Do Leaders Export Pollution While Importing Wealth?

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Standard political economy literature (e.g., Hodler and Raschky 2014) has robustly established that leaders direct economic resources to their birth regions, a phenomenon visible via satellite nightlights. However, this narrative overlooks the environmental cost of such development. Our project proposes a novel dimension: **"Green Favoritism."**

We hypothesize that sophisticated autocrats practice a "Not In My Backyard" (NIMBY) strategy: directing high-value, low-pollution sectors (tech, services) to their birth regions while relegating dirty heavy industry to peripheral or rival regions. We will test if leader birthplaces exhibit a "decoupling" effect: rising wealth (nightlights) without a corresponding spike in industrial pollution (NO_2). A finding that leader birthplaces have a significantly lower "pollution elasticity of growth" would provide the first empirical evidence of inequality in the quality of development, not just the quantity.

Datasets & Methodology

To isolate the causal impact of political power on environmental quality, we will employ a Difference-in-Differences (DiD) framework with high-dimensional fixed effects. This design compares the trajectory of a leader's birth district against all other districts within the same country, before and after their ascension to power.

- **Political Data:** *PLAD Dataset* (Bomprezzi et al. 2025).
- **Industrial Pollution (NO_2):** *OMI (Ozone Monitoring Instrument)* via Google Earth Engine (2004–Present) (Levelt et al. 2006).
  Variable: Tropospheric NO_2 Column Density (2004–Present). This proxy captures heavy industry and transport emissions.
- **Economic Activity:** *DMSP-OLS* (1992–2013) and *VIIRS* (2012–Present) (Elvidge et al. 2013).

References

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