personal, and political recruitment methods can represent the informal but prevailing reality (Van der Meer & Dijkstra, 2021). This return of patrimonial, politicised recruitment and career decisions can produce ample negative side effects. These include a performance deficiency, poor professional standards, impoverished managerial skills, and the weakening of the government's capacity for political decision-making and ability to choose among policy options. These negative side effects also impair the social trust in the legitimacy of government.

This separation between formal and informal (legal) civil service arrangements very much resembles the prismatic society concept as conceived and formulated by the American political science and public administration scholar Fred Riggs in the 1960s (1964, 2006). Riggs has argued that formal arrangements in developing and transition countries might prevail on paper and as such represent an official portrayal of the reality.

Nevertheless, the resilient (traditional) customs and routines are concealed under these formal arrangements, and they possess a greater force. This, of course, pertains not only to civil society, but also to government and bureaucracy. This prismatic rift between (legal formal) schemes based on the meritocratic criteria on the one hand and political and the patrimonial criteria on the other can produce serious difficulties regarding how to move from what is considered undesirable but prevailing arrangements to arrangements which are preferable from the perspective of a reform towards high-performance top civil service systems. What is wished for often differs from what actually exists. However, at a higher, abstract, and official level, all governments alike subscribe to these wishes for a reform. From the temporal perspective, one can argue that formal reforms will take hold over time when those formal arrangements are integrated into the political and bureaucratic culture. We should not forget that it took a considerable period of time to establish the meritocratic bureaucracies in North-Western Europe, and even there, there are discussions on what merit signifies; there are also pressures towards politicisation of these top positions (Peters & Pierre, 2003; Page & Wright, 1999, 2007). Additionally, one should be careful about exporting and transplanting institutional arrangements to other settings, given the specific conditions that have supported the development of these structures over time. A reform reversal might here be explained by observing that the socalled rational reform plans do not necessarily fit into the political and societal realities of a particular situation, and are thus rejected in a way that is analogous to a transplant rejection (Dijkstra & Van der Meer, 2020. We have to prioritise presenting best-practice examples that can readily be copied, as these have been embedded in a given politicaladministrative and societal system and environment. Reforms are the product of the long-standing process of political, administrative, and societal development. Only a simultaneous, incremental societal, political, and bureaucratic change process can offer a way forward.

### **Discussion and concluding remarks**

The argument that political and bureaucratic obstructions thwart the good intentions of rationallyoperating reformers is too facile in general, and is not helpful in explaining the developments in the EU27, or in Eastern European countries in particular. Decisions on these reform issues are highly political, as they involve making binding choices about the future and any existing problems on behalf of both the society and the government. This is not a technical exercise to be completed by neutral internal or external experts. Even when a reform follows a rational or apolitical path, it contains implicit normative assumptions. The EU- or the OECD-SIGMA-inspired reform initiatives for creating a meritocratic, competent, politically-neutral, and efficient administration in the EEU11 carry a heavy normative and political load. This does not diminish the relevance of a reform, but these plans are by nature not neutral. The problem remains the same whether one refers to the democratic rule of law (Nl. Rechtsstaat) principles or propose solutions, which draw on the Neo-Weberian State (NWS). As a normative concept, the latter enjoys substantial popularity amongst Central and Eastern European scholars and reform-oriented thinkers (cf. the special issue of the Nispacee Journal 2008/2009; Pollitt & Bouckaert, 2011; Randma-Liiv, 2008; Mazur & Kopyciński, 2017). The NWS is a popular, but underspecified concept. Its principles are abstract and open to differences in interpretation. Matters might take a turn for the worse when reforms that go against the grain of the major, dominant political and societal beliefs lead to setbacks or even reversals (see, for instance, our discussion in Section 4 of the stalling or even reversal of civil service reforms). The difficulties currently faced by some of the new member states after the direct, external, pre-accession pressure has subsided can be explained in these terms. Conflicts are reignited when pressure is reintroduced by the Commission or via EU legal procedures, as was recently (2021) the case in Poland and Hungary.

Finally, there is no point in denying the politicalbureaucratic dimension of unsatisfactory reform outcomes. Dysfunctional political bureaucratic behaviours, positions, and attitudes, as well as the lack of a substantive vision on the direction and path of reform can all be major factors in hampering real, durable (material) reforms. However, this is not only the case in the Eastern European accession states. Though the magnitude of the problem might differ, the phenomenon is discernible in the other EU27 member states, too. To put it perhaps a little cynically, a dysfunctional approach to reform - for instance as a consequence of an intentional democratic backsliding - at least contains a vision, albeit from a negative vantage point (cf. Gajduschek et al. in Kovač & Bileišis, 2017). The tendency to favour technical/rational and positivist legal reform solutions can represent the doctrine of reform neutrality, which means that politics and society take a back seat. The elitist reform perspective has proved to be risky, since the foundations for sustainable and enduring reforms provided by it are too shallow. When the short-term effects of reform hit the society, opportunities arise for dissenting voices and populist political movements. This issue can be adequately addressed only through a combination of politicaladministrative cooperation regarding a reform (ideas and vision), civil society development, participation, and support. An overtly instrumental, rational reform strategy can lead to reform fatigue. Political and societal dissatisfaction enhances populist tendencies and creates room for populist politics, reinforcing reform failure. As argued in this article, reforms are essentially the product of a long-lasting process of political, administrative, and societal changes. Successful reforms need to match these changes. Only a corresponding and incremental societal, political, and bureaucratic change process can offer a way out of this problem. Complaints over irrational reform obstacles are thus not productive, but have the potential to harm reforms over a longer run.

# References

- Aberbach, J. D., & Christensen, T., (2014). "Why Reforms So Often Disappoint". *The American Review of Public Administration*, 44(1), 3–16.
- Avis, W. R. (2015). Factors important to the establishment, renewal or rehabilitation of the civil service. University of Birmingham.
- Bouckaert, G., Nemec, J., Nakrosis, V., Hajnal, G., & Tonnisson, K. (2009). Public Management Reforms in Central and Eastern Europe. NISPAcee Press.
- Cardona, F. (2009). Integrating National Administrations into the European Administrative Space. Sigma.
- Dijkstra, G. S. A., & Van der Meer, F. M. (2020). "The Background, direction, ideas, triggers, and durability of public sector reforms: A conceptual analysis of the EU28 and the Visegrád 4". In S. Mazur (Ed.), *Public Administration in Central Europe: Ideas as Causes of Reform* (pp. 75–90). Routledge.
- Dijkstra, G. S. A., & Van der Meer, F. M. (2022). "The Politics of Staffing". In A. Ladner & F. Sager (Eds.), *Handbook on the Politics of Public Administration*. Edward Elgar, To be published.
- Dimitrova, A. (2010). "The New Member States of the EU in the Aftermath of Enlargement: Do New European Rules Remain Empty Shells?" *Journal* of European Public Policy, 17(1), 137–148.
- Drechsler, W., & Randma-Liiv, T. (2015). "The New Public Management Then and Now: Lessons from the Transition in Central and Eastern Europe". In *The New Public Management Then and Now: Lessons from the Transition in Central and Eastern* Europe, *12*, 33–49. The Other Canon Foundation and Tallinn University of Technology Working Papers in Technology Governance and Economic Dynamics 57, TUT Ragnar Nurkse Department of Innovation and Governance.
- Easton, D. (1953). *The Political System. An Inquiry in the State of Political Science*. Knopf.
- Gajduschek, G., & Staronova, K. (2021). "Politicization beyond the Merit-system Façade: The Intricate Relationship between Formal and Informal Institutions of the Senior Civil Service Systems in Central and Eastern Europe". *International Journal of Public Administration*, 1–12.
- Hobsbawm, E., & Ranger, T. (Eds.) (1983). *The Invention* of *Tradition*. Cambridge University Press.
- Kiser, L. L., & Ostrom, E. (1982). "The three worlds of action: A metatheoretical synthesis of institutional approaches". In M. D. McGinnis (Ed.), *Polycentric*

Games and Institutions: Readings from the Workshop in Political Theory and Policy Analysis (pp. 56–89). University of Michigan Press.

- Kovač, P., & Bileišis, M. (Eds.) (2017). Public Administration Reforms in Eastern European Union Member States: Post-Accession Convergence and Divergence. University Of Ljubljana, Faculty of Administration Mykolas Romeris University.
- Kreko, P., & Enyedi, Z. (2018). "Explaining Eastern Europe: Orbán's Laboratory of Illiberalism". *Journal* of Democracy, 29(3), 39–51.
- Lasswell, H. D. (1958). *Politics: Who Gets What, When, How.* Whittlesey House.
- Mazur, S., & Kopyciński, P. (Eds.) (2017). *Public Policy* and the Neo-Weberian State. Routledge Frontiers of Political Economy, Vol. 235. Routledge.
- Meyer-Sahling, J.-H. (2009). "Sustainability of Civil Service Reforms in Central and Eastern Europe Five Years after EU Accession". *SIGMA Papers, No. 44*. OECD Publishing.
- Meyer-Sahling, J.-H. (2010). "In Search of Past Legacies. Explanations and Administrative Reforms in Post-Communist East Central European Countries". In M. Painter & B. G. Peters (Eds.), *Tradition and Public Administration* (pp. 203–217). Palgrave Macmillan.
- Meyer-Sahling, J.-H. (2011). "The Durability of EU Civil Service Policy in Central and Eastern Europe after Accession". Governance: An International Journal of Policy, Administration, and Institutions, 24(2), 231–260.
- Meyer-Sahling, J.-H. (2017). "Bureaucracies in Central and Eastern Europe and the Western Balkans". In A. Fagan & P. Kopecký (Eds.), *Routledge Handbook* of East European Politics (pp. 126–138). Routledge.
- Meyer-Sahling, J.-H., & Toth, F. (2020) "Governing illiberal Democracies; Democratic Backsliding and the Political Appointment of Top Officials in Hungary". NISPAcee Journal of Public Administration and Policy, 13(2), 93–113.
- Meyer-Sahling, J.-H., & Yesilkagit, K. (2011). "Differential legacy effects: three propositions on the impact of administrative traditions on public administration reform in Europe East and West". *Journal of European Public Policy*, *18*(2), 311–322.
- Nemec, J. (2018). "Public Administration Reforms in Slovakia: Limited Outcomes (Why?)". The NISPAcee Journal of Public Administration and Policy, 11(1), 115–134.

- Nemec, J., & Špaček, D. (Eds.) (2017). 25 Years of Public Administration Developments and Reforms in V4 Region. Masaryk University.
- Painter, M., & Peters, B. G. (Eds.) (2010). *Tradition* and Public Administration. Palgrave Macmillan.
- Peters, B. G., & Pierre, J. (2004). *The Politicisation* of the Civil Service in Comparative Perspective: *The Quest for Control.* Routledge.
- Pakulski, J. (Ed.) (2016). *The Visegrád Countries in Crisis*. Collegium Civitas.
- Pollitt, Ch., & Bouckaert, G. (2011). Public Management Reform. A comparative Analysis – New Public Management, Governance and the Neo-Weberian State. Oxford University Press.
- Pollitt, Ch., & Bouckaert, G. (2017). *Public Management Reform. A comparative Analysis – Into the Age of Austerity.* Oxford University Press.
- Pollitt, Ch., Bouckaert, G., Drechsler, W., & Randma-Liiv, T. (Eds.). The NISPAcee Journal of Public Administration and Policy, Special Issue: A Distinctive European Model? The Neo-Weberian State, 1(2), 1–108.
- Raadschelders, J. C. N. (1998). "Evolution, institutional analysis and path dependency: an administrativehistory perspective on fashionable approaches and concepts". *International Review Administrative Sciences*, 64(4), 565–582.
- Raadschelders, J. C. N., & Bemelmans-Videc, M. L. (2015). "Political (System) Reform: Can Administrative Reform Succeed Without?" In F. M. van der Meer, J. C. N. Raadschelders, & Th. A. J. Toonen (Eds.), Comparative Civil Service Systems: Comparative Perspectives (pp. 279–296). Palgrave Macmillan.
- Randma-Liiv, T., & Drechsler, W. (2017). "Three decades, four phases: Public administration development in Central and Eastern Europe, 1989–2017". *International Journal of Public Sector Management*, 30(6–7), 595–605.
- Riggs, F. W. (1964). *Administration in Developing Countries: The Theory of Prismatic Society*. Houghton Mifflin Company.
- Riggs, F. W. (2006). "The Prismatic Model: Conceptualizing Transitional Societies". In E. E. Otenyo & N. S. Lind (Eds.), Comparative Public Administration. Research in Public Policy Analysis and Management, Vol. 15 (pp. 17–61). Emerald Group Publishing Limited.

- Thijs, N., & Hammerschmid, G. (Eds.) (2018). *The Public Administration in EU28*. Publications Office of the European Union.
- Thijs, N., Hammerschmid, G, & Palaric, E. (2018).
   A Comparative Overview of Public Administration Characteristics and Performance in the EU28.
   Publications Office of the European Union.
- Van der Meer, F. M., & Dijkstra, G. S. A. (2021). *The latitude for loyal contradiction and public leadership: A conceptual and comparative approach.* IJPL Pre-release.
- Van der Meer, F. M., Raadschelders, J. C. N., & Toonen, Th. A. J. (2008). Administrative Models, Traditions and Reform: Explanations of Last Resort?" *Chilean Journal of Public Administration*, 31, 85–103.
- Van der Meer, F. M., Raadschelders, J. C. N., & Toonen, Th. A. J. (2015). Comparative Civil Service Systems: Comparative Perspectives. Palgrave Macmillan.
- Van der Meer, F. M., Steen, T. P. S., & Wille, A. C. (2007). "Western European civil service systems: A comparative analysis". In: F. M. van der Meer, J. C. N. Raadschelders, & Th. A. J. Toonen (Eds.), Comparative Civil Service Systems in the 21st Century (pp. 34–49). Palgrave.
- Verheijen, A. (2000). "Administrative Capacity Development: A Race against Time? Scientific Council for Government Policy". Working Documents, 107.
- Verheijen, A. (2010). "The New Member States, Constructed and Historical Traditions". In M. Painter & B. G. Peters (Eds.), *Tradition and Public Administration* (pp. 217–223). Palgrave Macmillan.
- Verheijen, A., & Rabrenovic, A. (2015). "Civil Service Development in Central and Eastern Europe: A Perfect Storm". In F. M. van der Meer (Ed.), *Comparative Civil Service Systems: Comparative Perspectives* (pp. 15–37). Palgrave Macmillan.
- Wright, V., & Page, E. C. (Eds.) (1999). Bureaucratic elites in Western European states. Oxford University Press.
- Wright, V., & Page, E. C. (Eds.) (2007). From the active to the enabling State: The changing role of top officials in European nations. Palgrave.
- Yesilkagit, K. (2010). "The Future of Administrative Reform and Administrative Traditions". In M. Painter & B. G. Peters (Eds.), *Tradition and Public Administration* (pp. 145–158). Palgrave Macmillan.

# Paulina Kubera

# Mechanism-Based Explanations in the Impact Evaluation of Public Interventions: Digging Deeper into Why and How Programmes Worked or Failed to Work

#### Abstract

*Objectives*: The aim of the article is to consider the evaluation of public interventions through the prism of evidencebased policy (EBP) as well as, more specifically, its potential to address the problem of how to produce in the process of impact evaluation usable knowledge that can help improve policymaking and policy implementation which can be accumulated over time, where evaluations will not be single endeavours and one-off studies, but will contribute to the growing body of knowledge.

*Research Design & Methods*: The article provides a critical overview of the research literature on evaluation approaches and methods as tools for gathering and apprising evidence relevant for policymaking and policy implementation.

*Findings*: Building upon the identified limitations of the traditional input/output approach to impact evaluation of public interventions, alternative approaches to evaluation are considered that make use of a theory that properly explicates the causal mechanisms linking programme activities with programme outcomes, confronting the mechanisms with empirical observations. As a strategy for synthesising the gained knowledge, the realist synthesis is considered as being more appropriate for reviewing research on complex social interventions (rather than traditional meta-analysis).

*Implications / Recommendations*: The article demonstrates how theory-based evaluation with mechanistic explanation and realist synthesis can contribute to growing evidence for policy needs, identifying also their limitations and practical problems related to their implementation.

*Contribution / Value Added*: The article contributes to the existing pool of knowledge by providing important insights into how to use mechanism-based explanations in impact evaluation to make stronger causal claims and enhance policy-learning.

Keywords: evidence-based policy, evaluation, theory of change, causal mechanisms, realist synthesis

Article classification: conceptual article

JEL classification: H11, H43, H83, L38

**Paulina Kubera** – Faculty of Engineering Management, Poznań University of Technology; ul. J. Rychlewskiego 2, 60-965 Poznań; e-mail: Paulina.Kubera@put.poznan.pl; ORCID: 0000-0002-6246-6952.

### Introduction

The primary question of impact evaluation of public interventions - regardless of whether these are projects, programmes or policies - is 'what works'. However, finding 'what works and what does not work' rarely does the trick and is not as simple as identifying best practices and disseminating them widely. In many instances, interventions that turned out to be successful in one setting did not bring the expected results when implemented elsewhere. The principal reason for it is that we live in a complex world and the actions taken mean intervening in a system which consists of many components that interact with each other. Therefore, there is a strong need to better recognise the contextual factors that influence the intervention's success or failure. Byrne (2013) describes it aptly: "...in complex systems the cause will seldom be the intervention something done to the system - taken alone. What matters is how the intervention works in relation to all existing components of the system and to other systems and their sub-systems that intersect with the system of interest" (p. 219). This begs the fundamental question: how to build the evidence base for policymaking in complex environments?

The overarching aim of the article is to consider evaluation of public interventions through the prism of evidence-based policy (EBP) and, more specifically, its potential to address the problem of how to produce in the process of impact evaluation usable knowledge that can help improve policymaking and policy implementation which can be accumulated over time, where evaluations will not be single endeavours and one-off studies, but will contribute to the growing body of knowledge. To this end, the following lines of inquiry are pursued that are discussed in the subsequent parts of the paper. First, in order to take a broader perspective, the question is raised why it is so hard, in general, to implement evidence-based practice in public policy and management, and what are the limitations of the traditional input/ output approach to impact evaluation that has little

to offer to inform policymaking about the likely transferability of findings from one evaluation research to other settings. Secondly, based on a critical overview of the research literature on evaluation approaches and methods as tools for gathering and apprising evidence relevant for policymaking and policy implementation, theoretical inquiry is made into the potential contribution of the theory-oriented evaluation approach that uses mechanistic explanation to answer the question why and how the intervention worked or failed to work. To this end, various definitions of the term 'mechanism' are discussed in order to clarify the conceptual confusion that surrounds the term. As they are grounded in different types of causation and analysed using different research methods, they provide different answers and serve different policy needs. Thirdly, unpacking causal mechanisms, exploring what works and what does not work in a certain evaluation endeavour is one thing. Another one is to add to a growing body of knowledge. Therefore, a realist synthesis is discussed that is more suitable for reviewing research evidence on complex social interventions than traditional meta-analysis. Finally, as suggested solutions are hardly ever perfect in reality, the article ends with indicating the drawbacks and practical problems related to the application of the mechanism-based approaches and realist synthesis that should be accounted for by policymakers, as well as promising directions for future research are indicated.

# **Opening the 'black box' of public interventions**

The movement of evidence-based practice, i.e. the idea that professional practice should be informed by scientific inquiry, has been first institutionalised in medicine, and with success (Rousseau, 2006). However, its realisation differs in areas such as public policy and management, for a couple of reasons. First, this is due to the +distinctive features of social science that form evidence base for policymaking and managerial decisions. Contrary to natural sciences that deal with the physical world, social sciences deal with interactions and human behaviours, which makes it hard to copy ready-to-use solutions. In medicine, which is a combination of natural science and human science (Dreyfus, 2011), one can expect with a reasonable degree of certainty that a particular medicine or treatment will work against a particular disease no matter where the medicine is administered or where treatment is given. In the case of public interventions, the same programme can produce different results when implemented elsewhere. It suffices that the programme is presented to the beneficiaries in a different way, the cultural context is different, the programme is implemented by a less experienced administration, etc. (Józefowski, 2012). Nevertheless, it should be added that also in evidence-based medicine, it is acknowledged that using scientific evidence while making clinical decisions should not be automatic nor unreflective. It should be combined with clinical experience that doctors had acquired during years of clinical practice as well as patient values and preferences. Following these indications, Rousseau (2006) defines evidence-based management as "a paradigm for making decisions that integrate the best available evidence with decision makers expertise and client/customer preferences to guide practice toward more desirable results" (p. 258). (With regard to evidence-based policy, one could say 'beneficiaries' or 'recipients' of public policies' instead of 'clients' or 'customers', although the term 'recipients' has been criticised for having passive connotations; see European Commission, 2017).

Another point to note about why it is harder to make evidence-based practice a reality in the public policy and management is the way in which decisions are made. In medicine, this is principally a doctor that individually makes decisions and prescribes the treatment to a particular patient. In turn, political decision-making and managerial decision-making in the public sector as well as in the private sector can be characterised by bargaining, entrenched commitments, and the interplay of diverse stakeholder values and interests (Head, 2010).

All of those factors that influence policymaking should be taken into account in the realisation of the evidence-based policy postulates. However, the main problem around which this article is structured is of methodological nature, namely – how to produce in the process of impact evaluation usable knowledge that can help improve policymaking and policy implementation which can be accumulated over time?

Looking at the issue of the transferability of findings from one evaluation study to other settings, it can be argued that the main problem lies in the fact that public interventions are primarily viewed in terms of their effects, with not enough attention paid to how those effects are brought about. The traditional approach to impact evaluation is focused on the input and output side of an intervention, i.e. how much was invested in a given programme and how much was achieved owing to its implementation. It entails a comparison of the situation before and after the intervention. and calculating its average effect. Certainly, making such cause-and-effect connections is at the heart of impact evaluation, as well as evidence-based practice. Nevertheless, causation is not the same as explanation, and such an approach has little to offer to inform policymaking about whether the programme can be successfully scaled up, implemented elsewhere or towards other entities. or what should be done when a programme does not yield expected effects. Frequently, diverse and contradictory findings regarding the impact of public interventions (in particular in reference to the effectiveness of international aid programmes) were not taking account of diversity of social and institutional contexts, and failed to distinguish between aid channels, instruments and modalities, as well as neglected the technological aspect and capacity-building benefits of aid (Picciotto, 2012). For that reason, randomised control trials (RCTs) – which are so successfully applied in medicine and once labelled as a golden standard also in relation to social policy programmes<sup>1</sup> for eliminating selection bias<sup>2</sup> and addressing the attribution question in scientific and rigours fashion – had to give finally its way to the mixed methods doctrine and methodological triangulation that put quantitative and qualitative approaches on the same footing (Picciotto, 2012; Saunders, 2011). Ultimately, producing scientific knowledge does not entail merely the verification of whether one event follows another, but, rather, the explanation of the relationship between events by use of a theory (Chaney, 2016). Hence, the same expectation is placed on evaluation as a device to build evidence base for policymaking.

The limitations of the traditional approach to impact evaluation can be illustrated on the example of aid for research, development, and innovation (RDI). The input/output approach rests on three assumptions that do not necessarily hold true for

innovation (Bach & Matt, 2005). The first one concerns a linear model of innovation, i.e. that there is a clear link between input and output of innovation activities. It views innovation as an orderly and one-way process, starting with the discovery of new knowledge, moving through various development stages, and emerging in a final viable form. In turn, the innovation process tends to involve continuous feedback loops between the different stages, the interplay between supply sources of science, and the demand forces of the market. The systemic approach to innovation implies that, to understand the specific challenges and opportunities with respect to innovation, it is critical to examine the way in which the various actors, institutions, and structures interact and, thereby, influence driving forces and capabilities for innovation (Andersson et al., 2004). Secondly, that returns to the scale of the innovation activities are constant and divisible; one can frequently reap benefits from investments in innovation only after reaching a certain threshold. Partial knowledge or a part of a new technology is useless. Thirdly, there is no difference in the nature of the output generated by public and private funding. In turn, the role of the public sector in enhancing innovative activity is not about encouraging innovation as much as about directing the efforts to diverse and important social challenges and sustainable solutions. Thus, to arrive to a more meaningful conclusions concerning the effectiveness of public interventions and its applicability to other settings, there is a strong need to understand how and why public intervention unfolds the way it does, how inputs are transformed to outputs, how undertaken activities and involved resources lead to the observed effects. In other words, one needs to open the 'black box' of public interventions, regardless of whether one will fully inspect the contents of the box or just peek inside the box, depending on the adopted definition of a mechanism (mechanisms as systems versus the minimalist understanding of mechanisms discussed later in the article).

<sup>&</sup>lt;sup>1</sup> Esther Dufo, a co-founder of the MIT Poverty Action Lab and the 2019 recipient of the Nobel Prize in Economics, is known for saying during the World Bank Conference held in 2003: "Just as randomized evaluations revolutionized medicine in the 20<sup>th</sup> century, they have the potential to revolutionize social policy during the 21<sup>st</sup> century" (Picciotto, 2012, p. 214).

<sup>&</sup>lt;sup>2</sup> Selection bias arises when participants of a specific programme (intervention) are systematically different than non-participants even before they receive public support. There are two main types of selection bias: selfselection and committee-selection (agency selection). The former one occurs when companies voluntarily decide whether to apply for aid or not. In the case of aid schemes for innovative projects, companies that are more growth-oriented are more likely to become beneficiaries of such programmes and, owing to their motivation and dynamism, they are also more likely to perform better even without public assistance compared to those who lack ambition and creativity. The committee selection, in turn, occurs in the case of aid schemes where only a fraction of potential beneficiaries are awarded public support. It is argued that public authorities may follow a 'picking the winner' strategy - for instance, companies which are more engaged in RDI activity in the first place are also more likely to receive more aid for RDI. In short, firm-specific characteristics can influence in a systematic way the probability of receiving public support and heterogeneity in the treatment effect.

# Linking programme activities with the programme outcomes through causal mechanisms in the programme theory

The paper is based on the premise that mechanism-based explanation can play an instrumental role in enhancing evidence-based policy for its capacity to answer questions as to why and how programmes worked or failed to work. A widely held but unsubstantiated belief is that causal inferences are made on the basis of, and protected by, sound research technique, and that the good design and analysis are the foundation stones of the ability to make causal statements (Pawson, 2008). Yet, there is a difference between establishing whether or not two variables or events are causally related to one another, and developing good explanations. Establishing causal relationships is necessary, but rarely sufficient for giving an acceptable explanation (Hedström & Wennberg, 2017).

To fill the above-mentioned deficit, theoryoriented evaluation approaches have emerged<sup>3</sup>. What they have in common is the idea that public intervention is a particular kind of a theory of change. However, it is far more than a simple logic model or a result chain that is so prevalent in evaluation practice, as it identifies causal assumptions as to why and under what conditions each of the link in the impact pathway is expected to work (Mayne, 2015)<sup>4</sup>. Thus, a robust theory of change describes not only a sequence of steps in getting from activities to impact (how does it happen), but also the contextual factors (internal and external) that should be taken into account to make change work. For example, the reason why many publicly-funded venture capital programmes in the UK underperformed against initial expectations was not addressing properly the aversion of SMEs to equity finance as a form of investment (BIS, 2011). Collaboration between companies and universities will not boost innovation if absorption capacity – i.e. an organisation's ability to identify, assimilate, transform, and use external knowledge – is not high enough (Biedenbach et al., 2018).

(Causal) mechanism is an important but insufficiently recognised component of the theory of change. The term 'mechanism' denotes a set of parts that work together to perform a particular function. These can be various cogs and wheels which are organised in such a way as to transfer motion from one part to another. Important is not only the structure but also the dynamics - how the movement is transferred from one part to another. In a similar vein, behavioural mechanisms explain how programme activities and spent resources ("appropriate ideas and opportunities") affect participants' responses - their attitude, knowledge, and behaviour in a particular context. They are situated in the interaction between programme's activities and the programme's participants. Therefore, mechanisms are usually non-observable and are highly context-specific (Lemire et al., 2020). They should be distinguished from programme's activities, as they are cognitive, affective, social responses to an intervention, leading to desired outcomes (Weiss, 1997). They explain behaviour of specific actors (thinking, decision-making, action) in a given context with specific resources, opportunities, and constraints. Providing a training course is not a mechanism; it is, for example, how the training spark an 'eye-opener' for some participants, as they recognise the relevance and value of the contents of the training to their day-to-day work (Punton et al., 2016). Intervention works when the involved resources and undertaken activities 'strike a chord' with programme's participants, and public policymakers should acknowledge that the provided resources and activities resonate much more for

<sup>&</sup>lt;sup>3</sup> Three main theory-oriented approaches can be distinguished: theory-driven evaluation by Chen and Rossi (1989), theory-based evaluation by Weiss (1997), and realistic (realist) evaluation by Pawson and Tilley (1997). For a more detailed comparison, see: Stame, 2004.

<sup>&</sup>lt;sup>4</sup> Similar distinction between logic models and theories of change can be found in Patton (2008), who argues: "Specifying the causal mechanisms transforms a logic model into a theory of change" (p. 336).

certain people in certain contexts than others (Pawson, 2003). These regularities can provide useful insights while developing new policy instruments in relevant settings.

Behavioural mechanisms in the meaning described above are typically analysed in casebased research and are grounded in the generative type of causation. Generative causation differs significantly from other approaches to causation. Firstly, it does not rely merely on associations between one single cause and effect to explain the observed effects of a programme, as is the case with regularity and counterfactual approach, and takes account for interaction of causes. Social phenomena, though, are usually the effect of the combination of factors that jointly produce a change. This is something different than a claim that the effect results from many (independent) variables. Secondly, it is not limited to identifying a 'package of causes', as is the case with configurational approach, but, instead, describes the whole causal process taking place between cause and effect. Using an analogy to a recipe - generative causation offers not only a list of ingredients that are needed to make a certain meal (what combination of conditions produce the desired effect), but also the instructions on what to do with them, i.e. how to dose them, in what order, etc. (Befani, 2012).

However, with the increased interest in causal mechanisms, the way they are defined and analysed in evaluation literature and practice has become more diverse. Most of the scholars follow the abovementioned realist accounts of causation in their conceptualisation of mechanisms (Astbury & Leeuw, 2010). Still, some take the minimalist view of a mechanism. From the minimalist perspective, mechanisms are often described as a form of intervening factors between a cause and its outcome. Such a minimalist conceptualisation of mechanisms can be present in variance-based research, where mechanisms are defined as mediator variables which are positioned on the path between an intervention and the outcomes (mediation analysis - see, e.g., Bruder et al., 2020), but also

in case-based research (congruence method – see, e.g., Beach & Pedersen, 2019). In this light, Beach and Pedersen (2016) divide mechanisms into two groups: mechanisms as systems and the minimalist understanding of mechanisms. The former one enables the full inspection of the content of the 'black box' of a public intervention, while the latter one merely peeks inside, as the causal process between cause and outcome is not unpacked in detail.<sup>5</sup>

# **Realist synthesis – a way of accumulating knowledge on public interventions**

Gaining insights into underlying causal mechanisms, exploring what works and what does not in a certain evaluation endeavour is one thing. Another one is to avoid the perpetual, regressive habit of 'starting from scratch', as each evaluation should respond to and develop from what is already known (Pawson, 2013). It needs to add to a growing body of knowledge. In other words, there is a need for some kind of synthesis. Evidence reviews are an important element of evidencebased policy, i.e. building on evidence which already exists. This, however, is a daunting task given the specificity of public interventions and the complexity of social problems they are aimed to deal with. One of the viable approaches is realist synthesis (also known as a realist review), which has been developed in an attempt to overcome some of the limitations of the traditional meta-analysis.

As both of the strategies aim to systematically pull together findings of a particular research problem, it can be argued that the former one is theory-driven, while the latter one is method-driven. In meta-analysis, the quality and trustworthiness of primary evidence is assessed in terms of a methodological hierarchy, in which priority is

<sup>&</sup>lt;sup>5</sup> Schmitt (2020) indicates two axes around which causal mechanisms can be classified. These are: the level of analysis (behavioural mechanisms and process mechanisms that describe cause-and-effect relationships across multiple steps of the theory of change) and the methodological approach (case-based and variance-based).

given to experimental and quasi-experimental designs as the most rigorous and robust research method of determining whether a cause-and-effect relationship exists between an intervention and an outcome. Qualitative and case study designs are ranked lower and often only primary research results are used in meta-analysis. Moreover, an attempt is made to identify research results that can be generalised across contexts (Jagosh, 2019). For example, Storey (2000) introduced the 'Six steps to heaven' framework, which has been incorporated into the OECD Framework for the Evaluation of SME and Entrepreneurship Policies and Programmes (2008), in order to categorise them according to the sophistication in the assessment procedure. The assumption behind the Storey's Framework is that the higher position a method occupies, the more robust and convincing the results are. Realist synthesis, in turn, rejects methodological hierarchies and operates on the basis of a variety of data sources, including grey literature such as action research, administrative records, legislative analysis, conceptual critique, or personal testimony. This, however, does not imply that research quality is irrelevant, but, rather, that decisions about quality require complex contextualised judgements instead of following one pre-established checklist. Moreover, the unit of analysis in not a study, but a programme theory. Therefore, for example, only one element of a primary study can be under investigation by a realist reviewer to test a very specific hypothesis about the link between a context, a mechanism, and an outcome (Pawson et al., 2004), e.g. how to reach a target group or what are the trusted sources for those to whom an intervention will be addressed. Finally, the overarching aim of the realist synthesis is not seeking generalisable lessons or universal truths, but, rather, to find out under what conditions the intervention is more or less likely to work, or, to put it differently, what should be considered and what can be done to enhance the chances that the given intervention will succeed.

It is argued that realist synthesis is more explanatory than judgemental in nature as it seeks to find out how various combinations of context can amplify or mute the fidelity of the programme theory. This issue is well-explained by Pawson (2006) in his article provocatively entitled "Digging for Nuggets: How 'Bad' Research Can Yield 'Good' Evidence":

"...research synthesis follows a disciplined, formalized, transparent and highly routinized sequence of steps in order that its findings can be considered trustworthy – before being launched on the policy community. The most characteristic aspect of that schedule is the appraise-thenanalyse sequence. The research quality of the primary studies is checked out and only those deemed to be of high standard may enter the analysis, the remainder being discarded. This paper rejects this logic, arguing that the 'study' is not the appropriate unit of analysis for quality

	REALIST SYNTHESIS	META-ANALYSIS
focus	theory-driven	method-driven
unit of analysis	a programme theory	a single study (research)
		results of primary studies hierarchy of research designs, priority given to experimental and quasi-experimental designs
sequence of steps	analysis precedes appraisal	appraisal precedes analysis
guiding question	what works for whom in what circumstances – searching for contextual success factors	what works and what does not – searching for results that can be generalised across contexts

Figure 1. A comparison between realist synthesis and meta-analysis

Source: Own elaboration based on: Pawson et al., 2004; Pawson, 2006; Jagosh, 2019.

appraisal in research synthesis. There are often nuggets of wisdom in methodologically weak studies and systematic review disregards them at its peril." (p. 127)

Hence, the key point is that there is much to be learned about a given intervention when exploring the specifics of each study. While in a traditional meta-analysis appraisal goes first and then is followed by analysis, in realist synthesis it is other way round – analysis precedes appraisal (for an example of how a realist synthesis is carried out, see: Rycroft-Malone et al., 2012).

### **Concluding remarks**

The paper demonstrates how the feedback from evaluation can be used to enhance policymaking and policy implementation. Building upon the identified limitations of the traditional input/ output approach to the impact evaluation of public interventions, theory-oriented evaluations that focus on mechanistic evidence coupled with the realist synthesis are suggested to support usable knowledge creation and its accumulation for public policy needs. To this end, the role of theory in evaluation is discussed, providing clarification of the term 'mechanism', as different conceptualisations of the term can be found in the literature and evaluation practice. To complement the posed approach - the idea of a realist synthesis for reviewing research on complex social interventions is presented and contrasted with the traditional meta-analysis.

The following practical implications and recommendations for practice can be formulated to answer the questions about why and how programmes worked or failed to work. First, one needs an evaluation approach that makes use of a theory that properly explicates the causal mechanisms linking programme activities with programme outcomes, confronting the mechanisms with empirical observations. From the point of view of evidence-based practice, one needs knowledge which not only describes what happened, but which also explains the events that took place. This allows

predictions about the future, thereby making it possible to affect the future (i.e. improve future public interventions of the same kind or improve the ones in operation). Second, as different approaches to causation capture different aspects of causal relationships, distinctive features of mechanismbased causation must be recognised against other types of causation (regularity, counterfactual, configurational). None of them should be considered superior, as they answer different questions and serve different policy needs. The strength of mechanisms grounded in generative causation lies in capturing the complexity of social phenomena. They provide a fine-grained description of causal mechanisms at work, strengthen our understanding of how and why public interventions work, with whom, and under what circumstances, thereby allowing the inferences about the effectiveness of the intervention in other settings (opening the 'black box' of public interventions). However, there is nothing that would stop one from combining different approaches and methods to identify causal relationships. Quite contrary – it is even recommended. Cook (2000), for example, writes about "false choice" between theory-based evaluation and experimentation. Peck (2020) asserts that "operating experimental evaluations with a theory-based framework is ideal as both kinds of evaluations are made stronger by being in partnership" (p. 146). Frequently, the counterfactual approach is only the first step in the evaluation process, as in the second step, in-depth qualitative research is conducted to explain the observed relationship and the mechanisms that govern it.

Nevertheless, the suggested approaches are not free from certain practical problems and limitations. Providing mechanism-based explanations is very demanding in terms of time and data requirements. An in-depth understanding of micro-mechanisms at work enables gaining knowledge of more general significance, but requires taking into account also mechanisms working at the higher levels, i.e. meso and macro, emerging from a high number of micro-mechanisms being activated at the level of agents, which makes the causal

inference about public intervention a challenging task. Given the fact that the distance between the macro level and the micro level might be too big to explain certain phenomena properly (e.g. individual-level entrepreneurial outcomes through the prism of country characteristics and its institutional quality; see: Kim et al., 2016), exploring meso-level mechanisms is a promising directions for future research. As regards realist synthesis, it does not follow a standardised procedure, it is inherently pluralist and flexible, and, therefore, it is not easy to reproduce. Thus, it is not for novices. It requires substantial knowledge and expertise to identify and apprise the quality of evidence appropriately. In order to preserve the accuracy and reliability of the made judgements, one needs what Pawson (2013) calls "organised scepticism", which means that any scientific claim must be exposed to criticism. For that reason, it is imperative that any judgmental, discretionary decisions must be transparent enough to be openly challenged and scrutinised

# References

- Andersson, T., Appelquist, J., & Serger, S. (2004). "Public Research and Innovation Policy for the good of society: How to assess the way forward?" Background Paper at joint IKED/INNOVA seminar. November 8, 2004. Berns, Salonger, Stockholm, pp. 17–34. Available at: http://www.iked. org/pdf/Evalproceedings05.06.03.pdf (accessed: 09.10.2021).
- Astbury, B., & Leeuw, F. (2010). Unpacking Black Boxes: Mechanisms and Theory Building in Evaluation. *American Journal of Evaluation*, 31(3), 363–381.
- Bach, L., & Matt, M. (2005). From economic foundations to S&T policy tools: A comparative analysis of the dominant paradigms. In P. Llerena & M. Matt (Eds.), *Innovation Policy in a Knowledge-Based Economy* (pp. 17–46). Springer.
- Beach, D., & Pedersen, R. (2016). Causal Case Study Methods. Foundations and Guidelines for Comparing, Matching, and Tracing. University of Michigan Press.
- Befani, B. (2012). Development Models of Causality and Causal Inference. Appendix pp. 1–24, In E. Stern,

N. Stame, J. Mayne, K. Forss, R. Davies, & B. Befani (Eds). *Broadening the Range of Designs and Methods for Impact Evaluations*, DFID Working Paper 38. Department for International Development.

- Biedenbach, T., Marell, A., & Vanyushyn, V. (2018). Industry-university collaboration and absorptive capacity: An empirical study in a Swedish context. *International Journal of Technology Management*, 76(1/2), 81–103.
- BIS (2011). Equity finance programmes qualitative reviews of: a) ukhtf and b) the bridges fund. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/ file/32220/11-1009-bis-equity-finance-qualitativereviews-ukhtf-bridges.pdf (accessed: 07.05.2022).
- Bruder, M., Polak, J., Guffler, K., & Scheinert, L. (2020). Using mediation analysis to uncover psychological mechanisms of attitude change in a development volunteer pro-gram. *New Directions for Evaluation*, 167, 131–143.
- Byrne, D. (2013), Evaluating complex social interventions in a complex world. *Evaluation*, *19*(3), 217–228. https://doi.org/10.1177/1356389013495617.
- Chaney, B. (2015). Reconsidering Findings of "No Effects" in Randomized Control Trials: Modeling Differences in Treatment Impacts. *American Journal of Evaluation*, 37(1), 45–62. https://doi. org/10.1177/1098214015573788.
- Chen, H., & Rossi, P. (1989). Issues in the Theory-driven Perspective. *Evaluation and Program Planning*, 12(4), 299–306.
- Cook, T. (2000). The false choice between theory-based evaluation and experimentation. *New Directions for Evaluation*, *87*, 27–34.
- Dreyfus, H. (2011). Medicine as combining natural and human science. *The Journal of Medicine and Philosophy*, *36*(4), 335–341. https://doi.org/10.1093/ jmp/jhr027.
- European Commission (2017). *Quality of Public* Administration. A Toolbox for Practitioners. Publications Office of the European Union.
- Head, B. (2010). Reconsidering evidence-based policy: Key issues and challenges. *Policy and Society*, 29(2), 77–94. https://doi.org/10.1016/j.polsoc.2010.03.001.
- Hedström, P., & Wennberg, K. (2017). Causal mechanisms in organization and innovation studies. *Innovation: Organization & Management*, 19(1), 91–102. https://doi.org/10.1080/14479338.2016. 1256779.

- Jagosh, J. (2019). Realist Synthesis for Public Health: Building an Ontologically Deep Understanding of How Programs Work, For Whom, and In Which Contexts. *Annual Review of Public Health*, 40, 361–372. https://doi.org/10.1146/annurev-publhealth-031816-044451.
- Józefowski, B. (2012). Evidence-based policy nowa koncepcja dotykająca starych problemów. *Zarządzanie Publiczne*, *1*(19), 147–152.
- Kim, P. H., Wennberg, K., & Croidieu, G. (2016). Untapped Riches of Meso-Level Applications in Multilevel Entrepreneurship Mechanisms. *The Academy of Management Perspectives*, 30(3), 273–291.
- Lemire, S., Kwako, A., Nielsen, S. B., Christie, C. A., Donaldson, S. I., & Leeuw, F. L. (2020).What is this thing called a mechanism? Findings from a review of realist evaluations. *New Directions for Evaluation*, 167, 73–86.
- Mayne, J. (2015). Useful Theory of Change Models. *Canadian Journal of Program Evaluation*, 30(2), 119–142.
- OECD (2008). Framework for the Evaluation of SME and Entrepreneurship Policies and Programmes. DOI: 10.1787/9789264040090.
- Patton, M. Q. (2008). *Utilization-Focused Evaluation* (4th ed.). Sage.
- Pawson, R. (2003). Nothing as Practical as Good Theory. *Evaluation*, 9(4), 471–490. https://doi. org/10.1177/135638900300900407.
- Pawson, R. (2006). Digging for Nuggets: How 'Bad' Research Can Yield 'Good' Evidence. *International Journal of Social Research Methodology*, 9(2), 361– 372. https://doi.org/10.1080/13645570600595314.
- Pawson, R. (2008). *Causality for beginners*. In: NCRM Research Methods Festival 2008. (Unpublished) Available at: https://eprints.ncrm.ac.uk/id/eprint/245/ (accessed: 14.10.2021).
- Pawson, R. (2013). The Science of Evaluation. A Realist Manifesto. Sage.
- Pawson, R., Greenhalgh, T., Harvey, G., & Walshe, K. (2004). *Realist synthesis: An introduction*. ESRC Research Methods Programme, University of Manchester.

- Pawson, R., & Tilley, N. (1997). *Realistic Evaluation*. Sage.
- Peck, L. (2020). Leveraging experimental evaluations for understanding causal mechanisms. *New Directions for Evaluation*, 167, 145–160.
- Picciotto, R. (2012). Experimentalism and development evaluation: Will the bubble burst? *Evaluation*, 18(2), 213–229. https://doi.org/10.1177/1356389012440915.
- Punton, M., Vogel, I., & Llyod, R. (2016). Reflections from a realist evaluation in progress: Scaling ladders and stitching theory (CDI Practice Paper). Institute of Development Studies. Available at: https://archive.ids.ac.uk/cdi/publications/reflectionsrealist-evaluation-progress-scaling-ladders-andstitching-theory-0.html (accessed: 30.04.2020).
- Rousseau, D. (2006). Is There Such a Thing as "Evidence-Based Management"? *Academy of Management Review*, 31(2), 256–269.
- Rycroft-Malone, J., McCormack, B., Hutchinson, A., DeCorby, K., Bucknall, T., Kent, B., Schultz, A., Snelgrove-Clarke, E., Stetler, C., Titler, M., Wallin L., & Wilson V. (2012). Realist synthesis: Illustrating the method for implementation research. *Implementation Science*, 7(33), 1–10.
- Saunders, M. (2011). Capturing effects of interventions, policies and programmes in the European context: A social practice perspective. *Evaluation*, 17(1), 89–102. https://doi.org/10.1177/1356389010394480.
- Schmitt, J. (2020). The causal mechanism claim in evaluation: Does the prophecy fulfil? Causal Mechanisms in Program Evaluation. New Directions for Evaluation, 167, 11–26.
- Stame, N. (2004). Theory-based Evaluation and Types of Complexity. *Evaluation*, 10(1), 58–76. https:// doi.org/10.1177/1356389004043135.
- Storey, D. J. (2000). Six Steps to Heaven: Evaluating the Impact of Public Policies to Support Small Business in Developed Economies. In D. L. Sexton & H. Landstrom (Eds.), *Handbook of Entrepreneurship* (pp. 176–193). Blackwell.
- Weiss, C. (1997). Theory-based Evaluation: Past, Present and Future. New Directions for Evaluation, 76, 41–55. https://doi.org/10.1002/ev.1086.

Seweryn Krupnik, Anna Szczucka, Katarzyna Lisek

# The Effects of Supporting Business Innovation and R&D Activities from European Union Funds in Poland: A Review of Evaluation Studies

Abstract:

*Objectives*: In order to create more accurate public policies in the field of innovation subsidies, it is crucial to provide timely knowledge about the effectiveness of implemented interventions. This article explores the effects of EU programmes realised in Poland. The results are derived from evaluation reports.

*Research Design & Methods*: The article is based on a review of the most important evaluation research concerning innovation policies implemented as a part of the operational programmes in Poland.

*Findings*: The results from a review of evaluation studies show the impact of the policies on the innovativeness of Polish enterprises. An increase in indicators of innovation performance and R&D activities among the beneficiaries was observed. The achievements of particular enterprises translate into change at the macro level. However, there is not enough evidence to ascertain the sustainability of the programmes' effects. Based on the gathered evidence, it is hard to indicate a straight link between an increase of innovation and higher competitiveness of beneficiaries.

*Implications / Recommendations*: The results suggest a need for changes at different stages of the public policy cycle, namely design, implementation, and evaluation.

*Contribution / Value Added*: The article gives a picture of today's achievements in cohesive policy when it comes to innovation in enterprises; it sums up the knowledge about the effects of the implemented solutions, pointing out the fields that need more evidence.

Keywords: evaluation, public policies, innovation policy, innovation subsidies, technology policy, research and development policy

Article classification: theoretical/review paper

JEL classification: O380

Seweryn Krupnik (corresponding author) – Centre for Evaluation and Analysis of Public Policies, Jagiellonian University; ul. Ingardena 3, Kraków; e-mail: seweryn.krupnik@uj.edu.pl; ORDIC: 0000-0003-2486-0702. Anna Szczucka – Centre for Evaluation and Analysis of Public Policies, Jagiellonian University; ul. Ingardena 3, Kraków; e-mail: anna.szczucka@uj.edu.pl; ORCID: 0000-0001-9524-4347. Katarzyna Lisek – Centre for Evaluation and Analysis of Public Policies, Jagiellonian University; ul. Ingardena 3, Kraków; e-mail: anna.szczucka@uj.edu.pl; ORCID: 0000-0001-9524-4347. Katarzyna Lisek – Centre for Evaluation and Analysis of Public Policies, Jagiellonian University; ul. Ingardena 3, Kraków; e-mail: katarzyna.lisek@uj.edu.pl; ORCID: 0000-0003-2431-8307.

### Introduction

Business innovation is important for national economies. Indeed, innovation results in a country becoming more attractive for investors, the economy gaining competitiveness, and its place in the value chain becoming more favourable. Unfortunately, the Polish economy is not recognised as being innovative - in the Global Innovation Index, it occupies the 39th place, with only four EU countries behind it (Dutta et al., 2019). At the level of national strategic actions, a key document targeting support and stimulation for business innovation and investments in R&D is the Strategy for Economic Development of Poland. This strategy is implemented through direct investments; instruments indirectly mobilised to help businesses make increased investments and fiscal reforms or support for foreign investors; and programmes supporting the ecosystem (Orechwo, 2017).

At the same time, these interventions can be made more effective when it comes to their ability to improve the innovativeness of the economy; this can be done by adopting an evidence-informed approach to designing and implementing solutions. This approach assumes that before making decisions, the actors involved in the process should first familiarise themselves with a full set of information from various sources (Langer et al., 2016; Head, 2010). The concept of evidence-informed policymaking emphasises that the collected evidence is not the only factor present in the decision-making process; yet, it should play a significant role (Nevo & Slonim-Nevo, 2011). Applying an evidence-informed approach makes it possible to base the management of limited public resources on earlier experiences while also increasing investments in programmes proven to be effective, thereby increasing the efficiency of money spending. This also leads to greater control of the public funds (OECD, 2015; Urahn et al., 2014). This method expands the range of possible solutions to social problems while helping choose those with the greatest chance of success (Parkhurst, 2017; Rantala et al., 2017).

To allow for this approach to be used in designing and implementing further interventions, it is essential to bring about a streamlined system for generating, collecting, and providing access to knowledge from the implemented interventions.

The objective of the current article is to present the most important findings from the evaluation studies of public interventions that are aimed at increasing business innovation and R&D activities. The current article answers the following research questions: 1) What are the effects of support at the level of the Polish economy? 2) What are the effects of support at the level of the supported businesses?

### Materials and methods

The review focuses on 35 reports from the time programming period of 2007 to 2013 (reviewing the following cohesion policy programmes: Innovative Economy, Infrastructure and Environment, Human Capital, Development of Eastern Poland, and Regional Programmes). Only 4 out of these reports used most rigorous counterfactual approach to measure the net effect, i.e. the change which can actually be attributed to the investigated programmes. The findings from these studies are described in more detail. Where possible, the authors also considered the conclusions from 14 reports referring to the period of 2014 to 2020 (reviewing the following programmes: Smart Growth, Eastern Poland, and Regional Programmes). The 2004 to 2006 timeframe was used as a reference point (11 of the analysed reports referred to the following programmes: Sectoral Operational Programme Improvement of the Competitiveness of Enterprises and Integrated Operational Programme Regional Development). The evaluations of these programmes were considered in the overview, where the studies concentrated on issues of business innovation or R&D. We considered studies produced on behalf of the European Commission, the Polish National Evaluation Office, and other institutions involved in the implementation of the operational

Table 1.	Fields	of the	evaluation	studies'	database
----------	--------	--------	------------	----------	----------

1. Number	6. Month and year of finishing the study
2. Title	7. Commissioning Party
3. Type (Ex ante, On going, Ex post)	8. Contractor
4. Operational Programme	9. Size of the study (small, medium, large)
5. Topic (e.g. 'Innovation of economy', 'Innovation and research & development')	

Source: Own elaboration.

programmes taking place in Poland. In total, we analysed 58 reports (several of which went beyond one financial perspective).

The reports were identified using the Evaluative Research Database run by the National Evaluation Office at the Ministry of Development Funds and Regional Policy.<sup>1</sup> All reports from the categories 'Innovation of economy' and 'Innovation and research & development', and related to the described above programming periods, were selected from the database. The structure of the database is presented in Table 1. In addition, we identified relevant studies from the Website of the European Commission.

### Literature review

There is a visible division in the analysed studies between those concerning innovation and those regarding R&D. An additional differentiation is

	Level of the whole economy	Level of the supported businesses
Research	1. The units active in R&D in the enterprise sector	1. R&D activity (internally or externally)
& development	2. R&D expenditure in GDP (total/enterprise sector)	2. Private expenditure on R&D in the company
activity	3. Level of employment in R&D activity [EPC]	3. Employment in R&D positions
	(total/enterprise sector)	4. The R&D department (non-existent before
	4. Companies with R&D departments	the project)
	5. Number of patent applications to the Polish	5. Number of requests for patent protection
	Patent Office/the European Patent Office	filed with the Polish Patent Office/the European Patent Office
		6. Cooperation with scientific institutions
Innovation	1. Share of companies undertaking innovative activity	1. Number of introduced innovations (by type/level of innovation)
	2. Total/private spending on innovation activities	2. Income from the sales of innovative products and
	3. Spendings on industrial innovation	or services in Polish and international markets
	<ol> <li>Sales of new and significantly improved products in total manufacture in industrial</li> </ol>	<ol> <li>Total/private spendings on innovation activities</li> </ol>
	enterprises	4. Total factor productivity (TFP)
	5. Export of high-tech products in total	5. Share of innovatively active businesses
	exports	working together in innovation activities as a direct result of the funded projects

Source: Own elaboration.

<sup>1</sup> See: https://www.ewaluacja.gov.pl/strony/badaniai-analizy/wyniki-badan-ewaluacyjnych/baza-badan-warkuszu-kalkulacyjnym/ (accessed: 07.01.2020). the level of measurement and conclusions applied to individual enterprises and/or the entire economy. In the analysed studies, these effects are monitored using an array of indicators, the most popular of which are listed in Table 2.

# Effects at the level of the whole economy

One perspective when examining the effects of public interventions on innovativeness and R&D activities is the macroeconomic one. In general, those studies that introduce this approach indicated a positive impact of the interventions on the analysed indicators. In the case of one of the key indicators from Polish strategic documents concerning innovation policy, in 2008-2018, expenditure on R&D in the business sector in relation to GDP saw growth from 0.19% to 0.8%. The studies showed that around one-third of the change between 2008 and 2015 resulted from support from EU funds (Imapp, 2017). In 2010, when this inflow was the greatest, around 40% of annual spending on R&D activity resulted from the cohesion policy. At the same time, the effect on overall expenditure on R&D activity in the entire economy was around 22% in 2010-2011 (Regulski et al., 2017). In 2020, the programmes impact on the value of expenditure on R&D in the business enterprise became visible, with GDP at the level 0.11 percentage points higher than in the scenario without the public support (Bienias et al., 2020).

The effectiveness of spendings on R&D in Poland is estimated to be average or low (Regulski et al., 2017). The significant factors limiting the effectiveness of R&D expenditure include weak collaboration between science and business, the low quality of regulation of protection of intellectual property rights, and high bureaucratic costs.

Still at the macroeconomic scale but referring to the effects of innovation activities, in 2012–2015, around one-fifth of industrial enterprises were innovative, i.e. they introduced to the market at least one product or process innovation. Macroeconomic estimates show that in 2014, for example, one in four innovative companies had this status because of EU funds (Regulski et al., 2017). Greater innovation of the beneficiaries of this support translates to greater innovation for all businesses in a country (Imapp, 2017; Regulski et al., 2017).

An important measurement of the effects of R&D work is activity in the field of intellectual property protection. The cohesion policy resulted in an increase in the number of patent applications to the Polish Patent Office and the European Patent Office (Feldy et al., 2014; Imapp, 2017).

The implementation of projects also contributed to a significant increase in employment in the field of R&D (Imapp, 2017). In the periods showing the greatest inflow, the intervention accounted for almost 20% of R&D positions in the economy in a given year.

# Effects at the level of the supported businesses

Another perspective focuses on the effects of public interventions obtained at the level of particular supported businesses. Here, the most reliable evidence comes from counterfactual research schemes. Among the evaluation research reports that have measured the effects of the Innovative Economy Operational Programme, four included conclusions about innovativeness and R&D activities derived from quasi-experimental research.

The counterfactual evaluation studies indicate some influence of cohesion policy on the key indicators of the beneficiaries' innovativeness and R&D activities (Table 3). Most of the studies investigated the results of the specific measures included in the fourth axis of the Innovative Economy Operational Programme. When it comes to the positive effects resulting from the intervention, the studies mentioned the growth of expenditures on internal and external R&D, the increase in number of implemented innovative products, and processes and the growth of total factor productivity.

Overall, beneficiaries spend more on innovative activity and introduce innovations to the market more frequently. This situation results directly from the way interventions are designed; receiving support for the implementation of innovations almost

Category of effects	Key indicators	Results	Study	Additional comments
R&D	Expenditures on internal and external R&D	Positive effect for measure 4.4 Lack of effect of measure 8.2	Koniewski et al. (2015)	Relatively small samples (ca. 100 or lower)
		The positive effect for the fourth axis measures	GUS (2015)	The beneficiaries of measures 1.4-4.1, 4.2, 4.3 and 4.4
of in	Implementation of product or process innovations to the market	Effects aligned with goals of interventions for the fourth axis measures	Koniewski et al. (2015)	Relative effect (comparing different groups of beneficiaries)
		Effects aligned with goals of interventions for measures 4.2, 4.4 and 8.2	Trzciński (2013)	Relative effect (comparing different groups of beneficiaries)
	Share of entities involved in innovative activities	The positive effect for the fourth axis measures	GUS (2015)	The beneficiaries of measures 1.4-4.1, 4.2, 4.3 and 4.4
	TFP – total factor productivity	The positive effect	Gajewski et al. (2014)	Research conducted exclusively on large companies $\rightarrow$ small samples (n=45 for OP IE)

Table 3. Indicators of innovation and R&D activity at the level of the businesses supported within IE OP as measured in quasi-experimental schemes

Source: Own elaboration.

automatically results in innovative activity expenses and inclusion in the group of innovative enterprises (Regulski et al., 2017). The first evaluations of the effects of the Operational Programme Smart Growth (OP SG) point to a significant effect of incentives among the beneficiaries. The increase in their expenditure on R&D activity is higher than in unsupported enterprises. The beneficiaries declare that if it had not been for public support, they would not have carried out activities at this scale and at a comparable time (Bienias et al., 2020; PARP, 2020b). Almost two-thirds of the beneficiaries of the first and second axes of the OP SG declare that the R&D work they have performed ended with the implementation of results, which amounted to commencing the production or provision of services (Borowczak et al., 2020).

Some of the studies noted that this effect often refers to innovation at the level of the company, not to the market or world level (Imapp, 2017; Ciężka, 2017). At the same time, the findings indicate that in each financial perspective, the proportion of innovations at the market or international level increases (Feldy et al., 2014; Miller et al., 2014). Almost half of the OP SG beneficiaries define the innovations developed within the project as groundbreaking. One-third of the innovations from this programme are ranked at least at the European level, and one-fifth are ranked at the global level (PARP, 2018). Yet, some of the OP SG instruments still do not result in the production of solutions at the scale of innovation expected at the support design stage (PARP, 2020a).

Despite an increase in the scale of R&D and innovation activity among businesses, the economic effects of this process are not necessarily visible. Looking at the analysed indicators, the support provided was more significant for the measurements for the scale of the undertaken innovation and R&D activity than for those showing the measurable effects of this activity on the businesses' sales activity.<sup>2</sup>

 $<sup>^2</sup>$  The lack of evidence of economic effects might not only result from the small scale of these effects, but also from a measurement problem – the effects are usually delayed, much harder to test, and occur far less often than evaluative research.

Category of effects	Examples of indicators	Results	Study	Additional comments	
Competitiveness	Number of employees	The negative effect for measure 8.2 Lack of effect for measure 4.4	Koniewski et al. (2015)	Relatively small samples (ca. 100 or lower)	
		Positive effects for measures 4.2 and 4.4	Trzciński (2013)	Relative effect (comparing different groups of beneficiaries)	
		Lack of significant effect	GUS (2015)*	A decreasing, though insignificant, trend in the number of employees was marked in measures 1.4–4.1	
		Lack of significant effect	Gajewski et al. (2014)	Research conducted exclusively on large companies => small samples (n=45 for OP IE)	
	Gross profit divided by net income from sales	The positive effect for measure 8.2 Lack of effect for measure 4.4	Koniewski et al. (2015)	The beneficiaries had higher long-term liabilities than nonbeneficiaries Relatively small samples (ca. 100 or lower) Relatively short time that elapsed since the completion of the analysed projects (from 0.5 to 1.5 years) to achieve the expected economic effects	
	Gross profit	Mixed effects	Trzciński (2013)	Relative effect (comparing different groups of beneficiaries)	
	Profit on business activity	The positive effect for the fourth axis measures	GUS (2015)*	The average profit was similar (comparing beneficiaries and control groups)	
	Value of net sales revenues	Inconclusive (the positive effect but the deadweight loss)	Gajewski et al. (2014)	Research conducted exclusively only on large companies => small samples (n=45 for OP IE)	
		Lack of significant effect	GUS (2015)*		
	Exporting products or services	Lack of effect	Koniewski et al. (2015)	Relative effect (comparing different groups of beneficiaries)	
		The positive effect for most of the fourth axis measures (p<0.1)	GUS (2015)*		
	Revenues from sale for export	Lack of significant effect	GUS (2015)*		

Table 4. Indicators of competitiveness at the level of the businesses supported within IE OP as measured in quasi-experimental schemes

\* The beneficiaries of measures 1.4--4.1, 4.2, 4.3 and 4.4. Source: Own elaboration.

According to the premises of the cohesion policy, more intensive innovation activity should lead to greater competitiveness. Yet, this correlation is not always obvious. Innovative activity is laden with risk, and the probability of failure is an inextricable part of it. From the point of view of some businesses, the main use of support is to implement simpler investment projects rather than ambitious ones. Paradoxically, in the companies' view, implementing such simpler projects can be rational in the market sense (Cieżka et al., 2014, Koniewski et al., 2015; Regulski et al., 2017). In these cases, support may not result in increased innovation, but it boosts beneficiaries' competitiveness (Krupnik et al., 2010; Miller et al., 2018; Regulski et al., 2017).<sup>3</sup> From the perspective of innovation policy, however, this situation is undesirable (Bartkiewicz & Dębowski, 2010). At the same time, the desired intervention effect is the increased innovation of a business and the lasting benefits for it, i.e. increased competitiveness; in simple terms, innovation growth makes sense only if it translates into greater competitiveness (European Commission, 2016). Therefore, support should be considered as a certain long-term process, not an individual stimulus (European Commission, 2016).

The results of the evaluative studies, both those using quasi-experimental (Table 4) and less rigorous methods, reveal the moderately positive influence of support on the beneficiaries' competitive position. In particular, this support led to increased productivity, an improved financial situation, or growth in employment (Bukowski et al., 2017; Ciężka et al., 2017; European Commission, 2016; Regulski et al., 2017). However, this impact is significantly smaller than in the case of innovative activity (Regulski et al., 2017). Furthermore, the positive effects were not always observed (Bartkiewicz & Dębowski, 2010; GUS, 2015; Koniewski et al., 2015), which confirms the complicated nature of the relations between R&D activity, innovation, and competitiveness.

It is worth noting the benefits of supporting innovation for entities other than the direct beneficiaries of support: entities collaborating with beneficiaries have larger orders and the beneficiaries increase their payment funds, allowing employees to increase consumption. This increased investment and consumption translates into greater public subsidies. These effects are estimated using macroeconomic modelling conducted for some of the OP IE activities. Although the value of the analysed activities amounted to 14 billion PLN, its launch resulted in further 92 billion PLN being generated in 2007–2017 (Bukowski et al., 2017). The first effects concerning the dynamic growth of beneficiaries' external costs – which demonstrate the intensification of their cooperation with their surroundings – were observed within submeasure 3.2.1. of the OP SG (PARP, 2020b).

# **Concluding discussion**

The conclusions from a review of evaluation studies show the impact of the introduced policies on the innovativeness of Polish enterprises. The policies led to an increase of indicators of innovation performance and R&D activities among the beneficiaries. The number of evidence gathered in counterfactual studies is limited. The achievements of particular enterprises translate into change at the macro level. However, there is not enough evidence to ascertain the sustainability of the programmes' effects. Moreover, based on the gathered evidence, it is hard to indicate a direct link between an increase of innovation and higher competitiveness of beneficiaries.

The results suggest that there is a need for clearer conceptualisation of the strategic premises of support, i.e. its programme theories (European Commission, 2016). At both the level of the entire support and that of specific measures, the anticipated effects are not specified sufficiently. The studies made it clear that different effects will be achieved by supporting new enterprises previously inactive in terms of R&D and innovation activity when compared with directing support to businesses with a high potential, which can be defined as having experience, previous investments, and more human capital (Regulski et al., 2017). The examples

<sup>&</sup>lt;sup>3</sup> As shown by a report prepared for the European Commission, the support granted in 2007–2013 helped many businesses cope with the crisis, and, in the short term, this can be assessed positively. It is more difficult, however, to evaluate the long-term effect of support in the context of innovation.

of European innovation economies, i.e. Switzerland and Finland, show that making choices of this type brings tangible effects. In the case of Switzerland, an example might be the large concentration on SMEs, and in the case of Finland, there is sectoral concentration and its creation of domestic advantages (Feldy et al., 2014). For Poland, there is a lack of clarity regarding the strategic direction that subsidies should support, as indicated by the often contradictory recommendations presented in the evaluation reports.

The possibility of achieving the effects envisaged within the programmes heavily depends on the characteristics of the beneficiaries receiving support. These, in turn, are determined by the operation of the project selection system. Various strategies for developing the criteria for accepting the categories of enterprises into the programmes significantly modify the achieved effects of the interventions (Gajewski et al., 2019). At the same time, there are few in-depth analyses of these connections.

Measuring the effects of support concentrates too heavily on the direct results of the support projects and/or opinions of beneficiaries, and refers too little to the long-term effects, as illustrated by indicators of the economic situation. Supporting innovation and R&D activities is not an end in itself; it should lead to the economic growth of enterprises and the economy (and, more broadly, to socioeconomic development). Yet, the effects of support are largely measured at the level of indicators related to the scale of support, i.e. the number of innovations introduced or the increase in R&D expenditure, and, at the macro level, the percentage of enterprises conducting R&D. There is less research referring to the economic effects of provided support, but there are also calls for a greater emphasis on the long-term dimension of effects, as measured by indicators such as a company's operational margin, gross added value per employee, and total factor productivity.

The findings of the current study complement the literature on the innovation of the Polish economy and the effects of the interventions in the programming period of 2007 to 2013. The most important added value of the present study is the contribution to the accumulation of knowledge from diverse sources – in particular, studies based on authors' expert knowledge and empirical research reports. Even if the results refer to Poland, they have broader relevance to all catching-up countries (Krupnik, 2012, Szczygielski et al., 2016).

The main limitations of the current article involve the evaluation reports themselves, including their methodological inadequacies or premature measurement of effects. Specifically, the present article does not compare quantitative results from reports, because the format of the studies and reports does not provide a basis for such comparisons.

The evaluation reports usually did not refer to the premises of supporting innovation, e.g. the most popular linear model of public support, according to which the most effective way of supporting the development of innovation is intensive direct subsidies to enterprises' R&D activity (Godin, 2006). The evaluation reports also did not refer to the alternative models of conducting innovation policy, including systemic (Smits & Kuhlmann, 2004) and mission-oriented ones (Mazzucato, 2016). The role of evaluation reports often did not go beyond summarising the results from rather short lists of the monitored indicators. The situation changed from the new financial perspective, when the reports summarising the realisation of the OP ID aid plans were based on programme theory.

This overview shows that despite the large number of evaluation reports, there remains insufficient knowledge on the effects of interventions. Further actions are needed, and these should be geared towards more studies using rigorous and comparable methodology enabling mutual verification, accumulation, and reflexive analysis of the findings from the reports.

# Acknowledgements

Analyses on which the current article was based were conducted as part of a project commissioned by the Ministry of Innovation and Development, 'Developing a Synthesis of Results of Evaluative Research Concerning Support for Innovation from European Union Funds' and financed within the Technical Assistance Operational Programme 2014–2020. The work was also financed by the Polish National Science Centre (project 2019/35/B/HS5/04238).

# References

- Bienias, S., Gajewski, M., Gapski, T., Kalinowski, H., Kasparek, K., Koniewski, M., Krupnik, S., Kubajek, R., Lisek, K., Matejczuk-Rosa, A., Ośka, M., Regulski, A., Skórska, P., Szczucka, A, Szczucki, J., Trzciński, R., & Weremiuk, A. (2020). Badanie ewaluacyjne pomocy publicznej udzielanej w ramach Rozporzadzenia Ministra Nauki i Szkolnictwa Wyższego w sprawie warunków i trybu udzielania pomocy publicznej i pomocy de minimis za pośrednictwem Narodowego Centrum Badań i Rozwoju [The evaluation of the aid scheme granted under the Regulation of the Minister of Science and Higher Education on the conditions and procedures for granting state aid and de minimis aid through the National Centre for Research and Development]. National Centre for Research and Development in Poland.
- Bartkiewicz, P., & Dębowski, H. (2010). Ocena wpływu polityki spójności na wzrost konkurencyjności i innowacyjności polskich przedsiębiorstw i gospodarki [The impact assessment of the cohesion policy on the increase in competitiveness and innovation of Polish enterprises and the economy]. Institute for Structural Research. Available at: https://ec.europa. eu/regional\_policy/sources/docgener/evaluation/ library/poland/1009\_poland\_innovation\_eval\_pl.pdf (accessed: 06.03.2022).
- Borowczak, A., Dobrowolska, K., Klimczak, T., Ledzion, B., Miller, A., Płoszaj, A., & Popis, Z. (2020). Ewaluacja pierwszych efektów wsparcia PO IR w zakresie prac B+R oraz wdrażania wyników prac B+R realizowanych w przedsiębiorstwach [The evaluation of the first effects of OP IG in terms of R&D activities and implementation of the results of the R&D activities realised in enterprises]. Ministry of Development Funds and Regional Policy. Available at: https://www.poir.gov.pl/media/86273/Raport\_koncowy\_ewaluacja\_B\_R\_WCAG\_final. pdf (accessed: 04.03.2022).

- Bukowski, M., Feldy, M., Gąska, J., Iwanowski, D., Kowalczyk, B., Mazurowska, O., Pastor, K., & Siedlecka, U. (2017). Analiza wybranych działań PO IG na poziomie sektorowym i makroekonomicznym za pomocą modelu przepływu międzygałęziowych [The Analysis of selected OP IE measures at the sectoral and macroeconomic level with the use of the inter-industry flow model]. Polish Agency for Enterprise Development. Available at: https://www.parp.gov.pl/component/publications/ publication/analiza-wybranych-dzialan-po-ig-na--poziomie-sektorowym-i-makroekonomicznym-za--pomoca-modelu-przeplywow-miedzygaleziowych (accessed: 14.03.2022).
- Ciężka, B., Gąska, J., Mazurowska, O., Pastor, K., Siedlecka, U., & Widła-Domaradzki, Ł. (2017). Wpływ polityki spójności 2007–2013 na konkurencyjność przedsiębiorstw i rozwój przedsiębiorczości w Polsce [The impact of the 2007–2013 cohesion policy on the competitiveness of businesses and development of entrepreneurship in Poland]. Ministry of Development. Available at: https://www.ewaluacja.gov.pl/media/45723/RKPrzeds102017.pdf (accessed: 05.05.2022).
- Dutta, S., Lanvin, B., & Wunsch-Vincent S. (2019). *The Global Innovation Index 2019: Creating healthy lives: The future of medical innovation.* Cornell University, INSEAD, & WIPO.
- European Commission. (2016). Small and medium sized enterprises, innovation. ICT Work package 2. Ex post evaluation of Cohesion Policy programmes 2007–2013. European Commission. Available at: https://ec.europa.eu/regional\_policy/ pl/information/publications/evaluations/2016/ small-and-medium-sized-enterprises-innovation-ictfinal-report-work-package-2-ex-post-evaluation-ofcohesion-policy-programmes-2007-2013-focusing--on-the-european-regional-development-fund-erdfand-the-cohesion-fund-cf (accessed: 13.03.2022).
- Feldy, M., Knapińska, A., Młodożeniec, M., Ostraszewski, M., Rószkiewicz M. M., Tomczyńska A., & Warzybok B. (2014). Ewaluacja instrumentów wsparcia B+R w ramach perspektywy finansowej 2007–2013 [The assessment of the R&D support instruments in the financial perspective 2007– 2013]. Ministry of Development and Infrastructure. Available at: https://www.ewaluacja.gov.pl/media/24736/2\_108.pdf (accessed: 12.04.2022).
- Gajewski M., Szczucki, J., & Kusideł, E. (2014). Ocena efektów wsparcia dużych przedsiębiorstw w ramach

realizacji polityki spójności w Polsce [The assessment of the effects of supporting large enterprises in scheme of the cohesion policy in Poland]. Ministry of Development and Infrastructure. Available at: https://www.ewaluacja.gov.pl/media/25056/ Ocena%20efekt%C3%B3w%20wsparcia%20 du%C5%BCych%20przedsi%C4%99biorstw%20 w%20ramach%20realizacji%20polityki%20 sp%C3%B3jno%C5%9Bci%20w%20Polsce.pdf (accessed: 05.05.2022).

- Gajewski M., Szczucki, J., Kubajek, R., Witkowska, J., Pietrzak, B., Kalinowski, H., Matejczuk, A., Ośka, M., Regulski, A., Trzciński, R., Gapski, T., Bienias, S., Lisek, K., Kolczyński, M., Skórska, P., Weremiuk, A., & Szczucka, A. (2019). Ewaluacja systemu wyboru projektów POIR 2014–2020 – ocena wybranych zmian [The evaluation of the IG OP 2014–2020 project selection system: An assessment of selected changes]. Ministry of Investment and Development. Available at: https://www.poir.gov. pl/media/77847/Raport\_ewaluacja\_systemu\_wyboru projektow.pdf (accessed: 07.05.2022).
- Godin, B. (2006). The linear model of innovation: The historical construction of an analytical framework. *Science, Technology, & Human Values, 31*(6), 639–667. https://doi.org/10.1177/0162243906291865
- GUS. (2015). Ustalenie wartości wybranych wskaźników ekonomicznych dla beneficjentów Regionalnych Programów Operacyjnych, Programu Operacyjnego Innowacyjna Gospodarka oraz dla dobranych grup kontrolnych [Determining the value of selected economic indicators for the beneficiaries of Regional Operational Programs, the Innovative Economy Operational Program and for selected control groups]. Central Statistical Office of Poland. Available at: https://stat.gov.pl/files/gfx/portalinformacyjny/pl/defaultstronaopisowa/5807/1/1/ raport\_rpo\_poig.pdf (accessed: 03.04.2022).
- Head, B. W. (2015). Toward more evidence Informed policy making? *Public Administration Review*, 76(3), 472–484. https://doi.org/10.1111/puar.12475
- Imapp. (2017). Efekty Polityki Spójności w Polsce, krajach Grupy Wyszehradzkiej i państwach partnerskich [The effects of the Cohesion Policy in Poland, the countries of the Visegrad Group and partner countries]. Ministry of Development. Available at: https://www.ewaluacja.gov.pl/media/48824/ V4plus4 stronaPL.pdf (accessed: 04.04.2022).
- Koniewski, M., Krupnik, S., Skórska, P., Turek, K., & Geodecki, T. (2015). *Analiza efektów netto wybra*-

nych działań Programu Operacyjnego Innowacyjna Gospodarka 2007–2013, z wykorzystaniem podejścia counterfactual impact evaluation w ramach projektu ewaluacyjnego PARP "BAROMETR INNOWACYJNOŚCI" [The analysis of the net effects of selected measures of the Innovative Economy Operational Program 2007–2013, using the counterfactual impact evaluation approach under the PARP evaluation project "INNOVATION BAROMETER"]. Polish Agency for Enterprise Development. Available at: https://www.parp.gov. pl/images/sites/documents/Raport\_Barometr\_netto\_POIG.pdf (accessed: 03.03.2022).

- Krupnik, S. (2012). Evaluating the social mechanism of investment subsidies using an abductive approach, Evaluation, *18*(4), 466–476.
- Krupnik, S., Geodecki, T., Otręba, A., Szczucka A., & Szklarczyk, D. (2010). *Identyfikacja i ocena* barier w realizacji projektów inwestycyjnych w ramach schematu 2.2. B MRPO [The identification and assessment of barriers to the implementation of investment projects under Scheme 2.2. B MRPO]. Malopolska Voivodeship. Available at: https://www. ewaluacja.gov.pl/media/24410/ggov\_228.pdf (accessed: 05.04.2022).
- Langer, L., Tripney, J., & Gough, D. (2016). The science of using science: Researching the use of research evidence in decision-making. EPPI-Centre, Social Science Research Unit, UCL Institute of Education, University College London.
- Mazzucato, M. (2016). From market fixing to marketcreating: A new framework for innovation policy. Industry and Innovation, 23(2), 140–156. https:// doi.org/10.1080/13662716.2016.1146124.
- Miller, A. (2018). Ocena skuteczności wdrażania Programu Innowacyjny Rozwój przez Narodowe Centrum Badań i Rozwoju [*The impact assessment* of the implementation of the Innovative Development Program by the National Center for Research and Development]. National Centre for Research and Development in Poland. Available at: https://www. ewaluacja.gov.pl/media/62353/Raportkoncowy11. pdf (accessed: 02.03.2022).
- Miller, A., Klimczak, T., Lis, A. Rauzer, A., Piotrowski, S., Pander, W., Weremiuk, A., & Wojnicka-Sycz, E. (2014). Ocena wpływu Programu Operacyjnego Innowacyjna Gospodarka na zwiększenie innowacyjności przedsiębiorstw [*The impact assessment* of the Innovative Economy Operational Program on increasing the innovativeness of enterpris-

*es*]. Ministry of Development and Infrastructure. Available at: https://www.ewaluacja.gov.pl/strony/ badania-i-analizy/archiwum-2004-2015/ocenawplywu-po-ig-na-zwiekszenie-innowacyjnosciprzedsiebiorstw-1/ (accessed: 05.05.2022).

- Nevo, I., & Slonim-Nevo, V. (2011). The myth of evidence-based practice: Towards evidence-informed practice. The British Journal of Social Work, 41(6), 1176–1197. https://doi.org/10.1093/bjsw/bcq149
- OECD. (2015). Government at a glance 2015. OECD Publishing.
- Orechwo, M. (2017). Instruments and institutions for supporting R&D in enterprises. Journal of Modern Science, 34(3), 125–138.
- Parkhurst, J. (2017). The politics of evidence: From evidence-based policy to the good governance of evidence. Routledge, Taylor & Francis Group.
- PARP. (2018). Barometr Innowacyjności. Program Operacyjny Inteligentny Rozwój, Raport on-going, wyniki I rundy badania [*Innovation Barometer: Smart Growth Operational Program, on-going report, results of the first round of the study*]. Polish Agency for Enterprise Development. Available at: https://www.parp.gov.pl/images/Badania/BI\_rapot\_on\_going\_POIR\_I\_runda\_2018\_20190214. pdf (accessed: 05.04.2022).
- PARP. (2020a). Ewaluacja mid-term projektu pozakonkursowego inno\_LAB Centrum analiz i pilotaży nowych instrumentów [*The mid-term evaluation* of the inno\_LAB project Center for analyzes and pilots of new instruments]. Polish Agency for Enterprise Development. Available at: https://www.parp.gov. pl/storage/publications/pdf/raport\_inno\_Lab.pdf (accessed: 05.03.2022).
- PARP. (2020b). Ewaluacja pomocy publicznej PARP w ramach Programu Operacyjnego Inteligentny Rozwój, 2014–2020 [*The evaluation of the PARP aid scheme within the framework of the Operational Programme Smart Growth 2014–2020*]. Polish Agency for Enterprise Development.

- Rantala, L., Sarkki, S., Karjalainen, T. P., & Rossi, P. M. (2017). How to earn the status of honest broker? Scientists' roles facilitating the political water supply decision-making process. *Society* & *Natural Resources*, 30(10), 1288–1298. https:// doi.org/10.1080/08941920.2017.1331484.
- Regulski, A., Ośka, M., Antosiewicz, M., Bartkiewicz, P., Frankowski, J., Kalinowski, H., & Witajewski-Baltvilks, J. (2017). Ewaluacja ex-post wpływu funduszy unijnych w ramach perspektywy finansowej 2007–2013 na podstawowe wskaźniki innowacyjności i działalności B+R [*The ex-post* evaluation of the EU funds impact under the 2007-2013 financial perspective, based on indicators of innovation and R&D activity]. Ministry of Development. Available at: https://www.poir. gov.pl/media/45568/MR\_BR\_raport\_koncowy\_20. pdf (accessed: 04.05.2022).
- Smits, R., & Kuhlman, S. (2004). The rise of systemic instruments in innovation policy. International Journal of Foresight and Innovation Policy, 1, 4–32.
- Szczygielski K., Grabowski W., & Pamukcu M. T. (2017). Does government support for private innovation matter? Firm-level evidence from two catching-up countries. Research Policy, 46(1), 219–237.
- Trzciński, R. (2013). Barometr Innowacyjności. Analiza efektów netto wybranych Działań PO IG skierowanych do przedsiębiorstw, z wykorzystaniem podejścia counterfactual impact evaluation [Innovation Barometer: Analysis of the net effects of selected OP IE measures addressed to enterprises, using the counterfactual impact evaluation approach]. Polish Agency for Enterprise Development. Available at: https://www.ewaluacja.gov.pl/media/42600/19744. pdf (accessed: 04.03.2022).
- Urahn, S. K., et al. (2014). Evidence-based policymaking: A guide for effective government. The Pew-MacArthur Results First Initiative Report, The Pew Charitable Trusts, John D. and Catherine T. MacArthur Foundation.

Stanisław Wieteska, Maria Węgrzyn, Małgorzata Jeziorska

## Sleep Disorders as a Safety Issue in Transport and Communication Largely Not Appraised by National Health Policies

#### Abstract

*Objectives*: The objective of this article is to present the issue of sleepiness, sleep disorders, and their impact on traffic safety in Poland. The paper reviews published studies and data concerning the causes of driver fatigue and the scale of the sleep-related road accident problem.

Research Design & Methods: This paper uses an extensive analysis and study of literature, classification, and scientific description,

*Findings*: Road traffic accidents represent a huge public health concern, which needs to be tackled by a multi-disciplinary approach. Related deaths and disabilities have social and financial consequences, and are a real public health challenge. Sleep disorders have a tangible and empirically-proven effect on road safety. Effective identification, organised response, and therapy of this type of disorders should be implemented.

*Implications / Recommendations*: The realisation of healthcare needs and services provided by the state can only be obtained under conditions of properly organised and operationally-effective economic, political, and social systems. A proper understanding of mechanisms and factors responsible for hazardous road behaviour may be of practical use for many actors involved, including public services, the healthcare sector, road safety services, road and vehicle engineers, and the financial sector, primarily insurance companies.

*Contribution / Value Added*: As a result of the analysis, the synthesis of the theoretical findings on the road safety was presented. The certain consequences for national health policies were mentioned. This paper may serve as a basis for establishing subsequent empirical studies.

Keywords: sleep disorders, drowsy driving, road safety, economic consequences of road traffic accidents, health policy

Article classification: research article

JEL classification: H5, H8, M21, G22

**Stanisław Wieteska** – Professor emeritus of the University of Lodz, Faculty of Economics and Sociology, University of Lodz; 3/5 POW Street, 90-255 Lodz; ORCID: 0000-0002-6578-9861. **Maria Węgrzyn** – Wrocław University of Economics and Business; 118-120 Komandorska Street, 53-345 Wrocław; e-mail: maria.wegrzyn@ue.wroc.pl; ORCID: 0000-0002-5063-9238. **Małgorzata Jeziorska** – Faculty of Economics and Sociology, University of Lodz; 3/5 POW Street, 90-255 Lodz; e-mail: malgorzata.jeziorska@uni.lodz.pl; ORCID: 0000-0001-8364-7106.

#### Introduction

The realisation of healthcare needs and services provided by the state can only be obtained under conditions of properly organised and operationallyeffective economic, political, and social systems. Public health care, as an integral element of such systems, reflects social policies of the state and, in effect, decides upon the quality of public health in populations covered by the service. Three major directions of social policy involvement can be observed in this respect: the organisation and operation of the public healthcare system, lifestyle concerns, and the protection of natural environment.

As any other national system, public health care system is designed to respond to healthcare needs of specific populations, while the factual character and extent of such needs - confirmed by analyses of consumer behaviours in relation to the quality and quantity of rendered services - is determined by a wealth of other elements, particularly by the availability of resources held by the system as well as the system's capacity for accurate identification of such needs. Not all of them are properly reflected despite their confirmed negative effect on public health, as attested by the lack of policy measures for the identification and treatment of sleep disorders among drivers and machine-operators. Sleep disorders are confirmed to have a major effect on road accidents and should be regarded as a major cause of deaths and crippling injuries.

Sleep is a basic physiological need; humans devote almost a third of their lives in pursuit of it. General knowledge of the importance of sleep and of its role in maintaining good health and mental condition is still inadequate, as is the knowledge of methods used in therapy of sleep disorders (Wichniak & Poradowska, 2017). For this reason, causes and consequences of sleep disorders have become a major topic of public interest in many societies. Within the last few decades, sleep medicine has evolved to a status of a distinct medical subspecialty. Proper balance between sleep and daily activities is a determinant of the quality of life and occupational practice. Hence, good understanding of the sleep-related mechanisms and factors that may affect human behaviour, including road behaviour in drivers, is of paramount importance in many disciplines, such as medical science, psychology, and engineering (Biernacki, 2017).

Most of the sleep-related traffic accidents occur at standard driving conditions, often on straight sections of the road. Under the Polish law, these are described by official causes as falling asleep at the wheel or driver fatigue. Under the formal structure of classification, falling asleep at the wheel ranks at the rear of the list of major causes of road accidents. It must be noted, however, that drivers are often incapable of predicting and foretelling the incidence of sudden spells of tiredness or falling asleep while driving. Falling asleep at the wheel poses an extreme danger for all road-users, with the additional risk of major material damage, and often deaths.

The objective of this article is to present the issue of sleepiness, sleep disorders, and their impact on traffic safety in Poland. Drowsy driving is dangerous and leads to thousands of deaths and injuries on Polish roads. This paper reviews published studies and data concerning the causes of driver fatigue and the scale of the sleep-related road accident problem. Research methods used in this article include the analysis of official documents, current scientific literature, and secondary data.

The article consists of five parts. The first part is an introduction. The second one presents literature review and theory development of sleep disorders, sleep deprivation, and the impact of sleep disorders on road safety. In the next part, the material and the methods are presented. Discussion on road safety in Poland is investigated in the fourth section. Concluding remarks and recommendations for further research and public health policies are presented in the fifth part of the article.

# Sleepiness, sleep deprivation, and sleep disorders

Sleep is a complicated physiological phenomenon, essential for a normal, healthy functioning of the human body. It is not a matter of choice; it is essential and inevitable. Sleep deprivation impairs cognitive functions, and its long-term deficiency can even lead to death. Sleep cycle can be divided into two basic categories: non-rapid eye movement (NREM) and rapid eye movement (REM). During the NREM period, four separate stages can be distinguished. The final stage of non-REM sleep is called 'deep sleep'. Maintaining the proper architecture of sleep, and especially the presence of 'deep sleep', is necessary for the proper functioning of the body (Pływaczewski et al., 2013). Experts recommend that adults should sleep for 7-9 hours per day to promote optimal health (Watson et al., 2015; Hirshkowitz et al., 2015). Nowadays, many people sacrifice sleep in favour of other activities during the day. They borrow from sleep time to meet the demands of everyday life (Barnes et al., 2012). The loss or disruption of sleep may lead to sleepiness during periods of activity. According to the American Academy of Sleep Medicine, sleep deprivation occurs when an "individual fails to get enough sleep". Among the main causes of chronic sleep deprivation, those which stand out are medical problems, work hours, and other personal obligations restricting sleep time (American Academy of Sleep Medicine, 2008). Sleep deprivation can affect both women and men. They are spotted in mature people, but also in children and adolescents. After poor sleep, the human body can display a range of negative conditions, including cardiovascular disorders, shifts in body temperature, decreased concentration, impaired perception, memory lapses. Malaise is typically present, and the ability to perform is decreased in terms of both accuracy and speed. Every effort is exhaustive and serves as cause for irritation.

The first major classification of sleep disorders, the Diagnostic Classification of Sleep and Arousal Disorders, was published in 1979. It was thoroughly updated in 1997 (ICSD-1, published by the American Academy of Sleep Medicine). The second edition of that classification (ICSD-2) was published in 2005, and the third one (ICSD-3) was released in 2014.

The effective development of sleep studies and the apparent need for this type of involvement has also been reflected in Poland, stimulating a rapid increase of institutions and other bodies active in the field of sleep disorder research. The Polish Sleep Research Society was established in 1994 and the Sleep Apnea Syndrome Section of the Polish Physiopneumological Society was founded in 1996.

The International Classification of Sleep Disorders (ICSD-3) includes seven major categories of sleep dysfunctions (Sateia, 2014):

- insomnia;
- sleep-related breathing disorders;
- central disorders of hypersomnolence;
- CRSWDs;
- sleep related movement disorders;
- parasomnias;
- other sleep disorders.

Insomnia is defined as "a complaint of trouble initiating or maintaining sleep which is associated with daytime consequences and is not attributable to environmental circumstances or inadequate opportunity to sleep" (Sateia et al., 2017). The ICSD-3 classifies insomnia into acute or chronic based on the criterion of duration. When the disorder lasts at least 3 months and at least three times per week, it is identified as chronic (Sateia, 2014). Otherwise, it is considered as acute. Acute insomnia is not a medical condition, but a physiological reaction (Szelenberg, 2003).

Depending on the clinical picture or pathological mechanism, insomnia can be divided into the following subtypes (Avidan & Neubauer, 2017):

- psychophysiological insomnia (behaviourallybased);
- adjustment insomnia (occurs in temporal association with an identifiable stressor);
- paradoxical insomnia (reflects a complaint of severe sleep disturbance in the absence

of corroborative and objectively-verifiable indicators of the degree of sleep disturbance claimed by the patient);

- idiopathic insomnia (unrelated to an identifiable precipitant that begins insidiously in childhood and continues chronically in an unremitting pattern into adulthood);
- insomnia due to inadequate sleep hygiene;
- insomnia due to a mental disorder and insomnia due to a medical condition;
- insomnia due to a drug or substance.

A thorough overview of insomnia from a medical perspective can be found in Michael J. Sateia and Peter D. Nowell's (2004) expansive study of causes and effects of insomnia, complete with evaluation of therapeutic methods.

The development of research on the issue of insomnia has led to the conclusion that circadian rhythms are very important for the sleep quality. Circadian rhythm is one of the primary mechanisms influencing the length, quality, and time of sleep. Long persistence of these dysfunctions leads to a severe impairment in physical health and social functioning (Wichniak et al., 2017a).

Human bodies operate on the basis of an internal biological clock, which regulates the course of many physiological processes. We talk about circadian rhythm sleep-wake disorders (CRSWD) when there is a significant failure to adjust the patient's internal rhythm to social expectations. The origins of CRSWD may be endogenous or exogenous. Endogenous disorders include:

- delayed sleep-wake phase disorder;
- advanced sleep-wake phase disorder;
- non-24-hour sleep-wake rhythm disorder;
- irregular sleep-wake rhythm disorder.

Among exogenous disorders, the following ones are distinguished (Wichniak et al., 2017b; Sateia, 2014):

- dysfunction associated with shift work;
- jet lag disorder.

A large group of disorders are also those associated with the process of breathing during sleep. According to ICSD-3, sleep-related breathing disorders are divided into four sections: obstructive sleep apnea (OSA), central sleep apnea (CSA) syndromes, sleep-related hypoventilation disorders, and sleep-related hypoxemia disorders. Breathing disorders during sleep often coexist with lung diseases (Sateia, 2014). On average, bouts of sleep apnea and periods of shallow breathing last ca. 10 seconds, and the intensity of this disorder is measured by their per-hour incidence.

The most common sleep apnea is the obstructive sleep apnea (OSA). The OSA is a chronic disorder characterised by repetitive episodes of nocturnal breathing cessation due to upper airway collapse. It is characterised by repetitive episodes of complete or partial collapse of the upper airway during sleep, with a consequent cessation or reduction

Nocturnal symptoms	Waking hours symptoms
<ul> <li>loud snoring;</li> </ul>	<ul> <li>doziness and sleepiness at daytime;</li> </ul>
<ul> <li>episodes of sleep apnea observed by others;</li> </ul>	<ul> <li>falling asleep during monotonic activities;</li> </ul>
<ul> <li>sleep fragmentation (frequent wake-ups);</li> </ul>	<ul> <li>waking up with a feeling of tiredness and fatigue;</li> </ul>
- profuse sweating;	<ul> <li>the sense of inadequate sleep;</li> </ul>
- muscle (movement) agitation;	<ul> <li>morning headaches;</li> </ul>
- periods of dyspnea (shortness of breath) during sleep;	<ul> <li>irritability;</li> </ul>
- stenocardia (angina pectoris).	<ul> <li>disturbed concentration;</li> </ul>
	<ul> <li>potency disorders.</li> </ul>

Source: Own elaboration based on: Kiciński et al., 2012; Taźbirek et al., 2016.

of the airflow. The OSA is associated with a significant cardiovascular morbidity and mortality, and causes excessive daytime somnolence (Spicuzza et al., 2015). Table 1 presents a list of the most typical OSA symptoms.

The OSA is important from the perspective of public health; people with an untreated OSA have higher rates of health care use. Among individuals with an OSA, unintentional injury rates are also higher. Higher rates of motor vehicle collisions and work-related injuries add to the public health burden (Semelka et al., 2016). The 'sleep architecture' of persons afflicted by an OSA is so unstable that it affects the natural rhythm of their waking hours. This, in turn, further affects their concentration and performance.

The impact of various sleep disorders on the number of traffic accidents was confirmed by numerous studies. Effective treatment of patients with these conditions can reduce the road mishaps.

Two groups of fatigue causes can be identified:

- task-related (lack of sleep or poor sleep, timeon-task, monotonous tasks);
- individual characteristics including medical conditions (internal body clock, age, gander). Among the symptoms of fatigue, the following

can be distinguished (European Commission, 2018):

- muscle fatigue related to static load;
- sensory fatigue, or decreased perception and reaction time;
- mental fatigue, or a limitation of cognitive functions;
- emotional fatigue produced by stress factors.

Almost 30% of drivers experienced almost falling asleep at the wheel (Maycock, 1996). Nearly 19% of the subjects experienced near misses due to falling asleep at the wheel and 1,3% experienced an accident (Powell et al., 2007). Surveys reveal that excessive sleepiness is involved as a contributing factor in 5–7% of all road accidents (17% when accidents involved fatalities) (Tefft, 2012). The traffic accident risk with respect to a reference population varies between two- and seven-fold in different surveys (sometimes the results differ because of methodology) (Lyznicki et al., 1998; McNicholas & Rodenstein, 2015). Effective treatment of sleep disorders can result in substantial decreases of the motor-vehicle accident risk. This again seems to emphasise the urgency of the proper diagnostic and therapeutic procedures to reduce potential public safety risks. An effective therapy seems fairly obvious and rational not only for the afflicted people, but also for other participants of the economic and social life.

The high prevalence of undiagnosed sleep disorders requires an easy-to-use screening tool. One of the effective and reliable tools can be the Epworth Sleepiness Scale (ESS) (Johns, 1997). This scale measures the ease of falling asleep. The respondent answers the questions of how high the probability of falling asleep in specific situations has recently been. The ESS asks the respondent to rate on a 4-point scale their usual chances of having dozed off or fallen asleep while:

- sitting or reading;
- watching TV;
- sitting inactively in public places (e.g. theatre, cinema, meeting);
- riding a car (as a passenger);
- lying down to rest in the afternoon when circumstances permit;
- sitting and talking to someone;
- sitting quietly after a lunch without alcohol;
- being stuck at a traffic jam.

A double-digit value should be alarming. Another simple screening tool is the STOP-Bang questionnaire (Chung et al., 2008). The questionnaire includes eight yes/no questions related to snoring, tiredness, observed breathing cessation, high blood pressure, BMI, age, neck circumference, and gender. After identifying a subset of the population at risk, additional testing should be performed.

The argument of being diagnosed with a sleep disorder cannot be brought forward as a reason for precluding the patient from vehicle use. It should only serve to persuade the patient to seek assistance from the specialists in order to obtain help in limiting the negative effects of this condition. However, diagnoses of sleep disorders in Poland are fairly infrequent, as patients themselves rarely perceive their sleep disorders as a medical condition. Patients are not sufficiently aware of the relationship between sleepiness, sleep deprivation, sleep disorders, and road traffic accident risk.

#### Material and methods

To conduct the analyses, the data and information from the Polish Central Police Headquarters, the Registration System of Accidents and Collisions (SEWiK), and the Polish Border Guard Headquarters [Pol. *Komenda Główna Straży Granicznej*] were used. Also, aggregate information published by the National Road Safety Council about the valuation of the costs of accidents and collisions on the road network in Poland was analysed (Krajowa Rada Bezpieczeństwa Ruchu Drogowego, 2019). First, the raw data was described, grouped, and tabulated. Then, the analysis focused on the types of road events and circumstances of accidents, with particular emphasis on drowsy driving.

#### Road traffic accidents in Poland

Road traffic accidents represent a huge public health concern, which needs to be tackled by a multidisciplinary approach. Related deaths and disabilities have social and financial consequences, and are a real public heath challenge (Gopalakrishnan, 2012). The seriousness for public health and safety has been pointed out by numerous surveys.

For years, the number of motor vehicles registered in Poland has been growing systematically. In 2019, almost 31.4 million motor vehicles were registered. According to the data of the Polish Border Guard Headquarters, in 2019, 10.9 million vehicles entered Poland through the external borders of the European Union, including 8.7 million passenger cars (Komenda Główna Policji, Biuro Ruchu Drogowego, 2020).

Since 2014 till 2019, the number of vehicles has increased by 18,6% and the number of all road accidents, including those involving property damage only, has increased by 26,8%.

Fortunately, regarding the past six years, the total number of road accidents resulting in death or injury decreased by 13,3%. Figure 2. presents aggregate evolution in the number of road traffic accidents registered by the police.

Since 2014, a systematic decrease in the number of injured persons in road accidents could be noticed. In the years 2014–2017, a very encouraging decrease in the number of fatalities was also observed. Unfortunately, in 2018 and 2019, the number of fatalities increased.

A fatal victim of an accident is a person who died during or within 30 days from the date of the accident. The death must be a result of injuries sustained during the accident. A seriously injured person is a person who has suffered injuries in the form of blindness, loss of hearing, loss

Table 2. Number of registered motor vehicles in Poland

Year	Motor vehicles		Including	
	-	cars	lorries	motorcycles
2014	26,472,274	20,003,863	3,037,427	1,189,527
2015	27,409,106	20,723,423	3,098,376	1,272,333
2016	28,601,037	21,675,388	3,179,655	1,355,625
2017	29,634,928	22,503,579	3,248,538	1,427,115
2018	30,800,790	23,429,016	3,338,166	1,502,888
2019	31,388,643	23,874,531	3,387,536	1,553,370

Source: Komenda Główna Policji, Biuro Ruchu Drogowego, 2020, p. 5.

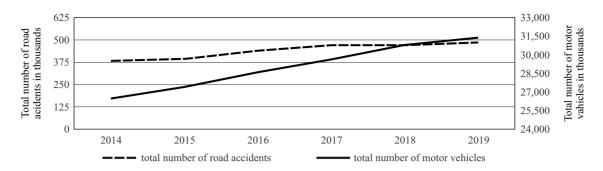


Figure 1. Vehicle fleet and road traffic accidents, 2014-2019

Source: Own calculations based on the SEWiK data available at http://sewik.pl; Komenda Główna Policji, Biuro Ruchu Dro-gowego, 2020, p. 5.

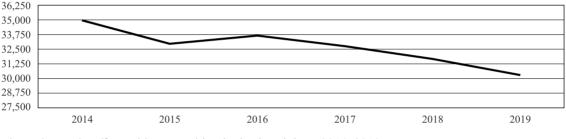


Figure 2. Road traffic accidents resulting in death or injury, 2014–2019 Source: Own calculations based on the SEWiK data available at http://sewik.pl.

of speech, loss of the ability to procreate, another severe disability, a severe incurable disease or a long-term life-threatening illness, a permanent mental illness, complete substantial permanent inability to work, permanent and significant body disfigurement or deformation, other injuries causing disturbance of the functioning of a bodily organ, or a health disorder lasting longer than 7 days (Komendant Główny Policji, 2015).

It can be stated that in 2019, per 100 roads accidents, there were approximately: 10 fatalities, 35 seriously injured people, and 82 moderately and lightly injured people. In comparison with 2018, the number of fatalities increased by 2%, the number of seriously injured persons decreased by 3%, and the number of moderately and lightly injured persons decreased by 6%.

According to the Registration System of Accidents and Collisions, the vast majority of road accidents is caused by human error. The most common causes of motor vehicle accidents include:

- failure to give the right of way;
- failure to maintain safe distance between vehicles;
- maladjustment of speed to road traffic conditions;
- incorrect overtaking;
- incorrect behaviour towards a pedestrian.

Among the circumstances which lead to road accidents, also pointed out are fatigue and falling asleep. Driving is a complex task involving cognitive, perceptual, motor, and decision-making skills. Sleep disorders can lead to increased inattention, reduced efficiency, and slower reaction (George,

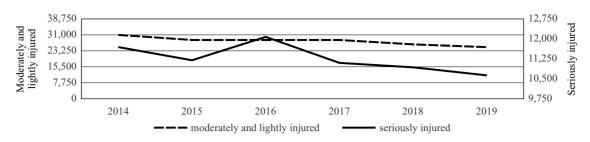


Figure 3. Fatalities and injuries in road accidents, 2014–2019 Source: Own calculations based on the SEWiK data available at http://sewik.pl.

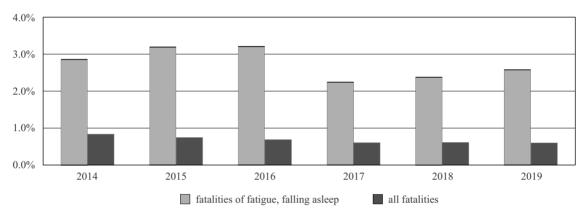


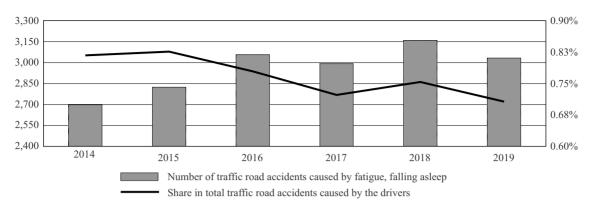
Figure 4. Fatalities and injuries in road accidents, 2014–2019 Source: Own calculations based on the SEWiK data available at http://sewik.pl.

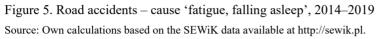
2004). Sleepiness reduces reaction time and has negative influence on vigilance and concentration. The ability to perform attention-based activities is impaired and the quality of decision-making is affected. Sleep-related road-traffic accidents peak between 2:00 a.m. and 6:00 am, and in the midafternoon between 3:00 p.m. and 4:00 p.m., which is mainly due to circadian rhythms. An increased awareness of the relationship between sleepiness and motor vehicle crashes will promote health and safety on the roads (Lyznicki et al., 1998).

According to the police statistics, the 'fatigue, falling asleep' cause accounts for almost 1% of all reported road traffic accidents caused by drivers. However, it should be mentioned that the police data is known to understate the number and the seriousness of accidents caused by fatigued drivers (Jamroz & Smolarek, 2012). Road accidents usually do not have a single cause; they are results of several mixed conditions. In the police statistics, only one cause is assigned to each accident – the one which seems to be the main one according to the police officer handling the case.

The share of fatalities caused by fatigued drivers is fourfold greater than in the total traffic road accidents. The share of the injuries in 'fatigue, falling asleep' accidents is three times higher than in the group of all traffic road accidents.

The fatalities in accidents caused by fatigued and falling-asleep drivers constitute approx. 3% of all fatalities, and the injuries constitute approx. 2% of all injured victims of road accidents.





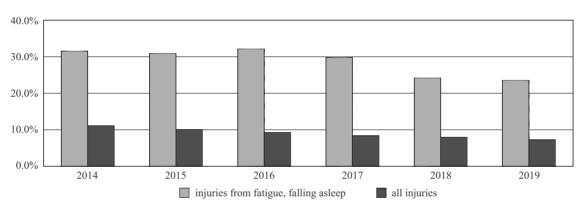


Figure 6. Share of fatalities and injured in the total road accidents caused by the drivers, 2014–2019 Source: Own calculations based on the SEWiK data available at http://sewik.pl.

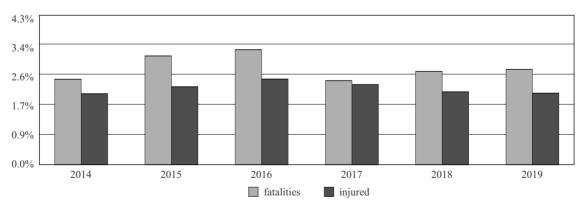


Figure 7. Share of fatalities and injured caused by 'fatigued, falling-asleep' drivers in the total number of fatalities and injured, 2014–2019

Source: Own calculations based on the SEWiK data available at http://sewik.pl.

These indicators have remained at a similar level in the past few years.

The aforementioned data shows that improving process of traffic safety in Poland should focus not only on traffic discipline and infrastructure safety, but also on encouraging road-users to address the causes of sleep deprivation. This may help to reduce the total number of fatalities and serious injuries on the roads in Poland. Proper management of sleep disorders will benefit not only the single road-user, but will also provide widespread benefits to the society as a whole (Morsy et al., 2019). The identification of, and access to, effective treatment may reduce health and societal consequences.

A very important aspect comes in the form of the economic consequences of road traffic accidents in terms of both healthcare resources and lost productivity. The total cost of road accidents is composed of two major parts: direct and indirect costs. Direct costs are classified into:

- healthcare costs related to the period of the patient's inability to work;
- transportation and emergency costs;
- property damage;
- insurance administration and reimbursements;
- police and justice system costs.

Lost GDP and unrealised consumption due to absence from work and premature death constitutes the indirect cost of road traffic accidents (Krajowa Rada Bezpieczeństwa Ruchu Drogowego, 2019, p. 22; García-Altés & Pérez, 2007).

In Poland, road accident losses in 2018 amounted to 2.7% of GDP, including the cost of road accidents resulting in death or injury – 2.1% of GDP. The social costs were estimated at around 56,6 billion PLN (costs of accidents resulting in death or injury amounted to 44,9 billion PLN and accidents involving property damage only to 11,7 billion PLN) (Krajowa Rada Bezpieczeństwa Ruchu Drogowego, 2019, p. 3). It is a very significant cost for the society, and it could be reduced by addressing drowsy driving in a widespread and organised manner.

# Concluding remarks and contribution to the discussion

Three major directions of social policy involvment can be observed with respect to the formulation of state social policies: the organisation and operation of the public healthcare system, lifestyle concerns, and the protection of natural environment. Each of these elements should be properly employed in response to any identified risk dangers to public health.

The epidemiology of sleep deprivation has intensified due to dynamic changes taking place in the society. Nowadays, many people sacrifice sleep in favour of other activities during the day. They borrow from sleep time to meet the demands of everyday life (Barnes et al., 2012). It has serious consequences for the quality of life as well as for health and the public safety.

According to the police statistics, the 'fatigue, falling asleep' cause accounts for almost 1% of all reported road traffic accidents caused by drivers. Determining the real impact is difficult, since there is no definitive way to figure out whether an accident is caused by drowsiness or by anything else. Thus, drowsy driving accidents are underreported. Studies show that drowsiness is rarely investigated by police officers as a potential cause of the accident. This results in a paucity of data on this issue (McNicholas & Rodenstein, 2015). To address the drowsy driving, it is crucial to understand the prevalence of the problem and to determine who is at the greatest risk (Higgins et al., 2017). The effect of prevention efforts would be far more satisfactory then.

Sleep-related accidents can have complex causes. It is, therefore, important to address the issue from various approaches, including providing professional help to individuals suffering from sleep disorders. Thus, it is very important to ensure that road-users understand the risk, are able to recognise the symptoms, and are familiar with countermeasures (Report of the Obstructive Sleep Apnoea Working Group, 2013). This will lead to better decisions about driving behaviours. Raising the public awareness can contribute to preventing potentially hazardous consequences. Road-users should have a chance to change their sleep habits. In most cases, sleep disorders can be reduced to a non-problematic level with proper treatment (Komada et al., 2013). Therefore, it is significant to encourage afflicted persons to seek professional help. Early diagnosis and prompt treatment should be promoted.

Of crucial importance in this issue is establishing clear policies to motivate changes in the behaviour. Such policies can take the form of national laws or administrative regulations. Promoting the development and deployment of drowsy driving warning systems in the vehicles and in the road infrastructure is not without significance.

Effective methods have been developed to change behaviour related to speed choices, drinking alcohol and driving, seatbelt wearing, child restraints use, and the use of hand-held mobile phones while driving. Now it is time to address drowsy driving in a widespread and organised manner. The coordinated effort involving traffic safety and sleep science communities is needed (Higgins et al., 2017). It seems that proper coordination of such actions with formal elements of national healthcare policies is more than advisable and is undeniably in line with public expectations as a source of tangible public health and security improvements and benefits.

It should be emphasised that this issue requires more in-depth analyses, but even the simplest actions can prove to be valuable. In the light of the above, the need for active involvement from national health policymakers in the studied context is of crucial importance for public safety.

#### References

- American Academy of Sleep Medicine (2008). *Sleep Deprivation*. Available at: https://aasm.org/re-sources/factsheets/sleepdeprivation.pdf (accessed: 07.03.2022).
- Avidan, A. Y., & Neubauer, D. N. (2017). Chronic Insomnia Disorder. *Continuum Lifelong Learning in Neurology*, 23(4), 1064–1092.

- Barnes, C. M., Wagner, D. T., & Ghumman, S. (2012). Borrowing from Sleep to Pay Work and Family: Expanding Time-Based Conflict to the Broader Nonwork Domain. *Personnel Psychology*, 65(4), 789–819.
- Biernacki, M. (2017). Modele teoretyczne wyjaśniające zachowanie kierowców na drodze. *Medycyna pracy*, 3, 401–411.
- Chung, F., Yegneswaran, B., Liao, P., Chung, S. A., Vairavanathan, S., Islam, S., Khajehdehi, A., & Shapiro, C. M. (2008). STOP questionnaire: A tool to screen patients for obstructive sleep apnea. *Anesthesiology*, *108*(5), 812–821.
- European Commission (2018). *Fatigue*. Directorate General for Transport. Available at: https://roadsafety.transport.ec.europa.eu/system/files/2021-07/ ersosynthesis2018-fatigue-summary.pdf (accessed: 07.05.2022).
- García-Altés, A., & Pérez, C. (2007). The economic cost of road traffic crashes in an urban setting. *Injury Prevention*, 13, 65–68.
- George, C. F. (2004). Sleep. 5: Driving and automobile crashes in patients with obstructive sleep apnoea/ hypopnoea syndrome. *Thorax*, *59*(9), 804–807.
- Gopalakrishnan, S. (2012). A public health perspective of road traffic accidents. *Journal of Family Medicine and Primary Care*, 1(2), 144–150.
- Higgins, J. S., Michael, J., Austin, R., Åkerstedt, T., van Dongen, H. P. A., Watson, N., Czeisler, C., Pack, A. I., & Rosekind, M. R. (2017). Asleep at the wheel: The road to addressing drowsy driving. *Sleep*, 40(2). https://doi.org/10.1093/sleep/ zsx001
- Hirshkowitz, M., Whiton, K., Albert, S. M., Alessi, C., Bruni, O., DonCarlos, L., Hazen, N., Herman, J., Katz, E. S., Kheirandish-Gozal, L., Neubauer, D. N., O'Donnell, A. E., Ohayon, M., Peever, J., Rawding, R., Sachdeva, R. C., Setters, B., Vitiello, M. V., Ware, J. C., & Adams Hillard, P. J. (2015). National Sleep Foundation's sleep time duration recommendations: Methodology and results summary. *Sleep Health*, 1(1), 40–43.
- Jamroż, J., & Smolarek, L. (2012). Analiza wpływu zmęczenia kierowców na ryzyko wypadków na drogach krajowych. *Drogownictwo*, 4, 121–126.
- Johns, M. (1997). https://epworthsleepinessscale.com/ about-the-ess/.
- Kiciński, P., Zakrzewski, M., Dybała, A., Zubilewicz, R., Mosiewicz, J., & Jaroszyński, A. (2012). Obturacyjny

bezdech senny – zasady diagnostyki i leczenia. *Forum Medycyny Rodzinnej*, 6(5), 228–235.

- Komada, Y., Asaoka, S., Abe, T., & Inoue, Y. (2013). Short sleep duration, sleep disorders, and traffic accidents. *IATSS Research*, 37, 1–7.
- Komenda Główna Policji, Biuro Ruchu Drogowego (2020). Wypadki drogowe w Polsce w 2019 roku.
- Komendant Główny Policji (2015). Zarządzenie Nr 31 Komendanta Głównego Policji z dnia 22 października 2015 r. w sprawie metod i form prowadzenia przez Policję statystyki zdarzeń drogowych.
- Krajowa Rada Bezpieczeństwa Ruchu Drogowego (2019). Wycena kosztów wypadków i kolizji drogowych na sieci dróg w Polsce na koniec roku 2018, z wyodrębnieniem średnich kosztów społecznoekonomicznych wypadków na transeuropejskiej sieci transportowej.
- Lyznicki, J. M., Doege, T. C., Davis, R. M., & Williams, M. A. (1998). Sleepiness, driving, and motor vehicle crashes. *Journal of the American Medical Association*, 279(23), 1908–1913.
- Maycock, G. (1996). Sleepiness and driving: The experience of UK car drivers. *Journal of Sleep Research*, *5*, 229–237.
- McNicholas W.T., & Rodenstein D. (2015). Sleep apnoea and driving risk: The need for regulation. *European Respiratory Review*, 24, 602–606.
- Morsy, N. E., Farrag, N. S., Zaki, N. F. W., Badawy,
  A. Y., Abdelhafez, S. A., El-Gilany, A. H., El
  Shafey, M. M., Pandi-Perumal, S. R., Spence, D. W.,
  & Bahammam, A. S. (2019). Obstructive sleep
  apnea: Personal, societal, public health, and legal
  implications. *Reviews on Environmental Health*, 34, 153–169.
- Powell, N. B., Schechtman, K. B., Riley, R. W., Guilleminault, C., Chiang, R. P. Y., & Weaver, E. M. (2007). Sleepy driver near-misses may predict accident risks. *Sleep*, 30(3), 331–342.
- Report of the Obstructive Sleep Apnoea Working Group (2013). New Standards and Guidelines for Drivers with Obstructive Sleep Apnoea syndrome.
- Sateia, M. J. (2014), International classification of sleep disorders-third edition: Highlights and modifications. *Chest*, 146(5), 1387–1394.

Sateia, M. J., & Nowell, P. D. (2004). Insomnia. *Lancet*, 364(9449), 1959–1973.

Sateia, M. J., Buysse, D. J., Krystal, A. D., Neubauer, D. N., & Heald, J. L. (2017). Clinical Practice Guideline for the Pharmacologic Treatment of Chronic Insomnia in Adults: An American Academy of Sleep Medicine Clinical Practice Guideline. *Journal of Clinical Sleep Medicine*, 13(2), 307–349.

- Semelka, M., Wilson, J., & Floyd, R. (2016). Diagnosis and Treatment of Obstructive Sleep Apnea in Adults. *American Family Physician*, 94(5), 355–360.
- Spicuzza, L., Caruso, D., & Di Maria, G. (2015). Obstructive sleep apnoea syndrome and its management. *Therapeutic Advances in Chronic Disease*, 6(5), 273–285.
- Szelenberg, W. (2003). Standardy leczenia bezsenności Polskiego Towarzystwa Badań nad Snem. Farmakoterapia w Psychiatrii i Neurologii, 1, 5–16.
- Taźbirek, M., Pierzchała, W., Ograbek-Król, M., Skoczyński, S., & Barczyk, A. (2016). Zaburzenia oddychania podczas snu. Śląski Uniwersytet Medyczny w Katowicach.
- Tefft, B. C. (2012). Prevalence of motor vehicle crashes involving drowsy drivers, United States, 1999– 2008. Accident Analysis & Prevention, 45, 180–186.
- Watson, N. F., Badr, M. S., Belenky, G., Bliwise, D. L., Buxton, O. M., Buysse, D., Dinges, D. F., Gangwisch, J., Grandner, M. A., Kushida, C., Malhotra, R. K., Martin, J. L., Patel, S. R., Quan, S. F., & Tasali, E. (2015). Recommended Amount of Sleep for a Healthy Adult: A Joint Consensus Statement of the American Academy of Sleep Medicine and Sleep Research Society. *Sleep*, 38(6), 843–844.
- Wichniak, A., & Poradowska, E. (2017). Zdrowy sen. Medycyna praktyczna – psychiatria, 3, 20–26.
- Wichniak, A., Jankowski, K. S., Skalski, M., Skwarło--Sońta, K., Zawilska, J. B., Żarowski, M., Poradowska, E., & Jernajczyk, W. (2017a). Treatment guidelines for Circadian Rhythm Sleep-Wake Disorders of the Polish Sleep Research Society and the Section of Biological Psychiatry of the Polish Psychiatric Association. Part I. Physiology, assessment and therapeutic methods. *Psychiatria polska*, 51(5), 793–814.
- Wichniak, A., Jankowski, K. S., Skalski, M., Skwarło-Sońta, K., Zawilska, J. B., Żarowski, M., Poradowska, E., & Jernajczyk, W. (2017b). Treatment guidelines for Circadian Rhythm Sleep-Wake Disorders of the Polish Sleep Research Society and the Section of Biological Psychiatry of the Polish Psychiatric Association. Part II. Diagnosis and treatment. *Psychiatria polska*, 51(5), 815–832.
- Pływaczewski, R., Brzecka, A., Bielicki, P., Czajkowska--Malinowska, M., Cofta, S., Jonczak, L., Radliński, J., Tażbirek, M., & Wasilewska, J. (2013). Zalecenia

Polskiego Towarzystwa Chorób Płuc dotyczące rozpoznawania i leczenia zaburzeń oddychania w czasie snu (ZOCS) u dorosłych. *Pneumonologia i Alergologia Polska*, *81*(3), 221–258. Katarzyna Obłąkowska, Artur Bartoszewicz

# Policy Towards the 'Auditorium Culture Sector' in Poland in the First Year of the COVID-19 Pandemic: Mechanisms of Restrictions and Support with Public Funds, Including State Aid

#### Abstract

*Objectives*: The objective of the article is to describe the public policy in the first year of the COVID-19 pandemic towards the *auditorium culture sector* in the Republic of Poland. This policy was stretched between the *anti-pandemic policy* and the *anti-crisis policy*, and it appeared in the end as *the policy for the hibernation of the auditorium culture sector*.

*Research Design & Methods:* The methods used to prepare the article involved juridical exegesis, desk research, as well as legal, sociological, and economic analyses.

*Findings*: Public authorities in Poland wanted the institutions, enterprises, and creators in the auditorium culture sector to survive the period of the pandemic.

*Implications / Recommendations*: The article denotes what the auditorium culture sector is according to the authors. It shows the importance of operation of theatres, cinemas, museums, art galleries, historical places, cultural centres, libraries, archives, and creators for the Polish society and economy. It presents the tools of policy against the COVID-19 pandemic and seven phases of the anti-pandemic policy, with the consequences for the auditorium culture sector. It describes the scale of the disturbance in the activity of the auditorium culture sector, and mechanisms of anti-crisis and hibernating intervention towards this sector. The support intervention for the sector is described in detail; the article presents programmes and numbers. The aid for the institutions and creators in the auditorium culture sector in Poland during the first year of the COVID-19 pandemic was provided by the central government, local governments, non-governmental organisations (sectoral NGOS), public cultural institutions, and artistic schools.

*Contribution / Value Added*: The article based on the "lesson learnt" method brings knowledge to public policy and for decision-makers in the face of future threats of a similar type.

*Keywords*: public policy, cultural policy, culture, art, auditorium culture sector, COVID-19, state aid, subsidies, the European Union, economic crisis

Article classification: research paper

JEL classification: J48, H11, H12, H20, H23, H24, H25, H71, H80, H81, H84, O52, P11, Z11, Z18

Katarzyna Obłąkowska, PhD – Finance Institute, ul. Świętokrzyska 12, 00–044 Warszawa; e-mail: katarzyna. oblakowska@mf.gov.pl; ORCID: 0000-0003-2311-0061. Artur Bartoszewicz, PhD – Collegium of Socio-Economics, Warsaw School of Economics; ul. Wiśniowa 41, 02–520 Warszawa; e-mail: artur.bartoszewicz@sgh.waw.pl; ORCID: 000-0002-3872-9441.

#### Introduction

The article deals with the subject of antipandemic and anti-crisis policy carried out by the Republic of Poland (RP) in the first year of the COVID-19 pandemic in the area of specific sectoral policy that is the auditorium culture policy as the part of the cultural policy. The auditorium culture sector is the authors concept and denotes that part of the culture sector that involves many people directly participating in the cultural experience simultaneously at the same time, in the same physical space. Entities from this sector produce and disseminate cultural goods related to the direct participation in their reception and experience of the audience in the same physical space and at the same moment. It, therefore, includes the activities of theatres, cinemas, museums, art galleries, historical places, cultural centres, libraries, archives, creators, and audiences in this sector.

The scientific background for the article is institutionalism (Dye, 2013, p. 17), but it moves beyond institutionalism to network paradigm (Anioł, pp. 63-67). In the pandemic situation, government institutions became a centre of determining, implementing, and enforcing the antipandemic policy and the anti-crisis policy. In March 2020, at the beginning of the COVID-19 pandemic, the activity of the auditorium culture sector was adjudged to be a potential source of threats and disease outbreaks by the Polish Government. Consequently, it was included in the spectrum of activities potentially threatening public health and creating the risk of negative impact on achieving goals and expected results identified in the antipandemic policy. Hence, during the first year of the COVID-19 pandemic, the operation of entities in this sector was the object of lockdowns, restrictions, and reopenings. As a result of this policy, the entities of the analysed sector alternately experienced a state of pandemic hibernation, and then underwent the process of awakening to activity. They could not operate as usual, they could not generate incomes, hence the central government and the local governments arranged state aid for

them as the part of the anti-crisis policy. During the pandemic, the activity of non-governmental organisations was also visible.

The aim of the undertaken research was to identify the policy tools used by the Polish government towards the auditorium culture sector during the first year of the COVID-19 pandemic. The hypothesis of the research was as follows in the first year of the COVID-19 pandemic, the Polish government on the one hand applied the sectoral anti-pandemic policy framework to the auditorium culture sector and assumed that this sector posed a threat to public health, thus significantly limiting its functioning, but applied the approach of phases of strengthening and weakening restrictions; on the other hand, the Polish government and local governments arranged state aid for entities in the auditorium culture sector as part of the anti-crisis policy.

The research covered only the institutional area of the Republic of Poland. The methods used to prepare the article involved juridical exegesis, desk research as well as legal, sociological, and economic analyses. All legal acts of the Polish government creating the anti-pandemic policy and anti-crisis policy – as well as influencing the activities of the auditorium culture sector in force at that time - were identified and analysed. The study period covers the first year of the COVID-19 pandemic, i.e. from early March 2020 to early March 2021. The research was conducted by the authors of this article from February 2021 to May 2021 and presented on the scientific conference titled "Public policies at the time of the COVID-19 pandemic. The analysis of the problem and future challenges", organised in Szczecin, Poland, by the Institute of Political and Security Sciences, University of Szczecin, and the Polish Association of Political Sciences on June 9th, 2021.

This article presents and characterises the legal instruments of the anti-pandemic policy and anti-crisis policy of the Republic of Poland, i.e. laws and regulations at the national level and the instruments on the local government level, which were important for the auditorium culture sector, including the assessment of their impact on this sector. The analysis carried out by the authors of the article allowed them to distinguish seven phases of the policy towards the auditorium culture sector as an element of the anti-Covid policy of the Republic of Poland in the first year of the pandemic, which is also presented in the paper.

# The auditorium culture sector and its role in the society

The auditorium culture sector is a concept which denotes this part of the culture sector that is associated with the direct participation in the cultural experience of many people at the same time and in the same physical space. In the Polish language, the word 'auditorium' means a group of people listening to a lecture, a speech,

a concert, a broadcast, etc. Moreover, both in Polish and in English, it denotes a big place (a chamber, hall) for the enclosed public gathering (e.g. lectures, concerts, theatre performances) (Słownik Języka Polskiego PWN, 2007, p. 64; Oxford Learner's Dictionary, 2021). Entities from the auditorium culture sector produce and disseminate cultural goods related to the direct and simultaneous participation in their reception and experience of the audience in the same physical space. It is created by cultural institutions (state and local government), non-governmental organisations (including social economy entities), and enterprises from the culture sector, and within them by particular individuals (creators, artists, animators, organisers). Entities operating in this sector in the national economy are included in the Polish Classification of Activities [Pol. Polska Klasyfikacja Działalności, PKD] in the subclasses listed in Table 1.

No.	Subclass according to the Polish Classification of Activities (PKD)	Name	Description of the subclass in the scope included in the auditorium culture sector
1.	59.14.Z	Activities related to film screening	<i>The entirety of the subclass:</i> The screening of films or video recordings in cinemas, in the open air or elsewhere; activities of film clubs.
2.	90.01.Z	Activities related to staging artistic performances	<i>The entirety of the subclass:</i> Staging of theatre, opera, ballet, musical, and other performances; activities of circus groups, orchestras, and musical groups; the activities of individual artists such as actors, dancers, singers, lecturers, or presenters.
3.	90.02.Z	Activities supporting the staging of artistic performances	<i>The entirety of the subclass:</i> Activities supporting the development of theatre, opera, ballet, musical, and other productions; activities of film directors, producers, set designers, designers and performers of stage scenery, stage engineers, stage lighting specialists, announcers, etc.; the activities of producers of artistic performances, on-site or off-site.
4.	90.04.Z	Operation of the cultural object	<i>The entirety of the subclass:</i> The operation of theatres and concert halls, galleries and exhibition halls, cultural centres, community centres, and other cultural facilities.
5.	47.78.Z	Retail sale of other new goods in specialised stores	<i>Part of the subclass:</i> Retail sales by commercial art galleries [in the field of works of art and exhibition activities – note by A. B. and K. O.].

#### Table 1. The auditorium culture sector

#### Table 1 – continuation

No.	Subclass according to the Polish Classification of Activities (PKD)	Name	Description of the subclass in the scope included in the auditorium culture sector
6.	47.79.Z	Retail sale of second- hand goods in specialised stores	<i>Part of the subclass:</i> Retail sale of second-hand books, other used articles, antiques, conducted by auction houses <i>[in the field of works of art and cultural heritage facilities and exhibition activities – note by A. B. and K. O.J.</i>
7.	91.01.A	Operation of libraries	<i>The entirety of the subclass:</i> Documentary and informational activities of libraries of all kinds, reading rooms, listening and viewing rooms, provided to the general public or special audiences, including students, scientists, teachers, members; the accumulation of collections; the cataloguing of collections; lending and storing books, maps, periodicals, films, CDs, tapes, works of art, etc.; searching for information from possessed collections, etc.; the storage of photos and videos by libraries; related services.
8.	91.01.B	Operation of archives	<i>The entirety of the subclass:</i> Documentary and informational activities of public archives provided to the general-public or special audiences including students, scientists, teachers, members; the activities of government archives; the accumulation of collections; the cataloguing of collections; lending and storing books, maps, periodicals, films, CDs, tapes, works of art, etc.; research with the use of available collections, etc.
9.	91.02.Z	Operation of museums	<i>The entirety of the subclass:</i> The activities of museums of all kinds, such as museums of art, jewellery, furniture, costumes, ceramics, silverware; museums of natural history, science and technology, or history, including military museums and memorials; other specialised museums; open-air museums.
10.	91.03.Z	Operation of historic sites and buildings as well as other similar tourist attractions	<i>The entirety of the subclass:</i> The conservation and protection of historic sites and buildings as well as historic movable objects.

Source: Own elaboration based on Biznes.gov.pl, 2021.

Table 2 presents the available data approximating this sector in terms of the numerical characteristics of entities by the PKD classes, according to the data of the Central Statistical Office. Unfortunately, there are many inconsistencies in the available data, which makes the summaries of the numerical sector difficult. The number of institutions operating in this sector and employing workers amounts to at least 15.7 thousand. In 2019, there were 528 cinemas in Poland. There were 188 theatres and musical institutions with their permanent artistic ensemble, but the total number of operating theatres of different status and characteristics in the 2015/2016 season was estimated at 847. There were 4,255 cultural centres and clubs as well as community centres. There were 327 art galleries and salons organising exhibitions as well as 208 art galleries, auction houses, and antique shops operating on the art and antique market, with 94 of them organising exhibitions. The total of 9,326 libraries and library & information centres as well as 33 state archives made their collections available, and 342 entities declared the activity of the archives in REGON. There were also 959 museums (including branches). Moreover, 1,302 entities declared to operate

Table 2. The number of national economy entities registered in the REGON register declaring that they operate in PKD subclasses of the au-
itorium culture sector as of March $31^{st}$ , 2020, and the number and type of institutional entities in the auditorium culture sector in Poland
in 2019 in public statistics

	<b>PKD</b> subclass	The domain of activity in the auditorium culture	nn Li	Number of entities registered in the REGON register	stered ter	Name in studies in the The field of culture statistics	Number of entities
		sector	Declaring running a subclass activity	Legal persons / organisational units without legal personality	Natural persons running a business activity		
			Sta	State as of March 31, 2020	2020		2019
	59.14.Z	Film screening	255	126	129	Cinemas	528
5	90.01.Z	Staging artistic performances (theatres, musical institutions;	7,457	1,331	6,126	Theatres and musical institutions with a permanent artistic team	188
		actors, dancers, singers, readers, presenters)				Theatres of various status and characteristics, operating in 2015/2016	847
3.	90.02.Z	Supporting the staging of artistic performances (producers, directors, stage specialists)	2,616	403	2,213	Data not available	Data not available
4	90.04.Z	Cultural facilities	2,872	2,553	319	Cultural centres, community centres	4,255
						Galleries and art salons organising exhibitions	327
5.	47.78.Z	Art galleries selling new works	Data not available	Data not available	Data not available	Art galleries, auction houses, and antique shops operating in the art	208, including 92 conducting
6.	47.79.Z	Art galleries, auction houses, and antique shops selling second- hand art	Data not available	Data not available	Data not available	and antique market and organising exhibitions	exhibition activities
7.	91.01.A	Libraries	2,141	2,130	11	Libraries and library & information centres	9,326
%	91.01.B	Archives	342	221	121	State archives	33
9.	91.02.Z	Museums	651	603	48	Museums	959
10.	91.03.Z	Historic sites and buildings and similar tourist attractions	1,302	237	1,065	Immovable monuments in the Register of Monuments	78,009
		SUM	17,636	7,604	10,032		

55

in the domain of historical places and buildings, and in 2019, 78,000 immovable monuments have been visited or have had the potential to be visited<sup>1</sup> (GUS, 2021a, Tables 1 and 5; GUS and US in Kraków, 2020a, pp. 36; 43–88; Open Data, 2020).

In 2019, 59,051 people worked in creative activities related to culture and entertainment<sup>2</sup>, while 48,409 people were employed in libraries, archives, museums, and other institutions conducting activities related to culture. In total, this amounts to 107,460 persons employed in the national economy (GUS, 2020a, Table 2). In 2019, 8,339 natural persons ran a business in the following professions: actor, dancer, singer, voiceover, presenter, announcer, producer, director, stage designer, stage specialist (designer and performer of stage scenery, stage engineer, stage lighting specialist) (GUS, 2021a, Tables 1 and 5).

Research by the SWPS University of Social Sciences and Humanities indicates that the number of artists, creators, and performers in Poland in 2018 was 59,870 people<sup>3</sup>, of which at least 48,815 people were included in the auditorium

<sup>3</sup> Estimated population numbers by the following industries: music (19,100), architecture (12,500), visual arts (12,005), theatre (5,750), film (3,580), literature (2,830), dance (2,380), folk art (1,475), interdisciplinary (350) (Ilczuk et al., 2019, p. 25).

culture sector (in the areas of music, visual arts, theatre, film, dance) (Ilczuk et al., 2019, p. 25). The IBS estimated that in 2015, 75,000 people worked in the field of artistic performance, literary creation, and the activities of cultural facilities; 18,000 people worked in the production and distribution of films and TV programmes; 18,000 in libraries and archives; and 15,000 in museums – i.e. a total of 126,000 (Baran & Lewandowski, 2017, p. 20). It seems that it can be estimated that before the COVID-19 pandemic, the auditorium culture sector was the source of jobs to the minimum of 120 thousand people.

The auditorium culture sector is important not only for cultural institutions, creators, and artists, but also for viewers, giving them a cultural experience, all of which contributes to the duration and development of culture. In 2019, the total attendance in auditorium culture institutions

No.	Institution	Attendance 2019 (mln)
1.	Cinemas	61,9
2.	Museums	40,2
3.	Historic sites (castles, palaces, churches, park complexes)	37,5*
4.	Cultural centres (events**)	37,5
5.	Theatres	14,4
6.	Libraries (readers)	6,0
7.	Art galleries and art salons	4,5
8.	Cultural centres (circles, clubs, art groups)	0,851
9.	State archives (resource users + tour participants)	0,0407
	SUM	202,89

Table 3. Attendance in auditorium culture institutions in Poland in 2019 (in millions)

\* Own estimates based on the GUS data and the assumption that a visitor visits historical places three times a year on average.

\*\* workshops, lectures, meetings, lectures, concerts, festivals, art reviews, concerts, interdisciplinary events.

Source: Own elaboration based on: GUS and US in Kraków, 2020a, pp. 43-88; GUS, 2021b, section IX, Table 1 (51).

<sup>&</sup>lt;sup>1</sup> These objects were in various ownership. According to data from 2017, the proportions of ownership were as follows: church (26%); private / natural persons (20%); local government (18%); the state (11%); mixed (7%); private / legal persons (6%). In 2020, there were 77.5 thousand immovable monuments in Poland. These are also various objects: residential, religious, residential, farm, public, industrial, economic, defence, cemeteries, greenery, urban planning (Open data, 2020; NID, 2020; NID, 2017, pp. 51, 108; NID, 2016).

<sup>&</sup>lt;sup>2</sup> The division of the PKD's 90 covering activities related to staging artistic performances (90.01.Z) and supporting it (90.02.Z), artistic and literary creative activity (90.03.Z), and activities of cultural facilities (90.04.Z). Artistic and literary creative activity was declared in REGON in 2020 by 5,872 entities (5,587 natural persons and 285 legal persons or organisational units without legal personality). GUS, 2021a, Tables 1 and 5.

in Poland can be estimated at almost 203 million participants. Detailed data is presented in Table 3.

The data of the Central Statistical Office (Pol. *Glówny Urząd Statystyczny*, GUS) indicates that in 2019, Poles most often made use of cinema offers (61.2% according to the declaration of Poles aged 15+), visited historical monuments (38.5%), visited museums in the country (26.7%), visited libraries or reading rooms (24.6%), and participated in theatrical performances (20.2%). They less often participated in festivals (10.1%), visited art galleries in the country (10%), attended the philharmonic hall or classical music concerts (8.3%), attended opera or operetta performances (5.8%), and participated in performances of ballet or dance (5.7%) (GUS and US in Kraków, 2020b, p. 18).

#### Tools and phases of the Polish government's policy against the COVID-19 pandemic, limiting the functioning of the auditorium culture sector

In the Republic of Poland, the policy of counteracting the COVID-19 pandemic was based on The Act of December 5th, 2008 on preventing and combating human infections and infectious diseases in humans (Journal of Laws of 2008, No. 234, item 1570). The first legal act directly related to COVID-19 was The Act of March 2<sup>nd</sup>, 2020, on special solutions related to the prevention, counteraction and combating of COVID-19, other infectious diseases and the emergencies caused by them (Journal of Laws of 2020, item 374). On March 14<sup>th</sup>, an epidemic emergency was introduced in the territory of the Republic of Poland<sup>4</sup>, and an epidemic state was announced on March 20th5. Numerous restrictions have been imposed on society and economic activity.

<sup>5</sup> Regulation of the Minister of Health of March 20<sup>th</sup>, 2020, on the declaration of an epidemic in the territory During the first year of the COVID-19 pandemic, the Council of Ministers, as a ruling tool in the antipandemic policy, used the regulations on imposing certain restrictions, orders, and bans in connection with the outbreak of an epidemic as implementing acts to the *Act of December 5<sup>th</sup>, 2008 on preventing and combating human infections and infectious diseases* in humans. In the analysed period, there were thirteen of them and forty-one amending regulations.

In the period from the beginning of March 2020 to the beginning of March 2021, the authors of this article distinguished between seven phases of the anti-pandemic policy with consequences for the auditorium culture sector. These phases were:

- 1. The starting point for the anti-pandemic policy the fundamental law, the legal basis for the anti-pandemic policy: *The Act of December* 5<sup>th</sup>, 2008, on preventing and combating human infections and infectious diseases in humans.
- 2. The preparation of the legal freezing of the economy, including the auditorium culture sector. The Act of March 2nd, 2020, on special solutions related to the prevention, counteraction and combating of COVID-19, other infectious diseases and the emergencies caused by them introduced changes to The Act of December 5th, 2008, on preventing and combating infections and infectious diseases in people. Provisions have been added allowing for the establishment of temporary limitation of specific scopes of business activity, temporary restriction of the use of premises or land and the obligation to secure them, and an order or prohibition to stay in specific places, areas, and facilities.
- The complete freezing of the auditorium culture sector (from March 13<sup>th</sup> to May 3<sup>rd</sup>, 2020). A complete ban on performing activities in the field of performing arts and all forms of collective culture and entertainment, philharmonics, operas, operettas, theatres, cinemas,

<sup>&</sup>lt;sup>4</sup> Regulation of the Minister of Health of March 13<sup>th</sup>, 2020, on the announcement of an epidemic threat in the territory of the Republic of Poland (Journal of Laws no. 2020, item 433).

*of the Republic of Poland* (Journal of Laws no. 2020, item 491).

libraries, archives, museums and historical places, community centres, art galleries (PKD 90.0, 91.0, 59.14.Z)<sup>6</sup>.

- 4. The partial unfreezing of the auditorium culture sector under pandemic rigours (from May 4<sup>th</sup> to June 5<sup>th</sup>, 2020). A complete ban on performing performance arts and film screenings (PKD 90.01 and 59.14.Z). Libraries, archives, museums, and historical places (PKD 91.0) could resume their activity by fulfilling the obligation to cover the mouth and nose with clothing or parts thereof, masks, a visor, or a protective helmet<sup>7</sup>.
- 5. The reopening under pandemic rigours of the auditorium culture sector (from June 6<sup>th</sup> to November 27<sup>th</sup>, 2020). The permission to conduct creative activity related to all collective forms of culture and entertainment (PKD 90.0) as well as cinema activities (PKD 59.14.Z), provided that the viewers comply with the obligation to cover their mouths and nose, and take no more than half (from

October 10<sup>th</sup>, 2020, it was 25%) of the number of seats available to viewers or listeners (or, from October 10<sup>th</sup>, 2020, keeping the distance in the audience between the spectators/listeners 1.5 m) and in the open air from June 19th, provided it is ensured that at the same time the number of spectators, listeners, visitors, or participants is not more than 1 person per 5 square metres, keeping a distance of at least 2 metres (from August  $8^{th} - 1.5$  metres) from other people by marking with horizontal signs places for the public, taking into account a distance of 2 metres (from August 8<sup>th</sup> -1.5 metres) in order to ensure that viewers, listeners, visitors, or participants comply with the obligation to cover the mouth and nose unless a distance of not less than 2 metres from other people is kept. Restricted activities could also be conducted by libraries, archives, museums, and historical sites (PKD 91.0)8.

6. The closing of the auditorium culture sector to direct audience experience (from November 28<sup>th</sup>, 2020, to January 29<sup>th</sup>, 2021). The performance arts sector (PKD 90.0) and museums (PKD 91.02.Z) could operate without the participation of the public. It was allowed to carry out activities necessary to prepare artistic events, such as rehearsals and exercises, phonographic and audio-visual recordings, and events transmitted using direct remote communication. Museums were forbidden to make their collections available to the public inside cubature interiors and to organise events involving the public. They could carry out

<sup>&</sup>lt;sup>6</sup> Legal bases for the stage: Regulation of the Minister of Health of March 13th, 2020, on the declaration of an epidemic threat in the territory of the Republic of Poland (Journal of Laws no. 2020, item 433); Regulation of the Minister of Health of March 20th, 2020, on the announcement of an epidemic in the territory of the Republic of Poland (Journal of Laws no. 2020, item 491); Regulation of the Council of Ministers of March 31<sup>st</sup>, 2020, on the establishment of certain restrictions, orders and bans in connection with an epidemic (Journal of Laws no. 2020, item 566); Regulation of the Council of Ministers of April 10th, 2020, on the establishment of certain restrictions, orders and bans in connection with the occurrence of an epidemic (Journal of Laws no. 2020, item 658); Regulation of the Council of Ministers of April 19th, 2020, on the establishment of certain restrictions, orders and bans in connection with an epidemic (Journal of Laws no. 2020, item 697).

<sup>&</sup>lt;sup>7</sup> Legal bases for the stage: *Regulation of the Council* of Ministers of May 2<sup>nd</sup>, 2020, on the establishment of certain restrictions, orders and bans in connection with the occurrence of an epidemic (Journal of Laws no. 2020, item 792); Regulation of the Council of Ministers of May 16<sup>th</sup>, 2020, on the establishment of certain restrictions, orders and bans in connection with an epidemic (Journal of Laws no. 2020, item 878).

<sup>&</sup>lt;sup>8</sup> Legal bases for the stage: *Regulation of the Council* of Ministers of May 29<sup>th</sup>, 2020, on establishing certain restrictions, orders and bans in connection with the occurrence of an epidemic (Journal of Laws no. 2020, item 964); *Regulation of the Council of Ministers of June* 19<sup>th</sup>, 2020, on the establishment of certain restrictions, orders and bans in connection with the occurrence of an epidemic (Journal of Laws, no. 2020, item 1066); *Regulation of the Council of Ministers of August* 7<sup>th</sup>, 2020, on the establishment of certain restrictions, orders and bans in connection with the occurrence of an epidemic (Journal of Laws no. 2020, item 1356).

activities through direct remote communication, make the collections available in a non-contact form, in compliance with appropriate sanitary requirements, and provide access to outdoor collections and historic forests, parks, and gardens. The prohibition related also to the operation of cinemas (PKD 59.14.Z), except for activities that could be carried out using means of direct remote communication. Libraries could make collections available, provided that no more than 1 person per 15 square metres of the area is present in the room accessible to the people who use them, except for librarians<sup>9</sup>.

7. The reopening under pandemic rigours of the auditorium culture sector (from January 30<sup>th</sup> to March 14<sup>th</sup>, 2021). From January 30<sup>th</sup>, activities of galleries and cultural institutions conducting exhibitions (museums) were allowed. Libraries operated under the rigours of the previous period. From February 12th, theatres and cinemas were allowed to operate under certain restrictions and regimes. Indoor activities related to all collective forms of culture and entertainment (PKD 90.0) were allowed in the scope related to the preparation and implementation of artistic events, exhibitions, and activities related to the projection of films or video recordings in cultural centres, cinemas, or other places and activities of film clubs (PKD 59.14), provided that: 1) viewers or listeners are made available every second seat in the audience, however not more than 50% of the number of seats, in the absence of designated seats in the audience, while maintaining a distance of 1.5 metres between viewers or listeners; 2) it is ensured that viewers or listeners comply with the order to cover the mouth and nose; 3) it is ensured that viewers or listeners do not eat drinks or meals<sup>10</sup>.

At the end of February 2021, Deputy Prime Minister and Minister of Culture and National Heritage Professor Piotr Gliński indicated that the sanitary regime is respected in cultural institutions, and the ongoing monitoring carried out by the ministry confirmed that no pandemic outbreaks had been recorded in them. He also noticed that after unfreezing in the rigours of auditorium culture (phase 7 of the policy), Poles were eager for contact with culture, which manifested in queues in front of cultural institutions (Redakcja *wPolityce.pl*, 2021).

# The scale of the disturbance in the activity of the auditorium culture sector

Already in the first quarter of 2020, over half of the public cultural institutions declared that they had experienced the negative effects of the pandemic. In the second quarter, this percentage was 65%, and in the third quarter, it was 62%. Revenues from economic activity decreased in all entities. The entities in the area of creative activity related to culture and entertainment experienced the strongest negative effects, which were indicated by 70% of them in the first quarter, 81% in the second quarter, and 78% in the third quarter of 2020 (GUS, 2020b, p. 1; GUS, 2020c, p. 1; GUS, 2021i, p. 1).

As a result of the COVID-19 pandemic and the imposed restrictions, in 2020, 50,9% of museums and museum branches limited their cultural

<sup>&</sup>lt;sup>9</sup> Legal bases for the stage: *Regulation of the Council* of Ministers of December 1<sup>st</sup>, 2020, on establishing certain restrictions, orders and bans in connection with the occurrence of an epidemic (Journal of Laws no. 2020, item 2132); Regulation of the Council of Ministers of December 21<sup>st</sup>, 2020, on the establishment of certain restrictions, orders and bans in connection with an epidemic (Journal of Laws no. 2020, item 2316).

<sup>&</sup>lt;sup>10</sup> Legal bases for the stage: *Regulation of the Council* of Ministers of January 29<sup>th</sup>, 2021, amending the regulation on the establishment of certain restrictions, orders and bans in connection with the occurrence of an epidemic (Journal of Laws no. 2021, item 207); Regulation of the Council of Ministers of February 11<sup>th</sup>, 2021, amending the regulation on the establishment of certain restrictions, orders and bans in connection with an epidemic (Journal of Laws no. 2021, item 267); Regulation of the Council of Ministers of February 26<sup>th</sup>, 2021, on the establishment of certain restrictions, orders and bans in connection with an epidemic (Journal of Laws no. 2021, item 367).

activities. This means that during that period they did not prepare and make the cultural offer available to recipients. In March, i.e. in the first month of the restrictions in force, the number of museums limiting their activities peaked (47%); a similar situation took place in November and December as a result of the recurrence of the disease wave. On the other hand, from June to October 2020, over 80% of entities conducted cultural activities while maintaining the sanitary requirements. Museums and museum departments implemented part of the cultural, scientific, and educational offer online, which can be described as external hibernation (internal activity of an individual without the direct participation of the public). Owing to these activities, 1367 exhibitions were made available to the audience through websites, social networks, and online video channels. The number of stationary temporary exhibitions decreased by 40% and the number of permanent ones decreased by 8,7% when compared to the previous year. During that period, the number of visitors decreased by 23,6 million (58,7%) (GUS, 2021d).

Out of 194 theatres and music institutions operating at the beginning of 2020, as a result of restrictions imposed on their activity, 114 (58,8%) limited their cultural activities. Already in March, over 50% of entities introduced restrictions on their activity. And from July to October, over 70% of theatres and musical institutions conducted cultural activities in sanitary conditions. Here, too, we observed external hibernation, as nearly 89% of entities made online performances and concerts available during the pandemic. Spectators could participate in 3,943 concerts and performances this way (GUS, 2021e).

During the analysed period, 64,5% of art galleries limited their cultural activities. As in the rest of the sector, the greatest number of units reduced their activity in March (59,9%), and the least in July and August (17,6% each). 65,5% of art galleries and salons have made their exhibitions available online, the total number of virtual exhibitions was 896 (GUS, 2021f).

The number of organised mass art and entertainment events in 2020 decreased by 89,5% compared to 2019 (GUS, 2021h).

In the first year of the pandemic, fixed cinemas staged 50,1% fewer screenings and gathered 68,4% fewer viewers. The number of produced full-length feature films decreased by nearly 1/4 (from 41 to 35) compared to the previous year. At the same time, the number of full-length documentaries produced has increased (from 16 to 26). The activity was limited by 60% of entities involved in film production. Most of them in April (every second unit), and least of them in the months from July to September (one in five units). Of the films planned for this year, 18 feature-length films and 182 medium and short films were not made (GUS, 2021g).

The above illustrates the scale of limitation of the direct experience of culture for spectators in Poland, as well as the degree of disorder affecting all participants of the auditorium culture sector. Poles had definitely limited access to this part of culture. For state cultural institutions, the financial situation, due to the maintenance of earmarked subsidies, did not deteriorate. In 2020, they achieved total revenues of 1,92 billion PLN (492,3 million USD), and in 2019 it was 1,8 billion PLN (465,16 million USD). Their costs in 2020 were 1,87 billion PLN (480 million USD). The revenues of self-government cultural institutions decreased by 7,7% from PLN 8,39 billion PLN (2,15 billion USD) in 2019 to 7,74 billion PLN (1,99 billion USD) in 2020. Their costs in 2020 were 7,59 billion PLN (1,95 billion USD) (GUS, 2021j). In local government budgets, spending on culture decreased significantly by 5,6% (198 million PLN) due to the limitation of the organisation of cultural and entertainment events (Nielicki, 2021).

#### Anti-crisis mechanisms and hibernating intervention towards the auditorium culture sector

The anti-crisis policy in Poland was based on two pillars: the Anti-Crisis Shield in versions

1.0–7.0 and the Financial Shield in versions PFR 1.0-2.0. The shape and scope of public intervention underwent significant modifications. It began from a broad mechanism addressed to all market participants - the so-called model of universal distribution of public funds. The model of universal distribution of public funds was identical to every industry, without the specificity of the sectors being recognised and taken into account, which could potentially risk inadequate and ineffective interventions. Transforming over time to directing support for selected sectors and industries based on the recognition of the specificity and the pandemic-related needs of the sectors, as well as on identification through the Polish Classification of Activities (PKD) - the so-called selective model of the distribution of public funds<sup>11</sup>. In its assumptions, the aid system had to consider the proportionality of the distribution of benefits to market participants, as the mechanisms addressed to entrepreneurs had to take into account the principles of state aid resulting from Art. 107 of the Treaty on the Functioning of the European Union (TFEU)<sup>12</sup>. The European Commission (EC) was notified of the planned aid programmes, based on the EC Notice: Temporary framework of state aid measures to support the economy in the context of the ongoing COVID-19 epidemic<sup>13</sup>.

<sup>13</sup> Commission Notice (2020): Temporary framework for state aid measures to support the economy in the context of the ongoing COVID-19 epidemic (consolidated version). Authentic versions of the temporary framework for State aid measures adopted on March 19<sup>th</sup>, 2020 (C (2020) 1863) and their revisions: C (2020) 2215 of April 3<sup>rd</sup>, 2020, C (2020) 3156 of May 8<sup>th</sup>, 2020, C (2020) 4509 of June 29<sup>th</sup>, 2020, C (2020) 7127 of October 13<sup>th</sup>, 2020, and C (2021) 564 of January 28<sup>th</sup>, 2021, have been published in the *Journal of the European Union*. https://ec.europa.

The regulations referred to as the Anti-Crisis Shields were introduced in specially dedicated acts on counteracting the economic effects of the coronavirus pandemic. The authors of the acts involved the Ministry of Development, the Ministry of Finance, the Ministry of Family, Labour and Social Policy, as well as the Ministry of Culture and National Heritage. The works were carried out under the supervision of the Chancellery of the Prime Minister of the Council of Ministers in cooperation with other ministries and public agencies. In the area of cultural policy, including support for the auditorium culture sector, the activities were conducted by the Minister of Culture and National Heritage. Entities in this sector could benefit from two waves of universal/horizontal support instruments (from March 2020) and selective support instruments (from May 2020). The government of the Republic of Poland designed and implemented the following aid mechanisms (which were notified to the European Commission):

- 1. Anti-crisis shield 1.014
- 2. Anti-crisis shield 2.0<sup>15</sup>

3. Anti-crisis shield 3.0<sup>16</sup>

eu/competition/state\_aid/what\_is\_new/covid\_19.html (accessed: 20.02.2021).

<sup>14</sup> Legal bases for the shield: Act of March 31<sup>st</sup>, 2020, amending the Act on special solutions related to the prevention, prevention and combating of COVID-19, other infectious diseases and crises caused by them, and some other acts (Journal of Laws no. 2020, item 568); Regulation of the Minister of Culture and National Heritage (MKiDN) of April 2<sup>nd</sup>, 2020, on financial support for natural persons, legal persons or organisational units without legal personality to change the form of disseminating creative or artistic activity during the period of an epidemic threat or state of an epidemic (Journal of Laws no. 2020, item 583).

<sup>15</sup> Legal bases for the shield: *Act of April 16*<sup>th</sup>, 2020, on specific support instruments in connection with the spread of SARS-CoV-2 virus (Journal of Laws no. 2020, item 695); *Act of April 3*<sup>rd</sup>, 2020, on special solutions supporting the implementation of operational programmes in connection with the occurrence of COVID-19 in 2020 (Journal of Laws no. 2020, item 694).

 $<sup>^{11}\,</sup>$  It can also be called: dedicated, vertical, sector, or industry.

<sup>&</sup>lt;sup>12</sup> More: Notice from the Commission on the notion of state aid within the meaning of Art. 107 paragraph. 1 of the Treaty on the Functioning of the European Union (C/2016/2946, OJ C262, 19.7.2016, pp. 1–50) https://eurlex.europa.eu/legal-content/PL/TXT/?uri=CELEX%3A5 2016XC0719%2805%29 (accessed: 20.02.2021).

<sup>&</sup>lt;sup>16</sup> Legal bases for the shield: Act of May 14<sup>th</sup>, 2020, amending certain acts in the field of protective measures in connection with the spread of SARS-CoV-2 virus (Journal of Laws no. 2020, item 875).

- 4. Anti-crisis shield 4.0<sup>17</sup>
- 5. Anti-crisis shield 5.0 (the so-called industry shield)18
- 6. Anti-crisis shield 6.0 (the so-called industryspecific)19
- 7. Anti-crisis shield 7.0<sup>20</sup>
- 8. Anti-crisis shield 8.0<sup>21</sup>

<sup>17</sup> Legal bases for the shield: Act of June 19th, 2020, on interest subsidies for bank loans granted to entrepreneurs suffering from the effects of COVID-19 and on simplified proceedings for approval of an arrangement in connection with the occurrence of COVID-19 (Journal of Laws of 2020, item 1086); Act of May 28th, 2020, amending the Corporate Income Tax Act, the Goods and Services Tax Act, the Act on the Exchange of Tax Information with Other Countries, and Certain Other Acts (Journal of Laws no. 2020, item 1106).

<sup>18</sup> Legal bases for the shield: Act of September 17<sup>th</sup>, 2020, amending the Act on special solutions related to the prevention, prevention and combating of COVID-19, other infectious diseases and crises caused by them, and some other acts (Journal of Laws no. 2020, item 1639); Regulation of the Council of Ministers of September 30<sup>th</sup>, 2020, on financial support for entities conducting cultural activity in the field of theatre, music or dance (Journal of Laws no. 2020, item 1729); Regulation of the Minister of Culture, National Heritage and Sport of October 30th, 2020, on financial support for authors and artists in the form of social assistance (Journal of Laws no. 2020, item 1938).

<sup>19</sup> Legal bases for the shield: Act of December 9th, 2020, amending the Act on special solutions related to the prevention, prevention and combating of COVID-19, other infectious diseases and crises caused by them and some other acts (Journal of Laws no. 2020, item 2255); Act of November 28th, 2020, amending the act on personal income tax, the act on corporate income tax, the act on flat-rate income tax on certain revenues earned by natural persons, and some other acts (Journal of 2020, item 2123); Act of January 21st, 2021, amending the act on special solutions related to the prevention, prevention and combating of COVID-19, other infectious diseases and crises caused by them, and some other acts (Journal of Laws no. 2021, item 159).

<sup>20</sup> Legal basis for the shield: *Regulation of the Council* of Ministers of January 19th, 2021, on support for participants in economic transactions affected by the COVID-19 pandemic (Journal of Laws no. 2021, item 152).

<sup>21</sup> Legal basis for the shield: Regulation of the Council of Ministers of February 26th, 2021, on support for participants in economic transactions affected by the COVID-19 pandemic (Journal of Laws no. 2021, item 371).

- 9. The Polish Development Fund (PFR) 1.0 financial shield<sup>22</sup>
- 10. PFR 2.0 financial shield (the so-called industry shield)23.

Based on the above-mentioned instruments, a wide range of solutions was developed aimed at entities from the auditorium culture sector. In the first period of the COVID-19 pandemic (from March 31st, 2020), these were multi-sector instruments supplemented by an intervention programme dedicated to culture, i.e. Culture in the web (for activities from May 2021). On August 14th, 2020, the legal basis for the intervention and the use of public funds from the state budget by the Minister of Culture and National Heritage for financial support in the form of social aid for authors and artists was adopted as well as public funds from the COVID-19 Counteracting Fund were used to support local government artistic institutions, non-governmental organisations, and entrepreneurs operating in the field of theatre, music or dance<sup>24</sup>. From October 2020 (Anticrisis Shield 5.0), specific solutions targeted

<sup>23</sup> Legal basis for the shield: Act of July 4<sup>th</sup>, 2019, on the system of development institutions (Journal of Laws of 2019, item 1572), amended by the Act of March 31st, 2020, on the system of development institutions (Journal of Laws of 2020, item 569) and the Act of April 16th, 2020, on specific support instruments in connection with the spread of SARS-CoV-2 virus (Journal of Laws of 2020, item 695).

<sup>24</sup> The Act of August 14<sup>th</sup>, 2020, amending the Act on special solutions related to the prevention, prevention and combating of COVID-19, other infectious diseases and emergencies caused by them, and the Act amending the Act on special solutions related to the prevention, prevention and combating of COVID 19, other infectious diseases and crisis situations caused by them and certain other acts (Journal of Laws no. 2020, item 1478). Effective as of September 4th, 2020.

<sup>&</sup>lt;sup>22</sup> Legal bases for the shield: Act of July 4th, 2019, on the system of development institutions (Journal of Laws of 2019, item 1572), amended by the Act of March 31st, 2020, amending the Act on the system of development institutions (Journal of Laws of 2020, item 569); Act of April 16th, 2020, on special support instruments in connection with the spread of SARS-CoV-2 virus (Journal of Laws of 2020, item 695).

at the auditorium culture sector were launched in response to environmental demands and the scale of the pandemic-related degradation<sup>25</sup>.

In July 2020, the Ministry of Culture and National Heritage announced that the total value of the multidimensional state support for the culture sector in Poland provided after the announcement of the epidemic threat and restrictions on the activities of cultural institutions amounted to over 5 billion PLN (1.28 billion USD) (Ministry of Culture and National Heritage, 2020a). In February 2021, the Minister of Culture and National Heritage Professor Piotr Gliński indicated that in the first year of the COVID-19 pandemic (from March 2020 to February 2021), the anti-crisis shield for culture<sup>26</sup> amounted to 6 billion PLN (1,54 billion USD). He emphasised that most of the aid involved activities that were implemented for the entire Polish economy. He claimed that none of the people of culture was left alone, because everyone could get social assistance. In the first year of the pandemic, the Ministry of Culture and National Heritage awarded 13,807 social benefits in the amount of 1,8 thousand PLN each (461 USD). Some people received this help several – even 6 - times. The cost of social benefits accounted almost 25 million PLN (6,4 mln USD) (Redakcja wPolityce.pl, 2021).

#### The support intervention for the auditorium culture sector – programmes and amounts.

The support intervention which applied to entities from the auditorium culture sector came from various Anti-crisis and Financial shields, and made the Anti-Crisis Shield for Culture. It consisted of the following elements (Ministry of Culture and National Heritage (2021a):

- 1. support for enterprises, non-governmental organisations, and self-employed persons in the form of: the exemption from social security contributions; subsidies for micro and small entrepreneurs; co-financing from the Labour Fund of part of the costs of employee salaries and social security contributions due from these salaries: 3-month salary subsidy employees and payment of social security contributions; working capital loan financing the payment of wages in the SME sector; the cancellation of tax arrears; the possibility of deducting the loss from the current year from the income for the previous year; low-interest loan from the Labour Fund for micro-entrepreneurs up to the amount of 5 thousand PLN (1,28 thousand USD); triple (for three mounts) downtime benefit for entrepreneurs (persons running a business) in the amount of 2,08 thousand PLN (533 USD) or 1,3 thousand PLN (333 USD) each; an additional downtime benefit for employees of the auditorium culture sector (from October 15th, 2020) (solutions included in versions of the anti-crisis shields from Shield 1.0, i.e. from March 31<sup>st</sup>, 2020);
- compensation for persons under civil law contracts in a situation where the contract has not been concluded or where there has been a limitation in its implementation due to a downtime in business as a result of COVID-19. The source of the payment was the Social Security Institution [Pol. Zaklad Ubezpieczeń Społecznych, ZUS] (Anti-crisis shield 1.0, i.e. from March 31<sup>st</sup>, 2020);

<sup>&</sup>lt;sup>25</sup> Including, among others: compensation for lost revenues, one-off industry parking benefit for people who have already used the parking benefit on general terms and conduct business with the codes PKD 90.01.Z, 90.02.Z, and later also 90.04.Z, 59.14.Z; the possibility of receiving financial support by a creator or artist with achievements in the field of cultural activity and in a difficult financial situation. On January 21<sup>st</sup>, 2021, a transfer of 120 million PLN to the Polish Film Institute was made to finance or co-finance the costs incurred by entities operating in the field of cinematography from November 1<sup>st</sup>, 2020, to April 30<sup>th</sup>, 2021, as a result of COVID-19.

<sup>&</sup>lt;sup>26</sup> This name was used by the Ministry of Culture and National Heritage to define the package of all anti-crisis tools, both implemented for the entire economy and specific to the industry, which could be used by the culture-sector entities (Ministry of Culture and National Heritage, 2021a).

- vouchers for culture cultural institutions and enterprises in the culture sector could change unrealised services into vouchers of a corresponding value (Anti-crisis shield 1.0, i.e. from March 31<sup>st</sup>, 2020);
- 4. support for the caretakers of the objects from the List of Historic Monuments (Poland) and the sites of the UNESCO World Heritage – the possibility of applying for cofinancing of salaries of persons employed by the entity managing the Historic Monument or the UNESCO World Heritage sites from the resources of the Guaranteed Employee Benefits Fund [Pol. *Fundusz Gwarantowanych Świadczeń Pracowniczych*, FGŚP] (Anti-crisis Shield 3.0, i.e. from May 16<sup>th</sup>, 2020);
- 5. subsidies to remuneration in cultural institutions – support from the Guaranteed Employee Benefits Fund (FGŚP) for cofinancing the remuneration of employees affected by the economic downtime or reduced working hours as a result of a pandemic in cultural institutions which were running by the state, local governments, and which were co-led (Anti-crisis Shield 4.0, i.e. from June 24<sup>th</sup>, 2020);
- 6. working capital loans with reduced interest rates with support in the form of an interest rate subsidy from the state budget (Anti-crisis shield 4.0, i.e., from June 24<sup>th</sup>, 2020);
- aid in the form of subsidies for microenterprises and in the form of subsidies to uncovered fixed costs for small and mediumsized enterprises from selected industries (Financial Shield 2.0, i.e. from April 18<sup>th</sup>, 2020);
- 8. compensation of lost income financial aid of 400 million PLN (102,6 million USD) directed to the culture sector from the Culture Support Fund [Pol. *Fundusz Wsparcia Kultury*]. In its assumptions, the purpose of the mechanism was to ensure the stable functioning of the institution and to maintain the current employment in the culture sector. Payments from the fund took the form of compensations for income lost due to the epidemic in the period from

March 12<sup>th</sup> to December 31<sup>st</sup>, 2020. The tool was addressed to local-government artistic institutions, non-governmental organisations, and entrepreneurs conducting cultural activities in the field of theatre, music, and dance (Anticrisis shield 5.0, i.e. from October 8<sup>th</sup>, 2020);

- 9. legislative support for the film industry a change of the definition of the 'film work' (change of the provision, indicating that a film is also a work that has not been shown in the cinema, suspension of data reporting by cinemas, changes to the act on financial support for audiovisual production<sup>27</sup> – from March 31<sup>st</sup>, 2020);
- 10. direct support for the film industry the Minister of Culture and National Heritage transferred to the Polish Film Institute [Pol. Polski Instytut Sztuki Filmowej, PIFS] at the request of its director 120 million PLN (30,7 million USD) in order to finance or co-finance the costs incurred by entities operating in the field of cinematography from November 1st, 2020, to April 30th, 2021, as a result of COVID-19, and which have not been financed or co-financed from other funds, including public funds. This included the possibility of granting funds by the PIFS to entities operating in the field of cinematography, regardless of the organisational and legal form and ownership structure, in the form of a grant, a loan, or a surety, and in the form of a scholarship to a natural person (Anticrisis Shield 6.0, i.e. from January 26th, 2021).

In addition to the mechanisms resulting from individual types and versions of Anti-crisis and Financial shields financed from the COVID-19 Countermeasure Fund, during the first year of the pandemic, support mechanisms were offered from the state budget funds at the disposal of the Minister of Culture and National Heritage (Ministry of Culture and National Heritage, 2021b), namely:

<sup>&</sup>lt;sup>27</sup> The Act of November 9<sup>th</sup>, 2018, on financial support for audiovisual production (Journal of Laws of no. 2019, item 50).

1) Culture in the Web – a programme of the Minister of Culture and National Heritage (MKiDN) announced on April 3rd, 2020, and managed by the National Centre for Culture [Pol. Narodowe Centrum Kultury], worth 80 million PLN (20,5 million USD), for activities related to the presentation of cultural events and online access to cultural resources. The programme consisted of two elements, i.e. a scholarship programme (worth 20 million PLN (5,1 mln USD)) and a grant programme (worth 60 million PLN (15,4 million PLN)). The scholarship programme was targeted at natural persons, creators, and artists. Applicants could be awarded scholarships for a period from 3 to 6 months for the projects to realisation in the period from May 1st, 2020, to October 31<sup>st</sup>, 2020 (the amount of the scholarship: 3 thousand PLN (769 USD) per month<sup>28</sup>). The following entities could apply for a subsidy: local-government cultural institutions, nongovernmental organisations, foundations, churches and religious associations, as well as entities conducting an economic activity (the amount of subsidy could be between 5 and 150 thousand PLN (1,28-384 thousand USD) and it could be up to 100% of the cost of the task)<sup>29</sup>. Calls for grant applications and scholarships took place from 6<sup>th</sup> to 21<sup>st</sup> April, 2020. The implementation of tasks took place from May 1st, 2020, to October 30th, 2020 (NCK, 2020a; NCK, 2020b; MKiDN, 2020b);

- social assistance from the Culture Promotion Fund, which could be obtained by authors and artists in a difficult financial situation (approx. 80% of the minimum wage);
- 3) **the modification of the Minister's 2020 Programmes** in terms of the implementation of projects that have already received a subsidy, allowing for the flexible introduction of changes in projects and their adaptation to a pandemic situation;
- 4) increasing the budget of 'The Minister of Culture and National Heritage's Competition for creative scholarships and scholarships in the field of promoting culture', aimed at supporting the individual development of creators, artists, animators, and educators, as well as researchers of the broadly understood sphere of culture and national heritage – from 1,5 million PLN (384 thousand USD) to 6,5 million PLN (1,66 million USD)<sup>30</sup>;

<sup>&</sup>lt;sup>28</sup> The Minister of Culture and National Heritage granted 2,223 artists and creators with the scholarships in the amount of 9 thousand PLN (2,3 thousand USD). The number of scholarships awarded in specific industries was as follows: music (743), visual arts (499), animation and cultural education (419), literature (160), film (110), theater (101), folk art (86), dance (57), cultural management and support for the development of cultural personnel (48). The number of applicants was 4,370 (formally correct applications) (Ministry of Culture and National Heritage, 2020b).

<sup>&</sup>lt;sup>29</sup> Grants were received by 1,182 beneficiaries. The competition was adjudicated on May 15<sup>th</sup>, 2020 (Ministry of Culture and National Heritage, 2020b).

<sup>&</sup>lt;sup>30</sup> State budget scholarship programmes: Competition for creative scholarships and scholarships in the field of promoting culture; Thesaurus Poloniae - a programme implemented in two categories: Senior Programme for professors and academic lecturers with a doctoral degree and Junior Programme for PhD students; Scholarships of the Minister of Culture and National Heritage for the artistic achievements for art schools' students educating themselves in the artistic profession who have achieved very good results in science and are winners of national or international competitions; Scholarships of the Minister of Culture and National Heritage for students; international artistic scholarships implemented on the basis of bilateral Programmes for the Cultural and Scientific Cooperation. Legal bases for the functioning of these programmes: Regulation of the Minister of KiDN of May 24th, 2012, on the detailed rules and procedure for granting scholarships to persons involved in artistic creation, promotion of culture and care of monuments, and the amount of these scholarships (Journal of Laws of 2012, item 612); Act of July 27th, 2005, Law on Higher Education (Journal of Laws no. 164, item 1365, as amended); Ordinance of the Minister of Science and Higher Education of August 16th, 2006, on detailed the conditions and procedure for granting and paying the minister's scholarship for academic achievements and the minister's scholarship for outstanding sports achievements (Journal of Laws no. 153, item 1093).

- 5) **increasing the budget of the 'Film Production Programme'** by approximately 40 million PLN (10,2 million USD) from the Ministry of Culture and National Heritage funds. The programme has been implemented by the PIFS;
- 6) additional subsidies, the so-called COVID-19 payments for the activities of cultural institutions in connection with reducing the negative economic and social effects of the pandemic – worth 140 million PLN (35,9 million USD);
- 7) the shield for writers a programme organised by the Institute of Literature, under which 2,3 million PLN (590 thousand USD) was allocated to support authors by purchasing licences for previously published or premiere texts: poems and short stories as well as critical sketches and translations.

Additionally, the Ministry of Culture and National Heritage has undertaken a number of initiatives in the existing sectoral mechanisms: they applied to the European Union for a derogation allowing the VAT rate to be changed to 0 for printed books; they intensified work on the act on the rights of a professional artist; they designed a special programme of the post-pandemic revival of cultural activity and compensated for some of the losses suffered by the culture sector through the introduced restrictions (budget 50 million PLN); they maintained the level of subsidies for cultural institutions, of which they are organisers and coorganisers<sup>31</sup>; they amended the state budget to ensure that the above-mentioned cultural institutions are compensated for losses related to restrictions on their activities; and they introduced the possibility for directors of cultural institutions to pay additional remuneration for artists for "substitute" work carried out outside the seat of the institution on the basis of the interpretation of Art. 31a, paragraph. 1 of the Act of October 25th, 1991, on organising and conducting cultural activities (Ministry of Culture and National Heritage, 2021c).

Environmental institutions offered the following aid instruments aimed at helping artists and creators as well as cultural organisers (Ministry of Culture and National Heritage, 2021d):

- the Adam Mickiewicz Institute 'The Polish Culture in the World Programme' was addressed to artists of all fields of art and creative industries as well as people involved in the dissemination and promotion of the Polish culture, supporting individual participation in events outside the country, including online ones. Electronic directory: *Partners in Culture*;
- the Institute of Music and Dance psychological advice for musicians and dancers; law advice; knowledge base on the possibilities of obtaining support; Professional Dancers Retraining Programme;
- the Zbigniew Raszewski Theatre Institute support for theatres that will present their activities under the banner of the Public Theatre Day on the Internet<sup>32</sup>; advising on the protection of authors' rights and aid programmes;
- 4) the National Institute of Museology and Collection Protection – a review of grant competitions;
- 5) the Polish Radio National Symphony Orchestra – support for local artists/musicians/ performers representing various musical disciplines and types by providing them with opportunities to work; concert and performance fees for concerts in the open air;
- 6) **the Polish Music Foundation** action directed to the organisers of live broadcast music events online or the premieres and retransmissions of previously recorded materials;
- 7) the Polish Musical Publishers [Pol. Polskie Wydawnictwa Muzyczne] – a project called TUTTI.pl aimed at supporting the performance

<sup>&</sup>lt;sup>31</sup> I.e. for 120 cultural institutions (museums and artistic institutions) (Redakcja *wPolityce.pl*, 2021).

<sup>&</sup>lt;sup>32</sup> Support in the amount of 7 thousand PLN (1,8 thousand USD) was given to 103 public theatres in Poland (drama, music, puppet theatres). The funds were to be allocated for employees of theatres working on the presentation of theatres on the Internet as part of the Public Theatre Day (Instytut Teatralny, 2021).

of the Polish music; a discount of 70% of the fee for borrowing performance materials;

- 8) the Association of Artists & Performers of musical and verbal-musical works 'SAWP' – advance payment towards future royalties; loans granted for 1 year with the possibility of extension; non-returnable, oneoff, permanent, or timely aid payments for performers who are members of the SAWP in difficult life or professional situations;
- 9) the Copyright Polska Authors and Publishers Association – distributing and paying Polish publishers the revenues from rights accumulated in 2019 – over 8,27 million PLN (2,12 million USD) for national book publishers, music, and cartographic prints and press publishers;
- the ZAiKS Authors' Association scholarships and grants from the Creative Support Fund;
- the Literary Union social support (1 thousand PLN (256 USD)) for writers who found themselves in a difficult financial situation as a result of the pandemic;
- 12) **the Zachęta National Gallery of Art** the transformations of projects implemented as part of the *Visual Arts* programme, taking place in galleries, museums, and various other spaces into those that could be implemented *online*;
- 13) the Association of Polish Stage Artists help for artists who are not employed fulltime and who find themselves in the most difficult life situation;
- 14) **the STOART Artists' Union** the promotion of the artistic activity of the members of the organisation; one-off non-returnable allowances (up to 2,5 thousand PLN (641 USD)) granted to STOART members in a difficult life situation.

Support for the auditorium culture sector was also offered by individual local governments at the level of communes, poviats, and voivodeships (see Ministry of Culture and National Heritage, 2021e). The examples include:

- the City of Gdańsk 'Cultural Scholarship of the City of Gdańsk' paid monthly in the amount of 2,6 thousand PLN (666 USD) gross for a creative process lasting up to 6 months, tool budget of 700 thousand PLN (180 thousand USD) (Urząd Miasta Gdańska, 2020); small grants for NGO's (10 thousand PLN (2,5 thousand USD) each); the Gdańsk Publishing Fund – purchase of the book and music-related publications (publications about Gdańsk and Pomerania, the broadly understood humanities, books for children);
- 2) the City of Gdynia 'The Breakwater for Culture' programme created from two pillars: 'Gdynia Culture joins forces' and support for NGO's; competitions for art projects and cultural activities in the city; legal advice on the implementation of cultural projects during the epidemic (Redakcja portalu *Gdynia.pl*, 2020);
- 3) the City of Katowice 'The Katowice Package for Culture' as a support programme for Katowice-based cultural creators, nongovernmental organisations, and other entities operating in the field of culture, with a budget of 0,5 million PLN (128 thousand USD). The mechanism included - among others exemptions from rent and rubbish fees for entities conducting cultural activity in municipal premises and financial cooperation with the city - the enabling of the implementation of tasks online or at a later date. The 'Katowice Entrepreneur Package 2.0+' programme exemptions from rent payments, exemptions from lease payments, redemption, spreading into instalments or deferring the deadline for paying real estate tax at the individual request of the entrepreneur, exemptions from fees for waste disposal (Urząd Miasta Katowice, 2020; Romańczyk, 2020);
- 4) the City of Kraków a package of activities supporting the 'Resilient Culture; programme worth 12 million PLN (3 million USD). The intervention and support were provided to both individual authors and animators as well as

non-governmental organisations, institutions, representatives of the most important creative sectors, including music and audiovisual producers, the visual arts sector, the film sector, and the book industry (Miasto Kraków, 2020); purchase of works worth 250 thousand PLN (64 thousand USD) – creative activities were purchased (not yet presented, not published or disseminated) in the field of artistic creation and activities related to the promotion of culture, in particular: visual arts, film, theatre, music, dance, literature, animation culture, and cultural and artistic education (Krakowskie Forum Kultury, 2020);

- 5) the City of Łódź the 'Healthy Culture' programme based on three pillars: 'Grants for culture Łódź supports artists' (500 thousand PLN (128 thousand USD)), 'Cultugrants 2.0' a programme of the Łódź Event Centre (1 million PLN (256 thousand USD)), 'Culture Pass and rent for 1 PLN' per month for April and May 2020 in municipal commercial premises for creative studios (institutions, clubs, companies, and creators related to culture) (Macias, 2020);
- 6) the City of Poznań the 'Poznań Supports' package consisting of the 'Take-away Culture' competition, additional recruitment for small grants, creative scholarship programme, solidarity programmes, cultural environment research (Urząd Miasta Poznania, 2020);
- 7) the City of Sopot cultural grants awarded by the city in 2020 were not withheld (postponing deadlines, transferring the implementation method to the Internet), scholarships for individual authors up to 5 thousand PLN (1,28 thousand USD), maintaining orders for publications, lowering the costs of the studios (amount for monthly rent in May: 1 PLN per m<sup>2</sup>), subsidies for cultural institutions, legal emergency for artists (Urząd Miasta Sopotu, 2020a); the 'Book on the phone' action – purchase of books by the city for libraries in local bookstores (Urząd Miasta Sopotu, 2020b);

- 8) the City of Warsaw the 'Mobile in Culture' programme (1 million PLN (256 thousand USD)) – competition of offers for non-governmental organisations to support people of culture. The 'Favourite bookstore in Warsaw' programme – an initiative dedicated to individual and stationary bookstores and/ or second-hand bookstores (prize pool of 40 thousand PLN (10,2 thousand USD));
- 9) the City of Wrocław the 'Wrocław Publishing Programme' - supporting literacy works of Wrocław-based authors at the stage of their creation and in the process of making it available to the public - the total budged was 132 thousand PLN (33,8 thousand USD); one-time aid for one artist - 2,2 thousand PLN (564 USD) gross (Culture Zone Wrocław, 2021); the Wrocław Social Intervention Programme - artists who rented their studios from the city for activities related to culture and art, from March 13th, 2020 until the end of the epidemic paid a symbolic rent (1% of the fees from before the pandemic). The package of scholarships for artists was extended in 2020. The total amount of planned and new funds allocated for this purpose was approximately 1.4 million PLN (359 thousand USD) (Redakcja www.wroclaw.pl, 2020);
- 10) the Pomorskie Voivodeship scholarships for creators of culture from the budget of the voivodeship government (for people involved in artistic creation, the promotion of culture, the care of historic monuments) in the maximum amount of 5 thousand PLN (1,28 thousand USD) gross (paid once) – the total competition budget was 200 thousand PLN (51,3 thousand USD) (Samorząd Województwa Pomorskiego, 2020).

The above aid mechanisms were supported by the EU offer under the *Creatives Unite* platform, with loan guarantees for the creative sector offered by the Polish Development Bank [Pol. *Bank Gospodarstwa Krajowego*, BGK] and liquidity loans for entrepreneurs from the European Regional Development Fund (ERDF) (Ministry of Culture and National Heritage, 2021f).

In addition, on April 27<sup>th</sup>, 2020, the Council of Ministers adopted the *Ad hoc Support Programme for NGOs in the field of counteracting the effects of COVID-19*, worth 10 million PLN (2,56 million USD), as a mechanism to support the institutional existence of civil-society organisations and their activities related to counteracting COVID-19<sup>33</sup>. The programme manager was the National Institute of Freedom – Centre for Civil Society Development (Ministry of Culture and National Heritage, 2021h)<sup>34</sup>.

Art colleges have also taken action in response to the pandemic. They offered help in various forms for students, doctoral candidates, and academic staff<sup>35</sup> (Ministry of Culture and National Heritage (2021i).

<sup>34</sup> It envisaged the following priorities: supporting activities as a supplement to the tasks of public administration, the aim of which was to counteract COVID-19 in local communities and the safety of NGOs, including the implementation of activities that had to be stopped by the epidemic, the implementation of activities that would enable the organisation to continue to function and purchase the equipment and materials necessary for the implementation of the above activities, as well as renting a seat or premises for the implementation of activities. The maximum amount of subsidy in the first priority was 50 thousand PLN, and in the second – 40 thousand PLN (NIW, 2021).

<sup>35</sup> It took the form of student allowances, deferred payments for educational services, and payments for using the Student Dormitory, as well as psychological support, reductions and exemptions from fees, etc. The value of one-time support was from 1 thousand PLN to

#### Conclusion

From the beginning of the COVID-19 pandemic, the government of the Republic of Poland included the operations of the entities in the auditorium culture sector in the spectrum of activities potentially threatening public health and creating a risk of negative impact on the achievement of the goals and results of the anti-pandemic policy. Hence, during the first year of the COVID-19 pandemic, it leaded the policy of lockdowns, restrictions, periods of reopening of this sector, and state aid. This policy could be, in general, named the policy for the hibernation of the auditorium culture sector. Public authorities in Poland wanted the institutions, enterprises, and creators in the auditorium culture sector to survive the pandemic period, because they took action aimed at it (behavioural evidence).

It is significant that the monitoring done by the Ministry of Culture and National Heritage confirmed that the auditorium culture institutions operating under the sanitary regime were not sources of COVID-19 outbreaks during the defrosting and reopening periods in the first year of the pandemic. This is an important piece of evidence for any next epidemic situation. When organising the work of the entities in the auditorium culture sector in an epidemic situation, one should remember about the sanitary regime (distances, masks, disinfection, clean air) and about the fact that the risk differs in different types of institutions – the situation in a museum is not equal to that of a theatre, and the situation in one specific cinema differs from that in another cinema.

- 1) The most important conclusions of the conducted analysis are as follows:
- 2) In the Republic of Poland during the first year of the COVID-19 pandemic, seven phases of the Polish government's policy towards the auditorium culture sector as an element of its anti-pandemic policy can be distinguished.

<sup>&</sup>lt;sup>33</sup> Resolution No. 48/2020 of the Council of Ministers of April 27<sup>th</sup>, 2020 on the adoption of a programme to support the development of civil society called "Ad hoc support programme for non-governmental organisations in counteracting the effects of COVID-19" (RM-111-47-20); Act of March 2<sup>nd</sup>, 2020, on special solutions related to the prevention, counteraction and combating of COVID-19, other infectious diseases and crisis situations caused by them (Journal of Laws of 2020, item 374, as amended); Act of September 15<sup>th</sup>, 2017, on the National Freedom Institute – Centre for Civil Society Development (Journal of Laws no. 2017, item 1909, as amended).

<sup>2</sup> thousand PLN (from 256 USD to 512 USD) (Ministry of Culture and National Heritage, 2021i).

- 3) From March 13<sup>th</sup>, 2020, the government of the Republic of Poland introduced a complete ban on the activity of entities in the auditorium culture sector and directed state aid to the sector as part of aid for the entire economy starting from March 31<sup>st</sup>, 2020 (Anti-Crisis Shield 1.0, and then further intervention tools).
- 4) The Polish government implemented two types of state aid for the auditorium culture sector: firstly, mostly through the model of the universal distribution of public funds, and secondly, through the selective model of distributing public funds.
- 5) The aid for the institutions and creators in the auditorium culture sector in Poland during the first year of the COVID-19 pandemic was provided by the central government, local governments, non-governmental organisations (sectoral NGO's), public cultural institutions, and artistic schools.

The authors formulated the following recommendations as to what needs to be done:

- 1) conducting a full assessment and evaluation of the intervention taken in the auditorium culture sector;
- improving the mechanisms of crisis management (especially for pandemic situation) and the mechanism of coordination of public decisions taken at all levels of implementing policies towards the auditorium culture sector;
- designing scenarios of responses to various types of threats, fitted with reactive instruments, the roles of institutions, and individual state services;
- 4) developing guidelines addressed to all participants of the process of providing services in the auditorium culture sector, guaranteeing the safety of providing such services also during the disclosure of a threat comparable in its socioeconomic effects to the COVID-19 pandemic;
- 5) establishing a Crises Council by the Minister of Culture and National Heritage, which would monitor and work out adequate solutions related to all types of threats in the area of culture and national heritage, and which would be

in constant contact and communication with cultural institutions, organisations, enterprises, and creators.

#### References

- Anioł, W. (2018). "Fabryka, sieć, arena. Trzy paradygmaty w badaniach nad polityką publiczną".
  In: B. Szatur-Jaworska (Ed.), *Polityki publiczne. Wybrane zagadnienia teoretyczne i metodologiczne* (pp. 53–72). Wydawnictwa Uniwersytetu Warszawskiego.
- Baran, J., & Lewandowski, P. (2017). Znaczenie gospodarcze sektora kultury w Polsce w latach 2008–2015. Instytut Badań Strukturalnych.Biznes. gov.pl (2021). "Lista kodów PKD". Available at: https://www.biznes.gov.pl/pl/tabela-pkd (accessed: 15.03.2021).Dye, T. R. (2013). Understanding Public Policy (14th edition). Pearson.
- GUS (2020a). Pracujący w gospodarce narodowej w 2019 roku. Available at: https://stat.gov.pl/ obszary-tematyczne/rynek-pracy/pracujacy-zatrudnieni-wynagrodzenia-koszty-pracy/pracujacy--w-gospodarce-narodowej-w-2019-roku,7,17.html (accessed: 21.02.2021).
- GUS (2020b). Wpływ pandemii na podmioty działające w obszarze kultury w I kwartale 2020 r. Informacja sygnalna. Available at: https://stat.gov.pl/ (accessed: 16.02.2021).
- GUS (2020c). Wplyw pandemii na podmioty działające w obszarze kultury w II kwartale 2020 r. Informacja sygnalna Available at: https://stat.gov.pl/obszary--tematyczne/kultura-turystyka-sport/kultura/wplyw--pandemii-covid-19-na-podmioty-dzialajace-w--obszarze-kultury-w-drugim-kwartale-2020-r-,23,2. html (accessed: 16.02.2021).
- GUS (2021a). Kwartalna informacja o podmiotach gospodarki narodowej w rejestrze REGON rok 2020. Tablice dotyczące podmiotów gospodarki narodowej zarejestrowanych w rejestrze REGON deklarujących prowadzenie działalności według stanu na 31 marca 2020 r. Plik w formacie XLSX. Available at: https://stat.gov.pl/obszary-tematyczne/podmioty--gospodarcze-wyniki-finansowe/zmiany-strukturalne-grup-podmiotow/kwartalna-informacja-o--podmiotach-gospodarki-narodowej-w-rejestrze--regon-rok-2020,7,8.html (accessed: 25.02.2021).
- GUS (2021b). Uczestnictwo ludności w kulturze w 2019 roku. Tablice w formacie XLSX w pliku

*ZIP*. Available at: https://stat.gov.pl/obszary-tematyczne/kultura-turystyka-sport/kultura/uczestnictwo-ludnosci-w-kulturze-w-2019-roku,6,3.html (accessed: 27.02.2021).

- GUS (2021c). Pojęcia stosowane w statystyce publicznej. Pracujący w gospodarce narodowej. Available at: https://stat.gov.pl/metainformacje/slownik-pojec/pojecia-stosowane-w-statystyce-publicznej/3399,pojecie.html (accessed: 22.04.2021).
- GUS (2021d). Działalność muzeów w 2020 r. Available at: https://stat.gov.pl/obszary-tematyczne/kultura--turystyka-sport/kultura/dzialalnosc-muzeow--w-2020-roku,12,4.html (accessed: 22.05.2021).
- GUS (2021e). Działalność teatrów i instytucji muzycznych w 2020 r. Available at: https://stat.gov. pl/obszary-tematyczne/kultura-turystyka-sport/kultura/dzialalnosc-teatrow-i-instytucji-muzycznych--w-2020-roku,13,4.html (accessed: 26.05.2021).
- GUS (2021f). *Działalność galerii sztuki w 2020 r.* Available at: https://stat.gov.pl/obszary-tematyczne/kultura-turystyka-sport/kultura/działalnosc--galerii-sztuki-w-2020-roku,10,4.html (accessed: 25.05.2021).
- GUS (2021g). *Kinematografia w 2020 r.*< Available at: https://stat.gov.pl/obszary-tematyczne/kultura-turystyka-sport/kultura/kinematografia-w-2020-roku,22,2.html> (accessed: 27.05.2021).
- GUS (2021h). Imprezy masowe w 2020 r. Available at: < https://stat.gov.pl/obszary-tematyczne/kultura--turystyka-sport/kultura/imprezy-masowe-w-2020--roku, 15, 4.html > (accessed: 27.05.2021).
- GUS (2021i). Wpływ pandemii na podmioty działające w obszarze kultury w III kwartale 2020 r. Informacja sygnalna. Available at: < https://stat.gov.pl/obszary--tematyczne/kultura-turystyka-sport/kultura/wpływ--pandemii-covid-19-na-podmioty-działające-w--obszarze-kultury-w-trzecim-kwartale-2020-r-,23,3. html > (accessed: 20.03.2021).
- GUS (2021j). Wyniki finansowe instytucji kultury w okresie I–XII 2020 r. Available at: https://stat.gov.pl/ obszary-tematyczne/kultura-turystyka-sport/kultura/ wyniki-finansowe-instytucji-kultury-w-okresie--ixii-2020-r-,8,16.html (accessed: 10.05.2021).
- GUS i US w Krakowie (2020a). *Kultura w 2019 r.*. Available at: https://stat.gov.pl/obszary-tematyczne/ kultura-turystyka-sport/kultura/kultura-w-2019--roku,2,17.html (accessed: 10.02.2021).
- GUS i US w Krakowie (2020b). Uczestnictwo ludności w kulturze w 2019r. Available at: https://stat.gov.pl/

obszary-tematyczne/kultura-turystyka-sport/kultura/ uczestnictwo-ludnosci-w-kulturze-w-2019-roku,6,3. html (accessed: 10.02.2021).

- Ilczuk, D., Gruszka-Dobrzańska, E., Socha, Z., & Hazanowicz, W. (2020). Policzone i policzeni! Artyści i artystki w Polsce. Dom Wydawniczy Elipsa.
- Instytut Teatralny (2017). Teatr w Polsce 2017. Dokumentacja sezonu 2015/2016. Instytut Teatralny.
- Instytut Teatralny (2021). Available at: https://www. instytut-teatralny.pl (accessed: 20.02.2021).
- Komunikat Komisji (2020). "Tymczasowe ramy środków pomocy państwa w celu wsparcia gospodarki w kontekście trwającej epidemii COVID-19 (wersja skonsolidowana)" (Dz.U.UE C z dnia 20 marca 2020 r.).
- Krakowskie Forum Kultury (2020). "Instytucje kultury wesprą lokalnych artystów i twórców – program 'Zakupu dzieł'". Available at: http://krakowskieforum.pl/aktualnosci/2020/05/06/instytucje-kulturywespra-lokalnych-artystow-i-tworcow-programzakupu-dziel/ (accessed: 20.02.2021).
- Macias, S. (2020). "'Zdrowa kultura'. Wsparcie w czasie epidemii'. Available at: https://uml.lodz.pl/ aktualnosci/artykul/zdrowa-kultura-wsparcie-w--czasie-epidemii-id34097/2020/4/20/ (accessed: 20.02.2021).
- Miasto Kraków (2020). "Kultura odporna". Available at: https://www.bip.krakow.pl/?dok\_id=124316 (accessed: 20.02.2021).
- MKiDN (2020a). "Ponad 5 mld zł na wsparcie kultury w Polsce. Trwa stopniowe odmrażanie sektora". Available at: https://www.gov.pl/web/kulturaisport/ ponad-5-mld-zl-na-wsparcie-kultury-w-polsce--trwa-stopniowe-odmrazanie-sektora (accessed: 22.05.2021).
- MKiDN (2020b). "20 mln zł na stypendia dla artystów! Rozstrzygnęliśmy II część programu 'Kultura w sieci'". Available at: https://www.gov.pl/web/ kulturaisport/20-mln-zl-na-stypendia-dla-artystow--rozstrzygnelismy-ii-czesc-programu-kultura-w--sieci2 (accessed: 20.05.2021).

MKiDN (2021a). "Tarcza antykryzysowa dla kultury". Available at: https://www.gov.pl/web/kultura/tarcza--antykryzysowa-dla-kultury2 (accessed: 20.05.2021).

MKiDN (2021b). "Wsparcie Ministra Kultury i Dziedzictwa Narodowego". Available at: https://www. gov.pl/web/kulturaisport/wsparcie-ministra-kultury--i-dziedzictwa-narodowego (accessed: 20.05.2021). MKiDN (2021c). "Dodatkowe działania MKIDN". Available at: https://www.gov.pl/web/kulturaisport/ dodatkowe-dzialania-mkidn (accessed: 20.05.2021).

- MKiDN (2021d). "Wsparcie Branżowe i Środowiskowe". Available at: https://www.gov.pl/web/kulturaisport/wsparcie-branzowe-i-srodowiskowe (accessed: 20.05.2021).
- MKiDN (2021e). "Samorządy". Available at: https:// www.gov.pl/web/kulturaisport/samorzady (accessed: 20.05.2021).
- MKiDN (2021f). "UE". Available at: https://www.gov. pl/web/kulturaisport/ue (accessed 20.05.2021).
- MKiDN (2021g). "Banki, Fundacje". Available at: https://www.gov.pl/web/kulturaisport/banki-fundacje-ngo (accessed: 20.05.2021).
- MKiDN (2021h). "Program wsparcia dla NGO". Available at: https://www.gov.pl/web/kulturaisport/ program-wsparcia-dla-ngo (accessed: 20.05.2021).
- MKiDN (2021i). "Uczelnie Artystyczne". Available at: https://www.gov.pl/web/kulturaisport/uczelnie--artystyczne3 (accessed: 20.05.2021).
- NCK (2020a). "Kultura w sieci nowy program dotacyjny!" Available at: https://nck.pl/dotacje--i-stypendia/dotacje/programy-dotacyjne-nck/ kultura-w-sieci/aktualnosci/kultura-w-sieci-nowy--program-dotacyjny (accessed: 10.04.2020).
- NCK (2020b). "Program dotacyjny 'Kultura w sieci'. Nabór wniosków". Available at: https://nck.pl/dotacje-i-stypendia/dotacje/programy-dotacyjne-nck/ kultura-w-sieci/aktualnosci/nabor-wnioskow-2020 (accessed: 10.04.2020).
- Nielicki, A. (2021). Wpływ ustawodawstwa okresu pandemii COVID-19 na finanse jednostek samorządu terytorialnego. Fundacja im. Stefana Batorego.
- NID (2016). "Definicje pojęć użytych w zestawieniu różnych typów zabytków nieruchomych wpisanych do rejestru zabytków". Available at: https://www.nid. pl/pl/Informacje\_ogolne/Zabytki\_w\_Polsce/rejestr--zabytkow/zestawienia-zabytkow-nieruchomych/ (accessed: 14.09.2016).
- NID (2017). "Raport o stanie zachowania zabytków nieruchomych w Polsce. Zabytki wpisane do rejestru zabytków (księgi rejestru A i C)". Warszawa.
- NID (2020). "Portal mapowy". Available at: https:// mapy.zabytek.gov.pl/nid/ (accessed: 05.10.2020).
- NIMOZ (2017). "Statystyka muzeów. Muzea w 2016 r." Available at: https://nimoz.pl/files/publications/41/ Statystyka\_muzeow\_online.pdf (accessed: 10.02.2020).

- NIW (2021). "Program COVID-19". Available at: https:// niw.gov.pl/nasze-programy/program-covid-19/ (accessed: 20.02.2021).
- Otwarte dane (2020). "Dane Statystyczne Rejestru Zabytków Nieruchomych". Available at: https:// dane.gov.pl/dataset/1130 (accessed: 15.06.2020).
- Oxford Learner's Dictionary (2021). "Auditorium". Available at: https://www.oxfordlearnersdictionaries. com/definition/english/auditorium?q=auditorium (accessed: 15.12.2020).
- Redakcja portalu *Gdynia.pl* (2020). *Falochron dla kultury*. Available at: https://www.gdynia.pl/korona-wirus,8402/falochron-dla-kultury,548797 (accessed: 20.02.2021).
- Redakcja *wPolityce.pl* (2021). "Kultura w czasie pandemii. Wicepremier Gliński o wsparciu sektora: Nikt nie został sam, ponieważ każdy mógł dostać pomoc". Available at: https://wpolityce.pl/ kultura/540616-kultura-w-czasie-pandemii-glinskinikt-nie-zostal-sam (accessed: 30.04.2021).
- Redakcja www.wroclaw.pl (2020). "Wrocławski Program Interwencji Społecznej. 1% stawki czynszu za pracownie artystów". Available at: https://www. wroclaw.pl/wroclawski-program-interwencji-spolecznej-1-procent-stawki-czynszu-za-pracownie--artystow (accessed: 20.02.2021).
- Romańczyk, J. (2020). Katowicki Pakiet Przedsiębiorcy 2.0. Available at: https://mojekatowice.pl/i,katowicki--pakiet-przedsiebiorcy-2-0,100,891419.html (accessed: 20.02.2021).
- Rozporządzenie Ministra Kultury i Dziedzictwa Narodowego z dnia 24 maja 2012 r. w sprawie szczegółowych zasad i trybu przyznawania stypendiów osobom zajmującym się twórczością artystyczną, upowszechnianiem kultury i opieką nad zabytkami oraz wysokości tych stypendiów (Dz. U. z 2012 r. poz. 612).
- Rozporządzenie Ministra Kultury i Dziedzictwa Narodowego z dnia 2 kwietnia 2020 r. w sprawie wsparcia finansowego dla osób fizycznych, osób prawnych lub jednostek organizacyjnych nieposiadających osobowości prawnej na zamianę formy upowszechniania działalności twórczej lub artystycznej w okresie obowiązywania stanu zagrożenia epidemicznego lub stanu epidemii (Dz. U. z 2020 r. poz. 583).
- Rozporządzenie Ministra Kultury, Dziedzictwa Narodowego i Sportu z dnia 30 października 2020 r. w sprawie wsparcia finansowego dla twórców i artystów w postaci pomocy socjalnej, Dz.U. 2020 poz. 1938.

- Rozporządzenie Ministra Nauki i Szkolnictwa Wyższego z dnia 16 sierpnia 2006 r. w sprawie szczegółowych warunków i trybu przyznawania oraz wypłacania stypendium ministra za osiągnięcia w nauce oraz stypendium ministra za wybitne osiągnięcia sportowe (Dz. U. Nr 153, poz. 1093).
- Rozporządzenie Ministra Zdrowia z dnia 13 marca 2020 r. w sprawie ogłoszenia na obszarze RP stanu zagrożenia epidemicznego, Dz. U. 2020 poz. 433.
- Rozporządzenie Ministra Zdrowia z dnia 20 marca 2020 r. w sprawie ogłoszenia na obszarze RP stanu epidemii, Dz.U. 2020, poz. 491.
- Rozporządzenie Rady Ministrów z dnia 31 marca 2020 r., w sprawie ustanowienia określonych ograniczeń, nakazów i zakazów w związku z wystąpieniem stanu epidemii, Dz.U. 2020 poz. 566.
- Rozporządzenie Rady Ministrów z dnia 10 kwietnia 2020 r. w sprawie ustanowienia określonych ograniczeń, nakazów i zakazów w związku z wystąpieniem stanu epidemii, Dz.U. 2020 poz. 658.
- Rozporządzenie Rady Ministrów z dnia 19 kwietnia 2020 r. w sprawie ustanowienia określonych ograniczeń, nakazów i zakazów w związku z wystąpieniem stanu epidemii, Dz. U. 2020 poz. 697.
- Rozporządzenie Rady Ministrów z dnia 2 maja 2020 r. w sprawie ustanowienia określonych ograniczeń, nakazów i zakazów w związku z wystąpieniem stanu epidemii, Dz.U. 2020, poz. 792.
- Rozporządzenie Rady Ministrów z dnia 16 maja 2020 r. w sprawie ustanowienia określonych ograniczeń, nakazów i zakazów w związku z wystąpieniem stanu epidemii, Dz.U. 2020, poz. 878.
- Rozporządzenie Rady Ministrów z dnia 29 maja 2020 r. w sprawie ustanowienia określonych ograniczeń, nakazów i zakazów w związku z wystąpieniem stanu epidemii, Dz.U. 2020, poz. 964.
- Rozporządzenie Rady Ministrów z dnia 19 czerwca 2020 r. w sprawie ustanowienia określonych ograniczeń, nakazów i zakazów w związku z wystąpieniem stanu epidemii, Dz.U. 2020 poz. 1066.
- Rozporządzenie Rady Ministrów z dnia 7 sierpnia 2020 r. w sprawie ustanowienia określonych ograniczeń, nakazów i zakazów w związku z wystąpieniem stanu epidemii, Dz.U. 2020 poz. 1356.
- Rozporządzenie Rady Ministrów z dnia 30 września 2020 r. w sprawie wsparcia finansowego jednostek prowadzących działalność kulturalną w dziedzinie teatru, muzyki lub tańca, Dz. U. 2020, poz. 1729.
- Rozporządzenie Rady Ministrów z dnia 1 grudnia 2020 r. w sprawie ustanowienia określonych ograniczeń,

nakazów i zakazów w związku z wystąpieniem stanu epidemii, Dz.U. 2020 poz. 2132.

- Rozporządzenie Rady Ministrów z dnia 21 grudnia 2020 r. w sprawie ustanowienia określonych ograniczeń, nakazów i zakazów w związku z wystąpieniem stanu epidemii, Dz.U. 2020 poz. 2316.
- Rozporządzenie Rady Ministrów z dnia 19 stycznia 2021 r. w sprawie wsparcia uczestników obrotu gospodarczego poszkodowanych wskutek pandemii COVID-19, Dz.U. 2021 poz. 152.
- Rozporządzenie Rady Ministrów z dnia 29 stycznia 2021 r. zmieniające rozporządzenie w sprawie ustanowienia określonych ograniczeń, nakazów i zakazów w związku z wystąpieniem stanu epidemii, Dz.U. 2021 poz. 207.
- Rozporządzenie Rady Ministrów z dnia 11 lutego 2021 r. zmieniające rozporządzenie w sprawie ustanowienia określonych ograniczeń, nakazów i zakazów w związku z wystąpieniem stanu epidemii, Dz.U. 2021 poz. 267.
- Rozporządzenie Rady Ministrów z dnia 26 lutego 2021 r. w sprawie ustanowienia określonych ograniczeń, nakazów i zakazów w związku z wystąpieniem stanu epidemii, Dz.U. 2021 poz. 367.
- Samorząd Województwa Pomorskiego (2020). "Uwaga artyści! Samorząd województwa ma dla was stypendia. Można dostać nawet 5 tys. zł". Available at: https://pomorskie.eu/uwaga-artysci-samorzad--wojewodztwa-ma-dla-was-stypendia-mozna--dostac-nawet-5-tys-zl/ (accessed: 20.02.2021).

Słownik Języka Polskiego PWN (2007). Tom 1, A – Gar. Wydawnictwo Naukowe PWN.

- Strefa Kultury Wrocław (2021). "Dokumenty". Available at: http://https//strefakultury.pl/programy/wroclawski-program-wydawniczy/dokumenty/ (accessed: 20.02.2021).
- Uchwała Nr 48/2020 Rady Ministrów z dnia 27 kwietnia 2020 r. w sprawie przyjęcia programu wspierania rozwoju społeczeństwa obywatelskiego pod nazwą "Program wsparcia doraźnego organizacji pozarządowych w zakresie przeciwdziałania skutkom COVID-19" (RM-111-47-20).
- Urząd Miasta Gdańska (2020). Stypendium Kulturalne Miasta Gdańska". Available at: https://www.gdansk. pl/urzad-miejski/biuro-prezydenta-ds-kultury/ stypendium-kulturalne-miasta-gdanska,a,170012 (accessed: 20.02.2021).
- Urząd Miasta Katowice (2020). "Katowicki Pakiet dla Kultury". Available at: https://www.katowice. eu/dla-mieszka%C5%84ca/aktualnosci?ItemID=

4096&ListID={75169DCB-89EF-46CD-A876-165C1E838909} (accessed: 21.02.2021).

- Urząd Miasta Poznania (2020). "Poznań Wspiera pakiet działań w trosce o ludzi kultury". Available at: https:// www.poznan.pl/mim/info/news/poznan-wspiera--pakiet-dzialan-w-trosce-o-ludzi-kultury,146625. html (accessed: 20.02.2021).
- Urząd Miasta Sopotu (2020a). "Sopocka kultura wsparcie dla artystów, funkcjonowanie instytucji w nowej rzeczywistości". Available at: https:// www.sopot.pl/aktualnosc/8210/sopocka-kultura--wsparcie-dla-artystow-funkcjonowanie-instytucji--w-nowej-rzeczywistosci (accessed: 20.02.2021).
- Urząd Miasta Sopotu (2020b). "Sopot wspiera lokalne księgarnie". Available at: https://www.sopot.pl/ aktualnosc/8167/sopot-wspiera-lokalne-ksiegarnie (accessed: 20.02.2021).
- Ustawa z dnia 27 lipca 2005 r. Prawo o szkolnictwie wyższym (Dz. U. Nr 164, poz. 1365 z późn. zm.) oraz rozporządzenia ministra nauki i szkolnictwa wyższego z dnia 16 sierpnia 2006 r. w sprawie szczegółowych warunków i trybu przyznawania oraz wypłacania stypendium ministra za osiągnięcia w nauce oraz stypendium ministra za wybitne osiągnięcia sportowe, Dz. U. Nr 153, poz. 1093.
- Ustawa z dnia 5 grudnia 2008 r. o zapobieganiu i zwalczaniu zakażeń i chorób zakaźnych u ludzi, Dz.U. 2008 nr 234 poz. 1570.
- Ustawa z dnia 19 listopada 2009 r. o grach hazardowych, Dz. U.2020.2094.
- Ustawa z dnia 15 września 2017 roku o Narodowym Instytucie Wolności – Centrum Rozwoju Społeczeństwa Obywatelskiego, Dz. U. z 2017 r., poz. 1909.
- Ustawa z dnia 9 listopada 2018 r. o finansowym wspieraniu produkcji audiowizualnej, Dz.U. 2019 poz. 50).
- Ustawa z dnia 4 lipca 2019 r. o systemie instytucji rozwoju (Dz. U. z 2019 r. poz. 1572), znowelizowana ustawą z dnia 31 marca 2020 r. o zmianie ustawy o systemie instytucji rozwoju (Dz. U. z 2020 r. poz. 569) oraz ustawą z dnia 16 kwietnia 2020 r. o szczególnych instrumentach wsparcia w związku z rozprzestrzenianiem się wirusa SARS-CoV-2 (Dz. U. z 2020 r. poz. 695).
- Ustawa z dnia 2 marca 2020 r. o szczególnych rozwiązaniach związanych z zapobieganiem, przeciwdziałaniem i zwalczaniem COVID-19, innych chorób zakaźnych oraz wywołanych nimi sytuacji kryzysowych, Dz.U. 2020 poz. 374.

- Ustawa z dnia 31 marca 2020 r. o zmianie ustawy o szczególnych rozwiązaniach związanych z zapobieganiem, przeciwdziałaniem i zwalczaniem COVID-19, innych chorób zakaźnych oraz wywołanych nimi sytuacji kryzysowych oraz niektórych innych ustaw, Dz.U. 2020 poz. 568.
- Ustawa z dnia 3 kwietnia 2020 r. o szczególnych rozwiązaniach wspierających realizację programów operacyjnych w związku z wystąpieniem COVID-19 w 2020 r., Dz.U. 2020, poz. 694.
- Ustawa z dnia 16 kwietnia 2020 r. o szczególnych instrumentach wsparcia w związku z rozprzestrzenianiem się wirusa SARS-CoV-2, Dz.U. 2020, poz. 695.
- Ustawa z dnia 14 maja 2020 r. o zmianie niektórych ustaw w zakresie działań osłonowych w związku z rozprzestrzenianiem się wirusa SARS-CoV-2, Dz.U. 2020 poz. 875.
- Ustawa z dnia 28 maja 2020 r. o zmianie ustawy o podatku dochodowym od osób prawnych, ustawy o podatku od towarów i usług, ustawy o wymianie informacji podatkowych z innymi państwami oraz niektórych innych ustaw, Dz.U. 2020 poz. 1106.
- Ustawa dnia 19 czerwca 2020 r. o dopłatach do oprocentowania kredytów bankowych udzielanych przedsiębiorcom dotkniętym skutkami COVID-19 oraz o uproszczonym postępowaniu o zatwierdzenie układu w związku z wystąpieniem COVID-19 (Dz. U. z 2020 r. poz. 1086).
- Ustawa z dnia 17 września 2020 roku o zmianie ustawy o szczególnych rozwiązaniach związanych z zapobieganiem, przeciwdziałaniem i zwalczaniem COVID-19, innych chorób zakaźnych oraz wywołanych nimi sytuacji kryzysowych. oraz niektórych innych ustaw, Dz.U. 2020 poz. 1639.
- Ustawa z dnia 28 listopada 2020 r. o zmianie ustawy o podatku dochodowym od osób fizycznych, ustawy o podatku dochodowym od osób prawnych, ustawy o zryczałtowanym podatku dochodowym od niektórych przychodów osiąganych przez osoby fizyczne oraz niektórych innych ustaw, Dz.U. 2020 poz. 2123.
- Ustawa z dnia 9 grudnia 2020 r. o zmianie ustawy o szczególnych rozwiązaniach związanych z zapobieganiem, przeciwdziałaniem i zwalczaniem COVID-19, innych chorób zakaźnych oraz wywołanych nimi sytuacji kryzysowych oraz niektórych innych ustaw, Dz.U. 2020 poz. 2255;
- Ustawa z dnia 21 stycznia 2021 r. o zmianie ustawy o szczególnych rozwiązaniach związanych z zapobieganiem, przeciwdziałaniem i zwalczaniem COVID-19, innych chorób zakaźnych oraz wywo-

łanych nimi sytuacji kryzysowych oraz niektórych innych ustaw, Dz.U. 2021 poz. 159.

Zawiadomienie Komisji w sprawie pojęcia pomocy państwa w rozumieniu art. 107 ust. 1 Traktatu o funkcjonowaniu Unii Europejskiej (C/2016/2946, OJ C262, 19.7.2016, p. 1–50). Available at: https:// eur-lex.europa.eu/legal-content/PL/TXT/?uri=C ELEX%3A52016XC0719%2805%29 (accessed: 20.02.2021).

# Public Governance / Zarządzanie Publiczne

## Aims and scope

*Public Governance / Zarządzanie Publiczne* is a quarterly published since 2007. It is intended for experts and researchers who specialise in public issues, including political decision-makers and students. It offers a forum for debates between academics and practitioners interested not only in the theoretical foundations of public governance but also in the opportunities for its practical application. The quarterly is international in scope, which is reflected in the nature of research issues (they involve matters of interest to academic circles worldwide), the contributing authors (a significant proportion of them comes from different countries), and the composition of its Programme Board as well as the make-up of the team of reviewers (it includes international research and academic centres).

The mission of *Public Governance / Zarządzanie Publiczne* is to publish advanced theoretical and empirical research in public management, governance, public policy analysis and evaluation, public sector economy as well as strategic management, which reflects new developments in the methodology of social sciences. The editors select papers with an original theoretical background and those that discuss the results of pioneering empirical research. We are also eager to promote the interdisciplinary and comparative approaches based on qualitative, quantitative, and experimental studies that provide new insights into the construction of theoretical models along with the methodological concepts in the field of public management.

In our journal, we adopt a unique approach to specific issues inherent in the sphere of public governance. The originality of our approach consists in the selection of both research areas and research methodologies.

A significant proportion of texts published by our journal is devoted to the analysis of the mechanisms of public governance at national and regional government levels (respectively), relevant to the administrative culture predominant in Central and Eastern European countries with a particular focus on the programming, implementation, and evaluation of public policies. The texts:

- a. focus on problems occurring in post-transition countries which build their own public governance institutions and mechanisms, including the sphere of good governance;
- b. represent attempts at a creative transposition and adaptation of international achievements in developing original solutions in the field of public governance in post-transformation countries.

The distinguishing features of the research methodologies preferred by our journal include:

- a. a strongly established interdisciplinary approach to the study of public governance, combining research and analyses in the areas of economics, political science, management, public policy, sociology, and psychology;
- b. the published texts are firmly rooted in social science theory.

# **Author Guidelines**

#### **Basic rules**

Before submitting your article, please read and apply the following rules:

- EASE Guidelines for Authors of Scientific Articles to be Published in English (version of November 2018) explaining in detail how to compose a scientific article according to international standards:
  - in English (https://www.ease.org.uk/wp-content/uploads/2018/11/doi.10.20316.ESE\_.2018.44. e1.pdf)
  - in Polish (https://www.ease.org.uk/wp-content/uploads/2018/11/doi.10.20316.ESE\_.2018.44. e1.pl\_.pdf)
- APA Style Manual (7th edition, 2020) explaining in detail how to use and cite references and how to apply linguistic rules while writing in English.
- Technical Guidelines for Authors explaining in detail how to prepare articles in accordance with our requirements see our website (www.publicgovernance.pl).
- During the submission process you must provide us with your ORCID number; otherwise we will not proceed your submission.
- Provide us with the Subject classification JEL classification in the OJS.

#### **Ensuring Blind Review**

To ensure the integrity of the blind peer review for submission to our journal, every effort should be made to prevent the identification of the authors and reviewers. This involves the authors, editors, and reviewers (who upload documents as part of their review) checking to see if the following steps have been taken with regard to the text and the file properties:

- The authors of the document have deleted their names from the text, with "Author" and year used in the references and footnotes, instead of the authors' name, article title, etc.
- With Microsoft Office documents, author identification should also be removed from the properties for the file (see under File in Word), by clicking on the following, beginning with File on the main menu of the Microsoft application: File > Save As > Tools (or Options with a Mac) > Security > Remove personal information from file properties on save > Save.
- With PDFs, the authors' names should also be removed from Document Properties found under File on Adobe Acrobat's main menu.

#### Article length and format

All submitted manuscripts should not exceed the recommended size in accordance with established rules:  $30\ 000 - 40\ 000$  characters, including abstract, keywords, tables, figures, references, etc.

# No article submission or article processing fees are charged. Nevertheless, the fee for each additional 1 800 characters (exceeding 40 000 characters) is 20€. The payment will be transferred to the Publisher's bank account after the article's approval for publication.

Only editable formats of text can be sent (doc or docx). We do not accept uneditable formats (e.g. pdf).

#### Language

1. Papers should be presented in clear, concise English. Articles written in poor English will be rejected immediately (and will not be accepted even for the review process).

2. We prefer British English (e.g. 'behaviour', not 'behavior'), this is why we strongly ask authors to use British English.

#### **OJS** system

We use the OJS system for submissions. After having finished your article, when your files are ready, visit the online submission website.

You will need to log into the system:

- If you know your login details, use your user ID and password to log in.
- If you do not know your login details, check to see if you are already registered by clicking on the 'Forgot your password?' button and following the on-screen instructions.
- If you are not registered yet, you can register by clicking on the 'Register' link on the login screen and following the on-screen instructions.

Please remember that you should register as 'Author', although we advise you to register also as 'Reviewer'. If you do not mark 'Author' status, you will not be able to submit your article.

## **Submission Preparation Checklist**

As part of the submission process, authors are required to check their submission's compliance with all of the following items, and submissions may be returned to authors that do not adhere to these guidelines.

- The submission has not been previously published, nor is it under consideration in another journal (or an explanation has been provided in Comments to the Editor).
- The submission file is in OpenOffice, Microsoft Word, or RTF document file format.
- Where available, DOI numbers or URLs for the references have been provided.
- The text is single-spaced; uses a 12-point font; employs italics rather than underlining (except for URL addresses); and all illustrations, figures, and tables are placed within the text at the appropriate points rather than at the end.
- The text adheres to the stylistic and bibliographic requirements outlined in the Technical Guidelines for Authors.
- ORCID number was provided on the first page of the article and was provided in the OJS system.
- Subject classification according to EconLit Subject Descriptors-JEL codes was provided in the OJS during the submission process.
- The instructions in Ensuring Blind Review have been followed.
- The article will be checked for antyplagiarism by CrossCheck.

The Editorial Board approves only original papers, previously unpublished in any other periodicals or books, and not being subject of evaluation in other journals. The articles must be prepared in accordance with our technical requirements and taking our academic ethics code into account. We will reject submissions not prepared according to our requirements.

## **Reviewing Policy and Procedures**

The Editorial Board will make a preliminary decision to either accept the paper for further review or reject the paper (desk rejection) if the submitted article does not meet our editorial requirements or

is beyond our aim and scope. The author will be notified of the decision no later than 10 days from the date of submission. In certain situations, this decision will be made following consultation with a member of the Editorial Board specialising in a given area of research.

- 1. The reviews are prepared by at least 2 independent reviewers indicated by the Editorial Board. Reviewers are not associated with the author's parent institution (reviewers external to the author).
- 2. Reviews are prepared to use a double-blind peer review. This process is based on the rule that the reviewer does not know the identity of the author and vice versa.
- 3. Each review is issued in written form (later revealed to the Author) and ends with a recommendation for or against publication.
- 4. Evaluation criteria: clarity of the stated objective, originality of research issues, theoretical background, quality of empirical research, originality of conclusions, significance for the research area aligned with the scientific profile of the quarterly, quality of language, comprehensibility, punctuation, and appropriate source selection. Each review ends with an unambiguous recommendation:
  - the paper can be published as submitted,
  - the paper can be published pending minor modifications and inclusion of additional relevant information,
  - the paper can be published pending substantial revision and re-review,
  - the paper is unsuitable for publication.
- 5. In addition to the recommendations made by reviewers, the Author may receive additional editorial suggestions from:
  - the Editorial Board, only in urgent cases,
  - a layout editor for technical and editorial comments,
  - a statistical editor if the paper contains statistics.
- 6. The Author must reply to all comments and suggestions (a special form is required to be filled in and to be sent back).
- 7. The Author should be familiar with the following forms and evaluation criteria:
  - Internal Review Form Checklist of the Article (\*.docx),
  - External Review Form (\*.docx),
  - Author's Statement after the Reviews (must be attached to the revised article),
  - Statement by Author (must be signed before publishing).
- 8. Before publishing each article is proofread by a linguistic editor (a native speaker or a bilingual speaker). Authors are obliged to apply all necessary changes, however they can negotiate special terminology use.
- 9. Prior to publishing, the Corresponding Author must sign and submit the Statement by Author, otherwise we will not be able to publish the given article.
- 10. Each Author must follow the principles of transparency and best practices in scholarly publishing (see our website for details). Editors and the Publisher will be documenting all forms of scientific misconduct and malpractice, particularly violations of ethics and science principles. Any such cases will be reported to the employer of the Author and to the relevant public and state institutions.

Submissions from Programme Board and Editorial Board members are handled in the same way as those from other authors.

## **Publication Ethics and Malpractice Statement**

The author's statement including the copyright notice as well as the statement on ethics and good practice in science (including financial disclosure, ghost-writing firewall, guest authorship firewall) must be submitted alongside the manuscript according to the form provided (see our website) as well as to be mentioned on the article title page.

The detailed information on Ethics and Malpractice is available in the guidelines established by the Ministry of Science and Higher Education of the Republic of Poland: Scientific Research and Articles Solidity and Intellectual Rights Respect.

We use the following guidelines (extract from Scientific Research and Articles Solidity and Intellectual Rights Respect):

- 1. Articles must be original and cannot include borrowings from other works, which could result in liability of the publisher. Papers cannot infringe any third-party rights.
- 2. Articles must reveal the contribution of all individual authors in the creation of publications (with their affiliations and contributions, such as information about who is the author of concepts, principles, methods, protocol, etc. used in the preparation of publications).
- 3. Articles cannot display any signs of 'ghost-writing', that is not to disclose the names of authors who have made a significant contribution to the publication of, or otherwise contributed to its creation.
- 4. Articles cannot display any signs of 'guest authorship', i.e. assign a person who did not contribute to the creation of publications.
- 5. Articles must include complete information concerning sources of funding, the contribution of research institutions, associations, and other entities ('financial disclosure').
- 6. Editors and the Publisher will be documenting all forms of scientific misconduct and malpractice, particularly violations of ethics and violations in science. Any such cases will be reported to the employer of the author and to the relevant public and state institutions.

COPE | Committee on Publication Ethics

We follow Core Practices of COPE including Code of Conduct and Best Practice Guidelines for Editors.