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**Summary of the doctoral dissertation entitled "Valuation of environmental public goods  
on the example of the Muskau Park"**

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The issue of public goods valuation has long been a source of difficulties for economists and economic policy makers. Public goods are not supplied through the market, and therefore do not have a market mechanism for determining prices. However, this does not mean that they have no value at all or are priceless. Recent years have seen a rapid development of non-market valuation methods dedicated to public goods, cultural goods or environmental goods. Proper valuation of such goods indicates the scope of external effects, helps to establish mechanisms for its financing and to determine the economic surplus for the society using the public good. In this dissertation, the author set the main goal of estimating the social benefits generated by the Muskau Park through non-market goods valuation methods. In order to achieve the main goal, the author adopted 6 additional goals:

1. Systematizing knowledge on public goods and their classification (chapter 2).
2. Evaluation of the application of various valuation tools for the public good (chapter 3).
3. Indication of the connections between benefits generated by public goods in the form of externalities and the trend of new institutional economics (chapter 4).
4. Indication of factors influencing the valuation value of the Muskau Park (chapters 5-6).
5. Empirical determination of the value of the Muskau Park, in accordance with selected models of valuation of environmental public goods (chapter 6).

6. Determination of the scale and determinants of individual willingness to pay for improving landscape protection (chapter 6).

The author's attempts to value the Muskau Park located in two countries and to assess the social benefits generated by it as a public good resulted in the adoption of the hypothesis that the *proper valuation of the Muskau Park and the social benefits generated by the park determine the willingness to pay fees for its operation*. The external effects that arise in this way may be assessed differently in different countries and may support the division of financing for such a good by both parties. The following auxiliary hypotheses were also put forward:

1. The valuation of Muskau Park is related to travel costs due to its nature.
2. The value of Muskau Park in the light of the methods used is determined primarily by economic factors.
3. There are differences in the participants' valuations depending on the alternative types of use of the public good that Muskau Park is.
4. An increase in the level of income of people using Muskau Park will increase the valuation of the environmental effects of the considered good.
5. In the process of estimating public goods, it is necessary to use different methods due to the discrepancies in the results between them.
6. An important factor influencing the value of the good's valuation is experience. Therefore, users who visit Muskau Park more often will show a higher level of valuation of the park's environmental effects on average.

The hypotheses proposed in this way constitute a comprehensive approach to the problem under consideration. Using different methods of determining the value of Muskau Park and selecting different socio-economic variables included in the valuation, one can expect different results in the level of the actual value of environmental services. Additionally, assuming that the park as a public good should also meet the needs of future generations gives it the rank of a global public good. This work consists of an introduction, six chapters and a conclusion.

The first chapter is a methodological part, indicating the research objectives and hypotheses adopted in the work and presenting the mechanism of selecting methods and adopted variables used in subsequent analyses. The second chapter attempts to systematize the knowledge related to public goods. A broad review of literature is used to discuss the typology of public goods, the characteristics of these goods and the externalities they generate. Both pure and impure public goods (merit goods) and global public goods are taken into account. Individual

differences in the technical aspect of public goods of each type are shown – club goods, common resources and pure public goods.

The third chapter presents considerations concerning the conditions, quantification and determination of the value and utility of public goods. Due to the lack of a price given by the market, the concept of full economic value (TEV) is used, indicating the utility and non-utility aspects of the good. The value of the good is the sum of the value of direct and indirect use and the value of options, existential and inherited. The latter aspect determines the existence of a global public good and is strongly related to the concept of sustainable development. The main methods of valuation of non-market goods, based on declared and revealed preferences, are also indicated. The advantages and limitations of using selected methods are indicated.

Chapter four contains a discourse on the issue of public goods, externalities and transaction costs in the new institutional economics. The development of contemporary economic thought has resulted in many discoveries in the field of economic sciences, indicating the importance of the institutional factor in economic analyses. In this field, researchers appeared whose perspective went beyond the classical framework of economics, and for their research they received Nobel Prizes in economics.

Chapter five presents the issue of classifying parks as environmental public goods. It characterizes the Muskau Park, as well as the economic, social and environmental conditions influencing its value as a public good. Non-market values of parks as public goods are distinguished and the components of the full economic value (TEV) of the Muskau Park are determined. Then, environmental public goods are characterized, with particular emphasis on parks as representatives of this type of goods. External effects generated by parks and the conditions for the functioning of parks as public goods are discussed. Actions were indicated to maintain parks in a proper condition for the implementation of their environmental functions from the point of view of the sustainable development paradigm.

In the sixth chapter, an attempt was made to value Muskau Park using the travel cost method and willingness to pay (WTP). For this purpose, a number of socio-economic variables were identified and the role of environmental conditions was indicated. As a result, the results of the applied valuation methods and their implications for the achieved social benefits were presented. The variable nature of the value of the public good over time was indicated, related mainly to socio-economic factors, which can be predicted thanks to established demand

functions. Finally, the social benefits resulting from the existence of Muskau Park were determined.

The whole work ends with conclusions and recommendations included in the conclusion.