CREDIT RISK MANAGEMENT THROUGH STRESS TESTING DURING THE COVID-19 CRISIS: CASE OF BANQUE EXTERIEURE D'ALGERIE

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Abstract
This article examines the impact of stress tests on the financial stability of BEA-Banque, with the primary objective of assessing the bank's resilience to macroeconomic and microeconomic shocks. The methodology relies on ordinary least squares (OLS) estimation to establish a long-term relationship between non-performing loans (NPL) and several macroeconomic variables, including inflation, exchange rates, and gross domestic product (GDP), as well as bank-specific variables such as size, ROA, and total credits. The results show that inflation and exchange rates significantly affect the level of NPLs. An increase in inflation is correlated with a rise in NPLs, while an appreciation of the exchange rate has an inverse impact. In terms of microeconomic indicators, ROA negatively influences NPLs, whereas total credits have a positive effect. The applied stress tests indicate that the quality of BEA-Banque's loan portfolio deteriorates under extreme scenarios, particularly when inflation rises simultaneously with a depreciation of the currency. Nevertheless, the bank's solvency ratio remains above the regulatory threshold set by the Central Bank of Algeria (9.5%), attesting to its financial strength.

Keywords
Stress testing, Credit risk, Loss, Risky credits, Model

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C14, G21.

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