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Δ CoVaR Network-Based Analysis of Systemic Risk

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Abstract

This paper focuses on systemic risk in the Moroccan banking sector from 2008 to 2022. The transmission of systemic risk is studied by means of Value at Risk (VaR), Conditional Value at Risk (CoVaR), and Δ CoVaR measures which are primarily used to track the tail risk spillovers across institutions [1];[2];[3]. The modeling of volatility dynamics is accomplished through the GARCH specifications [4]. The capturing of nonlinear dependencies is conducted via Quantile Regression Neural Networks [5]. This paper highlights that Attijariwafa Bank, Banque Centrale Populaire, and Bank of Africa are the main contributors to systemic risk. These results provide important contributions to regulators in strengthening macro-prudential supervision and promoting financial stability.

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