



Moderating Effect of Environmental Quality on the Relationship Between Trade Openness and Health Expenditure in Sub-Saharan African Countries

Awa'oma Abiambi Ekwebe^{1*} & Efeutlancha Forji Angelus²

¹Department of Humanities and Social Sciences, Yemyung Graduate University, South Korea

²Faculty of Economics and Management Sciences, University of Bamenda, Cameroon

*Corresponding Author: awaomaabiambi@yahoo.com

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Research Article

Abstract

Purpose: The main objective of this study is to investigate the moderating effect of environmental quality on the relationship between trade openness and health expenditure in sub-Saharan African countries.

Methods: This research utilizes panel data from 41 member countries of sub-Saharan Africa, covering the period from 1996 to 2020. Data was sourced from the World Development Indicators (WDI). The econometric analysis employs the Generalized Method of Moments (GMM) technique to address endogeneity issues in panel data.

Results: The findings reveal a significant positive relationship between trade openness and health expenditure in sub-Saharan African countries. Specifically, a 1% increase in trade openness corresponds to a 582.4-point increase in health expenditures. However, the study also indicates that trade openness negatively impacts environmental quality, as a unit increase in trade openness leads to a decline in environmental quality. This degradation has adverse health outcomes, contributing to increased health spending due to increased incidences of cardiovascular diseases, eye defects, and respiratory tract infections. The study finds that Gross Domestic Product (GDP) per capita negatively affects health expenditure, with a 1% increase resulting in a 0.1843-point decrease. Conversely, population growth positively influences health expenditure, where a 1% increase leads to a 0.1099-point rise in health spending. Industrialization has also been found to have a positive and statistically significant effect on health expenditure at the 5% level, although it contributes to environmental degradation, further impacting human health.

Implications: This study's theoretical implications enhance our understanding of the interconnections between trade, health expenditures, and environmental quality.

Keywords: Environmental quality, Trade openness, Health expenditure, Sub-Saharan African Countries

1. Introduction

Environmental quality, trade openness, and health spending are the three most contested issues that have drawn the interest of scholars and policymakers across the globe, and this is because both trades, the environment in which trade takes place, and health concerns are prerequisites for every nation to aim to develop (Shobande, 2020). The quality of trade policy is directly linked with the degree to which the environment can be affected through open trade activities (CO₂ emission), which might affect human health outcomes such as life expectancy, infant mortality, respiratory tract infection, eye defects, thus affecting the level of health expenditure (Shobande, 2020; Benjamin *et al.*, 2023; Rahman *et al.*, 2022). Researchers such

as (Chanda, 2017; Bettcher *et al.*, 2000; Blouin *et al.*, 2009; Nazar *et al.*, 2022) in their studies revealed that although the relationship between trade openness, environmental quality, and health spending is complicated, trade openness increases access to technology, which, for the industrial sector which are environmentally friendly such as improved machinery which are polluting, and medical resources, which are the foundation of health treatments. However, the healthcare system, through trade openness, must provide some degree of accessibility, quality, capability, organization, availability of people and physical resources, and equity in the provision of health services and to maintain stability in the healthcare system through environmental quality, trade openness however, must provide supplicated technology which is eco-friendly.

According to scholars such as Chanda (2017), Bettcher *et al.* (2000), Blouin *et al.* (2009), and Nazar *et al.* (2022), trade opens markets and brings competition from large corporations. It can also cause issues with equity and affordability in healthcare provision through competition, which drives up the cost of health services and thus increases health expenditure in these sub-Saharan African countries. Most foreign direct investors leave out the driving-up cost of environmentally friendly technology since these regions are guided by poor environmental policy and corrupt institutions, which are less concerned with environmental sustainability issues. In this respect, for Sub-Saharan African (SSA) countries to achieve environmentally sustainable goals and stable healthcare spending, trade openness through environmental quality and in the healthcare system ought to be seen as a way to improve the quality of the environment, affordability, and accessibility of health care, which has not been translated in Sub-Saharan African health sectors.

Trade openness is essential for all developed and developing countries, but for Sub-Saharan African countries, this openness is significant as the benefits are much greater. These include technological advancement, geography, foreign direct investment, institutions, and culture. (Chowdhury & Mavrotas, 2006; Yean *et al.*, 2018). With the opening up of economies, Sub-Saharan Africa can access foreign aid, new technologies, and international markets, and translating these trade opportunities can significantly affect the health financing of these countries (Ou *et al.*, 2023). Therefore, there is evidence to suggest that trade openness can have a positive impact on health outcomes by increasing access to healthcare resources and technologies, as well as by promoting economic growth and poverty reduction. However, this is not true in developing countries such as sub-Saharan Africa (Aziz *et al.*, 2021).

Trade openness affects the quality of the environment as well as the level of health expenditure in every nation through many indirect channels. Trade openness might raise CO₂, particularly CO₂, through trading activities such as agricultural development plans, mining, processing industries, etc., which have detrimental repercussions on human health and thus health care spending, especially in sub-Saharan African countries that are faced with weak trade policies, weak environmental policies, and corrupt top officials and poor institutions (Chowdhury & Mavrotas, 2006; Yean *et al.*, 2018).

Waage *et al.* (2015) suggest that achieving a sustainable environment, health, and well-being can only be accomplished through certain goals or policies. Several policies have been put in place in recent years: the Sustainable Development Goals (SDGs) 3 on well-being and health, and 13 combating climate change, and the Abuja declaration in April 2001 had been put in place to combat health-related problems such as HIV/AIDS and tuberculosis. The critical nature of environmental policies and health policies and their effect are essential to finding ways of improving the state of health in developing countries through trade liberalization.

Despite the general knowledge about the importance of open trade in the health system, which might result in healthy living, health issues remain a major challenge in Sub-Saharan African countries. Saharan Africa (SSA) is where insights into this relationship are most valuable, as the continent of Africa bears one-quarter of the overall global disease burden, with 69% of deaths in SSA resulting from infectious diseases like HIV/AIDS and malaria. Of the 37.4 million people living with HIV globally, 25 million live in Africa (Alkire

et al., 2018). Within the context of sub-Saharan Africa, countries are facing the challenges of stagnant economic development, a huge gap in energy demand and supply, a high mortality rate, and an increase in the incidence of respiratory diseases due to poor environmental quality and weak trade policies (Rudnicka *et al.*, 2020). For instance, in Nigeria, health indicators are among the worst in Sub-Saharan African countries; many people lose their livelihoods or die from different health conditions. At the same time, some suffer from disease burdens, including malaria, lower respiratory infection, neonatal disorders, diarrheal diseases, HIV/AIDS, ischemic heart disease, stroke, congenital defects, tuberculosis, and meningitis (Oladosu *et al.*, 2022).

The paper's implication is that, despite the massive trade in these regions and in line with various structural reforms implemented across Sub-Saharan African countries, available evidence revealed that the SSA region is ranked second among other regions worldwide. Average trade openness in SSA is estimated to be 61.04%, significantly higher than the world average of 59.20% in 2014. However, the improved trade openness performance has not translated into the health sector. The SSA region has continually seen slow progress in population health status. Sub-Saharan African countries continue to face high HIV prevalence, with the region accounting for over 69% of adults living with HIV (Frimpong, 2022). Moreover, under-five mortality in SSA was estimated to be 89.2 per 1,000 live births in 2013 (Frimpong, 2022). Furthermore, the majority of countries in the region missed the Millennium Development Goal (MDG) targets on health

As already noted, the gains from trade openness have not been enjoyed in many African countries, which cannot take advantage of the opportunities arising from a more globalized business environment; poverty levels and health costs remain very high on the continent. Since this evidence predates major trade reforms, studying trade liberalization's effects on health expenditure in developing countries such as SSA countries is imperative. It is also obvious that the gain from trade openness does not automatically translate into health cost reductions, as the high rates of trade and income growth do not explain the health financing level. By analyzing the effects of trade openness on health expenditure in SSA, the present study seeks to fill a significant gap in the literature. The paper evaluates the effects of trade liberalization on health expenditure in SSA countries. More importantly, this study sheds light on the transmission mechanism among trade, foreign direct investment, population, industrialization, and health expenditure levels in SSA countries.

2. Literature Review

According to the immense literature addressing the relationship between trade openness and other different factors or concepts, trade openness has been proxied by several measures, among which the most common and conventional way is employing the share of imports, exports, or total imports and exports to the country's nominal income (GDP). While trade openness contributes significantly to GDP in every economy involved in trade liberalization, it also leads to major environmental problems, such as excessive carbon dioxide emissions (CO₂). The Environmental Kuznets Curve (EKC), which depicts an inverted-U relationship between environmental degradation and GDP in 1993, is similar to the negative relationship between trade openness and environmental degradation (Dasgupta *et al.*, 2002; Perman & Stern, 2003; Perman & Stern, 2003).

Looking from a theoretical perspective, the environmental Kuznets Curve (EKC) developing countries such as sub-Sahara African countries are in the quest to achieve economic growth, which means most countries in this region have to compromise the quality of their environment to increase their GDP, this usually demonstrated at the initial stage of environmental Kuznets Curve (EKC) which show an increase in environmental degradation as trade increases which usually represent the first phase of environmental Kuznets Curve (EKC) and the second phase are usually experienced at the peak of the environmental Kuznets Curve (EKC) with a lower environmental degradation, the economy peaked at this time revealed an increase in income and, consequently, the ability for economic actors to pay a greater price for improved environmental standards. This is when the curve turns. There have been discussions on the EKC's decreasing slope and whether it is an illusion brought on by the transfer of polluting businesses (Perman & Stern, 2003)

Trade openness plays a significant role in the healthcare system. According to Jerrett *et al.* (2003), the accelerated expansion of healthcare costs because of extensive environmental degradation, extensive economic activity, and many social issues poses a significant challenge

for policymakers in emerging economies regarding public health. Air pollution is a major social and environmental cost. Most air pollution is caused by greenhouse gases (GHGs), which are produced by automobiles, manufacturing facilities, and power plants. These sources also produce PM_{2.5}, or atmospheric particulate matter (PM), with a diameter of less than 2.5 micrometers. According to Apergis *et al.* (2015), there is a persistent threat to public health and environmental degradation due to the increased expansion and emission of severe forms of greenhouse gases.

Trade liberalization brings advanced medical facilities in the form of technological transfers and improved health infrastructure, which affects the level of health expenditure depending on the economy's size and the economy's policies and institutions (Smith *et al.*, 2009). Trade openness has to be transmitted into the health sector; however, trade openness also brings in stiff competition among foreign investors, particularly in the health sector, thus giving room for a drive-up in costs in the health care system, which goes a long way toward increasing health spending. Enhancing health outcomes is the primary goal of rising health spending, in line with the World Health Organization's definition of health, which prioritizes mental, emotional, and social well-being (Bettcher *et al.*, 2000; Norouzi & Rabipour, 2022; Kouton *et al.*, 2021). This supports the notion that spending more on healthcare improves the general health and well-being of the populace. For example, Oaikhenan and Umoru (2012) hinted that low health investment contributed to Nigeria's poor health outcomes. According to empirical data, nations with greater health spending per person typically have better health outcomes, like lower death rates and longer life expectancies.

Empirically, several studies support the relationship between trade openness and carbon dioxide emissions (Sulaiman & Abdul-Rahim, 2017; Ling *et al.*, 2020; Awan & Azam, 2022; Chang, 2015). Their studies revealed that free trade increases the emission of carbon dioxide (CO₂), particularly in countries with higher levels of corruption and weak environmental policies, and reduces it in countries with low levels of corruption and strong environmental policies. Van-Tran (2020) and Hultberg (2018) confirm in their studies the detrimental effects of trade liberalization on the environment as a result of an increase in pollutants in the environment, such as CO₂, ambient particulate matter, Carbon monoxide (CO), and intensified nitrous oxide emissions in the previous period.

Anwar *et al.* (2022) investigated the effect of environmental factors on health spending in emerging nations. The results show that temperature and air pollution positively affect healthcare expenses, followed by private and government health spending. Ecevit *et al.* (2023) found health expenditure causally related to trade openness, GDP per capita, and greenhouse gas emissions. Nasreen *et al.* (2023), evaluating the role of GDP per capita, air pollution, and non-economic factors in determining health expenditure: evidence from the Asian region. The findings reveal the positive correlations between overall health expenditures and public and private health expenditures, as well as the effects of environmental pollution, health care costs, urbanization, and hospital bed capacity. It is interesting to consider that income per capita has a negative impact on health expenditure at lower quantiles, but at higher quantiles, it has a positive impact. The percentage of elderly people has a negative impact on overall health spending. In contrast, life expectancy positively impacts spending at lower quantiles and hurts higher quantiles.

Trade openness fosters the emissions of greenhouse gases such as ambient particulate matter, CO₂, NO_x, and NO₂, reducing the environment's quality, thus making the ecosystem more vulnerable. According to Usman *et al.* (2019), the results showed that CO₂ emissions and the environment index positively and significantly affected government health spending. The study confirmed a negative and substantial correlation between CO₂ emissions and health expenditure, and gross domestic product per capita impact demonstrated a uniformly favorable correlation with public and private health spending. The aging population significantly

positively impacted government and private health spending. Bilgili *et al.* (2021) confirm that CO₂ has a negative impact on both private and public health spending, but it is greater in private-sector health spending than in public health spending. Their study concludes that investment in the health sector will further increase the quality of the environment in the Asian region.

3. Methodology of the Study

To analyze the moderating effect of environmental quality on the effect of trade openness on health expenditures in selected sub-Saharan African countries, the study used panel data from 41 countries in four sub-regions of sub-Saharan Africa. The selection of the 41 countries was based on the availability of data on relevant variables in the context of the study. Data were available for all selected variables from 1996 to 2020, making this a 24-year study, and data for the study were selected from the World Development Indicators based on the 2020 database. The GMM system was used to demonstrate the moderating effect of environmental quality on the effect of trade openness on health expenditures in selected sub-Saharan African countries. To estimate the model below in Equation 2, the study used the Generalized Method of Moments (GMM) estimation approach designed for dynamic panel data models. The reason for this estimation technique is that it addresses the potential endogeneity bias in the model. The estimates are based on an unbalanced panel of 41 sub-Saharan countries for 1996- 2020. The selected time frame for the data is from 1996 to 2020 due to data availability constraints on the selected variables for this study. The economic functional model is as follows:

$$he = f(he_{t-1}, top, fdi, gdppc, pop, urb, ind) \dots \dots \dots (EQ1)$$

Due to linear specification, the current study utilized all the variables discussed in a natural log. The linear specification provides us with more consistent, efficient, reliable, and comparable findings compared to other specifications (Sarwar *et al.*, 2017; Shahbaz *et al.*, 2017; Waheed *et al.*, 2018). Moreover, the coefficients' values become elasticities of homogeneous units, which makes a comparative analysis with each other. The converted equation can be written as follows.

$$\ln he_{it} = \lambda_0 + \lambda_1 \ln he_{t-1} + \lambda_2 \ln top * \ln ghg_{it} + \lambda_3 \ln gdppc_{it} + \lambda_4 \ln pop_{it} + \lambda_5 \ln urb_{it} + \lambda_6 \ln ind_{it} + v_{it} \dots \dots \dots (EQ2)$$

Where: *he* = health expenditure; *ghg* = greenhouse gases; *top* = trade openness. Trade openness is measured by exports plus imports divided by GDP; *lngdppc* log of gross domestic product per capita; *lnpop* log of the population; *urb* = urbanization, and *ind* = industrialization are the explanatory variables in the multivariate analysis, and the choice of these variables relies on the data accessibility. The λ_0 is a constant term, and 1 to 6 are estimated parameters in the model, and v_{it} are error terms.

4. Results

4.1. Diagnostic Test Results

Unit root and endogeneity tests are conducted to confirm that the data used in the model estimation are appropriate. Recall that the IPS unit roots test was conducted to determine the level of integration of the variables used for the study. The results of the stationarity test are summarized in Table 1 below.

4.1.1. The IPS Unit Roots Test

In the combination of horizontal section data and time series data, which is the case with panel data, the stationarity of the series should be tested before performing econometric analysis (Baltagi & Kao, 2001). To investigate the statistical properties of the data, we started by checking the presence of a unit root. To this end, we applied the IPS Unit Roots Test (Im *et al.*, 2003). The unit root test results show that the null hypothesis of a unit root can be rejected because all variables have no unit root, implying that the series are stationary at level I(0). Therefore, we reject the null hypothesis for all the variables, implying that all the variables are stationary at the level for at least one of the panels. Thus, the variables can be analyzed at a level with little risk of generating spurious regression.

Table 1: Summary of IPS Unit Roots Test Results

Variables	Statistic (t- bar)	p-value	1% critical value	5% critical value	10% critical value	Decision
he	-1.8009	0.0198	-	-	-	I(0)
GDP (per capita)	-3.5015	0.000	-1.820	-1.730	-1.690	I(0)
Pop	-1.8334	0.0454	-1.820	-1.730	-1.690	I(0)
urb	-3.4230	0.000	-1.820	-1.730	-1.690	I(0)
lex	-3.544	0.000	-1.820	-1.730	-1.690	I(0)
indus	-3.1224	0.000	-1.820	-1.730	-1.690	I(0)

Source: Authors Compilation (2023)

4.2.Descriptive Statistics and Correlation Analysis

Table 2 shows the descriptive statistics of the variables used in this study from 1996 to 2020. It also includes statistical information regarding the data, including the mean, standard deviation, and median. Before showing the model coefficient results, descriptive statistics are given in Table 2. Regarding environmental quality, this disparity is reflected in industrialization, with an average value of 25.60674 and a standard deviation of 25.60674. Meanwhile, the mean value of the industry and manufacturing share of GDP is 25.60674. It should also be noted that the urbanization process in sub-Saharan Africa is constantly on the rise, though at different paces in different countries. Regarding industrialization, there are heterogeneities among the countries as depicted by the standard deviation of 12.81537; domestic production per capita is 4.079865; the population is 1.92e+07; urbanization is 39.35926; industrialization is 25.60674.

Table 2: Descriptive Statistics for Variables

Variable	Mean	Std. Dev.	Min	Max
he	99.89156	140.6764	4.648787	840.2806
top	69.21001	34.78102	.7846308	225.0231
urb	39.35926	15.79345	7.412	90.092
ind	25.60674	12.81537	4.555926	84.3492
lex	56.77612	7.266158	37.194	74.51463
gdppc	2181.868	2866.652	3.290291	16438.64
pop	1.92e+07	2.87e+07	76417	2.06e+08

Source: Authors Compilation (2023)

4.4 Empirical Analysis

Table 3 below shows the effect of environmental quality on trade openness on health expenditures. The study conducted a one-step system GMM, the results of which are reported in Table 3. The test for autocorrelation confirmed the absence of autocorrelation in the second order for all the regressors. The Sargan test for over-identification failed to reject the null hypothesis that over-identification restrictions are valid. The results from Table 3 show a significant and positive effect of the previous health expenditure on the current health expenditure in the Sub-Saharan African countries. This implies that the high level of health expenditure in the past has a huge lasting impact on the current health expenditure in these countries, and health policy in these countries should consider maintaining investment in the health sector. The finding further revealed that trade openness has positive and significant effects on health expenditure; this implies that a unit increase in trade openness will lead to a 0.0177331 increase in health expenditure in Sub-Saharan countries, with everything being equal. Trade openness intensifies greenhouse gases such as CO₂ emissions, NO₂, ambient particulate matter, or atmospheric gas, which in turn reduces the quality of the environment, leading to environmental-related diseases such as eye cataracts, cardiovascular diseases, and respiratory tract infections, which in the long run affect the health costs of these countries. This result was similar (Ling *et al.*, 2020; Awan & Azam, 2022; Chang, 2015; Sulaiman & Abdul-Rahim, 2017). According to their research,

free trade increases carbon dioxide (CO₂) emissions, especially in nations with high levels of corruption and lax environmental regulations. At the same time, it decreases emissions in those with low levels of corruption and robust environmental regulations. This was contrary to the findings by Van-Tran (2020) and Hultberg (2018) that trade liberalization has a negative impact on the environment because it has increased emissions of nitrous oxide in the preceding period and other pollutants like carbon monoxide (CO₂) and ambient particulates.

Table 3. The moderating effect of environmental quality on the effect of trade openness on health expenditure

inhe	coefficient	Robust std. Err	t	P< t	95% confidence interval	
inhe l1	0.9520732	0.042521	22.39	0.000	0.866135	1.038011
top	0.0177331	0.0079115	2.24	0.031	0.0017433	0.0337229
top -eq	-0.0017162	0.0007585	-2.26	0.029	-0.0032493	-0.0001831
ingdppc	-0.0184307	0.0603238	-0.31	0.762	-0.1403497	0.1034884
lex	-0.0016394	0.0039553	-0.41	0.681	-0.0096333	0.0063545
inpop	0.1098854	0.0512404	2.14	0.038	0.0063248	0.2134461
urb	-0.0019282	0.0027098	-0.71	0.481	-0.0074048	0.0035485
ind	0.0101243	0.0030634	3.3	0.002	0.003933	0.0163156
-cons	-1.573887	0.91961	-1.71	0.095	-3.432488	0.2847144
Number of countries: 41						
Prob<F=0.000						
Sargan (Prob> Chi ²) =0.0000						
Hansen =0.471						
Arellano–Bond test [AR(1) in the first difference Prob>z]=0.000						
Arellano–Bond test [AR(2) in the first difference Prob>z]=0.665						

Notes: Each cell contains the regression coefficients and the standard errors in parentheses *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Trade openness has a negative and significant effect on environmental quality, suggesting that a unit increase in the trade openness of these sub-Saharan African countries will decrease environmental quality. This was determined by considering the moderating effect of environmental quality on the effect of trade openness on health expenditure. All other things being equal, the value of 0.0017162 indicates that trade openness directly impacts the environment, increasing human health susceptibility (reducing environmental quality) to diseases linked to the environment, such as cancer and respiratory disorders. As a result of the reduced environmental quality, the health care system's spending has become weaker in these sub-Saharan African nations due to environmental-related diseases and the negative impact of trade openness. This implies that trade openness and environmental quality play a significant role in shaping the health expenditure of these countries, along with other health determinants. Usman et al. (2019) showed that CO₂ emissions as a result of free trade had a positive and significant effect on government health spending.

The finding shows that gross domestic product per capita and life expectancy have a negative and insignificant effect on health expenditure, implying that a percentage change in gross domestic product per capita and life expectancy will lead to a decrease in health expenditure, all things being equal. The decrease in health spending is due to the fact that despite the increase in the GDP per capita of these Sub-Saharan African countries, the transmission of this favorable GDP per capita due to trade liberalization is not translated into the healthcare sector. Urbanization was also found to be statistically insignificant. A percentage increase in urbanization will lead to a decrease in health expenditure. This could result from policy priorities and poor resource allocation, which might favor rural areas over urban areas. The result was contrary to Nasreen *et al.* (2023). Evidence from the Asian region examines the influence of GDP per capita, air pollution, and non-economic determinants on health spending. The results show that overall health spending and public and private health spending are positively correlated. They also show that hospital bed capacity, healthcare prices, urbanization, and pollution have an impact. Examining that income per capita influences health expenditures positively at higher quantiles but negatively at lower quantiles is intriguing.

The finding revealed that population positively and significantly affects health expenditure. This shows that when the population of these sub-Saharan African countries increases, health expenditure in this region also increases. This implies that a percentage change in population will lead to a 0.1098854 change in health expenditure, all things being equal. The result further shows that industrialization positively and significantly affects health expenditure. This implies that a percentage increase in industrial activities will lead to increased health expenditure. All things being equal, this implies that industrial production has resulted in improved economic growth. The revenue is translated through taxes into the health sector, which thus increases the expenditure. The study was contrary to the work of Nasreen et al. (2023); the proportion of elderly individuals negatively impacts the total amount spent on health care, while life expectancy positively affects spending at lower quantiles.

5. Conclusion and Policy Implications

In conclusion, this study emphasizes the significance of sustained investment in health expenditure in sub-Saharan Africa. The findings underscore the need for policymakers to prioritize healthcare funding and accessibility, considering the impact of trade openness, gross domestic product per capita, population growth, and environmental quality. The negative coefficient for trade openness indicates that careful consideration of trade policies is necessary to ensure they do not hinder healthcare investment. Conversely, the positive relationship between gross domestic product per capita and health expenditure highlights the importance of economic development in improving healthcare access and quality. Policymakers must also address the increasing demand for healthcare services resulting from population growth while considering the healthcare system's capacity and the population's health profile. Furthermore, the study underscores the need for effective energy policies that promote clean and renewable energy sources, as environmental degradation and greenhouse gas emissions indirectly affect health expenditure. By integrating these findings into policymaking, governments should work towards improving overall well-being and achieving better health outcomes for the population of sub-Saharan Africa. Sub-Saharan African countries should prioritize the development and implementation of robust environmental policies. These policies should aim to reduce pollution, control greenhouse gas emissions, and promote sustainable practices. By addressing environmental concerns, countries can mitigate the negative impact of trade openness on health expenditure. It is essential for sub-Saharan African countries to enhance their trade policies. This involves creating a regulatory framework that ensures fair trade practices, protects natural resources, and considers the environmental impact of trade activities. By implementing effective trade policies, countries can prevent the exploitation of their resources by foreign countries or multinational corporations.

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