

METHODOLOGICAL APPROACHES TO LEVEL ASSESSMENT DEVELOPMENT OF GREEN INTELLECTUAL CAPITAL IN CORPORATE MANAGEMENT

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Abstract. The author of the article assumes that at this stage of the development of domestic economic science, there are no thorough theoretical and practical studies regarding the assessment of the level of development of green intellectual capital in corporate management. The purpose of the study is to determine the possibilities of using the method of principal components of factor analysis in assessing the level of development of green intellectual capital. The object of research is the process of development of components of green intellectual capital of corporate business entities.

The research methodology is based on the use of factor analysis when determining the values of the main components by groups of initial indicators and using a hierarchical approach in the aggregate assessment of the level of development of green intellectual capital of a corporate entity based on the additive convolution of initial indicators. Public information on official websites can be used to generate input indicators (Khaustova Y. & Denysenko, 2020a).

The considered and tested methodical approaches to the assessment of the actual and forecast level of development of green intellectual capital and its components make it possible to comprehensively analyze the impact of numerous factors that differ in the nature of the impact on the corporate activity of the subjects under investigation, the system

of organizational and information support of innovative processes according to the principles of circular economy, as well as the functioning of open innovation structures and establishment of social partnership.

In order to build an economic-mathematical model and develop predictive assessments regarding the development of green intellectual capital in corporate governance, further research was related to determining the possibilities of using linear and non-linear models. In general, linear multiple regression models are the simplest in terms of mathematics and practical interpretation. Therefore, when evaluating models, preferences are given to linear or non-linear models that can be reduced to linear ones. Returning to the exponential growth model, it should be noted that this non-linear model can be transformed into a linear one by logarithmization (Khaustova Y. at al., 2020b).

The effectiveness of the proposed method is confirmed by the objectivity of the obtained assessments, which take into account strategic tasks by individual indicators and testify to the existing prospects for the development of green intellectual capital of corporate economic entities by its components such as green human capital, green client capital and green organizational capital (Bombiak E., 2023).

Keywords: development; corporate development; green capital.

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