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Impact of the Agricultural Cycle on Macroeconomic Fluctuations in Côte d'Ivoire: The Role of Climatic Shocks

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Abstract: This paper analyses the asymmetric effects of the agricultural cycle on macroeconomic fluctuations in Côte d'Ivoire following shocks caused by climatic disturbances. Estimation of the Markov regime-switching model (Hamilton, 1989; Diebold, Lee, and Weinbach, 1994; Filardo, 1994) using time-dependent probability transition variables such as temperature, rainfall and CO_2 emissions indicates that the business cycle follows the agricultural cycle. Given the dependence on the duration of expansion and recession, shocks linked to climate disturbances have persistent effects on economic activity. These results are consistent with real business cycle theory, highlighting the significance of climate shocks. Hence the need for structural policies aimed at integrating the climate dimension into economic policy-making in order to mitigate the country's vulnerability to natural hazards.

Keywords: Business Cycle, Real Cycle, Probability Transition

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