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**Measuring the Economic and Ecological  
Performance of OECD Countries**

by

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# Measuring the Economic and Ecological Performance of OECD Countries

von

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Abstract:

The economic and ecological performance of OECD countries over two decades is measured by employing a Malmquist-Luenberger productivity index. The index credits the expansion of goods (value added) and the contraction of bads (emissions), at given inputs. We consider the inputs of capital, labor, and energy, and the emissions of CO<sub>2</sub>, SO<sub>2</sub>, and NO<sub>x</sub>. The calculated indices are decomposed into measures of efficiency change ("catching up") and technical change (innovation). We analyse the variation of the results depending on the assumed returns to scale and dimensionality. Our findings suggest to employ aggregate analyses of productivity to identify crucial dimensions, which may then be analysed on a more disaggregated basis.

*Keywords:* Productivity; Efficiency; Environment; Dimensionality

*JEL-classification:* C61; O47; Q25

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