



## **Income Inequality And Economic Growth in Kenya**

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### **Abstract**

Kenya aimed to achieve an economic growth of 10% annually by the year 2012. However, the 10% economic growth rate has not been achieved as at the end of the year 2022. This is an indication that the economic growth rate has been lagging the target for the vision 2030. The gap between the richest and poorest has reached extreme levels in Kenya. Less than 0.1% of the population owns more wealth than the bottom 99.9%. The findings of this research indicate high levels of income disparity are affecting the economy's growth process as well as contributing to the rise in poverty. The increase in economic growth has the tendency to lessen income inequality after a certain point. The process of changing a country's economy from an agrarian society to an industrial society was responsible for the significant income inequality during the early stages of economic expansion. Kuznets also highlighted the fundamental adjustments made in economic growth. A negative relationship was observed which meant that a rise in income inequality would have a deteriorating effect on economic growth. This study therefore recommends that Kenya should devise appropriate measures such as deregulating the economy, setting up strong and accountable institutions to ensure the principle of equity is observed in the allocation and distribution of resources. This can be made possible through development of inclusive political and economic institutions that would promote the principle of equity as enshrined in the constitution of Kenya.

**Keywords:** Income inequality, Economic growth, Kenya

## **1. Introduction**

Household consumption in Kenya has contributed to economic re-bounce since 2017 and it is expected to sustain and support this growth in future. In the last three years, the contributions of household consumption to GDP have been increasing since 2017 from 4.4 percent to 4.7 percent in 2018. This improvement was attributed to increased incomes from agricultural production, lower food price inflation which was estimated at 1.6 percent in 2018 relative to 13.5 percent in 2017 and high inflows of remittances (Ozili, & Arun, 2020) and on the demand side, private consumption is also expected to positively grow even as the government consumption is expected to stagnate given fiscal consolidation.

The recovering growth in private consumption is due to improvement in purchasing power parity often brought by improvement in income among the middle-income earners. This has also been hastened by increased advancement in mobile phone technologies, credit facilities that has helped households to offset weak credit growth from the banking sector. This latest development has helped to smoothen consumption in the wake of shocks not only to boost consumption but economic growth. The launch of mobile money overdraft services such as M-Shwari, Fuliza has attracted over 7.7 million subscribers and an average Kshs.2.2 billion disbursements per month. However due to fiscal consolidation, government expenditure will shrink given fiscal consolidation (Wankuru, et al., 2019).

With the advent of Corona Virus Disease (COVID-19) in late 2019, many developing countries including Kenya will face unprecedented long-term consequences (Buheji, 2020). The pandemic is considered one of the current world threats to the livelihoods in all over the world. According to (World Bank, 2020) it is projected to be more devastating to those living below any economic, social, health and educational services which is precipitated through channels not limited to indirect effects such as sickness which causes a shrink in consumers' income as the ratio of active members to dependants falls.

Fall in consumers' income may also be compounded by loss of earnings and taking care of their ill and family members or funeral cost upon death. According to Chen (2020) China's consumption has fallen across its cities by over 70 percent with the largest drop in Wuhan the epicenter of the pandemic but estimates suggest a significant economic benefit of containing the virus through a lessened consumption decrease and a faster consumption recovery. The estimated average household consumption loss of 18.3 percent, compared to only 5.9% for the highest income earning individuals and without social protection,

the lowest income population is most impacted by the coronavirus crisis (Martin, Markhvida & Walsh, 2020).

Kenya is ranked 22nd among 47 countries in the Sub-Saharan Africa region, and its overall score is just above the regional average but below the world average (Anaman, 2018). Kenya is East Africa's economic, financial, and transport hub, and its real GDP growth has been robust in recent years. Kenya owes China \$5.3 billion, which is about 72 percent of its bilateral debt and a tenfold increase since 2013. The top income and corporate tax rates are 30 percent. Other taxes include a value-added tax and a tax on interest. The overall tax burden equals 15.7 percent of total domestic income. Over the past three years, government spending has amounted to 27.2 percent of the Country's output (GDP) and budget deficits have averaged 8.3 percent of GDP. Public debt is equivalent to 55.6 percent of GDP.

With political stability improving, the government hopes to alleviate structural obstacles and boost economic growth. The country has a growing entrepreneurial middle class and has enjoyed steady growth, but its economic and development trajectory is impaired by weak governance, ineffective rule of law, and corruption. The government has successfully courted foreign direct investment (FDI) for infrastructure development and is promoting regional trade liberalization. A system created in 2013 has gradually devolved state revenues and responsibilities to counties throughout the country. Private consumption is the market value of all goods and services that forms the household final consumption expenditure. The trend of expenditure changes over time, as a response to changes in household income, preference, taste, tax, subsidies and relative prices. While household is generating income and expenditure, they indirectly do income redistribution through payment of income taxes and social contribution to the Kenyan government.

### **1.1. Statement of the Problem**

The Kenya Vision 2030 is the development blueprint in the country whose overall objective is to achieve a middle-income nation status. It aimed to achieve an economic growth of 10% annually by the year 2012, which would not only have been globally competitive and prosperous, but also accord high quality of life to her citizens. However, the 10% economic growth rate has not been achieved as at the end of the year 2021 (Mulandi & Christine, 2022). This is an indication that the economic growth rate has been lagging the target for the vision 2030. The relationship between income inequality and its effect on economic growth

has occupied the minds of prominent economists for many decades, perhaps most notably beginning with the presentation of the inverted 'U' hypothesis introduced by the work of Kuznets (1955).

The gap between the richest and poorest has reached extreme levels in Kenya. Less than 0.1% of the population (8,300 people) owns more wealth than the bottom 99.9% (more than 44 million people). The richest 10% of people in Kenya earned on average 23 times more than the poorest 10%. The number of super-rich in Kenya is one of the fastest growing in the world. It is predicted that the number of millionaires will grow by 80% over the next 10 years, with 7,500 new millionaires set to be created (Walde & Makori, 2022). This study investigated the contribution of income inequality using Gini coefficient on economic growth in Kenya.

## **2. Literature Review of Income Inequality and Economic Growth**

Ever since nations began to form, income inequality has been a significant problem. Plenty of ancient Greek philosophers to our current leaders have hotly disputed income inequality and its effects. The IMF stated in a report that the challenge of our day is the widening of economic disparity. The wealth disparity in major economies has reached its largest level in decades (Dabla-Norris et al., 2015). Even though they are highly industrialized, several Western countries have seen an increase in inequality inside their boundaries. This is particularly noticeable in the United States. According to Alesina and Glaeser (2004), America is relatively uneven for a developed country. Piketty and Saez (2003) expand on this by investigating how wealthy America's richest 1% genuinely are; studies revealed that the 1%'s proportion of income increased by about 14 percent between 1979 and 2007.

Royuela et al., (2015) finds a significant, negative relationship between income inequality and economic growth in OECD nations over a period of thirty years. There was little indication that rich people distancing themselves from the rest of the population harms growth, but the gap separating low-income households and the broader population was shown to be critical. Their findings revealed that in unbalanced societies, the poor invested less in their education and abilities, while the middle and upper classes scarcely observed a difference in their human capital investments. This means that inequality will worsen the gap between education and income. The study divided the population into three categories (high, medium, and low) based on the educational levels of the parents, then used the OECD's Adult Skills Survey to assess the arithmetic results between the three groups. Students from low socioeconomic origins performed worse

than those from more egalitarian nations. This is potentially wasteful considering a workforce with higher levels of knowledge may contribute greater amounts to the economy (Cingano, 2014).

Kelly (2000) investigates the relationship between inequality and crime and explains how it affects violent crime using data from urban areas in the United States. In cultures with significant levels of inequality, the pressures and motivations for crime are stronger for the poor. People are more inclined to engage in criminal action if they believe it would offer a higher return than legitimate activities. Sampson (2016) argues that examining inequality at the local and regional levels in the US is essential to comprehending its effects on the entire country. At the neighborhood level, concentrated poverty, violent crime, and subpar education facilities frequently coexist, which is detrimental to the fundamental American idea.

According to Behrens et al. (2014), an analysis of the top of the income distribution posits that wealthy households migrate to big cities due to better returns on skill. In "superstar cities," this is referred to as the "superstar impact." Cities have a strict hiring process that raises the returns on talents and income disparity. Urban migration is encouraged by the promise of higher returns, which increases the number of more productive businesses, resulting in big market shares and the capacity to raise wages. As described by Behrens et al. (2014), when a difficult selection process tends to unduly reward the most capable individuals. Meanwhile, major cities often experience quicker growth because they take advantage of aggregation and attract a greater amount of human capital (OECD 2015). Major towns that place a high value on abilities may have had more success luring talent.

High income inequality can reduce an economy's capacity for production on the supply side, especially when it comes to human capital. Citizens should not invest in their own human capital in the form of education if they believe that their hard work will be in vain since a small portion of the population receives the majority of the national revenue. However, one essential condition for economic growth is a qualitative increase in human capital. When citizens' unhappiness is so widespread that they leave their country, high levels of income disparity become very worrisome. According to actual data, young, qualified individuals have the highest levels of cross-border mobility, which poses a threat to society as a whole.

The deterioration of human capital caused by substantial and expanding wealth disparities reduces an economy's ability for long-term growth (Bernstein 2013). A significant level of income gap can also undermine an economy's human capital since low-income persons do not have sufficient opportunity to

utilize the health care systems. In general, a lack of investment in education and health care slows the production of human capital, affecting economic growth (Daguet, Colombier, & Baur, 2015). ). The rising income disparity is the major challenge of our time. The wealth gap among the world's biggest economies is at its widest in years. Inequality trends in emerging markets and developing countries (EMDCs) have been more variable, with some countries experiencing reduced inequality while others continue to have persistent gaps in access to finance, healthcare, and education. As a result, it ought to come as somewhat of a surprise that the seriousness of inequality, its root causes, and potential solutions constitute some of the most hotly debated topics among politicians and scholars (Dabla-Norris et al., 2015). Various estimation approaches were developed in the 2000s in order to tackle the issue at hand.

Panizza (2002), for example, employed the generalized method of moments (GMM) and standard fixed effect (FE) to re-evaluate the relationship between income disparity and economic growth in the United States from 1940 to 1980. According to the study's conclusions, income disparity has an unfavorable effect on the growth of the economy. Wang et al. (2021) evaluated the short-term and long-term relationships between inequality and economic growth in China from 1987 to 2001 in a second single-country study. They discovered that the link was nonlinear and negative for China using three-stage least squares. Iyke and Ho (2017) have used the autoregressive distribution of lag (ARDL) estimate technique to study income inequality and growth in Italy from 1967 to 2012. Their study found that income inequality affected growth both in the short run and long run. That is, income inequality slowed down growth in the country.

Knowles (2005) evaluated the link between income inequality and development in 40 countries using comparable data and OLS from 1960 to 1990. The study found a negative relationship between inequality and economic progress for the entire sample. When the countries were separated depending on income level, he identified a significant negative association in low-income countries, but a minor relationship in high-income and middle-income countries. Mdingi, K., and Ho (2021) examined a sample of 60 nations (developed and emerging economies) using the Gini index as a measure of income inequality. Panel cointegration approaches, panel dynamic OLS, and panel dynamic seemingly unrelated regression (SUR) were used to investigate the steady-state relationship between income inequality and economic growth. Throughout the investigation period, the data revealed a negative steady-state relationship between

income distribution and economic growth. Furthermore, in developed countries, income disparity has historically been associated with weak economic growth.

Cingano (2014), for example, investigated the influence of income disparity on economic development in OECD (Organization for Economic Co-operation and Development) countries between 1980 and 2012. Using GMM, the study discovered that income disparity had a detrimental impact on economic growth in the aforementioned nations. The study also established human capital as a means of transmission via whereby income inequality influences growth. Braun et al. (2019) investigated the key forecasting capabilities of their model in terms of the effect of income disparity on growth at various stages of financial development. Using estimates from 150 countries and pooled OLS, dynamic panels, and instrumental parameters (IV), they demonstrated that higher income disparity is associated with slower economic development. They also observed that as economies' financial development levels climb, this effect diminishes significantly.

Royuela et al. (2019) investigated the connection between income inequality and growth in more than 200 comparable regions across 15 OECD countries between 2003 and 2013. By applying analogous estimating methodologies to Bruan et al. (2019)'s data, they established a broad negative link between inequality and growth in OECD regions. Breunig and Majeed (2020) evaluated the relationship between inequality and economic growth in 152 countries. The study, which spanned the years 1956 to 2011, revealed that inequality hampered progress. Furthermore, they discovered that when poverty and inequality were considered, countries with a high rate of poverty were more significantly impacted by inequality's detrimental impact on growth. Benos and Karagiannis (2017) provided data in support of Galor and Moav's (2004) integrated theory of inequality and growth.

Brueckner and Lederman (2015) studied whether the amount of economic development of a country influences how much inequality affects growth. Inequality and growth are favorably connected in wealthy countries, but have a negative relationship in less developed nations, as reported by Castelló-Climent (2010). According to Brueckner and Lederman (2015), increasing income inequality generally lowers GDP per capita, but the impact varies depending on the beginning income level of a nation. In particular, their panel data results and instrumental variable estimations show that, while inequality raises GDP per capita in middle- and high-income economies, it lowers it in impoverished economies.

The next stage in the literature, according to Bazillier and Hericourt (2017), is to apply the theories to the data to help us comprehend the relationship between finance and inequality and, as a result, evaluate the applicability of each theoretical claim. Our study adds to the body of research by investigating whether the degree of domestic financial development in a nation affects the impact of inequality on growth from both a theoretical and an empirical standpoint. Additionally, we provide data that illuminates the pathways via which a hypothetical nonlinear relationship between inequality and economic development can be sparked.

### 3. Methodology

**Measurement of Variables:** Economic Growth was measured using Gross Domestic Product (GDP) in Kenya Shillings whereas Income inequality was measured using Gini coefficient. The Gini coefficient, which ranges from 0 in the event of perfect equality to 1, is based on the comparison of cumulative population proportions against cumulative income proportions that individuals receive.

**Model:** This entailed developing numerous regression models to examine the impact of income inequality on Kenyan economic growth. Vector error correction regression model was model for prediction. The model specification is as follows:

$$ECO_t = \beta_0 + \beta_1 INEQ_t + \varepsilon_t \dots \dots \dots 1$$

Where:  $ECO_t$  = Economic growth measured using GDP,  $\beta_0$  = Constant,  $INEQ_t$  = income inequality,  $\beta_1$  = coefficient of regression or induced change and  $\varepsilon_t$  = error term.

**Stability of Coefficients:** The stability requirements of the estimations were obtained prior to performing statistical inferences on the estimated VECM. The presence of all distinctive roots outside the unit circle is both a necessary and sufficient condition for stability. This requires that the variables be covariant stationary.

$$A = \begin{pmatrix} A_1 & A_2 & \dots & A_{p-1} & A_p \\ I & 0 & \dots & 0 & 0 \\ 0 & I & \dots & 0 & 0 \\ \vdots & \vdots & \ddots & \vdots & \vdots \\ 0 & 0 & \dots & I & 0 \end{pmatrix} \dots \dots \dots 2$$



The companion matrix's modulus was calculated. If the modulus of each Eigen value of matrix A above is strictly less than one and lies within a unit cycle, the model is said to be stable (Lütkepohl, 2005). Results showed all coefficients were within a unit circle.

**Unit roots: Augmented Dickey-Fuller Test:** To ensure consistency and efficiency, the augmented Dickey Fuller test was utilized (Gujarati, 2004). Augmented Dickey Fuller test estimates the null hypothesis that data has unit root against alternative hypothesis that has no unit root. If the null hypothesis is not rejected at 5% significance level, the series is taken to be non-stationary. The augmented Dickey-Fuller (DF) test is a popular approach for determining the existence of unit roots.

#### **4. Results and Discussion**

Having tested the prerequisite tests such as unit roots, all the variables were stationary after first difference. VEC results confirmed a negative significant effect of income inequality on economic growth. The result implied that a rise in income inequality by 1 percent would lead to a drop in economic growth by .5379 units. The results of the study are similar to the findings of Degutis (2012) who concluded that income inequality significantly and negatively affected economic growth. Rocco et al., (2020) suggested that examining the relationship between income inequality and economic growth is crucial because, among other things, rising poverty levels which are accompanied by a decline in standard of living; constant labor union agitation for an increase in the minimum wage; and widening income inequalities which have increased social and political unrest. High levels of income disparity are affecting the economy's growth process as well as contributing to the rise in poverty. In a previous study, Ratnawati, (2020) predicted that inequality would have a positive effect on economic growth. The claim is that the wealthiest have a higher marginal propensity to save than the poor. A higher level of inequality suggests that the wealthy can save more and invest more, promoting economic growth and capital formation. Chen, et al., (2020) argued that higher levels of inequality encourage rent-seeking behaviors in society, which have a detrimental impact on the security of property rights. The majorities of voters in highly unequal nations are comparably poor and support re-distributive measures that involve raising taxes (Vo, et al., 2019).

According to Demir, et al., (2022), the poor will not be able to borrow and may not be able to invest in physical and human capital, which can negatively impact long-term growth, if there is severe inequality and credit market inefficiencies. In their study on the impact of income inequality on consumption-based

greenhouse gas emissions at the global level, Baležentis, Liobikienė, Štreimikienė, & Sun, (2020) contended that the positive effects of inequality and poverty may interact to affect growth in opposite directions. In other words, while inequality on its own may not always be harmful to growth, its coexistence with poverty may. As a result, long-term sustainability of economic growth through income inequality may not be possible.

The increase in economic growth has the tendency to lessen income inequality after a certain point. The process of changing a country's economy from an agrarian society to an industrial society was responsible for the significant income inequality during the early stages of economic expansion. Kuznets also highlighted the fundamental adjustments made in economic growth. The agricultural sector would gradually give way to the modern industrial sector, which includes the manufacturing and service sectors, as the industrial sector's influence increased. Labour productivity in the contemporary industrial sector would be higher than that in the agrarian sector during this economic transition (Sarkodie & Adams, 2020).

#### **5. Conclusion and Recommendation**

The study concluded that the expansion of the economy is being hampered by the widespread income gap, which also plays a role in the worsening of the global poverty crisis. The findings of the study concluded that income inequality does significantly affect economic growth. A negative relationship was observed which meant that a rise in income inequality would have a deteriorating effect on economic growth. This study therefore recommends that Kenya should devise appropriate measures such as deregulating the economy, setting up strong and accountable institutions to ensure the principle of equity is observed in the allocation and distribution of resources. This can be made possible through development of inclusive political and economic institutions that would promote the principle of equity as enshrined in the constitution of Kenya. The principle of equity can be implemented by providing opportunities to the majority of the individuals in the country that gives them a source of income and therefore enhancing their standards of living in the country.

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