MACROECONOMICS INFLUENCE ON TOTAL OIL IMPORTS: A CRISIS PERIOD ANALYSIS

RIYA KUMARI

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Chennai - 600025

ABSTRACT

This study examines the macroeconomic determinants impact on India's total oil imports during crisis periods, focusing on the financial volatility (VIX), economic policy uncertainty (EPU), inflation, and exchange rates. Using monthly data from 2008 to 2024, the research employs a Vector Error Correction Model (VECM) to analyze long-run equilibrium relationships and short-run dynamics. The Johansen cointegration test confirms two significant long-run relationships, with oil prices positively influenced by VIX (0.35%) and negatively by EPU (-0.32%), inflation (-0.19%), and exchange rate depreciation (-0.19%). Short-run results reveal rapid error correction (9.9% monthly adjustment), while structural breaks (e.g., 2014 oil price crash, 2020 pandemic) highlight regime shifts in import behavior.

Key findings suggest that financial market turbulence amplifies oil price volatility, while policy uncertainty and inflation dampen demand. The study advocates for strategic reserves, rupee stabilization measures, and renewable energy adoption to mitigate crisis impacts. Methodologically, the VECM framework bridges long-run equilibrium and short-run adjustments, offering policymakers insights into shock resilience. Future research should explore sector-specific impacts and high-frequency data integration. This study contributes to energy economics by contextualizing oil import dynamics within crisis-driven macroeconomic instability, providing actionable strategies for India's energy security.