2022

IARIW-TNBS Conference on "Measuring Income, Wealth and Well-being in Africa"

Does gender inequality affect the wealth and income distribution among the household member
Boniface Simpoli Yohana (National Bureau of Statistics (NBS), Tanzania)

BACKGROUND

Income distribution in Tanzania Mainland is widespread and both rural men and women face deficits in the quantity and quality of employment and income generating opportunities (Sawo (2020). However, rural women are often more disadvantaged than their male counterparts (Balestra, *et al* (2018). It is well documented that the ownership of assets improves the lives of the women and men who own and control them Doss, et al (2017). According to Alwang, *et al* (2019) the associations between asset ownership and reduced poverty and heightened security have been extensively researched, as has the relationship between asset accumulation and economic and political power. There are several studies conducted worldwide related to issue wealth distributions (Vermeulen, (2018); Achdou, et al (2017); Balestra, et al (2018) and Fernández-Villaverde, et al (2019) these studies general found that, women receive, on average, lower employment incomes than men, they more often work part-time or not at all, and they carry out the lion's share of unpaid work in the home. Lusasi, et al (2020) provide the supportive judgment that, in developing countries including Tanzania gender inequality practices in different economic activities.

Since several decades, gender inequality has been at the core of the policy debate concerning development agenda (Heise, et al 2019). The gender and income inequality are more likely influenced each other ie gender inequality normally lead to an evenly income distribution (Alwang, *et al* (2019). Other studies such of (Colciago, *et al* (2019); Balestra, et al (2018 and Doss, et al (2017)) pin out other factors which may influence on income and wealth distribution such as education level of household and household location, income, labor market, inheritances and financial decision.

In this study, we review the existing evidence from cross-country studies of an evenly wealth distribution among member of household and assess whether gender inequality may affect and how this evidence can be used to inform policy.

Objectives and significant of the study

The mainly objective of the study is to examine whether the gender inequality does effect the household wealth distribution in Tanzania. Specifically the study to dig deep assess the impact of level high school attendance share for male and female on wealth distribution. Secondly, household individual level attitude index on gender inequality on wealth distribution and lastly to assess the impact of other control variables on wealth distribution.

2.0 LITERATURE REVIEW

2.2 Empirical literature reviews

Balestra, *et al* (2018) conducted a study on the inequalities in household wealth across OECD countries. The study used quantitative secondary data obtained from OECD Wealth Distribution Database. The descriptive research design was employed in realization of end results. The findings revealed that, Firstly wealth concentration is twice the level of income inequality. Secondly, up to a quarter of all households report negative net worth (i.e. liabilities exceeding the value of their assets) in a number of countries and lastly, more than one in three people are economically vulnerable, as they lack liquid financial assets to maintain a poverty-level living standard for at least three months. However, there is a gap in the studies as they do only descriptive analysis and totally ignore the inferential part which normally show the factors for accordance of phenomena. Also the study conducted in developed economies only. Hence, our study will going to fill gap by introducing regression analysis.

Deere, et al, (2019), did the study about gender and the distribution of wealth in developing countries. Their thesis use also secondary data from different survey conducted among those countries on income and wealth issues. The study use only descriptive research approach to compare and contrast in issued gender with wealth distribution and income gap by gender. The final results show that, there are statistically significant in gender asset gap among household in delovoping country. Also the study pin out that, there are constraints on women's asset ownership with particular attention to the role of legal marital and inheritance regimes. The study only do descriptive research design approach without consider inferential technique approach. According to Gujarat (2004), before inferential statistics is performed, (regression analysis) data characteristics, features and their nature must be determined since it's an indication for best model selection and better coefficient estimates.

Grabka, et al (2015) made supportive argument on wealth distribution within couples. The study use secondary data collected from German Socio-Economic Panel Study (SOEP). The data sorted were unique individual micro level. The study employed both descriptive and inferential research design in realization of end results. The study found that, demographics, income, labor market, inheritances, financial decision-making in the partnership appred to be statistically significant influence the income gap among couple. However, there is a gap in their study as it look only in

urban area where somehow how there is evenly distribution of wealth than rural where mostly men has all say about wealth of household and women are not considered inheritance. Therefore, the study will going to fill the gap by conducting the study in both rural and urban areas.

Maliti, (2019) use secondary data from Demographic Health Survey (DHS) to conduct a study on inequality in education and wealth in Tanzania. The individual wealth inequality as measured by a composite index while in education are measure by number of member of household who reach secondary level. The study adopt only descriptive research design in testing the study hypothesis. The study end results show that, firstly education inequality persists but has been declining between rural and urban areas and particularly between Dar es Salaam and other regions. Secondly, gender inequality in education has also consistently been on the decline across different age ranges, more so for older individuals than younger ones. Lastly the study also found that, wealth inequality declining too. Like most of the study, also this study do only descriptive design and ignoring inferential statistics which is very important in showing the weight (coefficient) of each factor which may affect education and wealth inequality.

2.3 study gap
A lot has been done in this field related to income and wealth distributions (Balestra, *et al* (2018); Deere, et al, (2019); Grabka, et al (2015) and Maliti, (2019)) based on these studied there are several gap emerged such as some conducted their study in urban area while other consider only descriptive research design . Hence our study will cover the whole population (rural and urban) on top of inferential statistics (regression analysis).

3.0 METHODOLOGY
3.1 Research Design
 The study design consents scholars to refine the research approaches that will be appropriate for the subject matter and set up their studies up for success (Rahi, 2017). Based on our   research objectives, the study will use both descriptive and explanatory research design. Descriptive design seeks to explain characteristics and feature of data while explanatory design seeks to establish causal relationship between variables. The emphasis of explanatory study is to study situation or a problem in order to explain the relationships between variables (Tobi, *et al* (2018). The choice of this design is because the study aims to determine the relationship between variables i.e. Whether gender inequality could affect the income distribution among members of households.
3.2 The Study Area
This study will conducted in Tanzania main land whose headquarter is Dodoma (Salum, 2020). The area was selected for this study because 80% of its population are living in rural areas were still there a lot traditional and custom which put up men than women especially in owning and heritage of land (Maliti, 2019). As according to URT (2019) in Tanzania, statistics of in 2017 show that 75% of all men head of households were own fixed asset such as land and buildings while for women were only 25%. Hence there is a need to explore more on issue of gender and income distributions.

3.3 Sampling Procedures and Sample Size

Our study use secondary data gathered from National Panel Survey (NPS2014/15). The survey had used a stratified, multi-stage cluster sample design. The original sampling frame was from the 2002 Population and Housing Census (PHC). Within each stratum, clusters were randomly selected as primary sampling units, with the probability of selection proportional to their population size. In urban areas, clusters are equivalent to census enumeration areas, while in rural areas, clusters are equivalent to villages. Then lastly 8 households were randomly chosen in each cluster. Sample comprised of 409 clusters and 3,265 households.

3.4 Data Analysis plan

The data which will be used are in quantitative format which make easy for both descriptive and inferential statistics data analysis. Descriptive statistics will be performed including frequency, mean and standard deviation. For each objective, quantitative research methods will be employed on primary data. Therefore, the dependent variable will be income distribution while independent variable will be gender inequality on top of other control variables such as education level of household and household location, income, labor market, inheritances and financial decision.

3.5 Model specification

A multiple regression model used, links independent variables to dependent variable as follows

$$Y = \beta + \beta XI + \beta XI + \beta X2 + \beta X3 + \varepsilon_l$$

Where **Y** is the independent variable
, **X2**….**X**5= are dependent variable
εi is error term

$$wealth\ distr = \beta + \beta G\_inequlaity + \varepsilon_l$$

Key word: Gender inequality: wealth distributions and household

References

Achdou, Y., Han, J., Lasry, J. M., Lions, P. L., & Moll, B. (2017). *Income and wealth distribution in macroeconomics: A continuous-time approach* (No. w23732). National Bureau of Economic Research.

Alwang, J., Gotor, E., Thiele, G., Hareau, G., Jaleta, M., & Chamberlin, J. (2019). Pathways from research on improved staple crop germplasm to poverty reduction for smallholder farmers. *Agricultural Systems*, *172*, 16-27.

Balestra, C., & Tonkin, R. (2018). Inequalities in household wealth across OECD countries: Evidence from the OECD Wealth Distribution Databas

Colciago, A., Samarina, A., & de Haan, J. (2019). Central bank policies and income and wealth inequality: A survey. *Journal of Economic Surveys*, *33*(4), 1199-1231.

Deere, Carmen Diana; Doss, Cheryl R. (2006) : Gender and the distribution of wealth in developing countries, WIDER Research Paper, No. 2006/115, ISBN 9291908991, The

United Nations University World Institute for Development Economics Research (UNUWIDER), Helsinki

Doss, C., Kieran, C., & Kilic, T. (2017). *Measuring ownership, control, and use of assets*. The World Bank.

Fernández-Villaverde, J., Hurtado, S., & Nuno, G. (2019). *Financial frictions and the wealth distribution* (No. w26302). National Bureau of Economic Research.

Geoffrey, M. (2019). Essential of Research design and methodology.

Gujarati, D. N. (2004). Basic Econometrics. 4th Edition. The McGraw−Hill Companies. p.1-2.

Grabka, M. M., Marcus, J., & Sierminska, E. (2015). Wealth distribution within couples. *Review of Economics of the Household*, *13*(3), 459-486.

Heise, L., Greene, M. E., Opper, N., Stavropoulou, M., Harper, C., Nascimento, M., ... & Gupta, G. R. (2019). Gender inequality and restrictive gender norms: framing the challenges to health. *The Lancet*, *393*(10189), 2440-2454.

Kuhe, A., & Bisu, D. Y. (2019). Influence of situational factors on household's energy consumption behaviour. *International Journal of Energy Sector Management*.

Lusambo, L. P. (2016). Household energy consumption patterns in Tanzania. *J Ecosyst Ecography*, *1*.

Lusasi, J., & Mwaseba, D. (2020). Gender inequality and symbolic violence in women's access to family land in the Southern Highlands of Tanzania. *Land*, *9*(11), 468.

Ponthieux, S., & Meurs, D. (2015). Gender inequality. In *Handbook of income distribution* (Vol. 2, pp. 981-1146). Elsevier.

Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, *6*(2), 1-5.

Salum, H. (2020). *The contribution of retirement benefits on economic wellbeing of pensioners in Dodoma city, Tanzania* (Doctoral dissertation, The University of Dodoma).

Sawo, M. (2020). Time and Consumption Poverty among Mainland Tanzanian Children: Material Conditions to Secure Stated Rights.

Tobi, H., & Kampen, J. K. (2018). Research design: the methodology for interdisciplinary research framework. *Quality & quantity*, *52*(3), 1209-1225.

Turner, S. F., Cardinal, L. B., & Burton, R. M. (2017). Research design for mixed methods: A triangulation-based framework and roadmap. *Organizational Research Methods*, *20*(2), 243-267.

Vermeulen, P. (2018). How fat is the top tail of the wealth distribution?. *Review of Income and Wealth*, *64*(2), 357-387.

World Bank. (2020). Monitoring global poverty.