Central and Eastern Europe (CEE) Banking on the Stock Market: Turbulence of 2020 – 2022*

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Abstract

Recently, there have been many studies on the impact of the pandemic and Russia's war against Ukraine on the stock markets, while very few of them directly affect the banking sector. The issue of banks' strategies in such circumstances is suffocated by little coverage, especially since even the authors of the Fama-French analysis emphasized the difficulty of applying this approach in the banking sector. The presence of non-linearity in such strategies was emphasized. Analyzing the banking market and strategies of CEE banks, the authors applied a wide range of machine learning and clustering methods and modified the Fama-French approach by using neural networks. No clear gradation of CEE banks in terms of the impact of the pandemic and war was found. At the same time, the proposed method made it possible to single out the most vulnerable market participants and analyze the reasons for their current state.

Keywords: CEE, banking, portfolio optimization, Sharpe ratio, neural networks.

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