

## **A dynamic panel model for the relationship between environmental pollution and international tourism: evidence from Baltic states**

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### **Abstract**

The tourism industry is developing rapidly in the Baltic countries, which offer various attractions for international tourists throughout the year. This sector makes an important contribution to economic development in these countries. However, the positive impact on the economy is accompanied by an increase in the use of natural resources as well as environmental pollution, which can be a drawback in the conditions of an extremely competitive global market. On the other hand, tourism, when done responsibly, preserving and improving the environment, is a catalyzer for the development of local communities, decreasing unemployment and increasing the GDP of the host country. The purpose of this research paper is to investigate the possible relationship between environment and tourism in Baltic states, focusing on international tourism. Two dynamic econometric models are analyzed to evaluate this impact where CO<sub>2</sub> and fine particulate emissions PM<sub>2.5</sub> are included as environmental variables, while the development of international tourism is represented through the inbound tourism expenditure and number of international visitors. GDP per capita and trade openness are included as control variables in both models. Our results evidence the causality between international tourism and environmental pollution in Baltic states. We recommend taking measures and drafting policies for the promotion of sustainable tourism. There are few studies that analyze the relationship between environmental pollution and international tourism in the Baltic states. This paper is an added value to the existing literature on this particularly critical issue.