

THE INTENSITY OF USING PRODUCTION FACTORS IN ROMANIA. ESTIMATES FROM COBB-DOUGLAS AND CES MODELS

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Abstract. *The production function explains the mechanism through which inputs are changed into outputs and the partial efficiency of labour and capital. It also allows for understanding the elasticity of substitution, which measures the percentage change in factor proportions due to a percentage change in the marginal rate of technical substitution. In this research we have used aggregate production functions of Cobb-Douglas type in different time-series and cross-section analysis of Romania's economic growth from the standpoint of the intensity of using capital and labour factors, as determinant elements for the level of production and GDP. We have also applied the two factor Constant Elasticity of Substitution (CES) production function, which is considered to be the generalised form of the Cobb-Douglas function. Using the available statistical data regarding Romania's economy in the 1990-2005 period, we have performed time-series and cross-section analysis based on the aggregated production functions at the national level.*

Key words: *Production function, elasticity of substitution, Cobb-Douglas, CES, capital and labour, technological change*

JEL Classification: *A11, C1, C16, C62, L16*

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