

EconWorld2018@Amsterdam

# Rebound Effect for Energy Consumption: The Case of Turkey/ Enerji Tüketiminde Rebound Etkisi: Türkiye Örneği

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## ABSTRACT

Energy plays an important role in economic growth. However, the consumption of energy, particularly fossil fuel sources of energy, is associated with many problems including global warming and energy dependence. However, countries are not able to decrease dependence on fossil energy sources since alternative sources may have considerable costs. It is expected that technological advancement, thus total factor productivity may be solution to decrease resource usage since pollution and resource saving production process might be established through technology. On the other hand, Rebound effect foresees that resource usage rises due to increasing demand since technological advancement results in increased efficiency of production and resources usage process and leads prices to decline. So, resource usage and pollution will continue to increase. Considering the validity of Rebound effect, this study investigates the relationship between total factor productivity as a proxy for technological advancement and primary energy consumption for Turkey's data spanning from 1965-2014. Results Show that primary energy consumption simultaneously increases with total factor productivity.

**KEYWORDS** Energy consumption; Rebound effect; Total factor productivity

**JEL** Q5, O1, C5