

**INCOME INEQUALITY AND ITS DETERMINANTS: A
COMPARATIVE STUDY OF SELECT COUNTRIES BASED ON
INCOME AND GOVERNANCE QUALITY**

THESIS

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Chapter 6

Findings, Suggestions, and Conclusion

6.1 Introduction

The determinants of income inequality among different selected countries based on income and governance quality, i.e., income group countries, EWG and ERG countries, and India (that comes under LMI and weak governance quality), have been analyzed in different chapters. For empirical purposes, different variables are selected to understand how different factors affect income inequality. In this chapter, a summary of findings, recommendations based on findings, and limitations of the study have been presented.

6.2 Summary and Major Findings

6.2.1 Chapter 3 Summary and Major Findings

This chapter starts with the introduction, followed by the conceptual framework, literature review, data and methodology, empirical results and discussion, and a conclusion. This chapter empirically investigates the impact of different factors on income inequality among different income group countries. Countries are classified using the World Bank classification method of the year 2021 based on GNI per capita in current US\$ (Hamadeh *et al.*, 2021). In this chapter, a total of 116 countries (from LICs=13, LMICs=31, UMICs=29, and HICs=43) during the period from 1996 to 2021 have been included. For empirical analysis, the FGLS, PCSE, and DK regression methods are applied to find the determinants of income inequality. The results suggest that

- i) In LICs, HDI, natural resources, and liberal democracy exacerbate income inequality, while population, inflation, gender equality, and globalization significantly reduce it.
- ii) In 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.

- iii) In UMICs, economic growth, urbanization, unemployment, natural resources, liberal democracy, and governance exacerbate income inequality, while HDI and gender equality have an income inequality-reducing effect.
- iv) In HICs, population, urbanization, HDI, and natural resources worsen income distribution. But inflation, liberal democracy, gender equality, globalization, and governance quality significantly reduce income inequality.

6.2.2 Chapter 4 Summary and Major Findings

The chapter commences with an introduction followed by the conceptual framework, literature review, data and methodology, empirical results and discussion, and a conclusion. This chapter empirically investigates 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. Initially a total of 118 countries from the WID were selected for the period 1996-2021. The selection of the countries and time period is guided by data availability. A systematic approach is employed to determine the selection of countries. First, average governance scores from 1996 to 2021 are calculated for each country and are ranked accordingly, from ascending to descending order, according to their mean governance score. Additionally, like Cooray (2009), countries are classified into four distinct categories: EWG (score: 0-2.50), 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 that fall under the EWG and ERG scores were selected for the study. The study employed three regression methods: FGLS, PCSE, and DK regression methods, both with and without considering the interaction effect, to find out their impact on income inequality. The study finds that

- i) In both EWG and ERG countries, governance quality has a negative effect on income inequality, but the result is not significant for ERG countries.
- ii) Liberal democracy has a positive impact on income inequality in EWG countries and a negative effect on income inequality in ERG countries.
- iii) The interaction effect shows a negative effect on income inequality in EWG countries, but the result is positive and not significant for ERG countries.
- iv) The control variables, such as population, urbanization, HDI, and gender equality, have a negative impact, while globalization has a positive impact on income inequality in EWG countries. In the case of ERG 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.

6.2.3 Chapter 5 Summary and Major Findings

This chapter starts with the introduction, followed by the conceptual framework, literature review, data and methodology, empirical results and discussion, and a conclusion. This chapter investigates the impact of unemployment and governance quality on income inequality in India over the time span of 1996-2021. The investigator calculates the governance quality index using the method applied by Abbas *et al.* (2021) by averaging all components of governance and adding 2.5 to the average value and then multiplying the total value by 2 (the scores lie between 0 to 10; 0 indicates the EWG quality and 10 indicates ERG quality). Like Cooray (2009), If governance quality is divided into four parts, i.e., EWG (0 - 2.50 score), weak governance (2.51 - 5.00 score), strong governance (5.01 - 7.25 score), and ERG (7.26 - 10 score), India's governance quality is categorized as being of weak governance quality over the period from 1996 to 2021. Again, as per the World Bank classification method for the year 2021 based on GNI per capita in current US\$, India comes under the LMICs (Hamadeh *et al.*, 2021). The study employs an ARDL bound testing approach and the empirical results reveal that

- i) There exists a long-run relationship among the variables.
- ii) In the long run, both unemployment and governance quality have a positive and significant impact on income inequality in India.
- iii) In the long run, the control variables: economic growth and liberal democracy have a negative impact, while globalization has a positive impact on income inequality.
- iv) In the short run also unemployment and governance quality also exert a significantly positive impact on income inequality.
- v) In the short run, the control variables: economic growth and liberal democracy have a negative impact, while globalization has a positive impact on income inequality.

6.3 Hypotheses Decision

Table 6.1 shows the decision to fail to reject or reject the H_0 of the impact of selected variables on income inequality from Chapter 3 (first objective).

Table 6. 1: Decision to fail to reject or reject the hypothesis

Chapter 3 (first objective hypothesis)					
LICs	Results of the study	Decision to fail to reject or reject H_0	LMICs	Results of the study	Decision to fail to reject or reject H_0
Economic growth	Insignificant (+)	Fail to reject	Economic growth	Insignificant (-)	Fail to reject
Population	Significant (-)	Reject	Population	Significant (-)	Reject
Urbanization	Insignificant (-)	Fail to reject	Urbanization	Significant (+)	Reject
HDI	Significant (+)	Reject	HDI	Significant (-)	Reject
Inflation	Significant (-)	Reject	Inflation	Significant (-)	Reject
Unemployment	Insignificant (-)	Fail to reject	Unemployment	Insignificant (-)	Fail to reject
Natural resources	Significant (+)	Reject	Natural resources	Significant (-)	Reject
Liberal democracy	Significant (+)	Reject	Liberal democracy	Significant (+)	Reject
Gender quality	Significant (-)	Reject	Gender quality	Significant (-)	Reject
Globalization	Significant (-)	Reject	Globalization	Insignificant (+)	Fail to reject
Governance quality	Insignificant (-)	Fail to reject	Governance quality	Significant (+)	Reject
UMICs	Results of the study	Decision to fail to reject or reject H_0	HICs	Results of the study	Decision to fail to reject or reject H_0
Economic growth	Significant (+)	Reject	Economic growth	Insignificant (+)	Fail to reject

Population	Insignificant (-)	Fail to reject	Population	Significant (+)	Reject
Urbanization	Significant (+)	Reject	Urbanization	Significant (+)	Reject
HDI	Significant (-)	Reject	HDI	Significant (+)	Reject
Inflation	Insignificant (-)	Fail to reject	Inflation	Significant (-)	Reject
Unemployment	Significant (+)	Reject	Unemployment	Insignificant (-)	Fail to reject
Natural resources	Significant (+)	Reject	Natural resources	Significant (+)	Reject
Liberal democracy	Significant (+)	Reject	Liberal democracy	Significant (-)	Reject
Gender quality	Significant (-)	Reject	Gender quality	Significant (-)	Reject
Globalization	Insignificant (+)	Fail to reject	Globalization	Significant (-)	Reject
Governance quality	Significant (+)	Reject	Governance quality	Significant (-)	Reject

Source: Researcher's construction

Table 6.2 shows the decision to fail to reject or reject the H_0 of the impact of selected variables on income inequality from Chapter 4 (second objective).

Table 6. 2: Decision to fail to reject or reject the hypothesis

Chapter 4 (second objective hypothesis)					
EWG countries	Results of the study	Decision to fail to reject or reject H_0	ERG countries	Results of the study	Decision to fail to reject or reject H_0
Governance quality	Significant (-)	Reject	Governance quality	Insignificant (-)	Fail to reject
Liberal democracy	Significant (+)	Reject	Liberal democracy	Significant (-)	Reject
Interaction term	Significant (-)	Reject	Interaction term	Insignificant (+)	Fail to reject

Economic growth	Insignificant (+/-)	Fail to reject	Economic growth	Significant (+)	Reject
Population	Significant (-)	Reject	Population	Insignificant (-)	Fail to reject
Urbanization	Significant (-)	Reject	Urbanization	Significant (+)	Reject
HDI	Significant (-)	Reject	HDI	Significant (+)	Reject
Inflation	Insignificant (+)	Fail to reject	Inflation	Significant (+)	Reject
Unemployment	Insignificant (-)	Fail to reject	Unemployment	Significant (+)	Reject
Natural resources	Insignificant (+)	Fail to reject	Natural resources	Significant (+)	Reject
Gender equality	Significant (-)	Reject	Gender equality	Significant (-)	Reject
Globalization	Significant (+)	Reject	Globalization	Significant (-)	Reject

Source: Researcher's construction

Table 6.3 shows the decision to fail to reject or reject the H_0 of the impact of selected variables on income inequality from Chapter 5 (third objective).

Table 6. 3: Decision to fail to reject or reject the hypothesis

Chapter 5 (third objective hypothesis)		
India	Results of the study (long-run relationship)	Decision to fail to reject or reject H_0
Unemployment	Significant (+)	Reject
Governance quality	Significant (+)	Reject
Economic growth	Significant (-)	Reject
Globalization	Significant (+)	Reject
Liberal democracy	Significant (-)	Reject

Source: Researcher's construction

6.4 Suggestion and Policy Recommendations

6.4.1 Suggestion and Policy Recommendations of Chapter 3

Based on the findings, viable policy recommendations are:

- i) In LICs is to promote human development, investment of natural resources rent in education, skill development, etc., to further reduce income inequality. These factors may improve the opportunities of the impoverished and poor section of the population. Furthermore, liberal democracy and social justice should be balanced, because too much freedom may result in exploitation and discrimination.
- ii) In LMICs, urban policies need careful consideration to ensure equitable access to services and opportunities, and improving liberal democracy and governance quality may also help to reduce income inequality, but these should be combined with redistributive measures that ensure the benefits of growth and development are distributed more fairly among all.
- iii) However, for LICs and LMICs, careful attention should be given to population growth, as employing a growing population in all productive services might not be possible in the long run; rather, it may exacerbate income inequality in the long run.
- iv) In UMICs, a viable policy is to promote inclusive growth, which benefits all sections of society, especially the poor and marginalized. Moreover, promoting the facility of urbanization to access equitable services and opportunities, the creation of jobs, the investment of rent from natural resources, promoting democratic institutions and processes, and improving governance quality for weak governance countries can also help to reduce income inequality by ensuring that people have equal access to opportunities, rights, and justice and that public resources are allocated fairly and transparently.
- v) In HICs, a viable policy suggestion is to control population growth, promote facility of urbanization, equal opportunities for education and health benefit access, and the invest rent from natural resources in human development.

6.4.2 Suggestion and Policy Recommendations of Chapter 4

Based on the findings, possible policy recommendations are:

- i) The results show that both in EWG and ERG countries, governance quality helps in the reduction of income inequality, but the result is not significant for ERG countries. But it should be noted that in EWG countries, reduction of income inequality due to governance quality doesn't mean improvement of the welfare of the people because weak governance quality may create political unrest, conflict, and war, which can retard sustainable development of the economy. It is suggested to improve the quality of governance in such EWG countries because good governance quality can manage the equitable distribution of resources to the poor.
- ii) The impact of liberal democracy is negative in ERG countries but positive in EWG countries, suggesting that EWG countries should enhance the level of democracy in their countries to reduce income inequality. A well-managed democratic environment in the country allows the people to elect representatives who can implement effective policies for the fair allocation of resources to the disadvantaged sections of society.
- iii) The significantly negative coefficient of the interaction effect in EWG countries suggested the importance of governance quality to improve democratic institutions for reducing income inequality. Therefore, well-functioning governance and democratic political culture should work together to achieve sustainable economic development and social justice in the country.
- iv) Overall, well-managed governance and a democratic environment are crucial for reducing income inequality and promoting social welfare in the country. Therefore, it is suggested that policymakers in countries with weak governance quality and low levels of democracy should strive to improve their institutions and align them with the best practices of the good governance countries to reduce income inequality in the economy.

6.4.3 Suggestion and Policy Recommendations of Chapter 5

Based on the findings, the possible policy recommendations are:

- i) Since the coefficient of unemployment is significantly positive, it is also suggested to generate more employment opportunities for the population who are jobless, which can lower income inequality in the country.

- ii) The result further suggests enhancing the quality of governance from low to high levels so that it can foster and sustain long-term inclusive growth to reduce income inequality in the country.

6.5 Limitations and Future Scope of the Study

Although the thesis introduces novel aspects in terms of including different factors among different countries and provides robust and reliable findings in terms of controlling autocorrelation, heteroskedasticity, and CD issues, due to data unavailability, some of the countries are excluded from the present study. In addition, future studies can also investigate how the interaction of different socio-economic and political factors with governance quality and liberal democracy can affect income inequality in different countries or groups of countries. However, state-wise and region-wise (rural and urban) studies are suggested to validate the results (e.g., in Chapter 5). Despite this, further research with alternative econometric techniques and a larger and more diverse dataset, if available, is recommended to validate the findings.