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Chapter 7

Roadmap to Extension of the Balanced Scorecard with an ESG Perspective: The Concept for Large Cities

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The shortage of funds and the problems of ecological and social inequalities made economic entities, companies and public institutions aware of the need to consciously and decisively address the issues of sustainable development. Sustainable development is a complex issue and a system of expectations towards institutions whose common goal is to combine economic satisfaction, environmental awareness and social justice (Szóka, 2022). The opinion that contemporary organizations are responsible for their stakeholders, community and society has existed for many decades (Hoang, 2018). In such a situation, there is a growing demand for non-financial factors (Domanović, 2022; Mio, Costantini, & Panfilo, 2022). This information about the organization is required both to disclose relevant and reliable information as well as to monitor the governments of countries and local communities.

ESG (Environment, Social, Governance) is extremely important, but at the same time, it is nothing ground-breaking (Edmans, 2023). On the one hand, this is extremely important as it is fundamental to long-term value. On the other hand, glorifying ESG is not necessary. Firstly, the proposed European regulations will force pro-ecological actions. Secondly, attention to social aspects is a form of creating

capital that gives tangible benefits. Thirdly, good governance often allows for minimizing the costs of the organization's operation. Therefore, rewar-ding commitment to ESG can be compared to providing additional compensation for standard work.

The importance of protecting the environment, solving social problems related to internal and external stakeholders, as well as observing the principles of good corporate governance is becoming more and more important also in the life of local authorities. ESG reporting issue has recently come under the spotlight due to the growing public interest in good governance, accountability and transparency (Bose, 2020). In response, institutions must strive to disclose more information covering environmental, social, and governance factors. The inclusive perspective refers to the balanced, equitable and simultaneous consideration of every ESG factor to be implemented. Therefore, integrative ESG reporting would provide a means of engagement and communication between institutions and many stakeholders with different information needs (Manes-Rossi & Orelli, 2020).

Local communities are primarily interested in **environmental** factors, although they often do not explicitly name them (Zioło & Wójtowicz, 2022). Danger to the health and life of citizens caused by weather and hydrological phenomena and ways to protect against such problems are key elements of life for more people. Also, health issues and the treatment of diseases caused by environmental pollution are important to many. Water deficit that threatens to meet the needs of the population and the economy, poor water quality, low retention, lack of hydrotechnical structures regulating the flow of water, and low renewable water resources are other environmental issues. Air pollution with emissions from the citizens' housing, the municipal sector, industry and transport, the negative impact of smog on the health and life of residents, the poor condition of urban greenery, and the poor quality of water and soil are also becoming the subject of consideration by local authorities (Government Finance Officers Association [GFOA], 2020).

Another environmental aspect is the need to secure sewage networks and sewage treatment plants in the agglomeration and to overcome difficulties in integrating large areas with dispersed buildings and problems related to sewage sludge disposal. National and local authorities are trying to reduce the high share of furnaces and boilers for solid fuels, the low importance of cogeneration in heating, and the poor energy condition and external appearance of many residential and public buildings. Appropriate requirements for the thermal modernization of buildings are also important.

The more developed a society is, the more **social** issues are perceived. In the event of depopulation and a negative migration balance, the tax base decreases, an increase in unit costs of many social services and maintenance of technical infrastructure, and a decrease in the quality of human capital should be indicated as the key problem to be solved. It is also important to provide the elderly with long-term care, rehabilitation, care and assistance services. What also matters is

the need to help the socially excluded, the policy of social integration, and increasing support for the weakest. A social problem to be solved in most cities is the need to organize support for the unemployed, minimizing threats related to competition in the labour market of citizens, which often results in difficulties in finding employment or lower wages. The last important social problem is maintaining schools in a situation of a decreasing number of children or, on the contrary, difficulties related to ensuring the quality and availability of educational services in a situation of an increased number of students in schools. These threats are directly related to another social problem, which is the lack of urbanization sustainability, especially in a large city.

Good governance is an element of interest in the most developed local communities (Armstrong & Li, 2022; Kardos, 2012). It is important to ensure effective management control, appropriate internal audit, and provide residents with high-quality information and counteract fraudulent settlement of the budget. Important factors of good governance include the use of a system for evaluating the quality of work of city officials and the degree of bureaucracy. It is difficult but necessary to investigate the risk of human rights violations and the application of ethical standards, as well as to counteract corruption and implement a whistle-blowing procedure enabling employees or third parties to report cases of behaviour that is against the law or customs (Zioło & Wójtowicz, 2022).

All the arguments raised require time, human energy and additional funding. Assumptions constructed this way make it necessary to prepare assumptions for ESG reporting for local government and government institutions. Beautiful reporting, however, cannot be an art, an end in itself. Reporting should reflect the actual state of affairs, i.e., real activities of local community managers. It should report activities aimed at improving the quality of life. ESG reporting should be the final element of the city's ESG strategy. Preparing such a strategy requires many activities, especially incorporating it into the already existing strategy of the city. The best tool supporting the preparation and implementation of the strategy is the Balanced Scorecard (BSC). Therefore, the main objective of this chapter is to develop the concept of a roadmap for the implementation of ESG perspectives in the BSC of large Polish cities. The following research methods were used in the chapter: literature research, reasoning by analogy, and case analysis.

7.1. Traditional Balanced Scorecard for the City

The concept of the BSC was created in the 1990s in the United States. It was developed as a result of the research project 'Measuring Efficiency in Organizations of the Future' concerning enterprises (Kaplan & Norton, 1992). The main goal of the BSC is to ensure the implementation of the adopted development strategy. The BSC allows for formulating measurable and verifiable strategic goals,

effectively communicates these goals to members of the organization and enables control and assessment of the degree of achievement of goals.

The concept of the BSC was originally developed for the needs of enterprises. Simply transferring the concept of a strategic scorecard to public sector entities may cause disruptions in their functioning. This is due to the fact that these entities do not operate for profit but for the benefit of their stakeholders. The **adaptation of the concept of the BSC** developed for enterprises into a concept that could be used by public organizations was made thanks to the city of Charlotte (Kaplan & Norton, 2001). The city of Charlotte used a management-by-objectives process that has served the organization relatively well for many years and has helped staff monitor performance by comparing it to objectives. Nevertheless, it did not reflect the city's emphasis on strategic goals, management in line with the city's mission, and the rapid changes taking place in the environment. The old measurement system focused the city's attention on the past, not the future. It was an audit tool, not a planning tool, and had no direct connection with the vision, mission and goals of the city (Niven, 2008).

With the approval of Kaplan and Norton (2001), Charlotte adapted the BSC to suit her needs, bringing the customer perspective to the foreground rather than the financial perspective, as was the traditional concept of the BSC. This modification of the BSC allowed greater flexibility and facilitated its further use in the public sector (see more on the BSC for non-profit organizations in chapter 6).

The customer perspective determines who the city's customer is, how the city intends to compete for them, and how it plans to retain them. In the case of a city, the client will be both a resident and an investor. For example, a city can provide its residents with attractive housing and recreation opportunities, which entails the need to develop appropriate infrastructure, provide good services to citizens or provide them with new jobs. For potential investors, the activities of the city may be useful if they result in offering new places for investments, improving infrastructure or offering advice on the possibility of doing business in the city.

In order to design the customer's perspective, it is necessary to identify the most important urban governance issues that the city needs to solve in order to provide the citizens (the local community) with the services they require. The customer perspective of the city is also called the 'citizen's perspective', the 'citizen's service perspective', or the 'stakeholder perspective' (Kaplan & Norton, 2004; Nieplowicz, 2015; Niven, 2008). The strategic question from the customer's perspective is as follows: Does the city focus on the needs of its residents, and does it provide high-quality services? The answer to such a question determines the direction of the actions taken. In the city management strategy, the customer's perspective is subordinated to the other perspectives of the BSC, which is expressed by linking their objectives and measures with the implementation of tasks aimed at the well-being of citizens.

The internal processes perspective is the identification of the most important processes and the monitoring of their progress. Effective management of the process will be reflected in the acquisition and retention of a broadly understood client of the city. From the perspective of internal processes, it is therefore important: Can the city change the way the service is delivered and improve it? The management of internal processes is focused on increasing their efficiency, e.g., by coordinating (combining and reconciling) activities carried out by individual departments and departments within the city hall and the instruments they use. This perspective is also called the 'perspective of the city hall' or the 'perspective of resource management' (Kaplan & Norton, 2004; Nieplowicz, 2015; Niven, 2008).

The financial perspective points to the management of the city's financial resources, i.e., on the one hand, budgetary discipline, and on the other hand, the maximum rationalization of the funds spent. The city's financial and economic activities are not focused on profit (as in the case of enterprises) but on taking into account the principle of thriftiness and saving. For this reason, in the case of cities, the financial perspective of the BSC is called the 'perspective of management', the 'perspective of the city budget', or the 'perspective of running the business' (Kaplan & Norton, 2004; Nieplowicz, 2015; Niven, 2008). In the financial perspective, the strategic question should be answered: Are the funds spent economically? Proper financial management will allow for securing and developing the com-munal good, as well as encouraging potential investors and reassuring residents of the correct spending of their taxes. The objectives and measures of the financial perspective define the financial effectiveness of the city's activities, which is necessary to ensure the continuous implementation of the administrative tasks assigned to it and resulting from the strategy of actions aimed at the city's development.

The learning and growth perspective defines the resources necessary to introduce changes and achieve the goals included in the customer, internal processes and financial perspectives. The cause-and-effect chain of strategic objectives, passing through all four perspectives, has its origin in the learning and growth perspective. Therefore, the goals formulated in this perspective are the basis for long-term development and improvement of the city. It is, therefore, necessary to invest in changing the qualifications of employees, improving technologies and information systems, and adapting organizational procedures. In the perspective of learning and growth, the strategic question should be answered: Does the city provide IT and infrastructural support, and does it conduct training for employees for continuous improvement?

For the needs of the city, the learning and growth perspective is sometimes referred to as the 'perspective of the future' or the 'perspective of employee development' (Kaplan & Norton, 2004; Nieplowicz, 2015; Niven, 2008). The objectives and measures describing the requirements for the employees of the

city hall should be formulated in such a way that in the future, the city hall will become a learning organization, implementing a continuous process of improving its functioning, identifying strategic problems for the local community and providing the city with financing for planned tasks. In this perspective, the contribution of employees and the contribution of the entire city hall, necessary to achieve long-term social goals, can be defined, and not only the focus on the satisfaction of the employees themselves. This is related to the process of organizational and political changes in local government administration.

A properly designed BSC for the city communicates the strategy to the stakeholders on the basis of the goals, measures and relationships between them included in the strategy map. A precisely defined set of measures allows for focusing on the key factors for the implementation of the city's strategy and ensures that the mayor and the city council can receive reports enabling them to assess the degree and effectiveness of the implementation of the strategy. Thanks to this, the president of the city and the city council can effectively manage the city.

7.2. ESG Implementation in the City's Strategy

A city that wants to have effective achievements, satisfied residents, tailored and effective processes and satisfied employees should properly formulate a vision and mission, and then define a strategy and translate it into operational activities and implement a performance measurement system. In order to achieve the expected achievements, it is necessary to create appropriate incentive systems because only a properly built performance measurement system and the related remuneration system ensure the achievement of strategic goals set by the needs of the local community.

The **ESG strategy** expresses the city's long-term goals and general lines of action and shows how to allocate the resources that are necessary to meet the needs in the field of environmental protection, social welfare and good governance (Armstrong & Li, 2022). A well-developed strategy makes a city a better place to live than its neighbours when it develops something that will distinguish it and when it is able to maintain its uniqueness. Better environmental and social conditions will make the city more attractive and attract new residents, and thus new budget revenues will be generated. Synthetically defining in the operational sphere, changes should be introduced on an ongoing basis, ensuring the flexibility of operation and implementing model solutions used both by other cities and individual units of a given city. On the other hand, in the strategic sphere, it is important to constantly search for opportunities to strengthen the image of a comfortable place to live. The strategic sphere requires discipline and sticking to the chosen path. Measuring the results of strategic activities is necessary because 'you cannot manage what you cannot measure' (Kaplan & Norton, 2001). It can be

further specified as 'if you can't measure it, you can't understand it, and if you can't understand it, you can"t control it, and finally, if you can't control it, you can't improve it' (Nita, 2009).

The next important step is to set **strategic ESG goals**. Strategic goals are desirable states of affairs that determine the path of the city's development in the coming years. Cities should indicate strategic goals related to securing the health and life of residents, taking care of the weakest and eliminating waste and wasting opportunities resulting from poor governance (De Guimarães, Severo, Júnior, Da Costa, & Salmoria, 2020). In order to measure the degree of achievement of strategic goals, one or more ESG performance measures are defined. If you define several performance measures, you can expect better control over whether the intentions contained in the goal definition will be maintained.

The strategic analysis of the city is carried out using an analytical or synthetic method. The analytical method is an independent assessment of individual components of the environment and organizational resources, i.e., an analysis of the micro- and macroenvironment and then the analysis of the city itself. Depending on the knowledge and experience of the persons carrying out this analysis, a synthetic assessment of individual components of the environment and resources of the unit will be made in terms of developing a future strategy (Bibri, 2021). The synthetic method most often consists in comparing the achievements (in terms of ESG) of the city against the background of similar or neighbouring cities.

It is also useful to develop a strategic balance, i.e., a comprehensive method of analysis consisting of dividing the city into ESG areas that are subject to detailed study and assessment. Assessments are made by external experts and employees of various organizational units and are recorded on specialized cards that are significantly expanded (Teixeira Dias et al., 2023). The organization assigns a finite number of points separately for each area. Additionally, the assignment takes place after the assessment is completed. Thanks to this, a comprehensive assessment of the city's strategic ESG potential is obtained, and its strengths and weaknesses are identified. The use of this method requires the selection of the best assessment methods and the development of extensive databases on industries and units, which are the basis for the development of cost benchmarks, efficiency, etc. Such a method requires cooperation with external consultants who will support building a solid foundation for future reorganization.

The last element of conceptual work on the implementation of ESG in the city's strategy is the use of the experience of other cities. External **benchmarking** consists of carrying out comparisons with neighbouring cities or cities of similar size in other countries. Functional benchmarking is also used, which consists of comparing processes constituting the same function performed in various areas of the city's life (the subject of comparison is not a competitor). These comparisons

most often concern health protection, social development, forms of combating corruption and stigmatizing the reprehensible behaviour of local authorities. It is important that cities use benchmarking as a continuous process and not as a one-off or single action (Warnecke, Wittstock, & Teuteberg, 2019). The external environment is constantly changing, and it may turn out that the adopted solutions will no longer be valid.

Strategic analysis is the beginning of activities related to the development of the strategy. Thanks to it, the goal, state or model that the city should aim at in terms of minimizing the ESG risk is set. This state is described by means of objectives and measures of their performance. A useful solution is to group these intentions, taking into account the key areas of operation (Teixeira Dias et al., 2023). The result of the completed strategic analysis is often the assumption for the Balanced Scorecard model. Setting several or a dozen goals requires coordination and harmonization of activities in order to organize the intentions and adjust the available resources to them. A useful solution used by most entities implementing the BSC model is the strategy map.

The strategy map graphically reflects the hypotheses contained in the strategy by illustrating cause-and-effect relationships between strategic ESG goals. Depending on the priorities of the city's inhabitants, the importance of individual ESG areas is determined. Usually, the financial area is of key importance. However, in organizations that are not profit-oriented, the most important thing is to satisfy the residents who finance their activities (Niven, 2008). It is not enough just to set goals. It is necessary to confront them with external conditions. The solution used in this area is the analysis of key success factors. If it is supplemented with the proper allocation of available resources, it can be expected to develop the best possible ESG strategy contextually adapted to the expectations of the local community.

The element integrating the implementation of the ESG strategy is the development of control mechanisms. **Strategic control** of assumptions concerns the systematic adjustment of assumptions (hypotheses) adopted in the strategy. When formulating a strategy, certain presumptions are made that can be met in an uncertain future. Some of them are rejected as unrealistic. It is also associated with risk. Therefore, the adopted hypotheses should be monitored continuously at the stage of strategy implementation. The unpredictable future materialized threats and previously unrecognized factors can reveal themselves at any time. In addition, they can become a barrier that makes it difficult or impossible to achieve the intended goals. Strategic implementation control should be implemented at the initial stage of strategy implementation. At a time when an uncertain future turns into a certain present, also thanks to the availability of more information, they become the basis for assessing the correctness of the strategy and recognizing

whether the assumed strategic goals are being implemented. The strategy implementation schedule should be supplemented with disruptions, which should also force the application of modified control mechanisms.

7.3. ESG Perspective in the City - Case Study

Measuring the effectiveness of the instruments used to improve the quality of life of residents is a key element of the uninterrupted operation of local authorities. It is not possible to unequivocally indicate the form of extending the traditional concept of the BSC with the assessment of the effectiveness of broadly understood ESG activities. The existing BSC implementations allow for the use of one of the two opposite solutions (Butler, Henderson, & Raiborn, 2011). The first is to extract an additional ESG perspective in the structure of the already existing BSC. The second involves integrating quality-of-life goals and measures into all four standard perspectives of the BSC. Both approaches have their strengths and weaknesses, but implementing a separate ESG perspective will highlight the importance of local government efforts in this regard. Residents will receive a strong signal of how managers approach improving the quality of their lives in its most important non-financial aspects.

City administrators have a legal obligation to increase the quality of life by increasing the efficiency of managing public property and meeting key social needs. The financial consequences of the lack of an ESG strategy usually burden members of the local community as the final beneficiaries of the processes and decisions made. It is not possible to passively accept the lack of environmental and social activities; it is necessary to minimize the probability of the occurrence of such threats. Because local government units operate based on funds provided by taxpayers, therefore, the proposed solution is to include goals and measures related to the improvement of the quality of life in the structure of the BSC. Managers of many cities in the world often use the BSC, which is also implemented in Poland. Conceptual work is being carried out, which has not yet taken its final form. However, it is not possible to use a universal method of extending it to measure the effectiveness of ESG activities. In the case of large, dynamically developing cities, it seems reasonable to separate an additional ESG perspective, while in the case of smaller local government units, ESG objectives and measures should be integrated into the existing BSC perspectives, e.g., into the customer perspective or the perspective of internal processes.

Large cities have much more opportunities to carry out development projects (ESG). Most often, the reason for this situation is the amount of income, which translates into the ability to incur larger liabilities. The use of contracted liabilities is indispensable in the development process. However, these liabilities generate

the risk of over-indebtedness. The effects of such threats can affect the standard of living of residents for a long period of time. Therefore, due to the significant potential losses resulting from the implementation of large development projects, an additional perspective can be used in the BSC – which is ESG. In the **ESG perspective**, key benefits resulting from expenditure on improving the quality of life of residents should be indicated.

Bearing in mind the traditional concept of the BSC for a city presented in chapter 7.1 and the possibility of extending it with an ESG perspective, Table 7.1 presents strategic questions, strategic goals and measures in five **BSC** perspectives for an example of a **large Polish city**.

Based on Table 7.1, it can be concluded that the achievement of the objectives contained in the ESG perspective should translate into an increase in the quality of life of residents. On the other hand, it results directly from the financial perspective, as it involves the need to incur additional expenditures on environmental, social and governance activity. For example, higher spending should be compensated by increasing development opportunities and, indirectly, by increasing tax revenues. For this reason, in the ESG perspective, the question arises of which environmental, social and governance activities should be controlled in order to achieve a long-term increase in the operational efficiency of the unit. The ESG perspective on the strategy map is located between the customer perspective and the financial perspective, on par with the internal process perspective.

The presented case shows that ESG is a significant challenge for the city authorities, so it requires special management, especially at the strategic level. The BSC is a very good tool for evaluating the performance of any type of organization. Therefore, it is worth taking into account the problems of pro-environmental and pro-social activities as well as those improving governance. In large cities, in the BSC, an additional ESG perspective is to be separated, while in smaller units, it is crucial to include additional goals and measures in the existing perspectives to emphasize how important these activities are.

The main limitation of this research is the small research sample. Few Polish cities have implemented BSC. In many cases, this is the basic version of the BSC consisting of four perspectives. This is the reason why it is not possible to examine the readiness of city managers to develop this method of performance measurement. The second limitation is the still small participation of the residents of Polish cities in the work on the preparation of the BSC. Residents have a small share in the development of detailed measures, but they have no influence on the development of strategic goals. Thirdly, many residents are not aware of the possibility of their social participation at all (they do not know that they can have an impact).

Table 7.1. Strategic questions, strategic goals and measures in five BSC perspectives for an example of a large Polish city

Goals	Measures
Customer perspective: Is the city focused on the needs of its stakeholders, and does it provide high-quality services?	stakeholders, and does it provide high-quality services?
Increasing the level of social and relational capital	1. Place in the ranking of cities
Ensuring a high quality of life for residents	 Percentage of the population living in close proximity to green areas The level of a subjective sense of security (determined on the basis of a periodically conducted survey among residents) Number of social actions (communal fridge, sharing clothes, donating a book, etc.)
A friendly city for entrepreneurship	 Number of enterprises opened in the current period Number of inhabitants starting a sole proprietorship The value of outlays on infrastructural investments
Development of municipal construction	1. Number of new or revitalized facilities
ESG perspective: Which environmental, social and governance activities need to be controlled for long-term growth?	ice activities need to be controlled for long-term growth?
Strict adherence to environmental policy regulations and instructions	1. Number of violations
Maintaining the risk of depopulation, population ageing and the percentage of residents at risk of exclusion	1. Increase in spending on social care.
Reducing the risk of mismanagement and errors in city management	1. Number of faults and errors in audit and control procedures
Increased air quality	1. Number of days in a year for which the dust standard is exceeded
Promoting pro-ecological behaviour	 Number of social campaigns 'Plant a tree in your district' Percentage of residents engaging in pro-ecological campaigns organized by the city Percentage of inhabitants using bicycle paths
Providing diversified transport	 Percentage of residents using public transport Number of drivers using public transport

Internal processes perspective: Can the city change the way the service is delivered and improve it?	v the service is delivered and improve it?
Simplification of procedures and the service process at the Municipal Office	 The number of cases that can be dealt with 'in one go' in one building The number of city services that can be arranged via the Internet
Cooperation with external specialists	1. Number of projects implemented jointly with external specialists
Providing access to information	1. Number of residents satisfied with the information obtained 2. Number of officials having completed additional courses
Ensuring an efficient system of communication with residents	 Percentage of inhabitants using the transport system Number of projects submitted under the participatory budget accepted for implementation
Financial perspective: Are the funds being used economically?	Ŋż
Ensuring the continuity of financing public services	1. Value of budget deficit/surplus
Maximization of income from assistance funds	 Number of applications approved/total number of submitted applications Total amount of funds raised
Tax database management	 Current tax collection rate Number of changes in taxes favourable to entrepreneurs and investors Number of new residents and entrepreneurs
Learning and growth perspective: Does the city provide IT or improvement?	Learning and growth perspective: Does the city provide IT and infrastructural support, and does it conduct training for employees for continuous improvement?
Development of ICT infrastructure	 Percentage of employees working from home Number of faculties equipped with mobile applications
Increased involvement of city officials	 Number of new project activities the official is involved in Number of officials entering project activities for the first time
The real use of information (translation of information into knowledge)	 Number of submitted applications in competitions organized and financed by national and European institutions, initiated by officials
Promoting learning and development	1. Number of employees who volunteered for additional training

Source: own presentation based on (Lew, Nieplowicz, Ossowski, & Zackiewicz-Brunke, 2021; Nieplowicz, 2015; Zioło & Wójtowicz, 2022).

Summing up: the benefits and costs of implementing the ESG perspective can be significant, and cities should start implementation activities immediately. Making a decision to extend the BSC may result in an increase in organization costs and additional involvement of internal staff, but thanks to this, there will be additional social and environmental benefits that are difficult to evaluate. However, in the future, these benefits will result in significant competitive advantages. If it is not possible to implement the ESG perspective once, it is necessary to periodically extend the remaining BSC perspectives with these issues. In this way, the gradual expansion of the BSC over several subsequent periods will minimize the implementation costs. Finally, previously prepared goals in individual perspectives will allow for a smooth transition to the ESG perspective, with minimal expenditure. Future research work should be focused on improving methods related to determining key success factors, strategic goals and the most important measures in the ESG area. Cities should focus on listening to the needs of their residents and smartly integrating these needs with trends in the global economy.

References

- Armstrong, A. & Li, Y. (2022). Governance and sustainability in local government. *Australasian Accounting, Business and Finance Journal*, *16*(2), 12–31. DOI:10.14453/aabfj.v16i2.3
- Bibri, S. E. (2021). Data-driven smart sustainable cities of the future: An evidence synthesis approach to a comprehensive state-of-the-art literature review. *Sustainable Futures*, *3*, 100047. DOI:10.1016/j.sftr.2021.100047
- Bose, S. (2020). Evolution of ESG reporting frameworks. In D. C. Esty & T. Cort (Eds.), *Values at Work: Sustainable Investing and ESG Reporting* (pp. 13–33). Cham: Palgrave Macmillan. DOI:10.1007/978-3-030-55613-6
- Butler, J. B., Henderson, S. C., & Raiborn, C. (2011). Sustainability and the balanced scorecard: Integrating green measures into business reporting. *Management Accounting Quarterly*, 12(2), 1–10.
- De Guimarães, J. C. F., Severo, E. A., Júnior, L. A. F., Da Costa, W. P. L. B., & Salmoria, F. T. (2020). Governance and quality of life in smart cities: Towards sustainable development goals. *Journal of Cleaner Production*, 253, 119926. DOI:10.1016/j.jclepro.2019.119926
- Domanović, V. (2022). The relationship between ESG and financial performance indicators in the public sector: Empirical evidence from the republic of Serbia. *Management: Journal of Sustainable Business and Management Solutions in Emerging Economies*, 27(1), 69–80. DOI:10.7595/management.fon.2021.0032
- Edmans, A. (2023). The end of ESG. Financial Management, 52(1), 3-17. DOI:10.1111/fima.12413
- Government Finance Officers Association [GFOA]. (2020). Research report ESG risk factors: ESG considerations for governmental issuers: understanding ESG opportunities and risk factors and why governments should make them a priority. Retrieved from https://www.gfoa.org/materials/esg-considerations-for-governmental-issuers
- Hoang, T. (2018). The role of the integrated reporting in raising awareness of environmental, social and corporate governance (ESG) performance. In S. Seifi & D. Crowther (Eds.), *Stakeholders, governance and responsibility* (pp. 47–69), vol. 14. Bingley: Emerald Publishing. DOI:10.1108/ S2043-052320180000014003

- Kaplan, R. S. & Norton, D. P. (1992). The balanced scorecard measures that drive performance. *Harvard Business Review, 70*(1), 71–79. [Reprint #92105.]
- Kaplan, R. S. & Norton, D. P. (2001). *The strategy-focused organization: How balanced scorecard companies thrive in the new business environment*. Boston: Harvard Business School Press.
- Kaplan, R. S. & Norton, D. P. (2004). *Strategy map: Converting intangible assets into tangible outcomes*. Boston: Harvard Business School Press.
- Kardos, M. (2012). The reflection of good governance in sustainable development strategies. *Procedia-Social and Behavioral Sciences*, *58*, 1166–1173. DOI:10.1016/j.sbspro.2012.09.1098
- Lew, G., Nieplowicz, M., Ossowski, M., & Zackiewicz-Brunke, B. (2021). *The Balanced Scorecard in practice of Polish companies and institutions.* Katowice: Instytut Prawa Gospodarczego, IUS Publicum.
- Manes-Rossi, F. & Orelli, R. L. (2020). Reflections on new trends in public sector reporting: Integrated reporting and beyond. In F. Manes-Rossi & R. L. Orelli (Eds.), *New trends in public sector reporting: Integrated reporting and beyond* (pp. 195–205). Cham: Palgrave Macmillan. DOI:10.1007/978-3-030-40056-9 10
- Mio, C., Costantini, A., & Panfilo, S. (2022). Performance measurement tools for sustainable business: A systematic literature review on the sustainability balanced scorecard use. *Corporate Social Responsibility and Environmental Management*, 29(2), 367–384. DOI:10.1002/csr.2206
- Nieplowicz, M. (2015). The use of the balanced scorecard in the implementation of the strategy to support the development of sport and recreation in the city of Lublin. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, (375), 94–104. DOI:10.15611/pn.2015.375.11
- Nita B. (2009). Rola rachunkowości zarządczej we wspomaganiu zarządzania dokonaniami przedsiebiorstwa. Wrocław: Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu.
- Niven, P. R. (2008). *Balanced scorecard step-by-step for government and nonprofit agencies*. Hoboken, NJ: John Wiley & Sons.
- Szóka, K. (2022). The importance of green controlling the connection of the sustainability balanced scorecard and the ESG. In *38th EBES Conference Warsaw: Proceedings*, vol. 1 (pp. 866–880). Warsaw: University of Warsaw, Faculty of Economic Sciences.
- Teixeira Dias, F., de Aguiar Dutra, A. R., Vieira Cubas, A. L., Ferreira Henckmaier, M. F., Courval, M., & de Andrade Guerra, J. B. S. O. (2023). Sustainable development with environmental, social and governance: Strategies for urban sustainability. *Sustainable Development*, *31*(1), 528–539. DOI:10.1002/sd.2407
- Warnecke, D., Wittstock, R., & Teuteberg, F. (2019). Benchmarking of European smart cities a maturity model and web-based self-assessment tool. *Sustainability Accounting, Management and Policy Journal*, 10(4), 654-684. DOI:10.1108/SAMPJ-03-2018-0057
- Zioło, M. & Wójtowicz, K. (2022). Local Polish self-governments against the challenges created by the risk of non-financial factors (ESG). Zeszyty Naukowe SGGW: Polityki Europejskie, Finanse i Marketing, 28(77), 179–193. DOI:10.22630/PEFIM.2022.28.76.23