

## ABSTRAK

Studi ini menganalisa pengaruh pertumbuhan Penanaman Modal Asing terhadap intensitas energi tiap provinsi di Indonesia berdasarkan regresi data panel *fixed heteroscedasticity robust* dengan variabel *mixed linear log*. Metode ini dipilih karena dapat mengatasi masalah heteroskedastisitas yang sering terjadi pada analisis data panel. Pada analisis ini PMA tidak memiliki pengaruh signifikan terhadap perubahan intensitas energi. Sedangkan, terdapat faktor lain yang berpengaruh terhadap intensitas energi. Faktor tersebut adalah harga minyak mentah dunia, proporsi industri dan subsidi energi. Pengaruh dari harga minyak mentah dunia dan proporsi industri terhadap PDRB adalah negatif terhadap intensitas energi. Di mana kenaikan 1 persen harga minyak dunia menurunkan 1,14 poin intensitas energi, sedangkan kenaikan 1 persen proporsi industri pada PDRB suatu daerah menurunkan intensitas energi sebesar 0,14 poin. Namun pengaruh sebaliknya justru terjadi pada kenaikan subsidi, di mana kenaikan 1 persen proposi subsidi akan meningkatkan 4,53 poin intensitas energi.

Kata Kunci: intensitas energi, pma, provinsi, data panel

## **ABSTRACT**

The study analyzes the influence of foreign investment growth to the energy intensity of each province in Indonesia based on fixed heteroscedasticity robust panel data regression with mixed linear log variable. This method was chosen because it can overcome the problem of heteroskedasticity that often occurs in the panel data analysis. In this analysis PMA has no significant influence on changes in energy intensity. Meanwhile, there are other factors that influence energy intensity. These factors are the price of crude oil, the proportion of industrial and energy subsidies. The influence of crude oil prices and the proportion of industry to the GDRP to the energy intensity is negative. Where a percent increase in world oil prices decrease energy intensity by 1.14 points, while a percent increase in the proportion of industry in the GDP of a region decrease energy intensity by 0.14 points. But the influence of opposite actually happened on the subsidy increase, where a percent increase in the proportion of subsidies will increase energy intensity by 4.53 points.

Keywords: energy intensity, FDI, province, panel data analysis