ECON 315 Semester Long Project Report

Introduction

This project looks at how perceived corruption relates to development outcomes at global, regional, and local levels. The main measure is the Corruption Perceptions Index (CPI) from Transparency International, where higher scores mean less public-sector corruption.

The main hypothesis is that places **with lower perceived corruption, as indicated by higher CPI scores, usually achieve better development outcomes and more sustained progress.** Corruption can weaken institutions, divert funds from education and social programs, and make business more expensive. On the other hand, less corruption is expected to support human development and help societies better handle challenges.

The study covers all countries listed in the CPI from 2012 to 2023, grouped into six regions: Americas, Europe, Asia Pacific, Sub-Saharan Africa, Middle East & North Africa, and Eastern Europe & Central Asia. To see if the same patterns appear within one country, the analysis also looks at U.S. states, using data like education levels, poverty rates, income inequality, and population size.

Data Description

Country-level corruption data are from Transparency International's CPI for 2012 to 2023, given as yearly spreadsheets. If a country does not have a numeric score for a year, its CPI rank is used instead to keep it in the analysis.

U.S. state data come from the American Community Survey (ACS) by the U.S. Census Bureau. The analysis uses poverty rates (S1701), the Gini index for income inequality (B19083), total population (B01003), and the share of adults with at least a bachelor's degree (S1501).

All datasets were cleaned and combined using Tableau Prep. CPI files from different years were merged, given ISO country codes, and grouped by region. ACS data were linked to a U.S. state map file and reshaped so one setting can control which indicators show up on maps or scatter plots. The final Tableau file includes three main tables: one for global and regional CPI analysis, one for U.S. state data, and others for pinned-country and mapping features.

Visualization and Analysis

The first dashboard (*Figure 1*), called **Global Corruption Perception Index Map**, introduces the CPI and shows global trends. It uses an orange-gradient world map, where darker colors mean higher CPI scores and less corruption. A panel lists each country's score, rank, category (like "Very Clean"), and flag. Below, a line chart tracks **global CPI scores from 2012 to 2023**. The line stays mostly steady, with small drops in 2015 (due to less data and method changes) and during COVID-19, when perceived corruption increased with emergency spending. This dashboard shows that corruption perceptions are stable, the gap between clean and corrupt countries is large, and big events only cause short-term changes.

The second dashboard (*Figure 2 and 2.1)*, **Regional Comparison of CPI Scores**, groups countries into six regions. A lollipop chart ranks the regions by **average CPI score. Europe is at the top, while** Sub-Saharan Africa and Eastern Europe & Central Asia have the lowest scores. A regional map shows this pattern clearly. A nearby panel explains that regions with stronger institutions get higher CPI scores, and Sub-Saharan Africa is usually at the bottom worldwide.

A bar chart below lists all countries in a region from cleanest to most corrupt, with flags for each. The "pinned country" parameter lets users keep one country, like Kenya or Brazil, at the top for easy comparison with neighbors. In the bottom-right, a slope chart shows how regional **average CPI scores changed from 2019 to 2021**, with a line for the global average. During COVID-19, Europe stayed high and steady, the Americas improved, and Sub-Saharan Africa, Asia Pacific, and Eastern Europe & Central Asia fell further below the global average. These visuals support the idea that cleaner regions perform better and are more resilient.

The third dashboard *(Figure 3*), **U.S. State-Level Development Indicators**, looks at whether similar patterns appear within one country. A filled map shows U.S. states by different indicators, such as poverty rate, education level, income inequality (Gini), or population, using the same color scheme to highlight groups. On the right, a card shows the correlation for selected pairs of indicators, like Poverty vs. Education or Education vs. Gini, with icons to help explain the results.

The bottom panel shows a scatter plot, with each point as a state. For **Poverty versus Education**, states with more people holding college degrees usually have lower poverty rates, while many smaller or rural states have less education and more poverty. For Gini versus Education, the trend is different: states with more college graduates often have high**er** income inequality, as seen in rich, high-skill states like California, New York, and Massachusetts. These visuals show that development and inequality are linked in complex ways, but higher education is still tied to lower poverty.

The three dashboards make up a Tableau Story with three main parts: global CPI trends, regional comparisons, and the U.S. analysis. Navigation tabs let readers move from global to state-level results. Each slide has notes that sum up the findings in clear language.

Conclusion

Evidence from global, regional, and U.S. state data supports (but does not prove) the idea that less perceived corruption goes along with better development results. High-CPI regions like Western Europe and parts of Asia Pacific have higher human development and education, while many countries in Sub-Saharan Africa, the Middle East & North Africa, and Eastern Europe & Central Asia have lower CPI scores. The summaries show the same trend: CPI is linked to higher human development and more education, and to less inequality.

The dashboards also show that citizens' perception of corruption changes slowly. The global CPI line from 2012 to 2023 remains mostly unchanged, with only small drops in 2015 (less data) and during COVID-19. This suggests that CPI is tied to slow-moving factors such as institutions, inequality, and long-term development. U.S. state patterns are similar to those at the country level. States with higher levels of education usually have lower poverty rates, but some highly educated states have higher inequality. Overall, the data support the idea that cleaner governance is linked to better, more resilient development, though these are correlations, not proof of cause and effect.

Works Cited

About - Transparency.org, https://www.transparency.org, December 3, 2025

All country flags (accurate and complete) in SVG and PNG, https://hampusborgos.github.io/country-flags/, December 3, 2025

U.S. Census Bureau. (2010–2023). *American Community Survey (ACS) 1-year and 5-year estimates: State-level socioeconomic indicators* [Data set]. U.S. Census Bureau.https://www.census.gov/data/developers/data-sets/acs-5year.html

Poverty: ACS table S1701 (Poverty Status in the Past 12 Months)

Gini index & income: ACS table B19083 (Gini Index of Income Inequality)
Educational attainment: ACS table S1501 (Educational Attainment)
Population: ACS table B01003 (Total Population)

Appendix

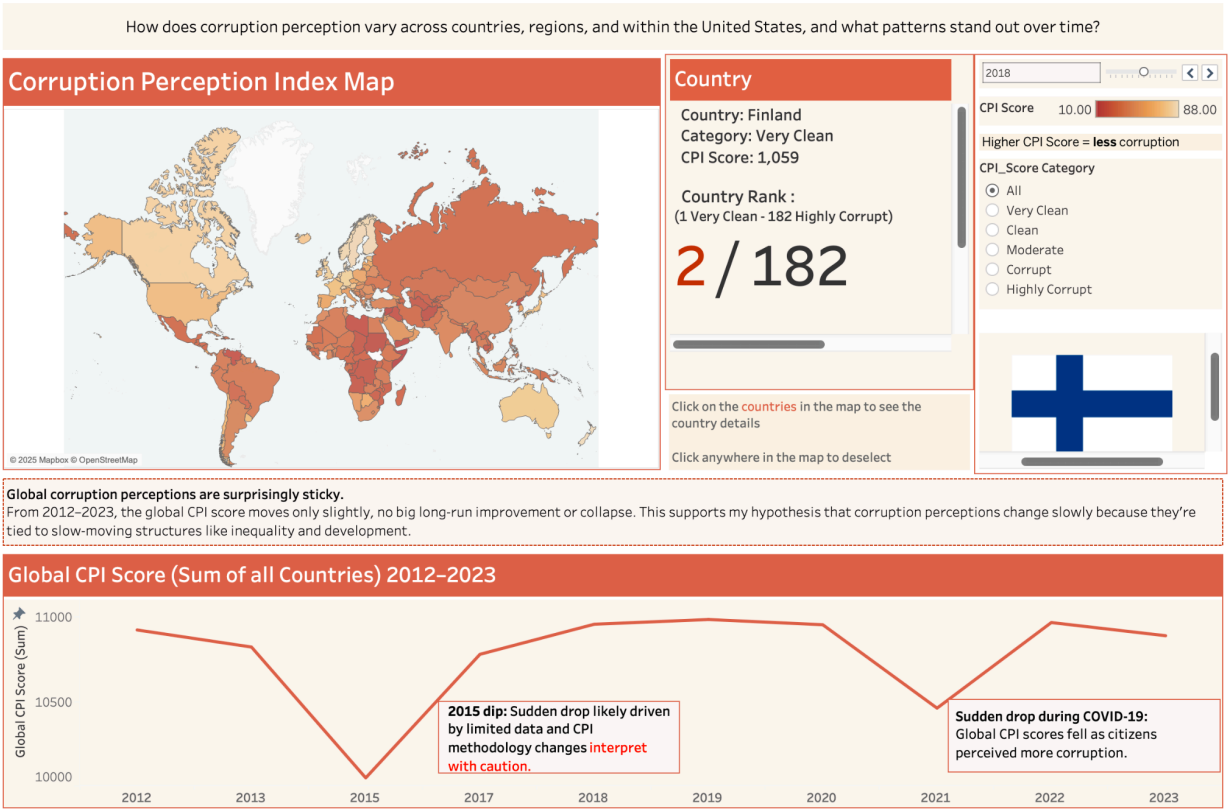

Figure 1: Corruption Perception Index dashboard

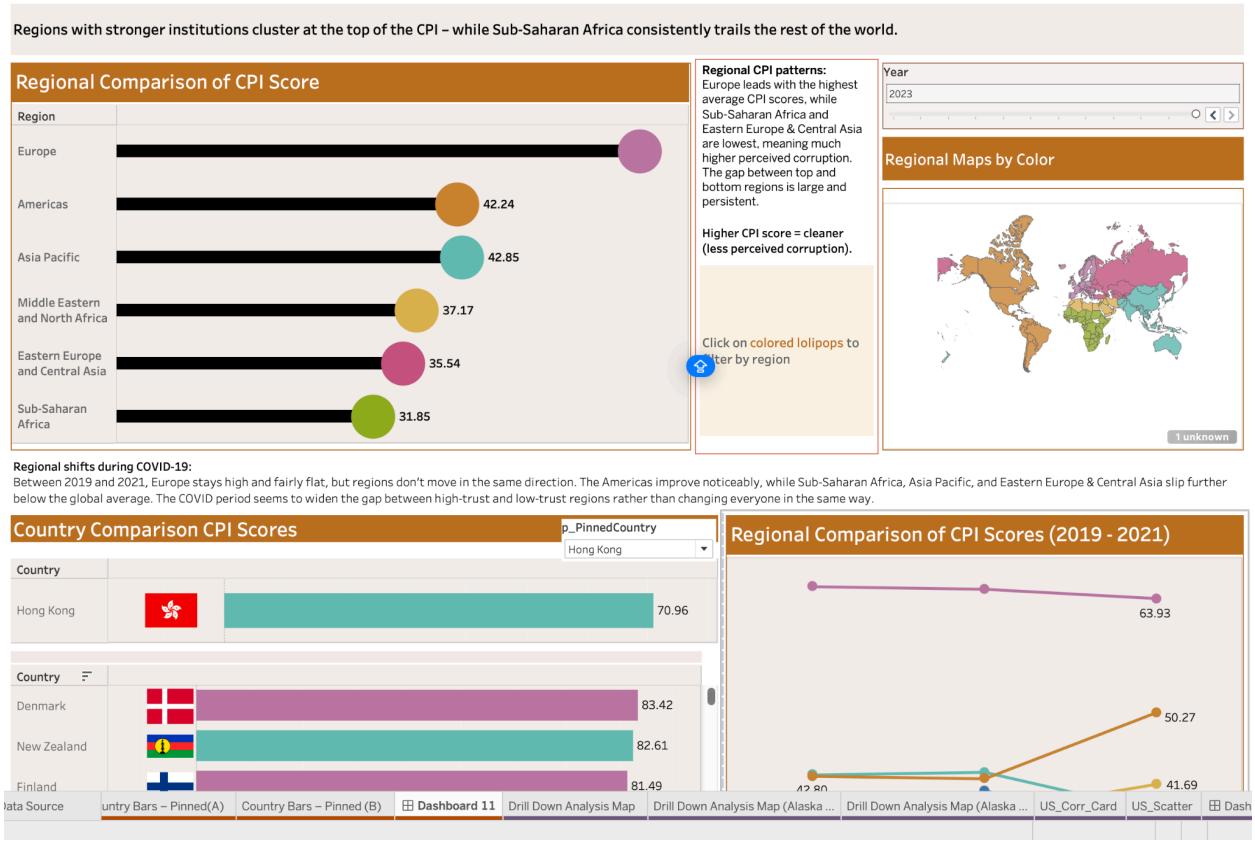

Figure 2 :Regional comparison dashboard

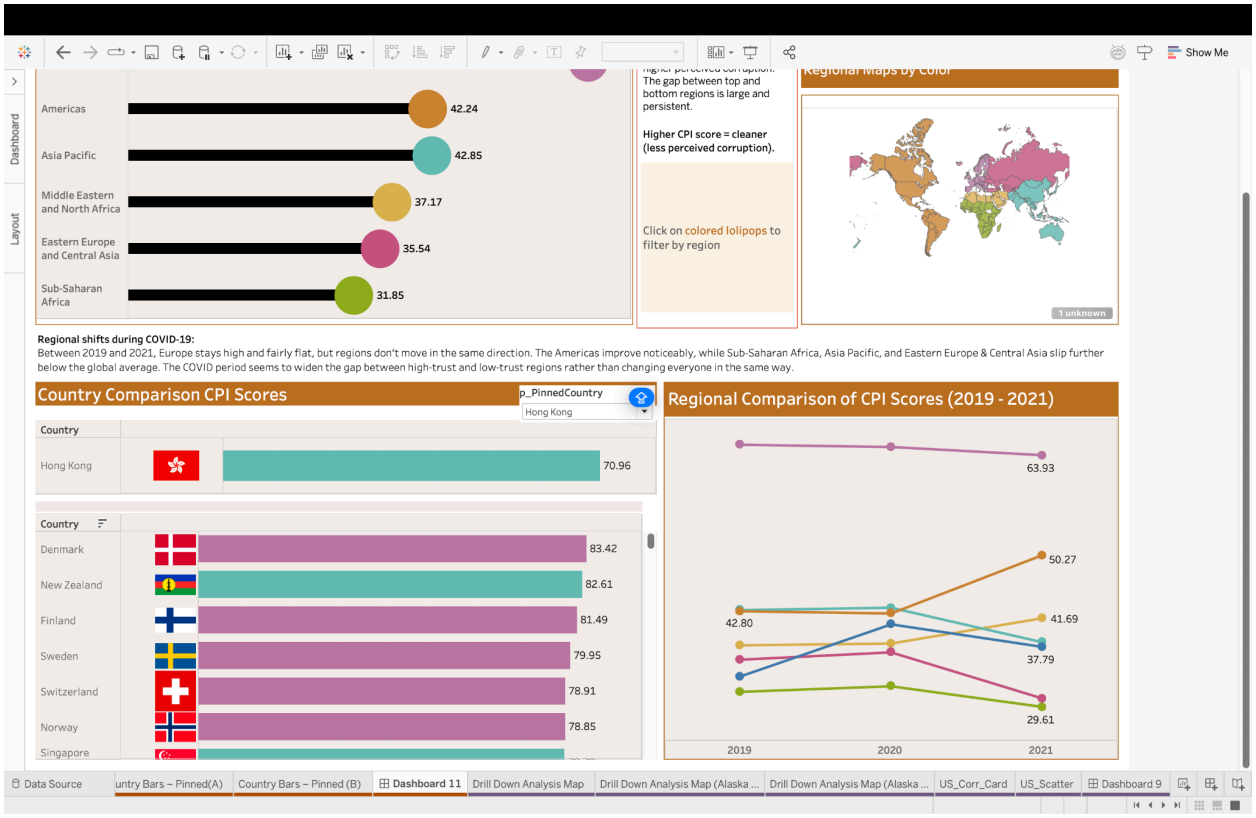

Figure 2.1:Regional comparison dashboard cntd'

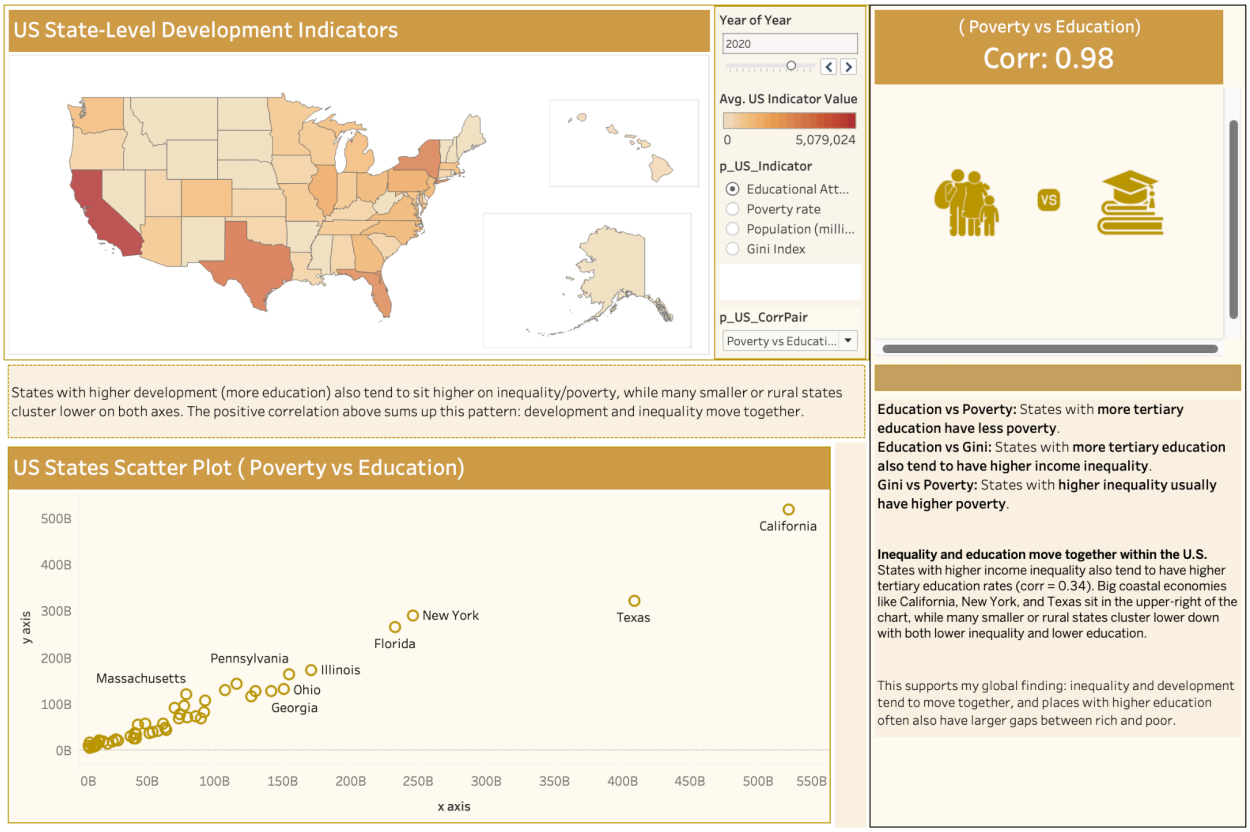

Figure 3:US- State level comparison