

ABSTRAK

Emisi karbon dioksida berdampak pada degradasi lingkungan sehingga faktor tersebut menjadi perhatian. Penelitian ini bertujuan untuk menganalisis GDP per kapita, nilai tambah industri manufaktur, dan *Foreign Direct Investment* (FDI) terhadap emisi karbon dioksida (CO₂) di Kawasan ASEAN. Sampel yang digunakan pada penelitian ini yaitu sebanyak lima negara di Kawasan ASEAN yang memiliki pertumbuhan emisi karbon tertinggi. Negara yang terpilih menjadi sampel, yaitu: Indonesia, Filipina, Malaysia, Singapura, dan Vietnam tahun 2008 sampai 2023. Data penelitian merupakan data panel yang merupakan gabungan dari data *time series* dan *cross section* yang dianalisis melalui analisis regresi panel statis melalui program *evIEWS 12*, yang sebelumnya telah melalui uji pemilihan model, yaitu uji *Chow*, uji *Hausman*, dan uji *Lagrange-Multiplier* (LM). Hasil penelitian menunjukkan bahwa model yang paling tepat pada penelitian ini yaitu *Random Effect Model* (REM). Hasil penelitian ini menunjukkan: (1). GDP per kapita berpengaruh negatif dan tidak signifikan terhadap emisi karbon dioksida (CO₂) di lima negara Kawasan ASEAN. (2) Nilai tambah industri manufaktur berpengaruh positif dan signifikan terhadap emisi karbon dioksida (CO₂) di lima negara Kawasan ASEAN (3). *Foreign Direct Investment* (FDI) berpengaruh negatif namun signifikan terhadap emisi karbon dioksida (CO₂) di lima negara Kawasan ASEAN.

Kata Kunci: Emisi Karbon Dioksida (CO₂), GDP Per Kapita, Nilai Tambah Industri Manufaktur, *Foreign Direct Investment* (FDI), *Random Effect Model* (REM).

ABSTRACT

Carbon dioxide emissions have an impact on environmental degradation, so this factor is a concern. This study aims to analyze GDP per capita, the added value of the manufacturing industry, and Foreign Direct Investment (FDI) on carbon dioxide (CO₂) emissions in the ASEAN Region. The samples used in this study were five countries in the ASEAN Region that had the highest carbon emission growth. The countries selected as samples were: Indonesia, the Philippines, Malaysia, Singapore, and Vietnam from 2008 to 2023. The research data is panel data which is a combination of time series and cross-section data analyzed through static panel regression analysis through the evIEWS 12 program, which has previously gone through a model selection test, namely the Chow test, the Hausman test, and the Lagrange-Multiplier (LM) test. The results of the study indicate that the most appropriate model in this study is the Random Effect Model (REM). The results of this study indicate: (1). GDP per capita has a negative and insignificant effect on carbon dioxide (CO₂) emissions in five ASEAN countries. (2) The added value of the manufacturing industry has a positive and significant effect on carbon dioxide (CO₂) emissions in five ASEAN countries (3). Foreign Direct Investment (FDI) has a negative but significant effect on carbon dioxide (CO₂) emissions in five ASEAN countries.

Keywords: *Carbon Dioxide (CO₂) Emissions, GDP Per Capita, Added Value of the Manufacturing Industry, Foreign Direct Investment (FDI), Random Effect Model (REM)*