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ENERGY-GROWTH CAUSALITY: 
A PANEL ANALYSIS

Abstract

Understanding the impact of energy consumption on economic growth is an important consideration in the formulation of both energy and environmental policies. Motivated by this development, this paper empirically re-examines the direction of causality and the sign (in the panel sense) between energy consumption (EC) and the gross-domestic product (GDP) for seventeen selected Asian countries. Results reveal long-run stable equilibriums in these countries, while the EC brings about a positive impact on GDP. Causality runs from EC to GDP in the short-run, while the long-run causal linkage exists from GDP to EC. This indicates that energy is a force for economic growth in the short-run, but in the long-run, the EC is fundamentally driven by economic growth. Efficient coordination and cooperation towards the implementation of energy conservation policies to support sustainable economic development should be in the regional agenda.

Key words:
Energy consumption, Panel analysis, Economic growth.

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