



“Gheorghe Asachi” Technical University of Iasi, Romania



IMPACT OF ENVIRONMENTAL REGULATION AND FDI ON GREEN TOTAL FACTOR PRODUCTIVITY: EVIDENCE FROM CHINA

Xu Xiaofei¹, Cui Yanjuan^{2*}, Zhong Yundi³

¹*Business School, Beijing Language and Culture University, Beijing, 100083, P.R. China*

²*School of Finance, Dongbei University of Finance and Economics, Dalian, 116025, P.R. China*

³*School of Management, Dalian Polytechnic University, Dalian, 116034, P.R. China*

Abstract

The energy constraints and environmental issues become more important in this green development era, in order to measure the quality of economic growth, this paper first introduces the definition of green total factor productivity, and then tries to find the relationship among environmental regulation, FDI and green total factor productivity. This paper also applies Luenberger productivity index and SBM directional distance function to measure provincial green total factor productivity of China from 2006 to 2017. The final results show that the environmental regulation influences green total factor productivity positively, and FDI has a negative relationship with green total factor productivity. Strict environmental regulation can improve the environmental threshold of FDI and play a role of "screening" for FDI. And the positive interaction between environmental regulation and FDI is an important factor affecting the promotion of green total factor productivity.

Key words: environmental regulation, FDI, green total factor productivity, interaction effect

Received: February, 2020; Revised final: August, 2020; Accepted: September, 2020; Published in final edited form: February, 2021

* Author to whom all correspondence should be addressed: e-mail: cuiyanjuan_dl@163.com