

Determinants of income inequality in Southeast European transition economies

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Abstract. This paper examines the determinants of income inequality in Southeast European (SEE) countries transitioning from socialist to market economies, in a 1990–2023 period. It focuses on economic, institutional, and technological factors that have shaped the region over three decades. Institutional deficits, corruption, weak competition, privatization speed and transparency, innovative and technological backwardness, and human capital development are hypothesized as key drivers. Using a fixed-effects panel regression for six SEE countries, we model the Gini index as a function of these variables. The results reveal strong persistence in income inequality, with the lagged Gini index being the most significant predictor. We find that the first phase of privatization and higher levels of innovation significantly increased inequality, the latter supporting the skill-biased technological change hypothesis. Contrary to expectations, variables for institutional deficit, corruption, and market competition did not show statistically significant direct effects in the multivariate model. The study concludes that reducing inequality in the region requires policies that directly address its structural persistence, manage the distributional consequences of technological advancement, and learn from the legacy of opaque privatization processes.

Keywords: income inequality, panel regression, Gini coefficient, Southeast Europe (SEE), transition economies.

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1. INTRODUCTION

Income and wealth inequality represent a key socioeconomic challenge in Southeast European countries, particularly in the context of their transition from socialist to market economic systems. Rapid changes in economic, political, and social structures over the past three decades have significantly widened the gap between the rich and the poor.

The transition brought numerous changes, including the privatization of state-owned enterprises, market liberalization, and integration into global economic flows. However, these reforms were often implemented without adequate institutional capacity, leading to increased corruption, a weakening of the rule of law, and growth in the shadow economy. These factors further deepened income disparities among the population.

The Gini coefficient, as the primary measure of inequality, has shown a general upward trend with periods of fluctuation in SEE countries since 1990, with periods of recovery but also sharp increases during economic crises. Such trends highlight the need for deeper analysis of the causes and consequences of this phenomenon. This paper aims to fill this gap by empirically testing the impact of these factors using a fixed-effects panel model for six SEE countries from 1990 to 2023.

2. LITERATURE REVIEW

2.1. From Kuznets to contemporary authors

Contemporary research on inequality relies on the works of key authors such as Kuznets (1955), Milanović (2016), Stiglitz (2012), and Acemoglu and Robinson (2012). Simon Kuznets (1955) was the first to point out the connection between economic development and inequality through the inverted "U" hypothesis, according to which inequality increases in the early stages of industrialization and decreases as institutions and redistributive policies strengthen. Milanović (2016) expanded Kuznets theory by introducing the concept of "Kuznets waves," which explains cyclical changes in the level of inequality conditioned by globalization and technological changes. Stiglitz (2012) emphasized that extreme inequality undermines economic growth and social stability. Acemoglu and Robinson (2012) highlight the importance of inclusive institutions for reducing inequality. According to Acemoglu, extractive institutions that favour the elite lead to stagnation of economic development and an increase in social disparities. He emphasized the importance of inclusive institutions for reducing inequality, while extractive institutions favour the elite and slow down economic development. In current economic research, measures to eradicate extreme inequality are considered due to their influence on quality of life and happiness perception (Aliyev, 2023; Pupavac et al., 2020), polarization in society and deprivation reduce (Sedefoğlu & Dudek, 2024), social protection for vulnerable groups and its socioeconomic impact (Bilan et al., 2025; Lyeonov et al., 2025; Roshchyk et al., 2025). Consequently, great attention has been paid to distributive policies (Lukpanova et al., 2025) and transparency for macroeconomic and social stability (Vasylieva et al., 2023).

2.2. Empirical and contemporary determinants of inequality in transition economies

Beyond these seminal contributions, more recent literature emphasizes the impact of technological change, globalization, and financialization on inequality (Autor et al., 2013; Piketty, 2014). Advances in information technologies and automation have disproportionately rewarded high-skilled labor while reducing opportunities for low- and medium-skilled workers, creating new income divides. Globalization has simultaneously increased returns to capital and integration into international markets, but in transition economies with weaker institutional capacity, it has often exacerbated inequality rather than alleviated it.

Piketty's (2014) findings on capital accumulation underscore the structural drivers of inequality, demonstrating how returns on capital tend to outpace economic growth, thereby concentrating wealth unless counterbalanced by progressive taxation and redistributive policies.

In the context of SEE, empirical studies have shown that inequality is strongly correlated with institutional deficits, corruption, and the design of privatization processes (Bartlett, 2007; Estrin & Mickiewicz, 2011). Rapid privatization in the 1990s often lacked transparency, leading to asset concentration among politically connected elites. Weak competition policies, coupled with underdeveloped welfare systems, limited the capacity of these countries to mitigate rising disparities. Furthermore, limited investment in human capital and innovation constrained the potential for more equitable growth paths.

Taken together, the literature highlights that inequality in transition economies cannot be understood solely through economic growth patterns but must also account for institutional quality, governance, and policy choices. This multidimensional framework provides the foundation for analysing inequality trends in SEE, where the interplay between historical legacies, market reforms, and institutional structures has produced unique outcomes compared to other regions. Several consistent determinants emerge across the literature: income inequality from the previous period, institutional deficit, corruption, underdeveloped market competition, innovation and technological backwardness, low levels of human development. Finally, extractive institutions, shadow economy effects, and other unobserved factors. Crucially, the inclusion of income inequality from the previous period is supported by a growing body of research emphasizing the path-dependent nature of inequality (Piketty, 2014; Acemoglu & Robinson, 2012). This concept of persistence suggests that inequality is not merely a temporary outcome but a structural feature that self-reinforces over time through mechanisms like wealth accumulation, unequal access to education, and political influence.

This paper synthesizes these strands to propose an empirically tractable model for SEE transition economies.

3. METHODOLOGY

3.1. Data and variable construction

In the research, we use data for six selected SEE countries: Montenegro, Croatia, Bosnia and Herzegovina, Serbia, Albania, and North Macedonia. The data are available on an annual basis, in a series from 1989 to 2023. Gini coefficient serves as the dependent variable measuring inequality. Independent variables are constructed using data from the World Bank, International Monetary Fund, Eurostat, Transparency International, and other organizations.

The independent variables used in this study are designed to capture a range of economic, institutional, and social factors influencing income inequality in SEE transition economies. Income inequality from the previous period (x_1) is included as the lagged value of the dependent variable GINI, measured on a 0–100 scale, where 0 represents absolute equality and 100 represents absolute inequality. Institutional deficit (x_2) is constructed using World Bank institutional quality parameters across six dimensions, averaged and converted to an inverse 0–100 scale, with higher values indicating weaker institutional performance and greater dysfunction (World Bank, 2023). Corruption (x_3) is measured through the Corruption Perceptions Index (CPI) published by Transparency International, ranging from 0 (very high perceived corruption) to 100 (very clean society) (Transparency International, 2023).

Underdeveloped market competition (x_4) is assessed using the Herfindahl-Hirschman Index (HHI), converted from the original 0.00–1.00 scale to 0–100, where higher values indicate less competitive, more monopolized markets (World Bank WITS, 2023). Innovation and technological backwardness (x_5) is

measured by the Global Innovation Index (GII) developed by WIPO, with lower values indicating constraints in innovation capacity, education, research infrastructure, patent activity, and high-tech exports, and higher values representing stronger innovation performance (World Bank Prosperity Data 360, 2023). Low levels of human development (x6) are captured through the Human Development Index (HDI), transformed from its original 0.000–1.000 scale to 0–100, with higher values reflecting better human development outcomes, including education, life expectancy, and GNI per capita (UNDP, 2023).

In addition, the first phase of privatization in SEE countries (1989–2004), coded as 1 for this period and 0 for subsequent years. Finally, the model accounts for extractive institutions, shadow economy effects, and other unobserved factors (C) through the model constant. Collectively, these variables provide a comprehensive framework to analyse the institutional, economic, and technological determinants of income inequality in the region.

In this research, relevant theoretical frameworks and data required for the analysis were collected and examined. Next, the data were organized according to the specifics of the analytical process using the econometric software EViews. Finally, we verified the reliability of the data to ensure suitability for analysis through the model and to derive conclusive findings.

3.2. Empirical model

The study starts from the assumption that a set of external factors influences the increase in inequality as the dependent variable, which drives broader social processes. These processes generate long-term trends of continuous growth in income and wealth inequality, especially in the context of the transition of socialist economies to market economies, technological progress, economic growth, and geopolitical changes (2000–2020). In line with the theoretical framework, these factors explain the presence of Kuznets waves and Milanović's inequality cycles in Eastern European countries.

Our main assumption is that the key factors influencing the increase in inequality in SEE countries are: institutional deficit, corruption, underdeveloped market competition, lack of competitiveness, technological and innovative backwardness, low level of human development, as well as other factors, including extractive institutions and the presence of the shadow economy. The model presented in Figure 1 represents an initial exploratory framework for analysing the impact of these factors on income inequality in SEE countries.

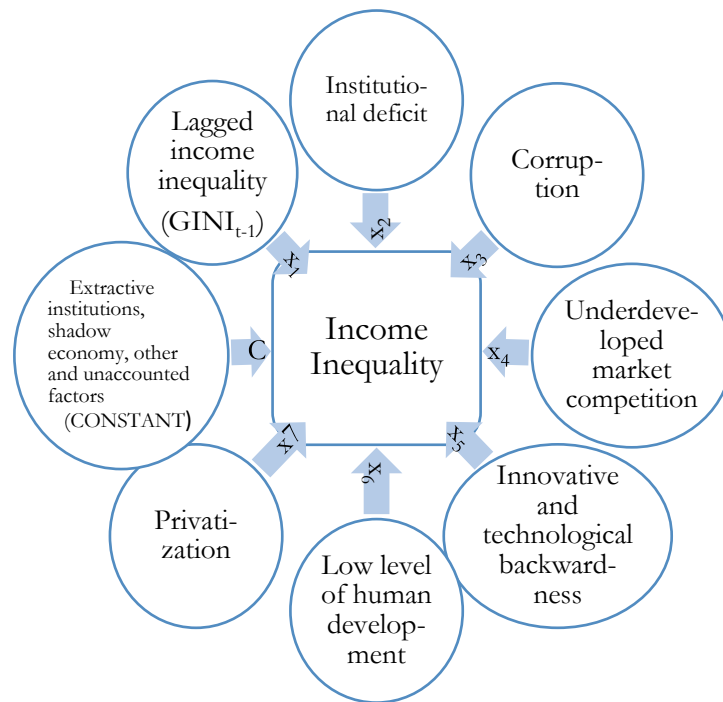


Figure 1. Research framework of the model

Source: authors

In this paper, we will use the Gini coefficient as a measure of inequality. Given the existence of several inconsistent databases on the Gini coefficient by country, it was necessary to select a database according to the following criteria: availability by country, availability by time period, quality of produced data, and mutual comparability.

For the purposes of the analysis, we used the interpolated version of the Gini coefficient from the WID database, since the existing databases (Eurostat, national statistics, World Bank) have shortcomings: Eurostat data do not cover all SEE countries and have a limited time frame, while national databases are not harmonized with each other and have short series. WID enables the monitoring of long-term trends for all countries in the region, although absolute values deviate from those of Eurostat and the UN. We interpolated World Bank data using WID series to obtain continuity. As most variables come from the World Bank database, its Gini coefficient is considered the most reliable for this study. Interpolation of data for each country was performed according to the following formula:

$$Gini_WB_t = \sum_{j=1}^4 \beta_j N_{j,t} + C$$

where:

- t – time
- $Gini_WB$ – mean expected value of the Gini coefficient according to World Bank data
- $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ – coefficients for independent variables
- $N_1 = Gini_WID_t$ – Gini index according to WID for the current year
- $N_2 = Gini_WID_{t-1}$ – Gini index according to WID for the previous year
- $N_3 = \log(GDPPC_t)$ – logarithm of GDP per capita for the current year, in international dollars (GK\$)

- $N4 = \text{TRANZ}_t$ – dummy variable with a value of "1" for the period 1989–2014 and "0" thereafter
- C – constant

Prior to model estimation, a series of diagnostic tests were conducted to ensure the robustness of the results and to inform the choice of the appropriate estimation technique.

First, we assessed the properties of the model's residuals. The Breusch-Godfrey test indicated the absence of serial correlation in the error term, and a battery of tests, including Harvey's test and a panel cross-sectional heteroskedasticity test, confirmed that the null hypothesis of homoskedasticity could not be rejected. Furthermore, the Jarque-Bera test on the residuals failed to reject the null hypothesis of normality. Finally, the Kwiatkowski-Phillips-Schmidt-Shin (KPSS) test was applied to key variables to assess stationarity, with results indicating stationarity around a level. These diagnostics collectively validate the underlying assumptions of the panel regression model.

The choice between a fixed effects (FE) and random effects (RE) specification was guided by the Hausman test. The canonical form of the Hausman test was initially infeasible due to the dimensionality of our full model. Consequently, we employed a reduced model excluding the lagged dependent variable, which is a common workaround in dynamic panel settings. This test strongly rejected the null hypothesis ($p < 0.01$), indicating that the FE estimator is consistent and preferred over RE. This result, combined with the fact that our research focuses on analyzing the specific effects of the six SEE countries in our sample, justifies the selection of the fixed effects model. The final model includes a lagged dependent variable to account for the dynamic persistence of inequality, a critical feature of our theoretical framework.

3.3. Multiple linear regression model

After conducting detailed analysis of the time series of independent variables for six examined SEE countries, we concluded that they meet the criteria for inclusion in the regression model of factors influencing income distribution inequality. The model enables the analysis of time trends and dynamic effects within each country and their impact on the Gini index as the dependent variable. The model can be presented by the following formula:

$$\bar{Y}_{i,t} = \sum_{x=1}^6 \beta_x X_{x,j,t} + \beta_{lag} Y_{i,t-1} + \beta_{dummy} D_{i,t} + \alpha_i + \epsilon_{i,t}$$

where:

$\bar{Y}_{i,t}$ – expected mean value of the dependent variable

i – countries, as observational units

t – time

x – independent variables

β_x – coefficient measuring the effect of the independent variable on the dependent variable

β_{lag} – coefficient measuring the effect of the lagged dependent variable in period $t-1$ on the dependent variable

β_{dummy} – coefficient measuring the effect of the dummy variable $D_{i,t}$ on the dependent variable

$D_{i,t}$ – dummy variable for country i and the time t

α_i – fixed effect for each country

$\epsilon_{i,t}$ – stochastic element.

4. EMPIRICAL RESULTS AND DISCUSSION

4.1. The long-term trend of inequality

Dashed line captures the powerful upward historical trend statistically (Illustrated in Figures 2, 3, 4, 5, 6, 7). It shows that despite any short-term fluctuations, the dominant force over the last 30+ years has been a steady increase in inequality in all investigate countries. North Macedonia represents a notable exception; it began with moderate inequality and was not immediately plunged into severe disparity following the breakup of Yugoslavia, unlike its neighbors.

The long-term trajectory reveals that inequality has become a structural feature rather than a temporary deviation, reflecting both systemic transformations and the uneven diffusion of economic growth benefits during the post-transition period. The dashed trend line captures this underlying dynamic with statistical precision, showing that while some economies experienced periods of relative stabilization, the cumulative effect over the last three decades has been a steady divergence between income groups.

Overall, the visual evidence presented in the following figures underscores the persistence of inequality as a defining characteristic of countries analyzed in this study.

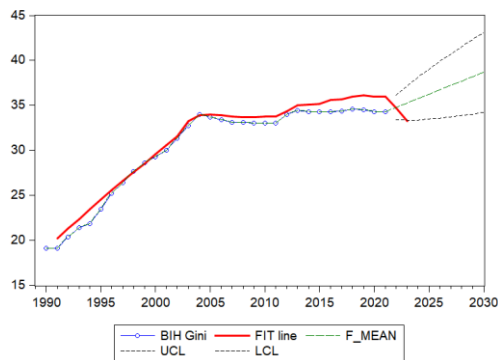


Figure 2. The long-term trend of inequality – Bosnia and Herzegovina

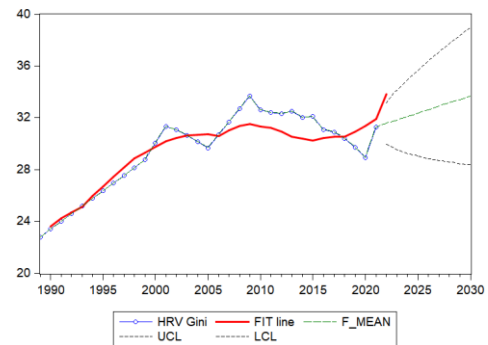


Figure 3. The long-term trend of inequality – Croatia

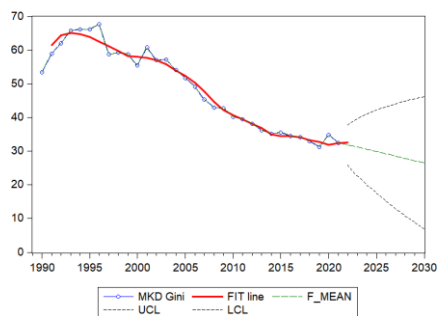


Figure 4. The long-term trend of inequality – North Macedonia

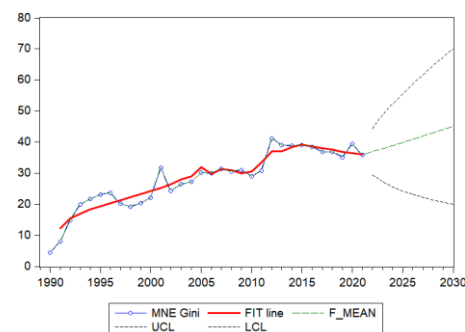


Figure 5. The long-term trend of inequality – Montenegro

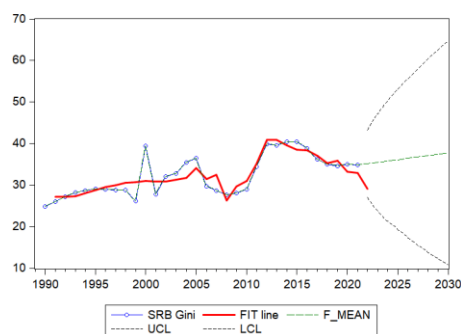


Figure 6. The long-term trend of inequality – Serbia

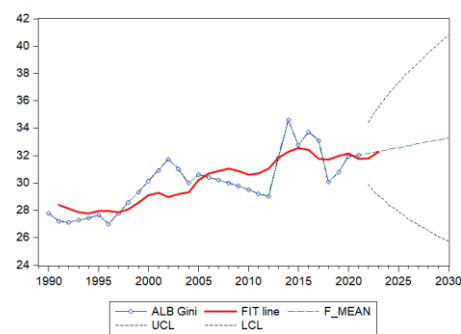


Figure 7. The long-term trend of inequality – Albania

4.2. Results of regression

The independent variables $x_1, x_2, (\dots) x_6$ have corresponding coefficients $\beta_1, \beta_2, (\dots) \beta_6$ which determine the slopes of the regression lines. The least squares method was used to estimate the value of $\bar{Y}_{i,t}$. According to the estimated coefficients, as shown in Table 1 the panel model of factors influencing inequality in SEE countries can be represented by the following formula:

$$\bar{Y} = 0,695 \times Y(-1) - 0,012 \times x_2 + 0,027 \times x_3 + 0,005 \times x_4 + 0,087 \times x_5 - 0,057 \times x_6 + 0,804 \times D + 11,409$$

The specified fixed effects panel data model includes both time series and cross-sectional dimensions. In line with the previously established theoretical framework and stated hypothesis, the model explains how an increase or decrease of a given parameter by one unit over the course of a year will lead to a change in the Gini coefficient, assuming that all other factors remain unchanged.

Table 1

Regression: Fixed Effect

Dependent Variable	Coefficient	Standard Error	t-Statistic	P	VIF
Lagged income inequality	0.695	0.029599	23.510	0.000	3.93
Institutional deficit	-0.012	0.019054	-0.632	0.527	1.12
Perception of Corruption Index	0.027	0.023191	1.175	0.241	1.18
Underdeveloped market competition	0.005	0.009527	0.566	0.571	1.19
Innovation	0.087	0.026462	3.295	0.001	1.25
Human development index	-0.057	0.036071	-1.580	0.115	1.17
Privatization	0.804	0.262336	3.067	0.002	1.04
C (Constant)	11.409	2.908239	3.923	0.000	

Source: authors' calculations

Based on the high coefficient of determination of 0.93 and a p-value of 0.00, which is given in Table 2, we can conclude that the model is well specified and significant. The values of R and R-squared indicate a strong positive correlation between the predicted and actual values of the dependent variable, as well as that the model effectively captures the overall variability of the dependent variable. The standard error of the regression estimate for the panel model is 0.87396, indicating a relatively low deviation of the predicted values of the dependent variable from their actual values.

Table 2

Summary regression indicators

R	R-squared	Adjusted R ²	Standard Error	F	P-value
0.935267	0.939086	0.881883	0.873965	111.3709	0.000

Source: authors' calculations

In Figure 8, the interpolation lines of all independent variables relative to the values of the dependent variable - the Gini coefficient - are presented for the entire panel model sample of Southeast European countries. The lines represent the arithmetic means of independent variables ($x_{1,2,...7}$) within the panel model in relation to the dependent variable Y across the entire sample, with a standard deviation of ± 2 . It should be noted that, for clarity, the dummy variable for privatization phases (x_7) is shown on the secondary axis of the figure. It takes a value of zero (for the period after 2004) and one (before 2004). According to the panel model, variables x_1 , x_4 , and x_7 - which refer to lagged inequality rate, innovation level, and privatization phase - have the greatest impact on the dependent variable.

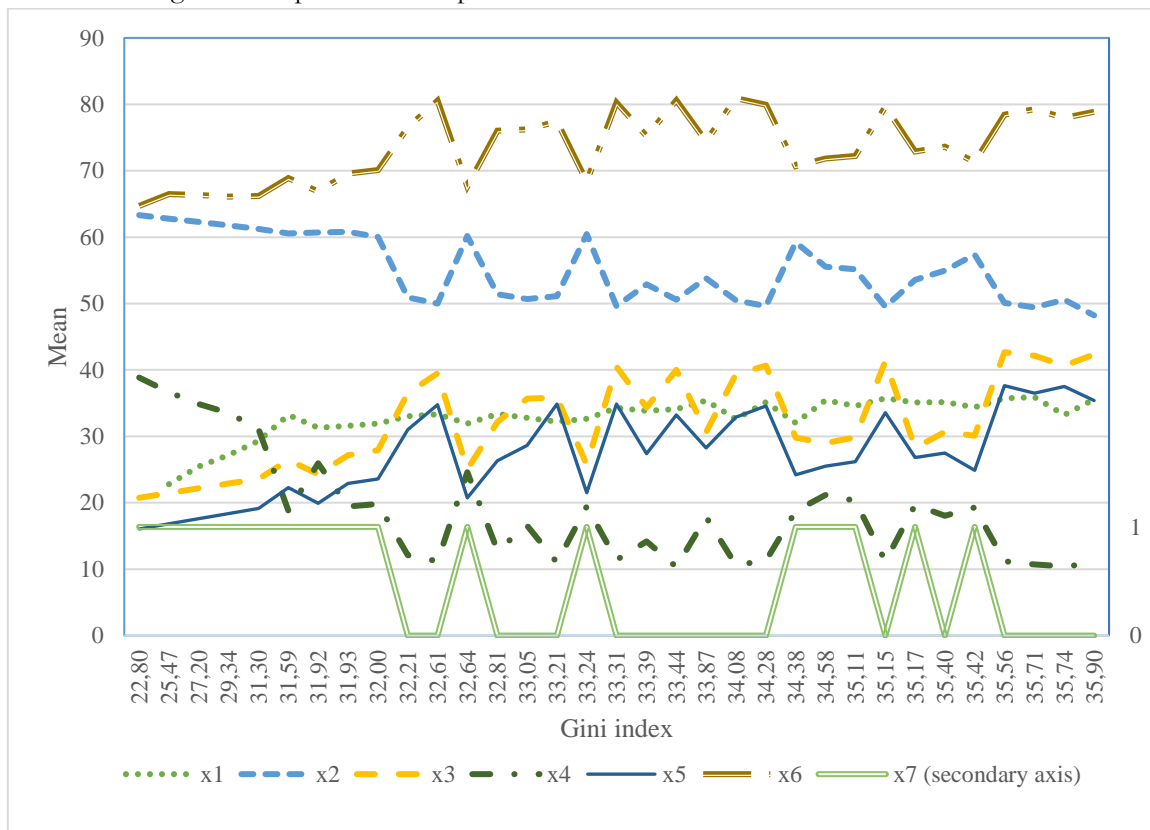


Figure 8. Linear relationship between the dependent variable and mean values of independent variables

4.3. Interpretation of the regression results

Lagged income inequality (Coefficient = 0.6959, $p < 0.001$). This variable is highly significant and positively related to current income inequality. The coefficient (0.6959) indicates that about 70% of the previous period's inequality persists into the current period. This result confirms that inequality is a structurally persistent phenomenon - once established, it tends to reproduce itself over time.

Institutional deficit (Coefficient = -0.0121, $p = 0.528$). Although the coefficient is negative (suggesting that countries with weaker institutions might experience slightly lower inequality), the effect is statistically insignificant ($p > 0.05$). This implies that, when controlling for other factors, institutional dysfunction does not exert a direct or significant effect on income inequality in this model.

Corruption (Coefficient = 0.0273, $p = 0.241$). The positive but insignificant coefficient suggests that higher perception of corruption index levels is associated with greater inequality, though this effect is not statistically robust. This may indicate that corruption's impact on inequality is indirect, possibly mediated through institutional quality, economic policy, or investment efficiency.

Underdeveloped market competition (Coefficient = 0.0054, $p = 0.571$). The coefficient is positive but statistically insignificant, suggesting that the degree of market competition does not significantly affect income inequality in this sample. However, the sign of the coefficient aligns with theoretical expectations that less competitive markets may enable income concentration among dominant firms or elites.

Innovation (Coefficient = 0.0872, $p = 0.0012$). The result for x_5 indicates that the process of technological modernization in the SEE region, while potentially driving economic growth, has had a distributional consequence. This relationship may reflect the skill-biased nature of technological progress, where innovation benefits skilled labor and capital owners more than low-skilled workers, thereby widening income disparities.

Human Development Index (Coefficient = -0.0570, $p = 0.116$). Although the relationship is negative - suggesting that countries with higher human development tend to have lower inequality - the coefficient is not statistically significant at conventional levels. This may imply that improvements in education, health, and living standards moderately reduce inequality, but the effect is overshadowed by other factors such as innovation and privatization.

Privatization (Coefficient = 0.8048, $p = 0.0025$). The privatization variable is statistically significant and positively associated with income inequality. This result aligns with empirical evidence showing that rapid or poorly regulated privatization often increases inequality, particularly in transition economies where assets are concentrated among a small number of individuals or groups.

Constant ($C = 11.41$, $p < 0.001$). The positive and significant constant indicates a baseline level of inequality even when all explanatory variables are zero, suggesting that structural or unobserved factors also contribute to income disparities.

The regression results reveal several important insights into the determinants of income inequality. The lagged income inequality variable exhibits a strong, positive, and highly significant effect, confirming the persistence and structural inertia of inequality over time. This suggests that income distribution tends to follow a path-dependent dynamic, where previous levels of inequality heavily influence current outcomes. As Piketty (2014) emphasized, inequality is not a temporary deviation but a long-term structural feature of capitalist economies, often reinforced by capital accumulation, inherited wealth, and unequal access to opportunities. The persistence of inequality implies that redistributive or institutional reforms have limited short-term effects, and substantial changes require prolonged, coherent policy interventions.

Among the contemporaneous factors, innovation and privatization emerge as statistically significant drivers of inequality. The positive coefficient for innovation (0.0872, $p = 0.0012$) supports the view advanced by Acemoglu and Autor (2011) that technological progress is often skill-biased, favoring highly

skilled labor and capital-intensive sectors while displacing lower-skilled workers. This dynamic results in a widening income gap between different segments of the labor market. Similarly, the strong positive effect of privatization (0.8048, $p = 0.0025$) aligns with findings from Milanović and Ersado (2012) and Estrin et al. (2009), who observed that rapid and weakly regulated privatization in transition economies frequently led to asset concentration and the emergence of new economic elites, thereby increasing inequality.

In contrast, variables capturing institutional deficit, corruption, underdeveloped market competition, and the Human Development Index do not show statistically significant effects. Although their coefficients follow the theoretically expected directions - where better institutions and higher human development are associated with lower inequality - the lack of significance suggests that their influence may be indirect, operating through other channels such as market efficiency, education, or redistribution. This finding resonates with North's (1990) institutional framework, which emphasizes that institutional quality shapes long-term economic performance primarily by defining the "rules of the game," rather than exerting immediate, direct effects on income distribution.

Overall, the model underscores that income inequality is both persistent and structurally driven, influenced more by technological and systemic economic transformations than by short-term institutional changes. The results suggest that policy interventions aiming to reduce inequality in SEE or transition economies must go beyond improving governance quality and instead address the deep structural roots of inequality - including the distributional consequences of innovation, privatization, and long-term capital accumulation.

4.2. Figures showing the of impact of the main influence factors taken separately

To provide a clearer understanding of the empirical findings, this section presents the graphical representation of the relationships between the dependent variable (income inequality, measured by the Gini coefficient) and selected independent variables. Each figure (9,10,11,12) illustrates the direction and intensity of the influence of a specific factor on inequality, based on the results of the conducted econometric analysis. The visual presentation enables a more intuitive interpretation of the statistical outcomes, highlighting patterns and trends that may not be fully captured through numerical data alone.

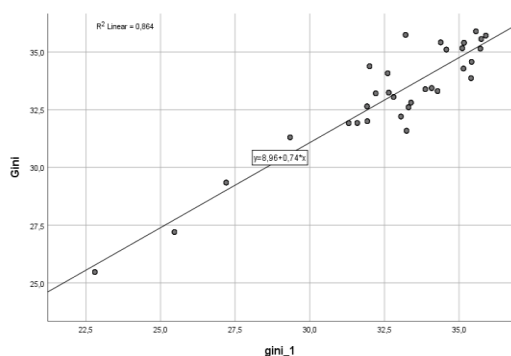


Figure 9. The impact of lagged Gini index on the Gini index

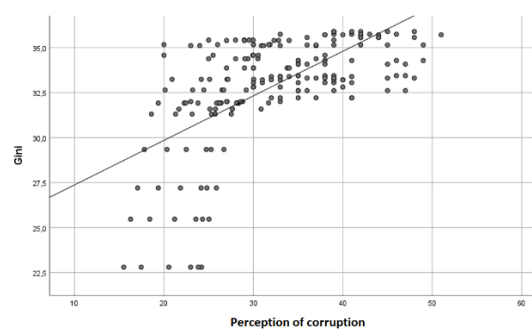


Figure 10. The impact of perception of corruption level

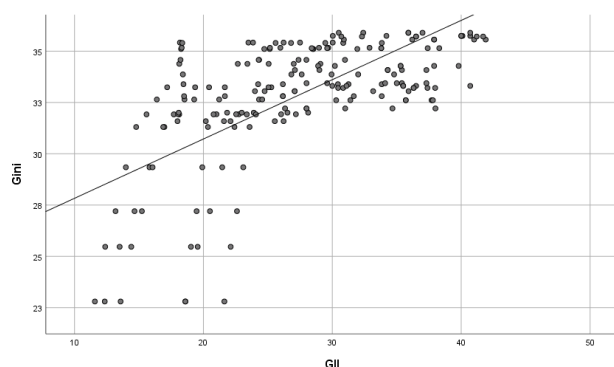


Figure 11. The impact of innovation and technological development on inequality

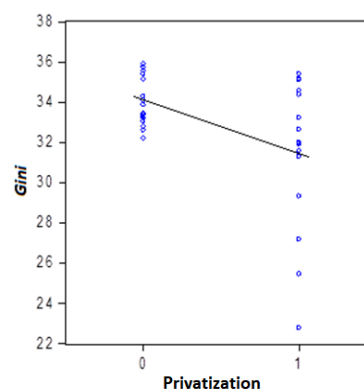


Figure 12. The impact of privatization on income inequality

5. CONCLUSION

This study has empirically investigated the multifaceted determinants of income inequality in SEE transition economies - Montenegro, Croatia, Bosnia and Herzegovina, Serbia, Albania, and North Macedonia - over the period 1989 to 2023. By constructing a comprehensive panel data model that integrates institutional, economic, and social factors, this research provides nuanced insights into the persistent challenge of inequality in a region uniquely shaped by its transition from socialism.

The analysis yields several critical findings. First and foremost, income inequality in the SEE region exhibits a strong inertial character. The lagged Gini coefficient emerged as the most powerful and statistically significant determinant (coefficient = 0.696, $p = 0.000$), indicating that historical inequality is a primary predictor of current inequality. This path dependency underscores the self-reinforcing nature of disparities, where initial advantages or disadvantages tend to perpetuate over time.

Second, the transition process itself, particularly the early phase of privatization, has had a profound and lasting impact. The highly significant positive coefficient for the privatization dummy variable (0.805, $p = 0.003$) confirms that the period of 1989-2004 was associated with a substantial increase in the Gini coefficient. This finding aligns with the literature on extractive institutions, suggesting that the process of asset transfer often lacked the transparency and institutional safeguards needed to ensure a more equitable distribution of wealth.

Third, the role of technological change presents a complex picture. Contrary to the expectation that innovation uniformly reduces inequality, the positive and significant coefficient for the innovation variable (0.087, $p = 0.001$) supports the skill-biased technological change hypothesis. This implies that in the current stage of development, the benefits of innovation and technological adoption in SEE countries are accruing disproportionately to a smaller, high-skilled segment of the population, thereby exacerbating income divides.

Fourth, while a preliminary bivariate analysis indicated a significant positive correlation between the perception of corruption index and inequality level, this direct relationship was not robust in the multivariate fixed-effects model. Similarly, the Human Development Index (HDI) and measures of institutional deficit and market competition did not show statistically significant independent effects in the panel model, suggesting that their influence is either indirect, contingent on other factors, or manifests over a longer time horizon than captured here.

The findings of this study carry several important policy implications:

1. Breaking the cycle of inequality: Given the strong persistence of inequality, policymakers must prioritize long-term, consistent redistributive policies. This includes progressive taxation, robust social

safety nets, and targeted investments in human capital from an early age to disrupt the intergenerational transmission of disadvantage.

2. Building inclusive institutions: While the panel results for institutional deficit were inconclusive, the theoretical framework and regional context emphasize that future reforms must focus on strengthening institutional quality - combatting corruption, enhancing the rule of law, and ensuring transparent governance. This is foundational for creating a level playing field.

3. Managing technological transitions: To counteract the inequality-increasing effects of innovation, policy must actively foster inclusive technological adoption. This involves major investments in education and lifelong learning systems, particularly in digital skills for mid- and low-skilled workers, to ensure a broader segment of the population can benefit from technological progress.

4. Learning from the transition: The legacy of the privatization era serves as a critical lesson for future large-scale economic reforms. Any future processes involving the transfer of public assets must be designed with utmost transparency, fairness, and strong regulatory oversight to prevent the excessive concentration of wealth.

Future research could build upon this work in several ways. Firstly, employing more granular, sub-national data could reveal important spatial inequalities within these countries that are masked by national averages. Secondly, exploring non-linear relationships and interaction effects between variables (e.g., how institutional quality moderates the impact of innovation on inequality) could yield deeper insights. Finally, a comparative analysis with more advanced Central European transition economies could help identify the specific thresholds of institutional and economic development at which the drivers of inequality begin to change.

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