Chapter 1

Introduction

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'Unless we act now, the 2030 Agenda will become an epitaph for a world that might have been.'[1]

António Guterres
Secretary-General, United Nations

1.1 Introduction

1.1.1 Concept on Income

The concept of income is very vast. So, different economists and scholars defined it in different ways. Hewett (1925) defined income as the flow of goods and services, which can be used to define income quantitatively in economic studies that are applied, and it is also free of theoretical errors and inconsistencies. Hicks (1946), in the book 'Value and Capital,' defined three concepts of income. Income No. 1 is 'the maximum amount which can be spent during a period if there is to be an expectation of maintaining intact the capital value of prospective receipts (in money terms).' Income No. 2 defined income as 'the maximum amount the individual can spend this week and still expect to be able to spend the same amount in each ensuing week.' Income No. 3 defined income as 'the maximum amount of money which the individual can spend this week and still expect to be able to spend the same amount in real terms in each ensuing week.' Along with the three concepts given by Hicks (1946), Froehlich (1948) adds one more concept of income, which is defined as 'receipts with the expectation of maintaining intact the value of capital measured in real terms.' Income is undoubtedly a vitally significant means, but its significance rests in the fact that it enables the individual to carry out worthwhile activities and achieve states of being that he or she has good reasons to seek (Sen, 1997). Consistent with Hicks' income concepts, Sefton & Weale (2006) called measures of income as real income and showed that first, the concept of income connects with current and future consumption; second, there exists a straightforward additive relationship between household incomes and measures of national or social income; and

[1] This quotation is taken from the Sustainable Development Goals (SDGs) Report, 2023 [The United Nations (UN), 2023].

third, the concept of national income connects to national product in both open and closed economies. Milanovic (2021) defined income as the annual after-tax and after-transfers income per capita (where the total income of the household is divided equally among the household members). The Organization for Economic Co-operation and Development (OECD) (2023) defined income as household disposable income in a given year. It comprises earnings, capital income, self-employment, as well as public cash transfers, from which social security contributions and income taxes by households are subtracted. Therefore, wages, salaries, rent, public transfers, interest on a savings account, dividends from shares of stock, and profit all represent income (Caous & Huarng, 2020). There are two measures of income: market household income and disposable household income (Roser & Ortiz-Ospina, 2013). Market household income refers to the sum of labor income, which is paid to employment and self-employment, capital income, private income, and private pensions, while disposable household income is the market household income plus transfer income (social security transfers such as work-related insurance transfers, assistance, and universal benefits; and private transfers) minus social security contributions and income taxes (Roser & Ortiz-Ospina, 2013).

1.1.2 Concept on Inequality

Equality and inequality are opposites of each other. Equality simply refers to the same size of two or more given quantities, while inequality refers to the differences in these quantities (Cowell, 2011). Inequality refers to disparities in income or consumption, regardless of whether they are desirable as a reward system or undesirable as a scheme that violates some ideal of equality (Asad & Ahmad, 2011). Even though poverty, welfare, and inequality are three separate concepts, inequality is frequently researched as part of a larger analysis addressing these topics, which encompasses the entire distribution rather than just the percentage of people or households below a specific poverty line; it is a larger notion than poverty (Litchfield, 1999). Many inequalities are based on socioeconomic nature, which is linked to access to basic services such as education, health, or housing but also related to income and access to basic means of subsistence, notably those related to employment (International Labour Conference, 2021). Inequality typically differentiates between two types: inequality in outcomes, which is quantifiable (like wealth, income, or expenditure), and inequality in opportunity, which is attributed to factors outside an individual's control, including gender, birthplace, ethnicity, or family background (Dabla-Norris *et al.*, 2015). The inequality in outcomes is a result of these differences in opportunities along with the individual's own efforts and abilities (Dabla-Norris *et al.*, 2015). The concept of inequality is different for different people. Many authors identify it as 'economic inequality,' which usually refers to income inequality or monetary inequality or more generally, inequality in 'living conditions,' while others distinguish it as a legalistic, rights-based approach to inequality, which is the inequality of rights and obligations (UN, 2015). In the same way, DeVerteuil (2009) and Koh (2020) also opined that the term inequality may be different for different people or individuals in different contexts. For example, economic inequality refers to the inequality in income, wealth, and assets; social inequality is the unequal access to rights and opportunities based on race, age, gender, ethnicity, citizenship, residential status, etc. and spatial inequality refers to the spatial manifestations and consequences of inequality, such as regional inequalities and rural-urban inequalities (DeVerteuil, 2009; Koh, 2020).

Based on individual and group inequalities, there are both vertical and horizontal inequalities. Vertical inequality is the inequality among individuals or households, whereas horizontal inequality is the inequality among groups that are often culturally defined, such as by ethnicity, religion, or race (Stewart *et al.*, 2009). Vertical inequality is typically assessed in terms of income and assets, while horizontal inequality is a broader range of economic (financial, human, and social capital, natural resources, employment, and incomes) inequality, social (education, health, housing, and also of human indicators, e.g., life expectancy or literacy) inequality, and political (group distribution of political engagement and control) inequality (Stewart *et al.*, 2009).

1.1.3 Concept on Income Inequality

Income equality or equality in the distribution refers to the share of income when every income-receiving unit must receive a proportional portion, and as a result, the distribution would be unfair if any person received less than his or her proportionate share of the total income (Schutz, 1951). Income inequality is a term that describes how some people earn more or less economic resources than others over a period of time, usually by working or investing (Morris & Western, 1999). Milanovic (2006) defined three types of global income inequality. The first idea of inequality (referred to as inequality 1) is concerned with inequality between countries in the world. It is a measure of inequality that is calculated without population weighting across gross domestic products (GDPs) or mean incomes gathered from household surveys of all nations in the world. The second concept of inequality (inequality 2) focuses on variances in country average income around the world while taking population weight into account. The third concept (inequality 3) is individual-based, in which each person, irrespective of country, enters their actual income into the calculation. In addition to the three concepts given by Milanovic (2006), another concept named 'concept zero inequality,' which refers to the inequality among nations ranked by total income and not by per capita income, was added by Anand & Segal (2008).

A number of researchers have developed the terms good and bad inequalities (Ravallion, 2007; Facchini, 2008). Good inequalities are those that support and strengthen the market-driven incentives that are essential for innovation, entrepreneurship, and growth, while bad inequalities are those that are detrimental to potential economic growth and towards the alleviation of poverty (Ravallion, 2007). In the words of Facchini (2008), some inequalities are harmful because they originate from extracting wealth without creating value, while others are beneficial because they are the results or rewards of productive work or innovation. Income inequality is good when it promotes economic growth and is possible if people have incentives to work hard, invest money, and take risks that could yield high returns (Mirrlees, 1971). Again, income inequality is good because higher inequality stimulates aggregate savings and capital accumulation because rich people have a low propensity to consume and in turn will boost economic growth (Bourguignon, 1981).

1.2 Statement of the Problem

Reducing income inequality is one of the inevitable goals of sustainable development, which is to be achieved by 2030 (Kanbur, 2021). The rising level of income inequality has emerged as a major social, economic, and political issue in recent years; the then U.S. President Barack Obama called it 'the defining issue of our time' back in 2013 (Hasell, 2018). The world in this present period seems socially and economically more unequal, where the super-rich enjoy mind-boggling luxury and solitude, while impoverished sections strive to live (DeVerteuil, 2009). Income inequality is a global issue that is becoming more of a concern for policymakers and has been a mainstay of recent political and economic debates (Sebri & Dachraoui, 2021). Sehrawat & Singh (2021) and Shi *et al.* (2022) also pointed out that income inequality is a main driver of the socio-economic factor, which is the main concern for both developed and developing economies. Inequalities in income have increased in some of the countries over the past few decades, which have brought about unequal access to essential services for the marginalized or poor section of society (Ferreira *et al.*, 2022). There is no country in the world where inequality does not exist, but the main concern is the level of inequality (Asogwa *et al.*, 2022). Extreme income inequality creates a threat to all economies, both developed and developing countries, because it leads to social inequality, divides the majority of 'have-nots' from the minority of 'haves,' allows the wealthy to further raise their wealth, and makes the poor even poorer (Tsui *et al.*, 2018). High income inequality is eventually an issue that could result in a violation of human rights, which is among the most obvious indications of injustice, and an issue for human development that frequently attracts global attention (Mishchuk *et al.*, 2018). Extreme income inequality prompts poor or low-income people to engage in crime and illegal activity, which wastes precious time and valuable resources that could be utilized for productive efforts (Barro, 2000).

We live in a society where rich people have access to the basic necessities of life, such as food, clothing, shelter, and basic infrastructure, while poor people are characterized by unemployment, low wages, poor health, and poverty (Asogwa *et al.*, 2022). The high level of income inequality, as well as the widespread expansion of inequality in recent decades, has prompted an active public policy debate about the impact of increased inequality on economic development (Azam & Bhatt, 2018). Income inequality is detrimental to growth because it results in laws that do not uphold property rights and do not permit the full private appropriation of investment returns (Persson & Tabellini, 1994). By lowering growth prospects, it poses a threat to halt future progress against poverty (Ravallion, 2014).

In recent decades, several countries around the world have experienced an increase in income inequality despite rapid economic growth (Piketty, 2015; Asamoah, 2021). Many authors argued that income inequality is harmful for the growth of the country (e.g., Alesina & Rodrik, 1994; Persson & Tabellini, 1994). It is considered detrimental to economic growth as it prevents the efficient and equitable use of available resources (Alesina & Perotti, 1996). While some inequality is unavoidable in a market-based economic system due to differences in ability, effort, and chance, excessive inequality could destroy social cohesiveness, cause political polarization, and eventually slow down economic progress (Rodrik, 1999). Countries with extreme income inequality lead to social unrest that result in strikes and triggers people to engage in illegal activities, which often give rise to the wastage of government resources and threaten the country's political stability, ultimately lowering the productivity of the economy (Mdingi & Ho, 2021). On the other hand, extreme income inequality can promote economic growth because leaders and politicians, to reduce strikes, illegal activities, and political unrest, transfer resources from the rich to the poor (Mdingi & Ho, 2021).

There are different factors that determine income inequality, which have been investigated by previous researchers. The role of these factors in income inequality is very complex. The literature provides evidence of mixed results. Previous literature does not clarify how one should consider the direct impact of different factors on income inequality. Hence, it is imperative that, to reduce income inequality, we must be aware of factors that are harming or making the condition of income inequality worse. If the factors that are making income inequality worse can be brought under control, then it is likely that rising income inequality or extreme income inequality can be reduced to some extent. Therefore, the researcher in this thesis focuses on how different factors affect income inequality from the point of view of different select countries based on income and governance quality.

1.3 Research Questions

The study investigates the following research query:

1. What are the factors that affect income inequality among different income group countries i.e., low-income countries (LICs), lower-middle income countries (LMICs), upper-middle income countries (UMICs), and high-income countries (HICs)?
2. How the quality of governance, liberal democracy and their interaction affect income inequality in extremely weak governance (EWG) and extremely robust governance (ERG) countries.
3. How unemployment and quality of governance affect income inequality in India.

1.4 Objectives

Following are the objectives that are undertaken for the present study:

1. To investigate the determinants of income inequality among different income group countries.
2. To investigate the impact of governance quality, liberal democracy, and their interaction on income inequality in EWG and ERG countries.

3. To investigate the impact of unemployment and governance quality on income inequality in India.

1.5 Hypotheses

The hypotheses for the objectives are given below:

1. Following are the hypotheses for objective 1:
   The null hypothesis (H_0): there is no effect of different factors on income inequality.
   The alternative hypothesis (H_a): there is an effect of different factors on income inequality.
2. Following are the hypotheses for objective 2:
   H_0: there is no effect of liberal democracy, governance quality, their interaction, and selected control variables on income inequality.
   H_a: there is an effect of liberal democracy, governance quality, their interaction and selected control variables on income inequality.
3. Following are the hypotheses for objective 3:
   H_0: there is no effect of unemployment, governance quality, and selected control variables on income inequality.
   H_a: there is an effect of unemployment, governance quality, and selected control variables quality on income inequality.

1.6 Methodology

The study is completely based on secondary sources of data. The research work is based on the determinants of income inequality among different select countries based on income and governance quality. For different countries, the study has classified the countries into income group countries, EWG and ERG countries, and the largest democratic country i.e., India which comes under lower-middle income (LMI) and weak governance quality[2]. The first objective relies on income group countries (i.e., LICs, LMICs, UMICs, and HICs); the second objective is based on the quality of governance (i.e., EWG and ERG); and the third objective is based on the country India (that comes under LMI and weak governance quality).

[2] The classification of weak governance quality of India is given in Chapter 5 under the methodology section.

The study uses the panel econometric method for the first objective, i.e., determinants of income inequality among different income group countries, and the second objective, i.e., the impact of governance quality, liberal democracy, and their interaction on income inequality in EWG and ERG countries. The time series econometric method is used for the third objective, i.e., the impact of unemployment and governance quality on income inequality in India. Regarding data collection, data sources, selection of countries, econometric modeling, and estimation techniques, all are discussed in the respective chapters.

1.6.1 Measures of Income Inequality

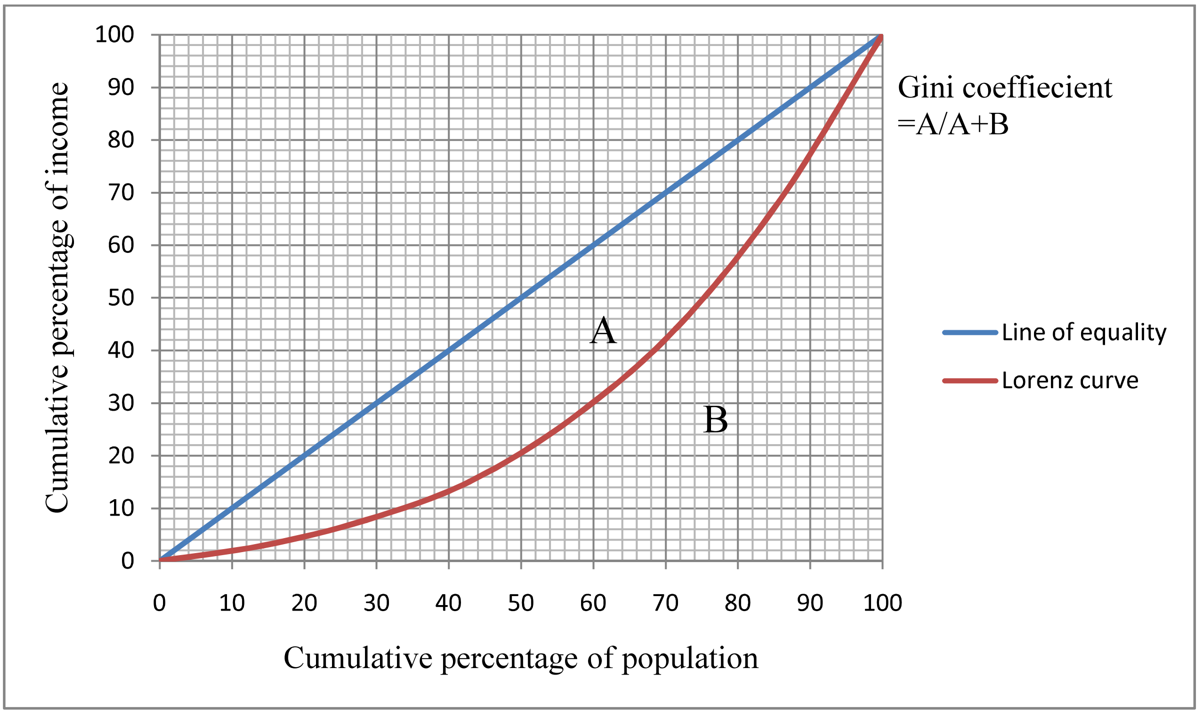
Although there are a number of measures or tools[3], such as the Gini index, Lorenz curve, generalized entropy indices, Theil index, Atkinson index, Palma ratio, inter-decile ratios, etc., to calculate income inequality, in this thesis, the investigator uses the Gini coefficient for the first and second objectives and the top 1% income share for the third objective as a measure of income inequality. The Gini coefficient, the most popularly used measure of inequality in social science, was developed by Corrado Gini, an Italian statistician, in 1912 (Gini, 1912). The value of the Gini coefficient ranges from zero (0) to one (1). The value of zero (0) indicates perfect equality, and one (1) indicates perfect inequality. The investigator has used the Gini coefficient as a measure of income inequality over other measures because it expresses overall income inequality in a single statistic, is an easy-to-interpret value that ranges from 0 to 1, and enables comparisons across countries with distinct population sizes. It is consistently updated, widely available, and reported by international organizations and countries (Sitthiyot & Holasut, 2020). There are two different methods to calculate the Gini coefficient. Method 1: The Gini is a measure of how much income inequality there is in a population compared to the average income, which shows how likely it is that two randomly chosen people will have different incomes (Hasell, 2023). Method 2: the Gini coefficient measures the deviation of the 'Lorenz curve' from a line of perfect equality (Hasell, 2023). A Lorenz curve was developed by Max Lorenz, an American economist, in 1905, which measures how far the curve differs from the line of equality (Lorenz, 1905). Figure 1.1 shows the Lorenz curve and the calculation of the Gini coefficient from the Lorenz curve.

In our study, Gini coefficient and top 1% income share data are taken from the World Inequality Database (WID) (retrieved from https://wid.world/wid-world/). WID.world relies

[3] See Litchfield (1999) and Sitthiyot & Holasut (2020).

on different types of data sources to measure how income or wealth levels evolve over time and across countries. These are national accounts, survey data, fiscal data, and wealth rankings. These sources help to capture the distribution of income or wealth among all groups, from the lowest to the highest. The measure of Gini in WID is produced by adding up all pre-tax personal income flows that accrue to the owners of the factors of production, labor and capital, before accounting for how the tax and transfer systems function (but excluding pension holdings) (Berisha *et al.*, 2020). The main contribution of WID.world is to use these sources in a consistent manner, allowing for long-term and cross-country comparisons (WID, retrieved from https://wid.world/wid-world/). For the third objective, the top 1% income share is preferred as a proxy of income inequality (the reason is given in the respective chapter) obtained from the WID.

Figure 1. 1: The Lorenz curve and the calculation of the Gini coefficient from the Lorenz curve



Source: Researcher's construction

1.7 Area of the Study and Reasons for Selection

In order to understand the role of different factors as determinants of income inequality, the investigator selects countries[4] based on income group and governance quality. Income inequality is a topic of great interest and concern for researchers, policymakers, and the

[4] The list and details of country selection criteria are explained in the respective chapters.

public, as it has implications for economic growth, social justice, and political stability (Dabla-Norris *et al.*, 2015). However, income inequality is not a homogeneous phenomenon, as it varies across different regions, countries, and groups of countries. Therefore, studying income inequality among different countries is an important research agenda that can provide valuable insights and policy recommendations.

One reason why studying income inequality among different countries is important is that it can help us understand the determinants of income inequality in a global context. Studying income inequality among different countries can reveal the underlying factors that shape the income distribution in each context. For example, some studies have found that income inequality is influenced by institutional factors such as the quality of governance, the rule of law, the level of democracy, and the degree of corruption (Nguyen *et al.,* 2021; Gupta *et al.*, 2002). Other studies have highlighted the role of economic factors such as economic growth, population, globalization, natural resources, etc. (Bahmani-Oskooee *et al.*, 2008; Deyshappriya, 2017; Ullah *et al.,* 2021). By comparing and contrasting income inequality among different countries, researchers can identify the common and specific drivers of income inequality in each case and provide insights for designing appropriate policies to reduce it. For instance, some studies have shown that income inequality is associated with lower levels of economic growth, human capital accumulation, social mobility, and trust, as well as higher levels of poverty, crime, violence, and political instability (Alesina & Perotti, 1996; Barro, 2000). Other studies have suggested that income inequality can affect the quality of public goods and services, such as health care, education, and infrastructure, as well as the distribution of political power and influence (Benabou, 2000; Persson & Tabellini, 1994). Therefore, the selection of LICs, LMICs, UMICs, and HICs helps to understand how different factors behave with income inequality at different development levels. Also, it was found that governance reduces income inequality (Roy-Mukherjee & Udeogu, 2020; Coccia, 2021; Nguyen et al., 2019), while others found governance increases income inequality (Dossou et al., 2022; Perera & Lee, 2013; Dossou et al., 2023c). Due to mixed results in previous studies, EWG and ERG countries are selected to check how governance quality based on their intensity affects income inequality.

Along with the group of countries, the researcher also selects India to investigate the factors, especially unemployment and governance quality, which determine income inequality. The researcher is looking at India separately, as it is one of the largest democratic nations and fastest-growing economies in the world. During British colonial rule in India (1858-1947), income inequality was incredibly serious, with the top 10% sharing around 50% of national income, but after independence, socialist-inspired five-year plans made it possible to reduce this percentage share to 35-40% [World Inequality Report (WIR), 2022]. Even though this income share declined, income inequality remained a very serious issue, along with a variety of socio-economic problems (Munir & Sultan, 2017). India is one of the fastest-growing economies in the world, but it is also one of the most uneven countries, with rising poverty and income inequality (WIR, 2022). The Standardized World Income Inequality Database (SWIID) also placed India among the second-most unequal in terms of income inequality in Asia, just after China [International Monetary Fund (IMF), 2017]. In India, the income of the top income earners, which shrank during the mid-1950s and mid-1980s, increased substantially after the mid-1980s (Chancel & Piketty, 2019). As per the WIR (2022), the top 1% and top 10% hold 22% and 57% of total national income, respectively, while the share of the bottom 50% has decreased to 13%. So, it is imperative to investigate the factors that determine income inequality in India.

Hence, studying income inequality among different countries is an important research topic that can contribute to a better understanding of the causes and effects of income inequality in various settings. It can also inform policy debates and decisions on how to address income inequality and promote inclusive and sustainable development.

1.8 Period of the Study

This study examines the role of different factors in income inequality among different select countries 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. The reason to choose this time period is the availability of data and the similarity in country selection, for which some countries are excluded from the present study.

1.9 Importance of the Study

Since income inequality is a global issue, it is necessary to understand the role of different factors in determining income inequality. The study of income inequality is a crucial topic in research, as it has significant implications for various aspects of society, such as economic growth, social mobility, and political stability (Dabla-Norris *et al.*, 2015). Income inequality has been declining in most countries, while it has been rising in many countries over the past decades (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 thesis tries to answer these questions from an economic and political point of view. Hence, by understanding the factors that affect income inequality, the investigator can provide evidence-based recommendations for policymakers and stakeholders that aim to design and implement policies that can foster a more balanced and fair distribution of income. However, this study also contributes to the body of literature on income inequality and different factors nexus among different countries. This research will provide a foundational reference for scholars and academics focusing on income inequality and its determinants, offering fresh perspectives for future investigations in this field. The novelty of this thesis lies in its comparative analysis of determinants of income inequality among select countries based on income and governance quality, which is still unexplored.

Given this background, the primary goal of this thesis is to investigate the determinants of income inequality among different selected countries that are based on income and governance quality.

1.10 Organization of the Thesis

The thesis is organized in the following manner:

Chapter 1: Introduction.

Chapter 2: Literature Review.

Chapter 3: Determinants of income inequality among different income group countries.

Chapter 4: Impact of governance quality, liberal democracy, and their interaction on income inequality in EWG and ERG countries.

Chapter 5: Impact of unemployment and governance quality on income inequality in India.

Chapter 6: Findings, suggestions, and conclusion.

1.11 Conclusion

This chapter analyzes the concepts of income, inequality, income inequality, statement of the problem, research questions, objectives, hypotheses, methodology, measures of income inequality, selection of the area of the study, selection of a time period, importance of the study, and chapterization. In the next chapter, the literature reviews based on empirical investigation have been presented to find the research gap and systematically carry out the research work.