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Growth of GDP Share and its Effects on Income Inequality: Evidence from Selected Sectors in Tanzania

Provident Dimoso, (Institute of Rural Development Planning, Domoda Tanzania) Shauri Timothy (Institute of Rural Development Planning, Tanzania), Hosea Mpogole (Institute of Rural Development Planning, Tanzania)

1.0 Background

Equality is something perceived very positive among individuals as it represent issues like fairness which is an important value in most societies. The opposite of equality is inequality, which can be a signal of lack of income mobility and opportunity—a reflection of persistent disadvantage for particular segments of the society (Dabla-Norris et al., 2015). Widening inequality also has significant implications for growth and macroeconomic stability, it can concentrate political and decision making power in the hands of a few, lead to a suboptimal use of human resources, cause investment-reducing political and economic instability, and raise crisis risk (Deyshappriya, 2017 and Irma et al., 2018). The economic and social fallout from the global financial crisis and the resultant headwinds to global growth and employment have heightened the attention to rising income inequality.

Literatures has advocated the influence of economic growth in reducing poverty (González Gordón and Resosudarmo, 2019). Basically, the explanation put behind this is that wealth must be created before it can be distributed among people leading to poverty reduction. However, it has been noticed that this claim it is not always the case, as to some economies economic growth is just the necessary condition for poverty reduction—and not a sufficient one (Dabla-Norris et al., 2015; Kinyondo and Pelizzo, 2018). This is because the only way that economic growth can reduce poverty is through suppressing income inequality something that is not guarantee when the economy is growing. Therefore, when we consider the inequality as a consequence of economic growth, some economists tend to argue that inequality may affect the growth at the same time and perhaps it is necessary to propel the growth (Berman et al., 2016; Schneider, 2015).

2.0 Problem Statement

While global inequality levels have declined by more than 5% over the last decade, associated with the rapid development of emerging economies, within-country income inequality has risen sharply in almost every country (Bastagli et al., 2012). Even accounting for population size, an IMF study found that for the period 1990–2010 inequality increased by 11% within emerging economies (Ostry et al., 2014).

There is similar trend in Tanzania, a study conducted by Kinyondo and Pelizzo (2018), has found that while economic growth has led to employment creation in Tanzania and some levels of poverty reduction, its impact on income inequality has been unnoticeable. Indeed, while the country has achieved a sustained and impressive economic growth since the turn of the millennium and in process has been able to create wealth as measured by the increase in GNI per capita and the number of millionaires—still it has failed to curtail inequality among Tanzanians. These information has risen a major question that what really causing income inequality in Tanzanian economy, and therefore motivate a further evaluation of the relationship between major sectors contributors in the economy and their effect in reducing income inequality.

3.0 Objective of the Study

The study is aiming at evaluating the effect of increasing the GDP share among the agriculture and manufacturing sectors in the economy for the period started 1985 to 2016 (the period the economy decided to opt for mixed economic system) on the income inequality. Specific objectives are:

- To examine GDP contribution trends for agriculture and manufacturing sectors for the period start 1985 to 2016
- To evaluate the relationship between growth of the sectors and income inequality in the mentioned period
- To assessing the effect of the two sectors growth in reducing income inequality

3.0 Measuring Inequality

There are two main methods for measuring inequality, the Lorenz curve and the Gini index. A Lorenz curve shows the percent of income earned by a given percent of the population. A “perfect” income distribution would be one where each percent received the same percent of income (Carter and Reardon, 2014; Litchfield, 1999; McKay). Changes in the position of the Lorenze curve indicates changes in the distribution of income. On the other hand, Gini coefficient or index is a mathematical device used to compare income distributions over time and between economies (Farris, 2010; Mirzaei et al., 2017). The Gini coefficient can be used in conjunction with the Lorenz curve. It is calculated by comparing the area under the Lorenz curve and the area from the 45⁰ line to the right hand and “x” axis. In terms of the Gini index, the closer the number is to 100 the greater the degree of inequality. The Gini coefficient can be applied to income inequality in several ways, including differences in original income, gross income (which adds cash benefits and deducts direct taxes) and disposable income (gross income less spending on indirect taxes) (Bellù and Liberati, 2006; Farris, 2010; Lambert and Decoster, 2005).

4.0 Research Design and Data

Based on the nature of the study, that will involve studying the country's sectoral GDP contribution as well the inequality information, a longitudinal research design will be used by considering panel data collected over the period starting 1985 to 2016. The sectoral growth will be measured by share of sectors value added as percent of GDP as well real GDP per capital based on purchasing power parity, both data are expected to be obtained from World Bank Data base. While the income inequality data measured by GINI coefficient are expected to be obtained from World Income Inequality Database (WIID).

4.1 Data Analysis

Examination of the GDP contribution trends for agriculture and manufacturing sectors (specific objective one), will be analyzed using time trend analysis. While analysis of variance will be used to evaluate the relationship between growth of the sectors and income inequality in the mentioned period (specific objective two) upon further categorizing the periods in 10 year time, and lastly the assessment of the effect of the growth of the five sectors in reducing income inequality (specific objective three) will be analyzed using multiple regression considering a short panel