

Influence of Health Insurance Financing on Economic Growth In Kenya



Diana Chepchirchir*¹, Dr. Richard Siele², Dr. Isaac Kemboi³

^{1,2,3} Department of Economics, School of Business and Economics, Moi University, Kenya

ABSTRACT: Economic growth positively impacts population health, providing access to quality healthcare, environmental protection, clean water, and better preventative behavior. However, Kenya's declining growth rate affects health financing, causing many citizens to struggle with access to care due to rising medical costs. This study sought to analyse the influence of health insurance financing on economic growth in Kenya. The study was guided by the Solow-Swan Exogenous Growth Model. The study was conducted in Kenya. Data used in study was longitudinal data for twenty two years. The study period was from 2000 to 2022. A descriptive and inferential analysis performed where Auto-Regressive Distributive Lag (ARDL) model was used. Analyzed data were presented in the form of tables and discussions. The health insurance financing indicated a positive and statistically significant ($b=0.2935$; $p = 0.028 < 0.05$), implying that one unit increase in health insurance financing could result in 0.2935 units in economic growth in Kenya. The study showed that adjusted R-squared was 0.9271, implying that the model explains approximately 92.71% of the variation in the economic growth in Kenya. The study concluded that, health insurance financing, is positively related to economic growth in the long run in Kenya. The study recommends that there is need for enhancing health insurance financing sources and gradually shifting towards sustainable domestic financing sources.

KEY WORDS: influence, health insurance financing, economic growth, Kenya

INTRODUCTION

Economic growth is the increase in production of goods and services over time, which can create cycles of prosperity (Gründler & Potrafke, 2019). Strong economic growth enhances human development, which further promotes economic growth, emphasizing the importance of citizen participation in the growth process (Wochner, 2022). Economic growth positively affects population health by improving access to healthcare, reducing environmental hazards, and promoting preventative behaviors (Martin, Grant & D'Agostino, 2020).

Investments in health financing can lead to increased labor productivity and income, enhancing overall population well-being (Crist, Mora & Engelman, 2017). A healthy population correlates with higher productivity and income, highlighting the role of human capital in economic growth (World Health Organization, 2018). Poor health among the labor force adversely affects productivity, contributing to economic growth disparities between developed and developing countries (Piabuo & Tieguhong, 2017).

In the USA, increased life expectancy has added USD 3.2 trillion annually to the economy (Gordon, 2016). India's economic growth plan includes health financing to improve healthcare (Meheus & McIntyre, 2017). African countries face significant health financing challenges, with low per capita health expenditure compared to high-income countries (World Health Organization, 2020). Kenya aims to provide equitable healthcare as part of its economic growth strategy, recognizing health as essential for development (Omamo, Rodrigues & Muliari, 2018).

Prior to the pandemic, Kenya experienced strong growth, but COVID-19 has exacerbated existing economic challenges, including inequality and poverty (Tesso, 2020). In Kenya, a significant portion of the health budget is allocated to salaries, limiting funds for healthcare services, leading to reliance on private financing (Nganyi, Jagongo & Atheru, 2019; Barasa, Maina & Ravishankar, 2017). There is a need for more studies on the impact of health insurance financing on economic growth in Kenya, addressing the declining economic growth and inadequate health expenditure (Barasa, Maina & Ravishankar, 2017). Therefore this study sought to establish the influence of health insurance financing on economic growth in Kenya.

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LITERATURE REVIEW

Theoretical Review

The study was guided by Solow-Swan exogenous growth model developed by Solow in 1956. The model explains long-run economic growth as a function of labour, capital accumulation and population growth, and productivity growth because of technological progress. The model recognizes human capital as a significant tool for continued endogenous growth. Human capital is accumulated through new skills, knowledge and improved efficiency and productivity of the workforce. In a study estimating the influence of health insurance financing on economic growth, the citizenry's health is considered a constituent of human capital in the aggregate production function.

A diseased labour force has poor performance and high dependence, negatively affecting productivity. When proper healthcare and attention are not available in a country, some diseases can affect the population, which can lower the labour force's productivity (Yu, Xia & Li, 2020). Moreover, increased contribution to production in the economy and diseased population negatively affect the economy as it spends what has already been produced without adding any value to the aggregate production. Moreover, since the diseased population requires more care, they waste man hours considering the labour force that cares for such a sickly population. An increase in health financing by the government and non-governmental actors is expected to lead to an increase in healthcare services. This would, in turn, lead to increased health outcomes for the population. A healthy population is a productive population, and hence productivity would improve. In the current study, the model was used to explain how health financing can lead to improved human capital, leading to increased productivity and economic growth. The model posits the health status of the population in a country to be a determinant of the labour force supply. When investments in the health sector are increased, this is expected to lead to an increase in the number of healthy labourers who will enhance the country's productive capacity. Conversely, when investments in the health sector are low, the population can be ravaged by disease and reduce their productivity, thus adversely affecting economic growth. The theory hence supports the alternate hypotheses in the study that health insurance financing would have a positive effect on economic growth.

Empirical Review

This empirical review discusses two primary types of health insurance financing: private and social health insurance. Private health insurance is funded through premiums from individuals or employers, which can be subsidized but are generally not free, leading to variability in coverage and costs (Bodenheimer, 2019). In contrast, social health insurance is tax-funded, often providing broader service coverage at a lower cost, particularly benefiting lower-income individuals (Kutzin & Yip, 2018).

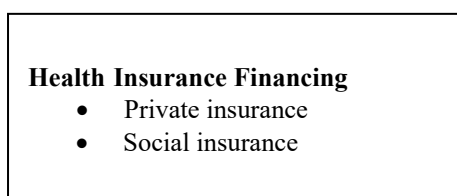
The review highlights the increasing role of private financing in healthcare access, especially in countries with weak public institutions, where private sector involvement can enhance efficiency and reduce public facility burdens (Mladovsky, 2020). However, private health insurance often faces challenges such as adverse selection, moral hazard, and risk selection, which can undermine equity and accessibility (Salim & Hamed, 2018; Liu et al., 2020; Wu et al., 2020).

In Kenya, private health insurers dominate the market, primarily serving wealthier individuals, while the National Hospital Insurance Fund (NHIF) covers a smaller segment of the population (Munge et al., 2018). The NHIF has expanded its services but faces governance and capacity challenges (Bakibinga & Bakibinga-Gaswaga, 2019). The reliance on private health services in sub-Saharan Africa is significant, yet many low-income individuals struggle to access quality care due to financial constraints (Tsui et al., 2017; O'Hanlon & Hellowell, 2020).

The review also emphasizes the importance of effective health financing mechanisms for achieving Universal Health Coverage (UHC) and stimulating economic growth, as demonstrated in various studies across different countries (Harris & Libardi Maia, 2022; Mor, 2021; Cui et al., 2023). However, excessive reliance on donor funding can jeopardize sustainability (Steurs, 2019; Croke, 2020). In Ghana, effective health financing policies have been linked to improved health outcomes and economic development (Osei-Tutu, 2021), while expanding health insurance in Kenya could enhance economic productivity (Ayiro et al., 2023; Wagura, 2019). Socio-economic factors also play a crucial role in health insurance uptake and overall health outcomes (Ng'ang'a, 2021).

Conceptual Framework

Independent Variables



Dependent Variable



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RESEARCH METHODOLOGY

The study utilized a longitudinal research design, focusing on data collected over time from the same participants to address the research problem (Kothari, 2014; Cockcroft et al., 2019). Data were gathered from 2000 to 2022. The Auto Regressive Distributed Lag (ARDL) model was employed to analyze the relationship between health financing and economic growth (Pesaran & Shin, 1999; Pesaran et al., 2001). The model allows for the examination of both short-run dynamics and long-run relationships among variables, suitable for small sample sizes. The research was conducted in Kenya, utilizing longitudinal data over 22 years to assess the impact of health financing on economic growth. Secondary data were collected from credible sources, including government publications and international organizations, to ensure validity (Punch, 2005). Key sources included the Kenya National Bureau of Statistics and the World Bank. The ARDL model was used to forecast future values and test for long-run relationships between health insurance financing and economic growth, controlling for other influencing factors. Ethical considerations included obtaining necessary permits for data collection and ensuring respondents' privacy.

RESULTS AND DISCUSSION

Table 1 Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Std. Dev
Health Insurance Financing	21	13.34	20.23	17.3056	2.29762

Source: Researcher (2024)

In the realm of health insurance financing, the statistics show a mean of 17.31, with a narrower range (minimum of 13.34 and maximum of 20.23) and a low standard deviation of 2.30. This indicates a more consistent level of funding in this area, suggesting that health insurance may provide a more reliable source of financial support for healthcare services. However, the relatively low mean also implies that many individuals may still be uninsured or underinsured, potentially limiting access to necessary healthcare. The study done by Simiyu (2021) notes that the Kenya Health Financing Strategy acknowledges the dominance of the National Health Insurance Fund (NHIF), which covers a significant portion of the population but still leaves a substantial number uninsured. This aligns with the original findings that indicate a low mean in health insurance financing, suggesting that many individuals remain underinsured or uninsured. The strategy aims to enhance coverage and improve the reliability of health insurance as a financial support system, addressing the concerns raised about the adequacy of health insurance financing in the original data.

Estimating the ARDL model

An ARDL (Autoregressive Distributed Lag) model estimated to assess the impact of various health financing sources on economic growth in a sample ranging from 2001 to 2020 with 20 observations.

Table 2 Autoregressive Distributed Lag

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Economic growth						
L1.	0.268623	0.097007	2.77	0.016	0.059052	0.478194
Health insurance financing	0.293525	0.118979	2.47	0.028	0.036486	0.550564
_cons	0.003823	0.274214	0.01	0.989	-0.58858	0.596227
Number of obs	20					
F (6, 13)	41.28					
Prob > F	0.0000					
R-squared	0.9501					
Adj R-squared	0.9271					
Log likelihood	41.13882					
Root MSE	0.0384					

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The study findings in Table 2 revealed that the F-statistic (41.28) is significant with a p-value of 0.0000, indicating that the model jointly explains a statistically significant portion of the variation in economic growth. R-squared (0.9501) and adjusted R-squared (0.9271) are both high, suggesting that the model explains a large proportion of the variance in economic growth. The coefficient (0.2686) is positive and statistically significant (p-value = 0.016), implying that past values of economic growth have a positive impact on current economic growth. This suggests a certain level of persistence in economic growth. The coefficient (0.2935) is positive and statistically significant (p-value = 0.028), suggesting that a rise in health insurance financing is associated with an increase in economic growth.

CONCLUSIONS AND RECOMMENDATIONS

The study concludes that, health insurance financing is a crucial factor in enhancing economic growth in Kenya. Despite the positive correlation, the low mean score indicates ongoing challenges regarding coverage adequacy, suggesting that policy efforts must focus on expanding access to health insurance to ensure broader financial support for healthcare services and ultimately foster sustainable economic development.

Recommendations

Expedite the establishment of the newly legislated Social Health Insurance Fund to ensure broader coverage and access to essential health services without financial hardship. This should include comprehensive benefits that cover a wider range of health services, including preventive care. Enhance collaboration between public health systems and private sector players to leverage resources and expertise, ensuring a more integrated approach to healthcare delivery.

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