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LOCAL POLISH SELF-GOVERNMENTS AGAINST THE CHALLENGES CREATED BY THE RISK OF NON-FINANCIAL FACTORS (ESG)

The article aims to systematize the state of knowledge about the risk of ESG factors in the Polish local government. The risk of climate change, energy transformation, population aging or pandemic risk is just an example of this affecting local government units (LGUs). In particular, the article presents the areas of public services provided by local governments most sensitive to ESG risk. Attention was paid to the adjustment mechanism and actions taken by the local government in Poland to reduce the negative impact of ESG risk on the activity of local government units and the stability of their budgets. The issues of the impact of EU regulations relating to "low-emission" and affecting public transport were presented, as well as the problems related to activities for the energy transformation or the fight against smog. The article uses critical literature analysis, comparative methods, observation, induction, and deduction methods. The study is one of the first to discuss the role and risk place of ESG factors in the activities of local government units.

Keywords: risk, ESG, self-government, public services JEL codes: H72, M42

Introduction

The risk of non-financial factors is one of the most significant risk categories taking into account the strength of its impact and the probability of its occurrence¹. This type of risk is also called ESG risk (environmental, social, governance) or the risk of sustainable development². It occurs and is co-created by environmental, social, and governance mapped to individual pillars and Sustainable Development Goals (SDGs). Climate risk or pandemic risk are only selected types of non-financial risk present in the activities of business entities, including local government units. In the literature on the subject, much attention is paid to ESG risk (particularly in the context of its impact on the financial situation of enterprises, e.g., Friede et al.³). However, its effect on the decisions and activity of local

¹ The Global Risks Report 2022 17th Edition – INSIGHT REPORT, World Economic Forum, 2022, https://www.weforum.org/reports/global-risks-report-2022/ (access: 05.04.2022).

² L. Zu: Sustainability Risk Management, [in:] S.O. Idowu, N. Capaldi, L. Zu, A.D. Gupta (eds), Encyclopedia of Corporate Social Responsibility, Springer, Berlin, Heidelberg 2013, https://doi.org/10.1007/978-3-642-28036-8_257

³ G. Friede, T. Busch, A. Bassen: ESG and financial performance: aggregated evidence from more than 2000 empirical studies, Journal of Sustainable Finance & Investment, 5, 4/2015, p. 210-233, https://doi.org/ 10.1080/20430795.2015.1118917

government (including local government units) in Poland is still poorly recognized. The study attempts to fill this gap. Undoubtedly, due to the effects and threats related to the presence of ESG risk in the contemporary environment, market participants must take adaptive measures, including integrating non-financial risk into the risk management system and decision-making processes⁴. Such activities take place either on the initiative of the entities at risk of this risk or are initiated as a result of systemic solutions adopted at the level of the European Union (EU) (the EU is currently the most advanced in terms of works and adopted strategic documents aimed at reducing negative changes determined by risk) climate, including "Fit for 55", Taxonomy as a consequence of the European Green Deal⁵) and, consequently, its Member States. The article aims to systematize the state of knowledge about the risk of non-financial factors in the Polish local government; in particular, the study indicates the areas of activity of local government units exposed to ESG risk, its potential consequences, and instruments for reducing this risk. The paper is organized as follows: the introduction is Section 1; Section 2 presents the theoretical aspects related to ESG risk in Polish local government; Section 3 describes the methodological approach; Section 4 discusses the impact of ESG risk on local government and the main tools of its mitigation; Section 5 is the conclusion.

Theoretical framework

Relatively few studies that directly refer to the issue of ESG risk in the Polish local government have been published so far⁶. The risk of non-financial factors has two dimensions and manifests itself as the so-called "transition risk" (regulations, technologies, market sentiment) and physical risk (emergencies, chronic events)⁷. The local government has to deal with the first and second risk categories. As an example of physical risk, one can mention sudden weather events causing crises (e.g., the destruction of infrastructure strategies for local government units). The risk of transition is expressed by undertaking transformative measures and adapting to functioning in ESG conditions (e.g., climate change). In the case of local government, the leading role in this respect is played by regulations (e.g., provisions resulting from the concept of the European Green Deal [including sustainable urban transport]). Today, local government units in Poland are obliged to prepare plans for adaptation to climate change⁸. The COVID-19 pandemic is also one of the manifestations of the risk of non-financial factors. During the pandemic, local Polish governments took several actions to support, in particular: 1) the healthcare system; 2) local entrepreneurs; 3) social welfare institutions; 4) residents (the elderly, the sick, the disabled,

⁴ B. Hübel, H. Scholz: Integrating Sustainability Risks in Asset Management: The Role of ESG Exposures and ESG Ratings, Journal of Asset Management 21 (1)/2020, p. 52-69, http://dx.doi.org/10.2139/ssrn.3091666

⁵On July 14, 2021, the European Commission approved the 'Fit for 55' package as part of the European Green Deal aimed at the implementation of measures leading to climate neutrality, More: Pakiet "Fit for 55". Działania legislacyjne UE dla klimatu, https://www2.deloitte.com/pl/pl/pages/zarzadzania-procesami-i-strategiczne/artic-les/pakiet-fit-for-55.html (access: 12.08.2022).

⁶ M. Zioło (ed.): Finanse. Finanse publiczne, Polska Akademia Nauk, Warszawa 2020; M. Zioło: Finanse zrównoważone. Rozwój, ryzyko, rynek, PWE, Warszawa 2020; K. Wójtowicz: Uwarunkowania i pomiar stabilności fiskalnej jednostek samorządu terytorialnego, Wyd. UMCS, Lublin 2019, p. 162-204.

⁷ Olech, D., Flak P. (2021). EBA pyta banki o praktykę zarządzania ryzykiem ESG i wskazuje kierunki, Biuletyn Ryzyka, 1, p. 1, https://www.ey.com/pl_pl/biuletyn-ryzyka/eba-pyta-banki-o-praktyke-zarzadzania-ryzykiem-esg-i-wskazuje-kierunki (access: 18.08.2022).

⁸Ustawa z dnia 8 marca 1990 r. o samorządzie gminnym, Dz.U. 2022r. poz. 559, as amended.

people in isolation or quarantine)⁹. Much attention has been paid in the literature to the issue of the influence of COVID-19 on local government units. It is worth mentioning here the publications analyzing the impact of COVID-19 on local government finances¹⁰. In the analysis, the authors indicate negative trends in local finances and an urgent need for changes (e.g., lifting the limitations in shaping the structure of local government spending¹¹), real estate tax reforms (differentiation of maximum rates depending on the wealth of the region or its size), or increasing the base amount of the educational subsidy¹². Apart from the pandemic risk, an important trend of research in the field of ESG/ local government units concerns the impact of climate risk on local government. The publications in this scope are varied and refer to, among other things, low-carbon urban transport¹³ and the broader low-carbon economy of the region¹⁴, as well as low-carbon and energy efficiency¹⁵. The analyses show Poland's large cities (over PLN 50,000 inhabitants) have lowemission economy plans. In local government units, construction (public utility buildings and residential buildings) and transport are among the sectors with the highest share of greenhouse gas (GHG) emissions and final energy consumption¹⁶. As U. Motowidlak points out¹⁷, transportation is one of the most difficult-to-control sectors concerning CO₂ emissions; therefore, thanks to integrated mobility plans, cities can significantly contribute to reducing GHG (e.g., by financing and implementing low-carbon transport solutions). Regarding construction, territorial self-governments face a difficult challenge related to the thermal modernization of public buildings. The first organizational solutions have already been developed and consist of the public-private partnership formula¹⁸. Waste management is an important area of local government activity, subject to regulations and, at the same time, sensitive to ESG risk. An in-depth discussion is currently underway on the impact of the climate and energy legislative package "Fit for 55" on waste management. A particular challenge for Polish local governments in this context is the implementation of the principles of a circular economy based on the processing - not storage - or incineration of waste (i.e., solutions dominant in Polish local government units¹⁹).

⁹ M. Klimek: Funkcjonowanie jednostek samorządu terytorialnego podczas pandemii COVID-19, Studia Politologiczne, 64/2022, p. 1.

¹⁰ P. Swianiewicz, J. Łukomska: Finanse samorządu terytorialnego w dobie pandemii, Fundacja Batorego, Warszawa 2020; E. Malinowska-Misiąg: Finanse jednostek samorządu terytorialnego w Polsce w pierwszym roku pandemii, Optimum Economic Studies, 1 (107)/2022, p. 7-32.

¹¹ Ibidem.

¹² Ibidem.

¹³ U. Motowidlak: Rola transportu miejskiego w realizacji celów gospodarki niskoemisyjnej, Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach, 249/2015, p. 172-184.

¹⁴ S. Jankiewicz: Gospodarka niskoemisyjna jako podstawa rozwoju regionu, Nierówności Społeczne a Wzrost Gospodarczy, 49, (1)/2017, p. 160-167.

¹⁵ I. Rackiewicz I. (ed.): Niskoemisyjność i efektywność energetyczna. Raport o stanie polskich miast, Instytut Rozwoju Miast, Kraków 2017, p. 9-60.

¹⁶ Ibidem.

¹⁷ U. Motowidlak: Rola transportu..., 2015, op. cit., p. 172-184.

¹⁸ Modernizacja energetyczna obiektów użyteczności publicznej w Płocku, https://www.ppp.gov.pl/efektyw-nosc-energetyczna/ (access:18.08.2022).

¹⁹ Pakiet "Fit for 55". Jak wpłynie na samorządy? Forum Ekonomiczne 2022, https://www.forum-ekonomiczne.pl/pakiet-fit-for-55-jak-wplynie-na-samorządy/ (accessed: 18.08.2022).

Methodology

The article is informative and review-based. The study uses the triangulation method, in particular: the analysis and criticism of the literature, the technique of examining documents, the method of analysis and logical construction, and the comparative method. Methodological triangulation refers to a situation where research uses several or different research techniques within one research method²⁰. The triangulation method ensures the reliability of the research approach and the acquisition of comprehensive and contextual knowledge about the phenomenon. Triangulation increases cognitive abilities concerning the studied phenomena²¹.

The impact of the risk of non-financial factors on local government and the main tools of its mitigation

As part of the ESG risk in the literature and public debates, the greatest attention is paid to environmental risk (E)²². Public services provided by the local government that are most sensitive to the disclosure of physical, weather, and hydrological events resulting from climatic changes include public safety and order, health protection, social assistance, municipal services, including technical and social infrastructure, as well as transport. Furthermore, the negative consequences of self-government can arise from the worsening economic situation of enterprises and farms caused by property damage, disruption of supply chains, and difficulties related to logistics, workforce, and sales (see Table 1). Environmental risks to local governments lie in the waste and pollution of natural resources such as water and clean air²³. The potential impact of environmental risks on local water management is related to low water availability in Poland (on average, approximately 1,600m³ per inhabitant, compared to the EU average of 4,500m³)²⁴. From the point of view of local authorities, the low water capacity of the retention ponds is disadvantageous (on average, at 6% of the long-term runoff compared to 10% for the countries neighboring Poland)²⁵. Furthermore, many local governments report problems associated with poor water quality. The environmental risk also materialized for LGUs in air pollution (so-called "smog"). Its sources include low municipal and housing emissions, pollution from point sources (electricity and industrial plants), and transport. All this has a negative impact, among other things, on the health of residents, and spatial order-including the quality of urban green

²⁰ A. Stolecka-Makowska: Triangulacja jako koncepcja pozyskania wiedzy o zachowaniach nabywczych konsumentów, Studia Ekonomiczne Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach 261/2016, p. 51-52. ²¹ Ibidem.

²² M. Zioło: Finanse zrównoważone..., 2020, op. cit., p. 14; M. Zioło, B. Filipiak: Finanse publiczne wobec ryzyka czynników niefinansowych (ESG). [in:] M. Zioło (ed.) Finanse. Finanse publiczne, Polska Akademia Nauk, Warszawa 2021; A. Sobol (ed.): Raport roboczy grupy eksperckiej Kongresu Polityki Miejskiej ds. Środowiska i adaptacji do zmian klimatu, Obserwatorium Polityki Miejskiej IMiR, Kraków 2019, p. 7-26.

²³ These issues are regulated by: Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (Journal of Laws of 2000, No. 327, p. 1) and the Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 14 października 2021 r. w sprawie ogłoszenia jednolitego tekstu ustawy - Prawo wodne, Dz.U. 2021 poz. 2233, as amended. ²⁴ Raport: Zarządzanie Zasobami Wodnymi w Polsce, Global Compact Network Poland ,Warszawa 2018. ²⁵ Ibidem.

areas, the condition of the facades of buildings, and the service life of the equipment used in industry and households.

Further challenges in the field of environmental risks relate to the implementation of the principles of the circular economy at the local level of government. It is one of the EU's political priorities and an important element of the European Green Deal. The tasks in the area of the municipal economy, which are included in local tasks, are of essential importance in this area²⁶. LGUs are responsible not only for providing important public services, but also as regulators of economic behavior, as well as investors in developing networks and devices. Moreover, the law allows for these tasks to be carried out in various ways, including in the form of local government budgetary establishments or using inhouse public procurement and assignment of their performance to municipal companies²⁷. An important part of the circular economy is waste management, which should be recognized not only through the prism of reducing waste volume, but primarily by its recycling into the production cycle. Environmental risk can be linked to the need for local governments to comply with the standards established in the EU and national legislation. They assume, among others, that by 2035, a proportion of 65% of municipal waste must be recycled, while in Poland, it was only 26.9% in 2021²⁸. Another legal requirement imposed on local government units is the obligation of municipalities to establish at least one selective municipal waste collection point. Furthermore, the challenges of the circular economy include energy efficiency, which focuses not only on finding cost-effective energy solutions, but also on diversifying external suppliers and combating energy poverty. An important part is the sewage infrastructure, wastewater production, and management. The tasks of the local government units include, among other things, ensuring the maintenance of wastewater systems and wastewater treatment plants within the so-called "agglomerations" (designated by local authorities in agreement with the State Holding 'Polish Waters'). This can pose risks to local authorities, as Poland is characterized by a relatively low percentage (and regionally diversified) of the population connected to water and sewer installations. For example, in 2021, the proportion of residents using wastewater treatment plants in cities was 95%, compared to only 46% in villages. When discussing the environmental risk resulting from a circular economy, it is also necessary to emphasize the challenges related to the so-called "bioeconomy", which is in the area of Smart Specialization Strategies of many Polish regions.

²⁶ Art. 1, point 1, sec. 1 of the Ustawa z dnia 20 grudnia 1996 r. o gospodarce komunalnej, Dz.U. 1997 nr 9 poz. 43.

²⁷ A. Sobol (ed.): Raport roboczy grupy eksperckiej Kongresu Polityki Miejskiej ds. Środowiska i adaptacji do zmian klimatu, Obserwatorium Polityki Miejskiej IMiR, Kraków 2019, p. 7-26.

²⁸Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain directives (Journal of Laws of the EU. No. 2008, No. 312, p. 3, as amended), art. 3b of the Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 13 maja 2022 r. w sprawie ogłoszenia jednolitego tekstu ustawy o utrzymaniu czystości i porządku w gminach, Dz.U. 2022 poz. 1297, as amended.

Sources of risk Consequences for various spheres of activity of local government units Sources of risk Consequences for LGUs

Sources of fisk	Consequences for EGOS			
ENVIRONMENTAL RISK				
Physical weather and hy- drological events Natural resources (water, soil, air) Circular economy Low-carbon economy	 threat to the lives and health of inhabitants resulting from weather and hydrological events; 			
	 medical assistance to people affected by weather disasters, treatment of diseases caused by environmental pollution; 			
	- water deficit threatening to meet the needs of the population and the economy, poor water quality, low retention, lack of hydrotechnical structures regulat-			
	ing water flow; low renewal of water resources;			
	- air pollution with emissions from the household and municipal sector, industry and transport; the negative impact of smog on the health and life of resi-			
	dents, the poor condition of urban green areas, poor water and soil quality, building facades or the lifetime of devices used in industry and households;			
	increasing the carbon dioxide emission; requirements related to ensuring a certain share of electric vehicles in public transport (electromobility);			
	 the need to guarantee sewage systems and wastewater treatment plants within the agglomeration, difficulties in sewing large areas with scattered develop- 			
	ment, problems related to the disposal of sewage sludge;			
	- a high share of solid fuel stoves and boilers, low importance of cogeneration in district heating, poor energy and visual condition of many residential and			
	public buildings; requirements for thermal modernization of buildings;			
	 rising energy prices, problems with finding external suppliers, energy poverty, low share of energy from renewable sources, unmodernized street lighting 			
Sustainability reporting	systems;			
	 growing requirements in the field of limiting the production of plastics and increasing their recycling and management of food waste, the need to replace 			
	traditional energy sources, the so-called "bioenergy": biofuels and biogas, space recycling;			
	- difficult access to credits and loans and higher costs of servicing debts incurred for purposes that do not meet the criteria of the EU Taxonomy (e.g., in-			
	vestments in thermal waste treatment installations); potential increase in the costs of implementing public procurement due to the reduction in the number			
	of contractors who meet the conditions specified in the EU Taxonomy; change in the current budget classification to 'green budgeting' (risk of improving budget indicators in order to gain access to external financing).			
SOCIAL RISK				
Depopulation Aging of the population Internal migration The influx of refugees Poverty Social exclusion Social inequalities	- in the case of depopulation and negative net migration, a decrease in the tax base; an increase in unit costs of providing many social services and mainte-			
	nance of technical infrastructure, a decline in the quality of human capital, oversupply of construction sites;			
	- the need to provide the elderly with long-term care, rehabilitation, care and assistance services, greater demand for health and social services for older			
	residents and - in the case of a positive net migration - for the immigrant population,			
	 the need to provide assistance to socially excluded people, social inclusion policy, increasing support for refugees; 			
	 problems with maintaining schools with a decreasing number of students in a situation of an influx of refugees - uncertainty and difficulties related to 			
	maintaining the quality and availability of care and educational services in the context of the increased number of children in schools;			
	 deterioration of the quality of space due to suburbanization; 			
	 the need to organize support for the unemployed, possible threats related to competition on the labor market of residents and immigrants, which may result 			
	in difficulties in finding employment or lower wages;			
	 preventing and combating crimes and social pathologies, 			
L	 pressure on the development of municipal housing 			

		GOVERNANCE RISK			
Management control, inter-	-	the obligation to ensure effective management control in the absence of uniform standards in this respect;			
nal audit	-	the need for a proper internal audit in view of its insufficient effectiveness;			
Transparency and infor- mation	-	ensuring high-quality information for residents (for properly assessing the degree of meeting their needs in relation to the taxes paid), entrepreneurs and capital donors (proper capital valuation), counteracting the 'Creative' budget accounting;			
Quality of social capital	-	implementation of a system for evaluating the quality of work of local government officials, their independence (civil service) and the degree of bureau-			
Good governance		cracy			
Anti-corruption	-	the need to ensure proportionate participation of women and men in the management of local government institutions;			
Ensuring gender equality	-	reduction of the gender wage gap			
and wages	-	reduce workplace rotation and implement procedures and activities to protect employees and prevent accidents and injuries in the workplace;			
Occupational Health and	-	the need to monitor the risk of human rights violations and the implementation of ethical standards (ethical code);			
Safety	-	fighting against corruption (preventing and eradicating corruption, freeriding, moral hazard and tax evasion), implementation of a whistle-blower proce-			
Respecting human rights		dure allowing employees or third parties to report potential or actual cases of illegal behavior and established standards;			
Sensitive data protection	-	ensuring sensitive data protection (including personal data) against unauthorized access by third parties.			
Source: own study.					
Table 2. Instruments of susta	Table 2. Instruments of sustainable public finance used to mitigate ESG risk in local government.				

i ype of fisk	Thist differences
	Eco-taxes (vehicle taxes, agriculture taxes, forestry taxes, real estate taxes) and eco-fees (local fees, municipal waste management fee; air pollution fees, product fees, trees
Environmental	and shrubs removal fees; license and maintenance fees; fees for exclusion of land form agricultural and forest production); administrative fines, other fines and tickets;
	funds from the National Fund for Environmental Protection and Water Management and the Regional Funds for Environmental Protection and Water Management (e.g.,
	under programs such as: 'District Heating', 'Clean Air', 'Sokół', 'Energia Plus', 'Green Public Transport'), the Thermo-modernization and Renovation Fund ('Stop Smog'
	program for municipalities) and the Polish Deal Fund: Strategic Investment Program; foreign funds (Regional Operational Programs; Operational Program Infrastructure
	and Environment, Operational Program for Eastern Poland, Norwegian Financial Mechanism, EEA Financial Mechanism, Just Transition Fund, Streetlight project - EPC
	under the Intelligent Energy for Europe program; Budget expenditure on pro-ecological projects (thermo-modernization, energy efficiency, RES installations, electromo-
	bility, transport infrastructure), targeted grants for financing environmental investments by entities not belonging to the general government, subsidies to tariffs for munic-
	ipal services; green public procurement; green bonds
	Benefits (permanent, periodic, specific), family benefits (family allowance, care allowance, nursing allowance, help for the birth of a child); financing non-cash benefits to
Social	reduce poverty and social inclusion; support for the unemployed, grants form State Fund for the Rehabilitation of the Disabled, and EU funds under the ESF financial tools
	targeted at families and the elderly; loans (e.g., for economic independence), socially sustainable public procurement, social bonds.
	Performance budgeting, participatory budgeting, development of methods for multi-criteria evaluation of public programs and long-term financial planning, green prac-
Governance	tices in budget accounting and reporting, debt management policy and financial liquidity management, application of fiscal rules, ensuring transparency and accountability
	of public finances.

Source: own study.

Moreover, the environmental risk to local governments stems from the need to adapt to the rules of a low-emission economy, which has been defined in many EU and national regulations²⁹. This risk is related to the need to reduce greenhouse gas emissions (especially in transport, heating, agriculture, etc.), ensure energy efficiency (e.g., by implementing cost-effective solutions in the field of thermo-modernization of buildings and the installation of more energy-efficient devices), and use of renewable energy sources (RES). It should be noted that for the low-emission economy, an important problem is the implementation (by local governments) of the appropriate instruments and action plans (including heat, electricity, and gas fuel supply plans – and, in the case of investments in RES or energy efficiency, Low-Emission Economy Plans).

In the area of local public transport in Poland, environmental risks arise, among other things, from certain obligations imposed on LGUs to ensure a certain share of electric vehicles in the fleet of vehicles used, as well as in public transport³⁰. In addition, the environmental risk related to the withdrawal of coal can be particularly acute for the local governments where the companies operating in this industry are located. This will require measures to mitigate the social and economic impact of this process. The source of environmental risk for LGUs may also be the provisions contained in the EU Taxonomy³¹, which is a system of uniform classification of environmentally sustainable activities. It aims to redirect capital from environmentally harmful investments towards greener alternatives. Although this regulation does not impose direct obligations on local authorities in the field of environmental reporting (except for some municipal companies), the risk may be manifested by restricting access to external financing and EU funds for purposes that do not meet the taxonomy criteria. One cannot ignore the potential impact of these regulations on tenders and public procurement, as well as changes in the current budget classification towards green budgeting³².

The second category included in ESG is social risk (S). The crisis caused by the COVID-19 pandemic and the outbreak of war in Ukraine influenced the appreciation of social factors, which so far were more secondary to environmental issues. Social risks in LGUs are related to unfavorable demographic phenomena and problems arising from exclusion and social inequality. Demographic processes that pose challenges at local and regional levels include depopulation, adverse changes in the demographic structure, and migration. In the period from 2004-2020, depopulation (a decrease in the number of inhabitants) affected almost 60% of Polish municipalities³³. This can affect the size and structure of labor supply, the distribution of consumer demand, as well as the type of needs

²⁹ Such as: European Green Deal, European Climate Law, "Fit for 55" (and many others) and national regulations (Poland's Energy Policy until 2040 and the National Plan for Energy and Climate for 2021-2030).

³⁰ Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 7 kwietnia 2022 r. w sprawie ogłoszenia jednolitego tekstu ustawy o elektromobilności i paliwach alternatywnych, Dz.U. 2022 poz. 1083, as amended.
³¹Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 establishing a frame-

work to facilitate sustainable investment and amending Regulation (EU) 2019/2088, Journal Of EU, L 198, from June 22, 2020.

³² K. Wójtowicz: Wpływ Taksonomii UE na finanse JST w Polsce, Konferencja naukowa pt. Diagnoza stanu finansów samorządu terytorialnego – problemy, wyzwania, rekomendacje, Białystok 30.05.2022 r.

³³ P. Swianiewicz, J. Łukomska-Szarek: Zmiany demograficzne 2004-2020 Ranking, Wspólnota, 18.12.2021 r.

met by the services provided by LGUs³⁴. Another problem is the so-called "grey tsunami"³⁵. The Central Bureau of Statistics shows that from 2009-2020, the proportion of people over 65 in Poland increased from 13.5% to 18.6%, while the population dependency rate rose from 19% to 28.2% (the second-highest result in the EU)³⁶. Aging has many consequences for local governments, such as increasing social expenditure (for example, related to long-term care for the elderly) and healthcare spending. These expenditures are usually not covered by increased local budget revenues due to the worse financial situation of the elderly and their lower ability to pay taxes. On the other hand, the social risk to LGUs may also arise from the increasing proportion of people of pre-worker age in the population. A high proportion of pre-workers determines one of the most important categories of local expenditure (i.e., expenditure on education). Another source of social risk in LGUs is migration, both internally (e.g., from the countryside to the city, from large metropolitan areas to suburban areas) and externally (including the influx of refugees from war-torn Ukraine). In 2021, net internal migration in more than 2,000 (of almost 2,500) municipalities in Poland remained negative³⁷. At the same time, at the end of May 2022, almost 3.4 million Ukrainian refugees arrived in Poland, which already accounts for 8% of the country's population. The influx of refugees has most affected urban areas where the proportion of the Ukrainian population is already, on average, 18%³⁸. The phenomenon of migration is a source of social risk, as it leads to changes in demand for public services, burdens on technical and social infrastructure, and sometimes also affects the spatial structure (e.g., as a result of suburbanization)³⁹. As part of social risk, one should also refer to challenges related to the broadly understood sphere of social exclusion (resulting from unemployment, homelessness, disability, addictions, etc.) and material poverty⁴⁰. Local governments affected by these phenomena are generally more vulnerable to financial problems. Furthermore, high concentrations of people with low social and material status in a particular area are often accompanied by high crime rates and other pathological behaviors. This results in an increase in local governments' expenditures on social assistance or public safety, which are not compensated by increased tax revenues.

The last category that makes up the ESG risk is governance risk (G). It is linked to corporate governance, which enables the respect of the rights and interests of all stake-holders that form the local government community (residents, local authorities, government officials, investors or capital donors). Within this risk category, particular challenges

 ³⁴ J. Czempas: Struktury i procesy demograficzne jako determinanty decyzji podejmowanych przez samorządy terytorialne, Finanse Komunalne (1-2)/2015, p. 66-82.
 ³⁵ With this phrase, the well-known Polish demographer P. Szukalski defined the aging process of the society,

³⁵ With this phrase, the well-known Polish demographer P. Szukalski defined the aging process of the society, whereby, while the real tsunami is retreating, 'the grey tsunami creates a permanent pool', P. Szukalski: Starzenie się ludności – wyzwania dla polityki społecznej, 2010, http://slideplayer.pl/slide/434248 (access: 31.08.2022).
³⁶ Local Data Bank, Central Statistical Office, www.stat.gov.pl (access: 31.08.2022).

³⁷ Ibidem.

³⁸ M. Wojdant, P. Cywiński, P.: Miejska gościnność: wielki wzrost, wyzwania i szanse, Raport o uchodźcach z Ukrainy w największych polskich miastach. Centrum Analiz i Badań, Unia Metropolii Polskich im. Pawła Adamowicza, Warszawa 2022.

³⁹K. Wójtowicz: Uwarunkowania..., 2019, op. cit., p. 197.

⁴⁰ M. Kawa, W. Kuźniar: Skala zagrożenia ubóstwem i wykluczeniem społecznym, Nierówności Społeczne a Wzrost Gospodarczy, 51 (3)/2017, p. 330-335.

for LGUs are related to ensuring effective management control and internal audit⁴¹. Management control aims to reduce irregularities in the activities of local government and contribute to achieving its goals. Internal audit should focus on the evaluation of management control for its suitability, effectiveness, and efficiency. Unfortunately, the report from the Supreme Audit Office shows that in most of the controlled LGUs, the audit is conducted incorrectly and remains ineffective⁴². Some problems for a limited number of local governments can also be linked to the requirement to establish internal audit committees. In the context of management control, one should also mention the whistle-blower procedure⁴³, designed to allow municipal employees and other stakeholders (the whistleblower) to report potential or actual unethical behavior or violations of the law. Governance risk can also result from a lack of transparency and access to information. Non-transparent behavior may lead to hiding the local public debt by using non-standard financial operations that are not included in the planned limits of incurred liabilities, as well as in budget reports. In extreme cases, this can lead to insolvency. In the context of the governance risk, it is necessary to mention the quality of local social capital, which consists of structural (groups, networks), normative-cognitive (social norms, value system), and behavioral (cooperation, cooperation, collective decisions) elements⁴⁴. The lack of social capital exposes local governments to corruption, moral risk, or tax avoidance. When discussing the governance risk, it is also important to emphasize the challenges faced by local authorities in connection with gender diversity policy, human resources policy (including the guarantee of equal pay for men and women and the limiting of the rotation of employment in local institutions), the guarantee of the respect of human and labor rights, and sensitive data protection.

The effects of ESG risk on the activity of local governments may be limited by appropriate fiscal policy instruments (sustainable public finances) (see Table 2). In the area of environmental risk mitigation, the main role is played by environmental policy instruments, such as environmental taxes and charges, as well as special purpose funds and foreign (including EU) financing. The environmental tax is an obligation fee on the subject of taxation that has a significant impact on the environment, which includes the following: vehicle tax, agricultural tax⁴⁵, forest tax⁴⁶, and property tax⁴⁷. The pro-ecological function of these taxes manifests itself in the possibility of distinguishing their amounts due to the magnitude of their impact on the environment (vehicle tax, property tax) or in direct relation to environmental risk are eco-fees. The 'garbage fee', which is fully allocated to cover the costs of the organization and operation of the municipal waste management system in municipalities, is very important. Other local ecological fees include air pollution fees,

⁴¹ Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 22 lipca 2022 r. w sprawie ogłoszenia jednolitego tekstu ustawy o finansach publicznych, Dz.U. 2022 poz. 1634, as amended.

⁴² Informacja o wynikach kontroli: Audyt wewnętrzny w jednostkach samorządu terytorialnego, LKI.430.007.2019, evidence number. 76/2019/P/19/074/LKI, NIK, Warszawa 2020.

⁴³ Directive (EU) 2019/1937 of the European Parliament and of the Council of 23 October 2019 on the protection of persons who report breaches of EU law (Journal of Laws of the EU, 2019, No. 305, p. 17, as amended).

 ⁴⁴ Z. Staniek Z.: Ekonomia instytucjonalna. Dlaczego instytucje są ważne?, Difin, Warszawa 2017, p. 47.
 ⁴⁵ Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 13 lutego 2020 r. w sprawie ogłoszenia jednolitego tekstu ustawy o podatku rolnym, Dz.U. 2020 poz. 333.

⁴⁶ Ustawa z dnia 30 października 2002 r. o podatku leśnym, Dz.U. 2002 nr 200 poz. 1682, as amended.

⁴⁷Ustawa z dnia 12 stycznia 1991 r. o podatkach i opłatach lokalnych, Dz.U. 1991 nr 9 poz. 31, as amended.

product fees, trees and shrubs removal fees, license and maintenance fees⁴⁸, and fees for the exclusion of land from agricultural or forest production. As a profitable tool for reducing local environmental risks, financial incentives can also be shown to support law enforcement (penalties and administrative fines). Furthermore, an instrument for countering environmental risks is also earmarked funds that combine penalties or taxes with their allocation to environmental objectives. The LGUs in Poland use mainly the resources of the national (or regional) fund(s) for environmental protection and water management. The role of foreign sources of financing cannot be neglected, among other things: Regional Operational Programs, Operational Program Infrastructure and Environment, Operational Program for Eastern Poland, Norwegian Financial Mechanism, European Economic Area Financial Mechanism and Just Transition Fund. On the other hand, expenditure tools include direct budgetary expenditure for pro-ecological projects as well as targeted grants for financing or co-financing environmental investments carried out by the private sector (households, housing communities, entrepreneurs, as well as municipal legal entities). This category also includes tariff subsidies for certain services provided by municipal companies (for example, collective water supply and wastewater disposal). Innovative financial instruments can be included in green public procurement and green bonds, which were particularly important after the introduction of the EU Taxonomy.

Financial tools to reduce social risk in LGUs are mainly manifested in social policy instruments⁴⁹, including benefits (permanent, temporary, specific) and loans. This category also encompasses family and care allowances. In addition, local governments finance non-monetary aid aimed at poverty reduction (providing shelter or a meal) and social inclusion (crisis intervention and medical services). Instruments to mitigate environmental risks may include financial resources to support the unemployed and job seekers. An important source for financing the integration of people with disabilities is the National Fund for the Rehabilitation of Persons with Disabilities⁵⁰. Tools aimed at families and the elderly should also be mentioned. An increasingly popular instrument is the use of social clauses in determining criteria for public procurement or projects financed from European funds, particularly the European Social Fund. An innovative mechanism is social bonds in which local authorities borrow funds from existing markets to fund investments in social impact programs.

To limit the governance risk, local governments should use sustainable public finance instruments such as performance budgeting and participatory budgeting. Tools relating to the protection of fiscal discipline, including debt management and financial liquidity policies, the application of fiscal rules – as well as transparency and accountability mechanism – play a very important role.

⁴⁸ Articles 133 and 134 of the Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 7 kwietnia 2022 r. w sprawie ogłoszenia jednolitego tekstu ustawy - Prawo geologiczne i górnicze, Dz.U. 2022 poz. 1072, as amended.

⁴⁹ Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 17 listopada 2021 r. w sprawie ogłoszenia jednolitego tekstu ustawy o pomocy społecznej, Dz.U. 2021 poz. 2268, as amended

⁵⁰ Ustawa z dnia 27 sierpnia 1997 r. o rehabilitacji zawodowej i społecznej oraz zatrudnianiu osób niepełnosprawnych, Dz.U. 1997 nr 123 poz. 776, as amended.

Conclusion

Local governments operate under the risk of non-financial factors present in the main areas of their activity. The ESG risk has financial consequences for the actions conducted by the local government, which makes it necessary for local government units to consider this type of risk in the management process. At the same time, due to the multidimensional effects on the activity of economic entities and the strength and scope of impact, ESG risk is subject to numerous regulations, including those concerning the functioning of local government units. Therefore, the local government must implement solutions and guidelines relating to ESG determined by the applicable law. The paper is one of the first to discuss the impact of ESG factors on local government activities. The European Union has introduced several measures to reduce ESG risk; these measures are also associated with implementation obligations on the part of local government units (including in urban transport or waste management) and burdens on local government budgets. In the coming years, it is expected that domestic and international institutions, including European institutions, will intensify actions to reduce the risk of factors resulting from the adopted and binding strategic documents. These activities will also apply to local government units, which must find funds to carry out adaptation activities and develop comprehensive risk management systems for local government units and ESG reporting.

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Polski samorząd terytorialny wobec wyzwań kreowanych przez ryzyko czynników niefinansowych (ESG)

Streszczenie

Celem artykułu jest usystematyzowanie stanu wiedzy na temat ryzyka czynników niefinansowych w polskim samorządzie terytorialnym. Ryzyko zmian klimatu, transformacji energetycznej, starzenia się społeczeństwa, czy ryzyko pandemiczne to tylko wybrane przykłady tego rodzaju ryzyka oddziałującego na jednostki samorządu terytorialnego (JST). W szczególności w artykule przedstawiono płaszczyzny i obszary usług publicznych realizowanych przez samorząd terytorialny najbardziej wrażliwe na działanie ryzyka ESG. Zwrócono uwagę na mechanizm dostosowawczy i działania podjęte przez samorząd terytorialny w Polsce mające redukować negatywny wpływ ryzyka ESG na aktywność JST i stabilność ich budżetów. Zaprezentowano kwestie wpływu regulacji unijnych odnoszące się do "niskoemisyjności" i mające wpływ na transport publiczny, przybliżono kwestie dotyczące działań na rzecz transformacji energetycznej, czy walki ze smogiem. W artykule wykorzystano krytyczną analizę literatury, metody porównawcze, obserwację, metody indukcji i dedukcji. Opracowanie jest jednym z pierwszych, które podejmuje dyskusję na temat roli i miejsca ryzyka czynników finansowych w działalności JST.

Słowa kluczowe: ryzyko, ESG, samorząd, usługi publiczne Kody JEL: H72, M42

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