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TOTAL PUBLIC EXPENDITURES AND QUALITY OF LIFE: CASE FOR KENYA

[1*]Leonard Njung'e Kimani
Candidate, PhD Economics
Open University of Tanzania
lnkimani@hotmail.com
[2]Felician Mutasa
Open University of Tanzania
felicianmutasa@yahoo.com
[3]Gabriel N Kirori
The Catholic University of Eastern Africa
gkirori@cuea.edu & gnkirori@gmail.com

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ABSTRACT

Purpose of Study: This study investigates the influence of total public expenditures on the quality of life (QoL) of people in Kenya over a period of 15 years, 2008-2022. The period marks the larger part of the ongoing Kenya Vision 2030.

Methodology: The study uses human development index as the metric for QoL, secondary data sources, and the autoregressive distributed lag model in the analysis to test the null hypotheses that total public expenditures are not statistically important in influencing QoL in Kenya.

Results: The results indicate that there is not enough evidence against the null hypothesis, contrary to popular expectations. One possible explanation for this outcome is attribution arising from the likelihood of unbalanced economic growth process in Kenya over time.

Keywords: *Quality of life, total public expenditures, autoregressive distributed lag model, unbalanced economic growth, Kenya Vision 2030.*

INTRODUCTION

Kenya's historical development efforts were adversely affected by weak implementation and deep inequalities, falling short of attaining targets (Gainer, 2015). The Kenya Vision 2030 is a most-far reaching and ambitious national development strategy since Kenya's independence in 1963, covering a period of 25 years, 2008-2032. The two-fold mission of the Vision 2030 is transformation of Kenya into a middle-income industrializing country and attainment of high QoL of the people (GoK, 2007). The strategy embraced wide-ranging policy priorities ranging from agriculture, education and the rule of law in the economic, social, and political spheres, and targeted economic growth at an average rate of 10 percent per annum. The governing structure of the strategy comprise two 'Anchors' and three 'Pillars'. The two Anchors comprise the 'foundations (enablers) for national transformation' anchor, and the 'macroeconomic stability' anchor. The Anchors together form the 'building blocks' for the three Pillars which comprise the 'economic pillar', the 'social pillar', and the 'political pillar' (GoK, 2007). One of key assumptions in the study is that the Kenya Vision 2030 is a function of macroeconomic variables including total public expenditures, economic growth, public investments, remittances, and total factor productivity. The actual average growth rate of the economy over the 15 years period is about 5 percent. According to the World Bank (2024), Kenya made significant political and economic reforms over the study period reflected in poverty reduction from 37 percent in 2015 to 27 percent in 2019.

Quality of life is a broad concept for welfare improvement reflecting peoples' desire to advance their lives, and is necessary for economic transformation (Krinitcyna, 2016; Hrynchyshyn, 2020). The concept is based on welfare economics with direct focus on economic efficiency and income distribution [Boyle, 2024]. The prism of welfare economics is welfare maximization of all members of society. Introduced by the United Nations in 1997, the human development index is the most authoritative metric of QoL in the world (Krinitcyna et al., 2016). It is a summary measure of the average achievement in three key dimensions of human development including a long and healthy life, being knowledgeable, and having a decent standard of living (Krugman, Rodriguez & Choi, 2011). Two theories governing the study are the economic welfare theories and circular cumulative causation theory of growth.

LITERATURE REVIEW

Welfare economics is study focusing on determining the optimal allocation of economic resources, goods, and income to improve the overall social welfare or good of the society (Boyle, 2024). It relates directly to the study of economic efficiency and income distribution as well as the factors affecting the overall well-being of the people in the economy. Welfare economics begins with application of utility theory in microeconomics where individuals seek to maximize their utility through their actions, consumption choices, and the interactions of buyers and sellers through laws of demand and supply in competitive markets to yield consumer and producer surpluses. It is heavily dependent on assumptions regarding the measurability and comparability of human welfare across individuals as well as the value of other ethical and philosophical ideas about well-being (Backhouse, 2009).

Hrynchyshyn (2020) examined the evolution of welfare theories of economic schools and concepts and explains that economic welfare theories in the first period of development related in prevalence of either the market or state. Kolot (2017) points out that in the classical paradigm of development, the functioning of economic systems is mainly in the context of two institutions, the market and the state. In the neoclassical paradigm of development, the functioning of economic systems was distinguished as a critical balance of triad interests and connections in the 'state-market-community/man' relationship in the context of ensuring that welfare acquired meaning (Laqutin, 2016; Rajan, 2016). Further, the authors explain that economic theories and schools/concepts over the 20th century related under the influence of the dominance of either the market or the state. Over the 19th and 20th centuries, public welfare belonged in macroeconomics but, later moved towards microeconomics with the development of economic welfare theories to embrace social and environmental parameters as part of the economic content of public welfare (Hrynchyshyn, 2020). According to author, the theory of welfare today is based on the imperatives of economic growth including location theories, neoclassical theories, and theories of cumulative growth, institutional theories, and the new theories of regional development and is imperative also in the search for indicators of human development that go beyond GDP. With the emergence of capitalism, mercantilists made attempt to understand economic relations through the prism of monetary relations and welfare, through the prism of trade through the accumulation of money, the author explains (Rajan, 2016).

Smith (2018) contends that the welfare of a nation depends on the welfare of each member of the society embodied in labour and capital. The author emphasizes that welfare is a fundamental concept of the classical school of economics through the prism of welfare maximization of all members of the society, a "top-down" principle, where the individual welfare of each person is determined by ability to effectively use own capital and labour. According to Keynes (2002), the most considerable shortcomings of the economic society are, firstly, its inability to provide full employment and secondly, it's arbitrary and unfair distribution of wealth and income. In the middle of 20th century, Arrow (2004) defined function of public welfare as aggregation of welfare of the individual members of society in the absence of transitivity. In the German School of neoliberalism, Erhard (1991) attaches great importance to the desire to achieve an increase in overall welfare and lays the foundations for a socially oriented market economy. The main postulates of Erhard theory are to find a compromise between liberalism and socialism leading to two types of welfare states, the conservative-corporate based on the German model, and the social-democratic based on the Scandinavian countries. The result of the Erhard theory was the introduction of social insurance in German (Hrynchyshyn, 2020).

Glushcheko (2016) notes that despite considerable economic progress in the second half of the 20th century, there has been a change from focusing on purely economic approaches to an integrated combination of qualitative parameters of human development and estimation of the standard of living. For instance, since the 1990s, there has been considerable interest in social indicators, outlining various doctrinal forms including social progress, human development, quality of life, welfare in a new sense, and search for metrics of human development that go beyond GDP (Hrynchyshyn, 2020). The author outlines three sets of theories as key to understanding welfare, firstly, the theories of public welfare highlighting the predominance of the institution of the state or the market, secondly, theories aimed at intensifying economic growth including location theories, neoclassical theories, cumulative growth theories, and endogenous potential and place-based theory, and thirdly, theories that determine the social status of people from the perspective of their standing of living, human development, subjective welfare, and so on.

Based on the utilitarian theory and the philosophy of morality and ethics, Bentham (1998) identifies welfare with happiness of the people and explains its importance in the definition of the "utility principle". In focusing on the need for mutual coordination of the interest of individuals, enterprises, and society, Pigou (1985) termed economic welfare as the national dividend and distinguished between the welfare of individuals, social groups, and society in general.

One of the founders of the liberal movement, Friedman (2006), emphasize the importance of relationships built on value principles and identifies two types of values, firstly, the value of relations between people being the right of individual to choose freedom, and secondly, the value to use this freedom being individual responsibility. The author defended and widely promoted the freedom of the individual and family.

Rajan (2019) advances the need to balance the functioning of two key institutions, the state and the market, originating to the emergence of the idea of communitarianism as a reaction to the liberal field of economic science especially the “theory of justice”. The idea of communitarianism reflects the emergence of the community as a necessary institution in the functioning of the democratization of society (Hrynchyshyn (2020). Examining the liberal worldview, Scroder (2014) notes that delegating political decisions to the local community will promote self-organization and decentralization of the concentration of economic and political power. The author defends the need for self-organization and self-determination of people by involving them in making important local decisions (Hrynchyshyn, 2020). Coleman (2004) formulates the methodological individualism strategy appropriate for describing a community in the context of three ties, firstly, macro-micro communication where the social phenomenon correlates with individual level, secondly, the micro-macro communication where a “stimulus” generates a “response”, and thirdly, the feedback from the micro level to the macro level summing the individual actions.

Criticisms of welfare economic theories stem from underlying criticisms of welfare economics. Most potent critics of welfare economics include Little (1950:2002), Arrow (1950:1951:1951), and Backhouse (2009). In early 1950s, Arrow introduced the ‘Impossibility Theorem’ signifying flaws in deducing social preferences in aggregating individual rankings and tendency to disregard the problems of distribution of income, unrealistic empirical assumptions, and philosophical issues in the formulation of welfare economics such as the meaning of interpersonal comparisons in relation to social welfare judgments. Little (2002) explore the overlap between the three disciplines of ethics, economics, and politics. The critique by Backhouse (2009) focused on lack of objectives of measurement to compare utility among different market participants.

Criticisms by Timlin (1949) are directed against the work of the classical school with main concern that the equilibrium process of the free market will lead to a more efficient allocation According to Arrow (1962), competition insures a Pareto optimum under the hypotheses that the utility functions of consumers and the transformation functions of producers are well-behaved functions in the economic system and that the transformation functions do not display invisibilities. These assumptions prohibit uncertainty in the production and utility functions which will not be the case when a commodity cannot be made into private property. Three classical reasons for possible failure in perfect competition achieving optimality in resource allocation include indivisibilities, inappropriability, and uncertainty (Arrow, 1962). The indivisibility and inappropriability reasons have much been studied under marginal cost pricing and social/private benefit (cost), respectively, while the uncertainty reason is studied under the critical notion of information (Arrow, 1962). The author explains that uncertainty creates subtle problem in resource allocation where information becomes a commodity with economic value and should be transmitted at marginal cost, explains Arrow.

Pareto efficiency does not provide unique solution to how the economy should be arranged (Boyle, 2024). For instance, moving the economy toward Pareto efficiency might be an overall improvement in welfare but it does not provide specific target as to which arrangement of economic resources across individuals and markets will actually maximize welfare, explains the author. Welfare functions have been devised for deriving welfare maximization where maximizing the value of these functions become the goal of economic welfare analysis of markets and public policy (Boyle, 2024). According to the author, results of economic welfare analysis heavily depends on assumptions regarding treatment of utility between individuals as well as philosophical and ethical assumptions about the value to assign on the well-being of different individuals.

Acar and Tirgil (2022) study the relationship between public expenditures including health, education, and recreation and people's life satisfaction of a large household survey with 196,000 observations in Turkey, using ordinary least squares (OLS) and probit models. The authors find positive relationships between the expenditures for health, education, and recreation with life satisfaction of the individuals. Fardoush (2020) studies the impacts of public spending on education, health, social safety net, and agriculture on QoL in rural Bagladesh using simultaneous equation model in the form of a Three-Stage Least Squares (3SLS) technique and data from 1982-2017. The results show that public spending has positive effects on the advancement of the quality of life. For instance, a 1% increase in public spending in education would result in an increase in QoL, proxied by life expectancy, of 0.182% on average, ceteris paribus, whereas the public expenditure elasticities in health, social safety net, and agriculture on QoL are found to be 0.05, 0.03, 0.04, respectively. Onofrei, Vatamana, Vintila and Cigu (2021) employ panel data and factor analysis methods to study the relationship between public health expenditures and health outcomes (QoL) among European Union and developing countries including Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Lativia, Lithuania, Poland, Romania, Slovakia, and Slovenia. The authors used life expectancy and infant mortality as health outcome proxies for the QoL. The results show that quality of public health expenditure reflects health outcomes suggesting that causal linkages between public health outcomes and healthcare expenditure depend on government implication in providing QoL through a good health system. Novignon, Olakojo and Novignon (2012) study the effects of public and private healthcare expenditures on health status in SSA using panel data over the period, 1995-2010, covering 44 countries. The authors employ fixed and random effects panel data regression models to determine the effects of health care expenditures on health outcomes and find that health care expenditures significantly influence health status through improvement of life expectancy at birth, reduction in death and infant mortality rates. The authors also show that both public and health care spending significantly influenced health status with public health care spending showing relatively higher effect. The authors conclude that health care expenditures remain a crucial component for the improvement of health status in SSA countries.

METHODOLOGY

The study employed secondary data sources and the autoregressive distributed lag model to achieve its objective. The data included the HDI as proxy for the QoL variable, total public expenditures as ratio of GDP, economic growth rate, and the log of total factor productivity as proxy for total factor productivity. Data diagnostics tests for normality, multicollinearity, heteroscedasticity, autocorrelation, and stationarity (unit root) were undertaken. The VIF value for the total public expenditures variable was 12>critical value VIF =10, suggesting violation of the multicollinearity assumption under the classical linear regression modeling. The study addressed the multicollinearity problem by taking the squares of the variable. The ADF p-value for QoL was 0.5788>critical value = 0.05, suggesting ‘not to reject’ the null hypothesis that the QoL variable has a unit root, that is, it is non-stationary.

FINDINGS AND DISCUSSION

The regression results were attained using the ARDL (1 0 0 1) model, Schwartz Information Criterion (SIC) model selection method, and automatic selection of maximum dependent lags as well as dynamic regressors. These include the Adjusted R-Squared at 0.4919, the F-statistic at 3.7109, and the p-value at 4.23 percent, implying that the regression model is objectively robust. Further, the results show a positive and statistically significant value of the coefficient for the autoregressive dependent variable (QoL) at first lag, HDI(-1) at 0.7448, with t-statistic at 2.8223 and p-value at 0.0200<0.05, suggesting that the QoL at first lag variable is positively and statistically significantly related to the QoL in Kenya. This implies that the values of the QoL experienced during the last period/year are statistically important in explaining/determining the QoL during the current period/year.

POLICY INITIATIVES/IMPLICATIONS

Total public expenditures are crucial in the improvement of QoL as a goal of economic development. A key strategic policy to enhance QoL is the improvement in the quality of government and effectiveness (Lee, 2021). The quality of government entails efficiency in obtaining objectives on revenue and expenditure, as well as abating the degree of resources wastage that exist (Kirori, 2019). Flavin (2018) found robust evidence that QoL increased with increase on public spending on public goods but the relationship does not hold for total government spending or for government spending on programs that are not public goods like education and welfare assistance to the poor.

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