

## **Abstract**

Energy and its impact on economic growth is the most concerned subject among the researchers and policy makers. This study is conducted to investigate the long run relationship between three main hydrocarbon fuels petroleum oil, natural gas, coal and the economic growth for the sample of developing countries over the period of 1980-2013. For this purpose three Panel Cointegration techniques named; Dynamic Fixed Effects, Pooled Mean Group and Mean Group are applied. Results verify the existence of long run relationship between these fuels and economic growth. The results of Panel Granger Causality support the feedback hypothesis in case of petroleum oil and natural gas because there is a bidirectional relationship between economic growth and petroleum, and also between economic growth and natural gas. There is unidirectional relationship between economic growth and the consumption of coal. The relationship runs from economic growth to coal consumption which is the approval of conservation hypothesis. Recommendations based on the empirical analysis are made at the end of the study.