

THE CONTRIBUTION OF THE EU FDI'S TO THE REDUCTION OF ROMANIA'S MANUFACTURING PRODUCTION CO₂ EMISSIONS: HIGHER EXPORTS AND GDP GROWTH

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Abstract

Reducing the CO₂ footprint of Romanian manufacturing production under the positive influence of the EU foreign direct investments (FDIs) can have a substantial contribution to Romania's presence on the EU common market. Moreover, it might contribute to the increase the country's GDP. To prove the assumptions, the author developed an econometric model that he called „*A predictive model of the CO₂ emissions inter-country interaction*”, based on multiple linear regression, using a highly unique and latest database published by Eurostat, in 2022. He also designed several scenarios regarding the positive impact on the Romanian economy based on reducing the CO₂ emissions generated by the EU FDI's. In the base scenario, a 1.5% annual reduction of the CO₂ emissions generated in Romania due to the FDI's originating from the EU Member States could stimulate an 1% annual increase of the intra-community deliveries. This impact would determine an increase of Romania's GDP by 0.3%. To have a realistic contribution to achieving the goal of a net zero economic model, the EU FDI's should obtain, between 2025 – 2050, a ten-time decreasing rhythm of their CO₂ emissions. From minus 0.4%, the actual average decrease annual level between 2010 – 2020, the FDI's must decrease their emissions by 4% per year. This would increase Romania's annual intra-deliveries by 2.6%, adding 0.8% per year to Romania's GDP growth.

Keywords

Foreign direct investments, GDP, CO₂ emissions, trade

JEL Classification

F00, F40, F45

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