ABSTRACT

The rising level of income inequality has emerged as a major social, economic, and political issue in recent years; the then United States President Barack Obama called it 'the defining issue of our time' back in 2013 (Hasell, 2018). Income inequality has been declining in most countries, while it has been rising in many countries over the past decades [United Nations (UN), 2020]. This trend has sparked a lively debate among researchers, policymakers, and the public about the causes, consequences, and solutions of income inequality. So, the question arises: why is income inequality not homogenous across countries? What factors are responsible for this heterogeneous phenomenon? This study tries to answer these questions from an economic and political point of view. In this context, the objectives of the study are: (i) to investigate the determinants of income inequality among different income group countries; (ii) to investigate the impact of governance quality, liberal democracy, and their interaction on income inequality in extremely weak governance (EWG) and extremely robust governance (ERG) countries; and (iii) to investigate the impact of unemployment and governance quality on income inequality in India. To investigate the objectives of the study, the countries are classified based on income and governance quality. Since the study is completely based on secondary sources and is a macro-level study, the time period selection is from 1996 to 2021. Although there are a number of measures or tools, such as the Gini index, Lorenz curve, generalized entropy indices, Theil index, Atkinson index, Palma ratio, inter-decile ratios, etc., to calculate income inequality (See Litchfield, 1999; Sitthiyot & Holasut, 2020), in this study, the investigator uses the Gini coefficient for the first and second objectives and the top 1% income share for the third objective as a measure of income inequality. For all objectives, governance quality is calculated using the method applied by Abbas *et al.* (2021), where its score lies between 0 (EWG) to 10 (ERG). The study applies the feasible generalized least squares (FGLS), panel-corrected standard errors (PCSE), and Driscoll-Kraay (DK) regression for the first and second objectives and the autoregressive distributed lag (ARDL) regression approach for the third objective.

According to the World Inequality Report (WIR) (2022), the wealthiest 10 percent of the population control up to 52 percent of the global income, while the poorest half segment earns just 8.5 percent of it. A large number of researchers and experts have examined how income inequality affects economic development and how different factors affect income inequality. During the initial stages of rapid economic development, when income

inequalities tend to rise across social and spatial dimensions, such income inequality may be tolerable to society (Hirschman & Rothschild, 1973). However, the persistent increase in income inequality poses significant challenges for the contemporary world in various social, economic, and political aspects [Organization for Economic Cooperation and Development (OECD), 2015; Huang *et al.*, 2019]. Therefore, the first objective investigates the determinants of income inequality among different income group countries over the period 1996-2021. For this purpose, based on the World Bank's 2021 country classification criteria, countries are classified into low-income countries (LICs), lower-middle income countries (LMICs), upper-middle income countries (UMICs), and high-income countries (HICs) according to their gross national income (GNI) per capita measured in current U.S. dollars ($) (Hamadeh *et al.*, 2021). A total of 116 countries (from LICs = 13, LMICs = 31, UMICs = 29, and HICs = 43) are taken into account to analyze the impact of different factors on income inequality among different income group countries. The selection of countries and time periods for each income group is determined by the availability of data. To address the issues of heteroskedasticity, autocorrelation, and cross-sectional dependence (CD) and to find more robust results, FGLS, PCSE, and DK regression approaches are applied. The results of the study suggest that in low-income countries (LICs), human development index (HDI), natural resources, and liberal democracy exacerbate income inequality, while population, inflation, gender equality, and globalization significantly reduce it. In lower-middle income countries (LMICs), urbanization and governance quality increase income inequality. On the other hand, population, HDI, inflation, natural resources, and gender equality significantly contribute to reducing income inequality. In upper-middle income countries (UMICs), economic growth, urbanization, unemployment, natural resources, liberal democracy, and governance quality exacerbate income inequality, while HDI and gender equality have an income inequality-reducing effect. In high-income countries (HICs), population, urbanization, HDI, and natural resources worsen income distribution. But inflation, liberal democracy, gender equality, globalization, and governance quality significantly reduce income inequality.

Reducing income inequality by providing basic social needs to needy people is a strategy to foster economic development (Dabla-Norris *et al.,* 2015; Asamoah, 2021). However, some countries in the world have experienced an increase in income and wealth inequalities in recent decades, leading to unequal access to basic services for the marginalized sections of society (Ferreira *et al.*, 2022). This tremendous rise in income inequality brought on by economic progress and prosperity worsens the situation for the poor while improving it for the rich, making the world a more unsettling place (Sala-i-Martin, 2002). It results in the concentration of political power in the hands of a few elite groups, causing inefficient use of human resources and political and economic instability that discourages investment (Dabla-Norris *et al.*, 2015). In today's modern world, governance is far better in developed countries as compared to developing and underdeveloped countries (Hassan *et al.,* 2021). In a country or region where there is a lack of good governance, civil war is likely to occur in that country. Walter (2015) points out that civil wars are much more likely to occur in countries where government authorities are unaccountable to the citizens, where there is no citizen participation in political life, and where information is not transparent. The quality of democracy in a country depends on the effectiveness of its governance system. A weak legal system, unaccountable public administration, corruption, and restrictions on freedom of expression can undermine democratic quality (Karataş, 2021). Conversely, countries with higher levels of democracy tend to have better governance qualities (Rivera-Batiz, 2002). Therefore, in the second objective, an attempt has been made to empirically investigate the impact of governance quality, liberal democracy, and their interaction on income inequality in EWG and ERG countries during the period from 1996 to 2021. For the purpose of country selection, average governance scores are calculated for every year for each country during the period from 1996 to 2021. Countries are then ranked accordingly, from ascending to descending order, based on their average governance score. Further, like Cooray (2009), countries are classified into four categories: EWG (score: 0.00-2.50), weak governance (score: 2.51-5.00), strong governance (score: 5.01-7.50), and ERG (score: 7.51-10.00). Based on data availability, six (6) EWG and seventeen (17) ERG countries fall under the EWG and ERG scores are selected for the present study. To find more robust results, heteroskedasticity, autocorrelation, and CD issues are addressed using FGLS, PCSE, and DK regression approaches. The study reveals that in both EWG and ERG countries, governance quality has a negative effect on income inequality, but the result is not significant for ERG countries. Liberal democracy has a positive impact on income inequality in EWG countries and a negative effect on income inequality in ERG countries. The interaction effect shows a negative effect in EWG countries, but the result is positive and not significant for ERG countries. In addition, the control variables- population, urbanization, HDI, and gender equality have a negative impact on income inequality in EWG countries, while globalization has a positive impact on income inequality in these countries. Gender equality and globalization have a negative impact, while economic growth, urbanization, HDI, inflation, unemployment, and natural resources have a positive impact on income inequality in ERG countries.

Since 1990, most countries in the world, including India and China, have witnessed an increase in income inequality within them (UN, 2020). The literature on inclusive growth provides evidence that, although the increased gross domestic product (GDP) in most of the countries, notably the developing economies, has resulted in a decrease in poverty, these countries also experienced a rise in income and wealth disparities at the same time (Aggarwal, 2022). Developing countries such as India also grapple with such an inequality challenge, which is a detrimental issue to the economy (Wicaksono *et al.*, 2017; Huynh & Nguyen, 2019). The issue of unemployment also continues to be a significant challenge in the country. As reported by the Centre for Monitoring Indian Economy (CMIE) (2023), the unemployment rate in India was recorded at 8.11 percent in the month of April 2023. In the case of governance also, India's governance quality is categorized as weak governance (the score lies between 4.299 to 4.727) when observed from the World Bank, Worldwide Governance Indicators (WGIs), during 1996-2021. Hence, the purpose of the third objective is to explore the impact of unemployment and governance quality as determining factors on income inequality in India during 1996-2021. The study utilized a cointegration test to check cointegration among the variables and an ARDL model to find the estimates. The study employing the ARDL bound testing approach confirms the existence of a long-run relationship among the variables in India. The empirical results show that in the long run, unemployment and governance quality have a significant and positive impact on income inequality. The control variables- economic growth and liberal democracy have a negative impact, while globalization has a positive impact on income inequality in the long run.