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# UNDERSTANDING BANK DIVESTMENT IN FOSSIL FUELS. AN APPROACH FROM VAR AND MONTE CARLO SIMULATION.

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## Abstract

The energy transition is one of the most relevant priorities in the context of the current production and consumption system. Finance, through Sustainable Finance, must start redirecting money flows towards projects with less impact on the environment. Through portfolio construction, this paper conducts an analysis based on Monte Carlo Simulation and Value at Risk. Based on a sample of 40 international banks, distributed by those that invest more in fossil fuels vs. those that invest less, the main objective of this work is to know the financial viability of the different portfolios considering their return and risk. The results show that the banks that are divesting more in fossil fuels have a lower return and a higher risk compared to those banks that continue to invest in fossil fuels. According to the Monte Carlo Simulation, there is also a better performance of those banks that continue to have a strong fossil fuels investment policy. According to these results, it seems that stronger restrictions should be imposed on fossil fuels investment in order for the major banks to become profitable by investing in projects with lower environmental impact. An in-depth analysis of the policy and legal implications of this performance is a line that can be addressed in the future.

### Keywords

Fossil Fuels, Divestment, Monte Carlo, Sustainable Finance, Value at Risk.