Summary of "The Long-Term Effects of Africa's Slave Trades"

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The Long-Term Effects of Africa's Slave Trades on JSTOR

1 Objective

The objective of the study is to examine the long-term effects of Africa's slave trades on the continent's current economic underdevelopment.

2 Reason

This research is conducted to understand how historical events, specifically the slave trades, have shaped the economic trajectories of African nations up to the present day.

3 Data

Two types of data are used:

- Shipping Data: Records the total number of slaves exported from each port or region in Africa, mainly from the Trans-Atlantic Slave Trade Database.
- Ethnic Identity Data: Provides information on the ethnic identities of slaves, helping to trace the origins of slaves shipped from coastal countries.

4 Results

The study finds a significant negative relationship between the number of slaves exported from African countries during the four slave trades between 1400 and 1900 and the current economic performance of these countries. This suggests

that the slave trades have had a long-lasting adverse impact on African economic development.

5 ChatGPT Prompt for Python Program Replication

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Could you create a Python program capable of replicating the statistical analysis
performed in a study where all the relevant data is contained within a file called
replicationData.csv? The study involves a two-stage regression analysis:

First Regression: Ordinary Least Squares (OLS) Regression
Dependent variable: ln_maddison_pcgdp2000 (log of GDP per capita in 2000).
Independent variables: ln_export_area, longitude, rain_min, humid_max, low_temp,
ln_coastline_area, island_dum, islam, legor_fr, region_n, ln_avg_gold_pop,
ln_avg_oil_pop, ln_avg_all_diamonds_pop, colony0, colony1, colony2, colony3,
colony4, colony5, colony6, and colony7 (the colony variables are called the
colonizer fixed effect and should be omitted from the regression summary table
but included in the overall regression estimation).

Second Regression: Two stage Instrumental Variable regression
First Stage
Dependent variable: ln_export_area
Independent instrument variables: atlantic_distance_minimum, indian_distance_minimum,
saharan_distance_minimum, red_sea_distance_minimum.

Second Stage
Dependent variable: ln_maddison_pcgdp2000
Independent variable: Predicted values of ln_export_area from the first stage of the IV regr

Please include comments to explain each step and make sure the code is structured
in a way that is easy to follow. Add functionality to plot the relationship between
ln_export_area (x-axis) and ln_maddison_pcgdp2000 (y-axis), displaying a scatter plot
with a trendline. Add functionality to plot the relationship between ln_pop_dens_1400
(x-axis) and ln_export_area(y-axis), displaying a scatter plot with a trendline.
Add functionality to plot the relationship between ln_export_area (x-axis) and
ethnic_fractionalization(y-axis), displaying a scatter plot with a trendline.
Additionally save all regression summaries printed to two .txt files (one for the
OLS regression and one for the IV regression first and second stage) and save the
scatterplot outputs to .jpg files. Additionally, include in all regression summary
outputs a summary statistics table for the independent variables used excluding the
colony variables. All files should be saved to the current directory. Please make
the program organized by functions.
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