Intisari

Penelitian ini bertujuan untuk menganalisis dampak kebijakan moneter dan makroprudensial, serta interaksinya, terhadap emisi karbon dioksida (CO_2) di Amerika Serikat, dengan mempertimbangkan kondisi rezim suku bunga yang berbeda. Menggunakan model *Threshold Autoregressive* (TAR), studi ini mengkaji hubungan nonlinier antara kebijakan ekonomi dan emisi dalam periode M8:2010 hingga M12:2023. Studi ini menemukan bahwa pada rezim suku bunga sangat rendah (*Zero Lower Bound*) emisi menurun akibat investasi hijau meskipun ekonomi stagnan. Di rezim menengah (0,087%–0,64%), kombinasi moneter longgar dan makroprudensial ketat efektif menekan emisi, menunjukkan sinergi kebijakan yang optimal. Sementara di rezim tinggi, kebijakan moneter kontraktif menurunkan emisi melalui pelemahan aktivitas padat energi, didukung oleh energi terbarukan dan penurunan likuiditas. Interaksi kebijakan hanya signifikan di rezim menengah. Hasil ini menegaskan bahwa efektivitas kebijakan sangat dipengaruhi konteks makroekonomi, sehingga koordinasi adaptif diperlukan untuk mendukung transisi menuju ekonomi rendah karbon

Kata Kunci: Kebijakan Moneter, Kebijakan Makroprudensial, Emisi CO_2, TAR Model

Abstract

This study aims to analyze the effects of monetary and macroprudential policies, as well as their interaction, on carbon dioxide (CO_2) emissions in the United States, while considering different interest rate regimes. Using a Threshold Autoregressive (TAR) model, the study examines the nonlinear relationship between economic policy and emissions over the period from August 2010 to December 2023. The findings show that under a very low-interest rate regime (Zero Lower Bound), emissions declined due to increased green investment despite stagnant economic conditions. In the medium interest rate regime (0.087%–0.64%), the combination of accommodative monetary policy and tighter macroprudential policy effectively reduced emissions, indicating optimal policy synergy. In the high-interest rate regime, contractionary monetary policy decreased emissions by reducing energy intensive activity, supported by increased renewable energy use and reduced liquidity. The interaction effect between the two policies was only significant in the medium regime. These results highlight that policy effectiveness depends heavily on macroeconomic context, underscoring the importance of adaptive coordination to support the transition toward a low-carbon economy.

Keywords: Monetary Policy, Macroprudential Policy, CO_2 Emissions, TAR Model