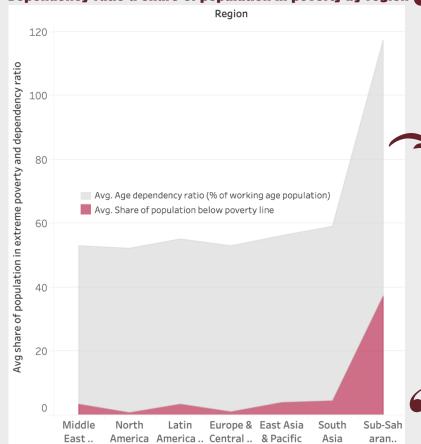
Objective

Today, 689 million people live in extreme poverty; mostly concentrated in Sub-Saharan Africa (Barbier & Hochard, 2019). Poverty has adverse effects on health and economic stability. Hence, it is important to understand the root cause of poverty for effective mitigation. Recent study examines how poverty affected by social perspectives such as literacy rate. However, there is little to no research on how environmental issues and the political landscape cause poverty. Therefore, this assignment examines the effect of corruption index (corruption factor), age dependency ratio, access to electricity (environmental factor) and GDP per capita on the share of population live below the poverty line (\$1.90 per day).

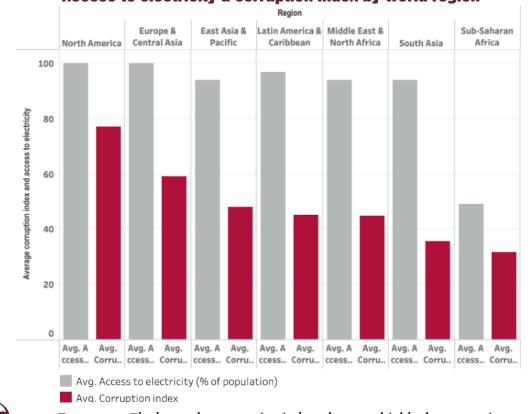
Sub-Saharan Africa (SSA) is the most corrupted [1] and poorest region in the world. This indicates that the government funds are not being used appropriately to improve the infrastructure such as electric systems. This led to the fact that only 50% of the population has access to electricity. Lack of power supply affects industrialisation which leads to lower manufacturing production, higher unemployment rate and increased rate of impoverishment (Osakwe, 2017). The SSA region government should implement anti-corruption policy and deliver essential infrastructure to reduce poverty effectively.





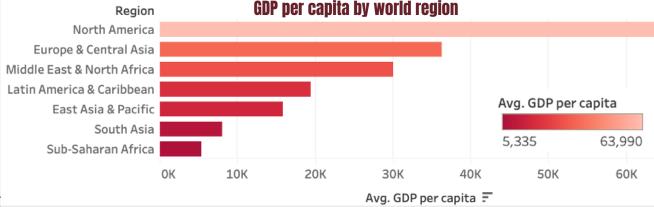
Footnotes: 2 High dependency ratio indicates working age population has greater burden in supporting dependant group. 3 GDP refers to Gross Domestic Product, indicator of overall wellbeing of countries.

Access to electricity & Corruption index by world region



Footnote: 1 The lower the corruption index, the more highly the corruption.

Dependency ratio & share of population in poverty by region 66 The graph illustrate that age dependency ratio is positively related to the share of population living in extreme poverty. SSA is accounted for the highest dependency ratio [2] and poverty rate. This suggests that the low-income working-age population is unable to support the old-aged and children who need education and medical attention; thus inducing poverty. In contrast, North America has the lowest dependency ratio and poverty rate. This suggests that the working-aged has less burden as the developed-region government provides financial assistance to senior citizens. For instance, Canada Government provides monthly payment to people aged 65 years old and above (Canada.Ca, 2022). This advices that government should care for elderly welfare to reduce dependency ratio and poverty.



The graph above illustrate that GDP per capita [3] is negatively related to poverty. The low GDP in emerging countries is caused by the poor industrial revolution which results in lower productivity and living standards where the citizens are struggling to get basic needs. The excess demand over supply leads to inflation and increases the burden on the poor. Thus, it is advisable for the government to implement tax reduction for the industrial sector to stimulate the production chain, increase exports volume, and boost GDP. This is proven by North America as they are the world's largest exports and trade regions has the highest GDP per capita.

Estimated Model (What's new)

Predicted Share of population live below poverty line = 4.001e+01 - 8.813e-02 Corruption index + 2.234e-01 Age dependency ratio -3.791e-01 Access to electricity(% of population) -1.486e-04 GDP Per Capita.

The predictors have statistically significant influence on dependant variable. Share of population live below poverty line (extreme poverty) increase when corruption index decrease (highly corrupt), age dependency ratio increase, percentage of population access to electricity decrease, and GDP per capita decrease, on average. Finding surprisingly shows that poverty are mostly increased by low corruption index and low access to electricity which means political and environmental factors are the key contributors to poverty as well other than well-known social factor in past study such as literacy rate. Conclusion (So What and contribution)

The finding suggests that government of developing countries should focus on anti-corruption initiative such as reform institution and implement anti-corruption policy so that the government funds will be used to improve on public services such as expanding the electricity supply to every household (International Monetary Fund, 2022). Thus, the industrialisation and manufacturing process can be carried out as the equipment can be operated, the tax reduction policy on industrial sector recommended can further stimulate the production chain and exports volume. This can increase the job opportunities and increase the income distribution. Besides, government could improve the old-aged welfare by providing financial assistance to further reduce poverty. The overall improvement on the living standard will raise the GDP per capita and reduce the share of population live below poverty line which is \$1.90 per day.

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