

Institutional conditions of real estate valuation in the light of the sustainable development theory

The considerations and analyzes undertaken in the dissertation regarding the institutional conditions of real estate valuation in the light of the sustainable development theory were carried out both in the theoretical and empirical sphere, leading to the development of important recommendations whose task will be to support property appraisers in considering ESG factors in the real estate valuation process.

The dissertation systematizes and structures the current scientific achievements in the field of sustainable development theory, presenting its sources in the economic theory and describing the genesis, paradigm and subject of sustainable development economics along with its pillars in the form of environmental, social and governance factors (ESG). In the course of considerations on the theory of sustainable development, the author proposed to include in the theory of sustainable development a new model of the human being, *homo sustinere-cooperativus*, characterized by an attitude focused on communication, cooperation, continuous learning and searching for new solutions, who participates in the creation of social and economic institutions and is capable of to take moral responsibility for future generations. This is a certain model that guides the way humans' function in the theory of sustainable development, and which can be a model for people active in the real estate market. Owners, tenants, lenders, appraisers, interdisciplinary teams, managers, real estate agents and investors should communicate to ensure data transparency and enable a better understanding of the approach to ESG factors, because ESG factors should become a conscious, common and consistent part of conversations about real estate values.

The analysis of source materials made it possible to present sustainable development from the perspective of both ongoing climate changes and legal and political regulations (COP3, COP21, MDGs, PRI, SDGs, NFDR, SFDR, EU Taxonomy, CSRD, ESRS, EPBD), with a particular presentation of the role that buildings have to play in this respect.

The analysis of specialized industry solutions made it possible to present selected tools for measuring ESG factors in the real estate market. In addition to presenting the regulatory environment for reporting ESG factors in the real estate market, the tools are described in detail, including: EPC, CEEB, LEVEL(s) and benchmarks including: CRREM, GRESB, ECORE and sample industry recommendations EPRA sBPR and a table was presented comparing multi-

criteria construction certification systems, i.e.: GREEN HOUSE, Level(s), BREEAM, LEED, DGNB, in relation to the requirements of the EU Taxonomy for buildings.

The properties of the real estate market were characterized in relation to the process of real estate valuation and the institutional conditions of the activity of the property appraiser. The regulatory framework in which a property appraiser operates in the context of collecting data for real estate valuation was presented, as well as a broad description of the role of a property appraiser in the face of the sustainable transformation of the real estate market.

The dissertation describes the issue of real estate value, along with presenting an analysis of the definition of real estate market value and proposes the author's definition of sustainable real estate value. Moreover, national and international regulations of real estate valuation methodology were presented along with the evolution of real estate valuation standards in the context of sustainable development, as well as the presentation of the real estate valuation market in the context of sustainable development.

As part of the empirical research conducted for the purposes of this doctoral dissertation, an in-depth analysis of the issue of implementing ESG factors in the real estate valuation process by Polish property appraisers was made, along with a diagnosis of existing barriers and expectations in this area.

The considerations presented in the dissertation have not only a theoretical but also an application dimension. The method of implementing the topic ensured a broad approach to the issues discussed. Based on a detailed literature review and own research, a standardized solution can be identified in the form of the author's ESG-REV matrix, the purpose of which is to support property appraisers in considering ESG factors in the real estate valuation process.