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Effects of Mortality and Fertility on Economic Growth in Sub-Saharan Africa, 1970–2005

The study assesses the trend and pattern of mortality and fertility rates and investigates the direction of causality between fertility and economic growth in sub-Saharan Africa (SSA). My goal is to evaluate the impact of mortality and fertility rates on the economic growth in SSA from 1970 to 2005. While many regions of the world are already experiencing declines in mortality and fertility rates, and increases in economic growth and development; the mortality rate is still high in SSA, the fertility rate is rigidly downwards, and economic growth is also very low. Using secondary data, the study reveals that one-way causality runs from fertility to economic growth and high mortality and fertility rates are contributing to low economic growth in SSA.

Countries where the research will take place

Sub-Saharan Africa

How does the research describe the impact of population/reproductive health on poverty reduction and/or economic growth?

Population dynamics matter in the determination of economic growth but rapid population growth may bring about poor economic performance, upholding the pessimistic position. Sub-Saharan Africa is an important region to study because it has lagged behind other regions both in terms of economic development and in terms of completing the demographic transition. Hence, this study focuses on providing answers to the following questions: What is the direction of causality between economic growth and fertility rate in SSA? Does it follow the Malthusian or Transition theory, or both? Are the mortality and fertility rates contributing positively or negatively to the economic growth in SSA and to what extent have these demographic variables affected economic growth in SSA?

How will the research address a policy need, and what kind of policy lesson is expected?

High mortality and fertility rates are contributing to the low economic growth in sub-Saharan Africa. High mortality rates are mainly caused by HIV/AIDS and malaria. Positive association exists between mortality and fertility in sub-Saharan Africa. Thus, we need to improve health policies in sub-Saharan African countries, especially in the area of health insurance. Also increasing the awareness of the benefits of contraceptive use will help reduce high fertility rates in the region.

Methods used

Graphs and charts were used to assess the trend and pattern of mortality and fertility rates. The study uses the Granger causality test to examine the direction of causality between fertility and economic growth. A panel data analysis was used to investigate the impacts of mortality and fertility on economic growth in sub-Saharan Africa. The study uses the Pooled OLS and the SYS-GMM (System Generalized Method of Moments) to compare the results from the two estimation techniques. A total of 35 countries were used based on the availability of data and these countries reflect the diversities that exist in sub-Saharan Africa.

Data used

The study uses secondary data. Data on mortality rates, fertility rates, and economic growth were sourced from World Development Indicators, while data on civil and ethnic violence were sourced from Polity IV database. The study period covers from 1970 to 2005.

Research results

- High mortality rates are mainly caused by HIV/AIDS and malaria in sub-Saharan Africa.
- Access to contraceptives is still low in SSA especially among women who are in their childbearing years.
- There is a positive correlation between mortality and fertility rates.
- The Granger test shows showing a one-way causality from fertility rate to economic growth.
- Mortality rates and fertility rates are causing negative effects on the economic growth in SSA.

Note

The results presented are preliminary results because the final results have not been presented.