**Merged Regression Results**

**Table 1: Effect of Income Inequality on GHG Emissions per Capita**

|  |  |  |
| --- | --- | --- |
| Variable | Model 1 (Baseline) | Model 2 (With Controls) |
| **Gini coefficient** | -0.135\*\*\* | -0.129\*\*\* |
|  | (0.047) | (0.040) |
| **Log GDP per capita** | - | 1.423\* |
|  |  | (0.734) |
| **Urban index** | - | -0.036 |
|  |  | (0.039) |
| **Democracy index** | - | 0.066 |
|  |  | (0.489) |
| **Constant** | 12.394\*\*\* | 2.236 |
|  | (1.824) | (5.053) |
| **R-squared** | 0.013 | 0.033 |
| **Observations** | 5,712 | 4,330 |

**Model Statistics:**

* **R-squared**: 0.013 (Model 1), 0.033 (Model 2)
* **N**: 5,712 (Model 1), 4,330 (Model 2)
* **F-test**: 8.186 (Model 1), 4.832 (Model 2)

**Notes:**

* Dependent variable: GHG emissions per capita
* Standard errors in parentheses
* \*\*\* p<0.01, \*\* p<0.05, \* p<0.1
* Model 1 presents baseline results with only the Gini coefficient
* Model 2 includes control variables: GDP per capita, urban index, and democracy index

**Key Findings:**

1. **Income Inequality Effect**: Both models show a statistically significant negative relationship between income inequality (Gini coefficient) and GHG emissions per capita. The coefficient remains stable around -0.13 across both specifications.
2. **GDP Effect**: In the controlled model, log GDP per capita shows a positive and marginally significant effect (p<0.1) on emissions, with a coefficient of 1.423.
3. **Other Controls**: Neither the urban index nor democracy index show statistically significant effects on GHG emissions per capita.
4. **Model Fit**: The addition of control variables improves the R-squared from 0.013 to 0.033, indicating better model explanatory power, though the overall explanatory power remains relatively low.