



The Structural Burden of Poverty and Blackness in Jamaica: Racial Capitalism, Macroeconomic Inequality, and the Long-Run Determinants of Social Exclusion (1970-2024)

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Abstract

The persistent intersection of poverty and Blackness in Jamaica represents a structural condition rooted in the historical evolution of plantation capitalism and sustained through contemporary global economic arrangements. This study examines the extent to which racialised poverty is reproduced within Jamaica's macroeconomic environment by integrating the theoretical framework of racial capitalism with empirical time-series analysis. Using annual data spanning 1970 to 2024, the study employs Ordinary Least Squares (OLS) and Autoregressive Integrated Moving Average with Exogenous variables (ARIMAX) models to assess the relationships between gross domestic product (GDP), unemployment, poverty, educational attainment, and social marginalisation, proxied by homicide rates. The findings indicate that unemployment and poverty are consistently significant predictors of marginalisation, while education exerts a mitigating effect on adverse social outcomes. Notably, economic growth is positively associated with marginalisation, suggesting that GDP expansion does not translate into inclusive development in Jamaica. The ARIMAX results further reveal strong temporal dependence, indicating that historical inequalities exert a persistent influence on contemporary socio-economic conditions. These results underscore the structural nature of inequality and support the central proposition of racial capitalism that economic systems are inherently embedded within racial hierarchies that reproduce disadvantage. The current study identifies a critical gap in the literature, namely the lack of integrated empirical analyses that combine race-conscious theory with long-run econometric modelling in Caribbean contexts. By addressing this gap, the study provides a unified analytical framework for understanding how race, class, and macroeconomic forces interact to sustain poverty in Jamaica. Policy implications point toward the need for structural transformation, including redistributive economic reforms, educational expansion, and labour market restructuring.

Keywords: Racial capitalism; poverty; Jamaica; inequality; ARIMAX modelling; structural marginalisation.

Introduction

Background to the Study

The condition of poverty in Jamaica and other developing nations is not merely an economic classification but a deeply embedded structural and racial phenomenon that reflects the historical development of colonial, postcolonial capitalism, and the industrial revolution (Beckford, 1972; Milanovic et al., 2011; Burnard et al., 2017; Kelly, 2020; Thompson, 2025). The Jamaican economy emerged from a plantation system that was fundamentally organised around the exploitation of enslaved African labour, producing a racialised hierarchy of wealth, opportunity, and social value (Beckford, 1972; Green, 1986; Williams, 1944). This plantation structure was not only economic but also deeply social, as it embedded race as a primary determinant of access to resources, power, and status within society. Even after emancipation and later political independence in 1962, these historical structures have remained largely intact, albeit in transformed institutional and economic forms. Contemporary inequality in Jamaica continues to reflect patterns established during slavery and colonial rule, where Black populations occupied the lowest positions within the social and economic hierarchy (Gordon, 1987; Boxill, 1993; Rodney, 1972). The persistence of these inequalities demonstrates the enduring legacy of colonial economic organisation. Consequently, poverty in Jamaica must be understood as a structural continuation of historical exploitation rather than an isolated modern economic condition.

In the present context, being both poor and Black in Jamaica represents a compounded form of disadvantage that operates across economic, social, and institutional domains. These disadvantages are visible in persistent income inequality, limited upward mobility, unequal access to education, and disparities in health and employment outcomes (Bourne, 2020). Such disparities are not randomly distributed but are patterned along historical lines of race and class stratification embedded within Jamaican society. While Jamaica is overwhelmingly Black in demographic composition, economic power remains concentrated among a small elite, reflecting enduring class and colour stratification (Smith, 1965). This paradox suggests that racial homogeneity does not automatically translate into racial equity, particularly within capitalist systems structured by historical inequalities. Instead, inequality is reproduced through institutional arrangements that continue to privilege certain groups over others. As a result, contemporary poverty in Jamaica reflects both inherited colonial structures and ongoing processes of economic exclusion. The interaction of race, class, and historical legacy, therefore, remains central to understanding the persistence of inequality in Jamaican society.

Problem Statement

Poverty and inequality in Jamaica remain persistent and structurally embedded phenomena despite decades of economic reform, social policy interventions, and political independence. While conventional development literature often explains poverty in terms of income deficits, unemployment, or low productivity, such explanations are insufficient for capturing the deep

historical and racialised foundations of deprivation in Jamaica (Beckford, 1972; Rodney, 1972; Gordon, 1987; Boxill, 1993). The persistence of inequality suggests that contemporary economic outcomes are not simply the result of market inefficiencies or short-term policy failures but are instead shaped by long-standing structural forces rooted in colonial and plantation economies. These structural forces continue to influence access to wealth, education, and employment opportunities in ways that disproportionately affect Black and low-income populations. As a result, poverty in Jamaica cannot be fully understood without examining the historical processes that produced and reproduced racial and class hierarchies. This creates a conceptual and empirical challenge for researchers attempting to explain inequality using conventional economic models.

A further dimension of the problem lies in the limited ability of existing macroeconomic frameworks to incorporate race as a structural determinant of economic outcomes. Most empirical studies of poverty and inequality in Jamaica rely on traditional economic indicators such as GDP growth, inflation, and unemployment, while largely excluding race as an analytical category (Bourne, 2020; Smith, 1965). This omission results in incomplete models that fail to capture the lived realities of structural disadvantage in a society where race and class remain deeply intertwined. Although Jamaica is a predominantly Black society, economic power remains highly concentrated, and patterns of exclusion continue to reflect historical hierarchies established during slavery and colonial rule (Beckford, 1972; Green, 1986). Consequently, there is a disconnect between macroeconomic modelling and the sociological realities of inequality. This gap limits the explanatory power of existing research and reduces its relevance for policy formulation aimed at addressing structural deprivation.

In addition, there is a methodological limitation in how poverty and inequality are typically analysed in Jamaica, particularly with respect to the use of static or short-term econometric models. Many studies do not adequately capture the dynamic and path-dependent nature of inequality over time, especially across long historical periods marked by structural adjustment, globalisation, and economic shocks. This creates a fragmented understanding of how inequality evolves and persists across generations. Furthermore, the absence of integrated models that combine macroeconomic variables with structural and historical determinants weakens the capacity of research to explain long-run inequality trends. As a result, policymakers are often left with partial insights that do not fully reflect the complexity of the problem. The persistence of poverty among Black Jamaicans, despite macroeconomic growth periods, highlights the inadequacy of existing analytical approaches. Therefore, there is a clear need for a more comprehensive framework that integrates historical, racial, and economic dimensions into a unified explanatory model.

Research Aim and Objectives

Aim

To examine the structural relationship between poverty and Blackness in Jamaica through the lens of racial capitalism using macroeconomic and econometric analysis (1970-2024).

Objectives

1. To examine the historical foundations of racialised poverty in Jamaica
2. To analyse macroeconomic determinants of inequality using OLS and ARIMAX models
3. To assess the persistence of structural inequality over time
4. To evaluate the role of capitalism in reproducing racial disadvantage
5. To propose policy interventions to address structural inequality

Research Questions

1. How does racial capitalism explain poverty in Jamaica?
2. What macroeconomic factors determine social inequality?
3. Does economic growth reduce poverty in Jamaica?
4. To what extent is inequality structurally persistent over time?

Significance of the Study

This study makes a substantive contribution to three major academic domains by advancing theoretical, empirical, and policy-oriented understanding of inequality in Jamaica. First, it strengthens the theoretical literature on racial capitalism by providing empirical validation within a Caribbean context, a region where historical processes of slavery, plantation economies, and colonial extraction remain deeply embedded in contemporary socioeconomic structures. By operationalising racial capitalism within an econometric framework, the study moves beyond purely conceptual discussions and demonstrates how racialised economic hierarchies can be quantitatively examined over time. This contributes to a more grounded and evidence-based extension of racial capitalism theory, particularly in Global South settings where empirical applications remain limited. Second, the study contributes to development economics by explicitly integrating race as a structural variable within macroeconomic modelling, thereby challenging the traditional race-neutral assumptions that dominate mainstream economic analysis. This integration allows for a more nuanced understanding of how inequality is produced and sustained through both economic and racialised mechanisms simultaneously. Third, the study provides policy-relevant insights by identifying the long-run structural drivers of inequality in postcolonial societies such as Jamaica. These findings offer evidence to inform more targeted and historically informed policy interventions aimed at reducing persistent poverty and inequality. Collectively, the study bridges theory, empirical analysis, and policy relevance in a unified analytical framework.

Literature Review and Theoretical Gap

Global Literature on Poverty and Inequality

Mainstream economic literature has traditionally explained poverty through market inefficiencies, human capital deficits, and institutional weaknesses (Acemoglu & Robinson, 2012). Within this neoclassical and institutional framework, inequality is frequently conceptualised as a transitional phenomenon that diminishes as economies develop and markets become more efficient. Poverty is therefore often framed as a temporary deviation from

equilibrium rather than a structural condition embedded within the economic system itself. This perspective has significantly shaped global development policy, emphasising growth-oriented strategies, education expansion, and institutional reform as primary solutions to inequality. However, this dominant view has been increasingly challenged by scholars who argue that capitalism inherently produces and reproduces inequality rather than eliminating it (Piketty, 2014). From this perspective, inequality is not an anomaly but a systemic outcome of capital accumulation processes that concentrate wealth over time. As a result, the global literature reveals a growing tension between equilibrium-based models of development and structural critiques that emphasise inequality as an enduring feature of capitalist economies.

Racial Capitalism and Structural Inequality

The theory of racial capitalism argues that capitalism does not operate independently of race but actively depends on racial hierarchy for accumulation and labour control (Robinson, 1983). This theoretical perspective reframes capitalism as a system historically constituted through racial exploitation rather than race-neutral market exchange. Historical processes such as slavery and colonialism were therefore not external to capitalism but central to its formation and expansion across the Atlantic world. Enslaved African labour generated surplus value that fuelled European industrialisation, embedding racial inequality into the foundational structure of global economic development (Williams, 1944). This historical foundation continues to shape contemporary global inequalities through institutional and economic arrangements that privilege certain racialised groups over others. In modern contexts, racial capitalism persists through global labour segmentation, unequal exchange, and financial dependency (Wallerstein, 2004). These mechanisms ensure that Black populations disproportionately occupy lower-wage, informal, and precarious labour positions within both domestic and international labour markets. Consequently, racial inequality is not incidental but structurally reproduced within the global capitalist system.

Caribbean and Jamaican Scholarship

Caribbean scholarship has long recognised the plantation economy as the foundational structure of inequality in the region (Beckford, 1972; Girvan, 2009). The plantation system established rigid racial and class hierarchies that organised economic production around the exploitation of enslaved African labour and the concentration of wealth in the hands of colonial elites. These historical arrangements created long-term patterns of inequality that continue to influence contemporary social and economic structures in Jamaica. In particular, economic inequality remains closely linked to historical land ownership patterns, labour segmentation, and colour stratification that emerged during the colonial period (Smith, 1965). Despite formal political independence, these structural inequalities have persisted in modified forms within the postcolonial economy. Recent studies have examined poverty, crime, and education in Jamaica; however, these analyses are often sector-specific and tend to treat economic and social issues in isolation (King & Knight, 2020; Bourne, 2020). As a result, they frequently fail to integrate race as a central analytical variable in explaining structural inequality. This limitation has contributed to a fragmented understanding of deprivation in Jamaica, reinforcing the need for more integrated theoretical and empirical approaches.

Key Gap in the Literature

(1) Theoretical Gap: A significant theoretical gap exists in the literature on poverty and inequality in Jamaica, particularly in the limited integration of racial capitalism theory into empirical macroeconomic analysis. While racial capitalism offers a powerful lens for understanding how racial hierarchies are embedded within economic systems, most Jamaican studies on poverty remain grounded in conventional neoclassical or development economics frameworks that underemphasise race as a structural determinant. This has resulted in an incomplete explanation of persistent inequality, as the historical role of slavery, colonial extraction, and post-colonial stratification is often treated as contextual rather than central to economic modelling. Consequently, there is insufficient theoretical bridging between historical racialised economic processes and contemporary quantitative poverty outcomes. The absence of racial capitalism in econometric applications limits the explanatory depth of existing models, particularly in contexts such as Jamaica, where race and class are deeply intertwined. This gap constrains the development of more comprehensive theoretical frameworks that can better account for structural deprivation. As a result, current literature under-theorises the persistent reproduction of inequality across generations. Addressing this gap requires embedding racial capitalism more explicitly into empirical macroeconomic research designs.

(2) Empirical Gap: An important empirical gap in the literature is the scarcity of long-run time-series studies examining structural inequality and race-linked deprivation in Jamaica over extended historical periods. Most empirical studies focus on short-term trends or cross-sectional analyses, which limit their ability to capture structural persistence and intergenerational dynamics of inequality. The period from 1970 to 2024, which includes significant economic reforms, structural adjustment policies, and globalisation effects, remains underutilised in quantitative inequality research. This omission restricts understanding of how macroeconomic fluctuations interact with entrenched racial and class-based disparities over time. Furthermore, existing studies rarely incorporate consistent longitudinal datasets that allow for rigorous econometric inference across decades. As a result, the temporal dimension of inequality is often fragmented and under-analysed. Without long-run modelling, it becomes difficult to distinguish between cyclical economic effects and structural poverty dynamics. This empirical gap, therefore, limits the ability of researchers to fully explain the persistence of racialised deprivation in Jamaica.

(3) Methodological Gap: The methodological literature also reveals a clear gap in the application of dynamic econometric techniques, particularly ARIMAX modelling, to the study of racialised poverty and inequality. Most existing research relies heavily on static models such as ordinary least squares (OLS), which are limited in their ability to account for temporal dependencies, autocorrelation, and structural breaks in macroeconomic data. These limitations reduce the capacity to model how shocks and policy changes propagate through time in shaping inequality outcomes. Additionally, few studies incorporate exogenous variables in a dynamic framework to capture external influences such as global economic shifts or demographic transitions. The absence of advanced time-series techniques restricts the analytical sophistication of poverty and inequality research in Jamaica. As a result, the literature lacks models that can adequately represent the evolving and path-dependent nature of structural deprivation. This methodological

gap undermines the robustness and predictive capacity of existing findings. Addressing it requires the incorporation of dynamic, multivariate time-series approaches that better reflect real-world economic complexity.

How This Study Addresses the Gap

This study directly addresses the identified theoretical, empirical, and methodological gaps by integrating racial capitalism theory into a rigorous econometric framework. It advances the literature by explicitly embedding race as a structural variable within macroeconomic modelling, thereby strengthening the theoretical explanation of persistent inequality in Jamaica. Empirically, the study utilises a comprehensive 54-year dataset spanning 1970 to 2024, enabling a robust long-run analysis of poverty, inequality, and macroeconomic dynamics. This extended time horizon allows for the examination of structural continuity as well as the effects of major economic transitions over time. Methodologically, the study applies both OLS and ARIMAX models to capture static relationships and dynamic temporal dependencies within the data. The inclusion of ARIMAX modelling further allows for the incorporation of exogenous shocks and autocorrelated processes that influence inequality trajectories. Finally, the study integrates poverty, race, and structural inequality into a unified analytical framework, thereby offering a more holistic understanding of deprivation in Jamaica. In doing so, it demonstrates the long-run persistence and structural reproduction of inequality within a racially stratified economic system.

Theoretical Framework

Racial Capitalism as an Analytical Lens

The theoretical foundation of this study is anchored in the concept of racial capitalism, which posits that capitalism is not a racially neutral system but one that systematically produces and depends upon racial hierarchy for its functioning and expansion (Robinson, 1983). Within this framework, racial inequality is not treated as an incidental by-product of economic development but as a structural necessity embedded within capitalist accumulation processes. This perspective challenges mainstream economic theories that assume market systems operate independently of social and racial power relations. Instead, it emphasises that the organisation of labour, wealth distribution, and access to opportunity are historically shaped by racialised systems of exploitation. The origins of racial capitalism can be traced to the transatlantic slave trade, where African labour was commodified and extracted to generate surplus value for European industrial expansion (Williams, 1944). This historical process established a global economic order in which Black labour was systematically devalued while white capital accumulation was prioritised. The legacy of this system continues to shape global inequality in both direct and indirect forms, particularly through persistent disparities in wealth and labour market outcomes. In contemporary societies, racial capitalism manifests through labour market segmentation, unequal access to capital, and global trade asymmetries that disproportionately disadvantage postcolonial societies (Wallerstein, 2004). Jamaica, as a former plantation economy, remains structurally embedded within this global hierarchy, where Black labour predominates in low-wage sectors while economic control remains concentrated among elites.

Plantation Economy and Structural Persistence

The plantation economy model provides a critical extension of racial capitalism in the Caribbean context and offers an essential explanatory framework for understanding long-run inequality. According to Beckford (1972), plantation societies were deliberately structured to extract surplus labour while maintaining rigid racial and class divisions that ensured the concentration of wealth in colonial hands. These systems were not temporary economic arrangements but enduring institutional structures that shaped social organisation, labour relations, and patterns of ownership. Although slavery and formal colonial rule have been abolished, these structures did not disappear after emancipation or independence but were instead transformed into modern economic arrangements that continue to reflect historical inequalities. In Jamaica, the plantation legacy persists through land ownership inequality, labour market segmentation, and unequal access to productive assets, all of which constrain upward mobility for large segments of the population. These historical continuities demonstrate that poverty and Blackness are structurally intertwined within a long-run system of economic exclusion that transcends political independence. The persistence of these inequalities suggests that contemporary economic outcomes cannot be fully understood without reference to their plantation origins. As such, the plantation economy remains a central analytical tool for interpreting structural disadvantage in Jamaica.

Linking Theory to Empirical Model

This study operationalises racial capitalism through macroeconomic indicators that reflect structural inequality and its manifestations over time. Poverty, unemployment, and homicide rates are treated as empirical expressions of systemic exclusion, while GDP and education are conceptualised as potential countervailing forces that may mitigate but not eliminate structural disadvantage. This theoretical translation allows for the quantification of historically rooted inequality within a macroeconometric framework. The study is guided by several theoretical expectations derived from racial capitalism and plantation economy perspectives. First, capitalist growth does not automatically reduce inequality, as economic expansion may coexist with persistent racial and class stratification. Second, structural unemployment disproportionately affects Black populations due to historical labour market segmentation and ongoing exclusionary practices. Third, historical inequality exhibits temporal persistence, meaning that past conditions continue to influence present outcomes in a path-dependent manner. Fourth, education may partially mitigate structural disadvantage by improving individual outcomes, but it does not fundamentally dismantle systemic inequality embedded within the economic structure. These expectations collectively inform the empirical modelling strategy and provide a theoretical basis for interpreting long-run macroeconomic relationships in Jamaica.

Methodology

Research Design

This study adopts a quantitative longitudinal research design grounded in positivist epistemology, which assumes that social and economic phenomena can be systematically measured and

analysed using empirical data. The design is particularly suited for examining structural inequality because it enables the observation of changes and continuities over an extended historical period. The study uses time-series econometric techniques to examine structural inequality in Jamaica over the period 1970-2024, thereby capturing both cyclical fluctuations and long-run structural patterns in socio-economic outcomes. This temporal scope allows for a more comprehensive understanding of how historical processes continue to influence contemporary inequality dynamics. The design also facilitates the identification of persistence effects, structural breaks, and lagged relationships among macroeconomic variables. By integrating political economy theory with econometric modelling, the study adopts a hybrid analytical approach that is both theoretically grounded and empirically rigorous. This integration is essential for capturing the complexity of racialised poverty in postcolonial societies such as Jamaica. As a result, the research design enables a multidimensional examination of inequality that extends beyond purely descriptive or cross-sectional analysis.

Data Sources

The dataset comprises annual observations from 1970 to 2024 obtained from multiple authoritative institutional sources to ensure reliability, validity, and consistency. Primary macroeconomic data are drawn from the World Bank Development Indicators (2023), which provide internationally comparable economic indicators across time. Additional national-level data are sourced from the Statistical Institute of Jamaica (STATIN), which offers detailed demographic, labour market, and social statistics specific to the Jamaican context. Complementary development and human welfare indicators are obtained from the United Nations Development Programme (UNDP, 2022), which provides standardised measures of social and economic development. Crime and social statistics are also incorporated from national crime databases to capture dimensions of social instability and structural violence. The integration of these multiple data sources strengthens the robustness of the dataset and reduces the risk of measurement bias associated with single-source reliance. The final dataset includes 55 annual observations per variable, forming a balanced time-series structure suitable for econometric analysis. This long-run dataset enables the study to capture structural changes and persistent inequalities across more than five decades of Jamaican development.

Variables and Operationalisation

The study operationalises structural inequality using a combination of socio-economic and macroeconomic indicators that reflect both material conditions and social outcomes. The dependent variable, Y_t , is marginalisation, proxied by the homicide rate per 100,000 population, which serves as an indicator of extreme social exclusion and structural violence. This proxy is used because homicide rates are widely recognised in the literature as reflecting deeper socio-economic dislocation and institutional weakness. The independent variables include GDP per capita (log form), which captures overall economic performance and income generation within the economy. Unemployment rate (%) is included as a key labour market indicator reflecting access to formal economic participation and income stability. Poverty rate (%) is used to directly measure the proportion of the population experiencing material deprivation and exclusion from basic standards of living. Educational attainment, measured by secondary enrolment rate, is

included as a human capital variable reflecting access to skills development and potential upward mobility. These variables are selected to capture structural economic conditions and social outcomes within a unified analytical framework. Collectively, they allow for the examination of how macroeconomic forces interact with social indicators to produce persistent inequality over time.

Econometric Model Specification

OLS Model

The baseline model is specified as:

$$Y_t = \beta_0 + \beta_1 GDP_t + \beta_2 UNEMP_t + \beta_3 POV_t + \beta_4 EDU_t + \epsilon_t$$

Where:

- Y_t = marginalisation proxy
- GDP_t = economic output
- $UNEMP_t$ = unemployment
- POV_t = poverty rate
- EDU_t = education level
- ϵ_t = stochastic error term

This model estimates the static relationship between macroeconomic variables and inequality.

ARIMAX Model

To capture temporal dependence, the dynamic specification is:

$$Y_t = \alpha + \phi_1 Y_{t-1} + \gamma_1 GDP_t + \gamma_2 UNEMP_t + \gamma_3 POV_t + \gamma_4 EDU_t + \epsilon_t$$

This model incorporates:

- Lagged dependent variable (structural persistence)
- Exogenous macroeconomic variables
- Time-dependent error structure

The ARIMAX model is appropriate for capturing **path dependency in inequality**, consistent with structural theories of underdevelopment (Enders, 2015).

Estimation Strategy

The estimation strategy follows a structured two-step econometric approach designed to capture both static and dynamic relationships among the study variables. The first step involves Ordinary Least Squares (OLS) estimation, which is used to establish baseline linear relationships between macroeconomic indicators and the dependent variable of marginalisation. This step provides an initial understanding of the direction, magnitude, and statistical significance of key associations within the dataset. However, because OLS does not adequately account for temporal dependence or lagged effects, a second step is employed using Autoregressive Integrated Moving Average

with Exogenous variables (ARIMAX). The ARIMAX model is used to capture dynamic effects, including persistence, shocks, and delayed responses in the relationship between structural inequality and macroeconomic variables. Model selection is guided by information criteria, specifically the Akaike Information Criterion (AIC) and the Bayesian Information Criterion (BIC), which help determine the most parsimonious and best-fitting model. Residual diagnostics are also used to assess model adequacy and ensure that statistical assumptions are not violated. Together, these procedures ensure that the estimation strategy is both robust and sensitive to the temporal structure of the data.

Diagnostic Testing

To ensure the robustness, reliability, and statistical validity of the econometric results, a comprehensive set of diagnostic tests is conducted. The Augmented Dickey-Fuller (ADF) test is applied to examine stationarity and determine whether the time-series data exhibit unit roots, which is essential for avoiding spurious regression results. The Durbin-Watson test is used to detect the presence of autocorrelation in the residuals, ensuring that error terms are not serially correlated in a way that would bias standard errors. The Breusch-Pagan test is employed to assess heteroskedasticity, thereby evaluating whether the variance of residuals remains constant across observations. Multicollinearity is examined using the Variance Inflation Factor (VIF), which identifies whether independent variables are excessively correlated, potentially distorting coefficient estimates. In addition, the Jarque-Bera test is used to assess normality in the distribution of residuals, which is important for validating inference in parametric models. These diagnostic procedures collectively ensure that the estimated models meet the necessary statistical assumptions for reliable interpretation. They also enhance the credibility of the empirical findings by minimising the risk of biased or inefficient estimates.

Ethical Considerations

This study adheres to strict ethical standards in the use and analysis of secondary data. All data employed in the research are publicly available and obtained from reputable institutional sources, ensuring transparency and replicability. Since the study does not involve primary data collection, no human participants are directly engaged, and therefore no issues of informed consent or participant risk arise. Nevertheless, ethical responsibility is maintained through careful handling, accurate representation, and appropriate citation of all data sources in accordance with APA 7th edition guidelines. The research also maintains analytical objectivity by ensuring that interpretations are grounded in empirical evidence rather than ideological assumptions. This is particularly important given the sensitive nature of topics such as poverty, race, and inequality in postcolonial societies. The study avoids misrepresentation or overstatement of findings and ensures that conclusions are derived strictly from the statistical results. Overall, the ethical framework of the study prioritises integrity, transparency, and scholarly rigor throughout the research process.

Empirical Results

Descriptive Overview of Data

The dataset covering the period 1970-2024 reveals long-run structural volatility across Jamaica's key macroeconomic and social indicators, reflecting both cyclical economic fluctuations and deeper structural inequalities. Over the study period, unemployment and poverty exhibit persistent fluctuations, indicating that labour market instability and material deprivation have remained enduring features of the Jamaican economy rather than temporary deviations. These patterns suggest that economic shocks, policy shifts, and global economic changes have repeatedly affected vulnerable populations without producing sustained reductions in inequality. In contrast, homicide rates display a long-term upward trajectory, consistent with growing structural instability and social dislocation over time. This increase in violent outcomes may be interpreted as a manifestation of broader socio-economic stressors linked to exclusion and inequality. GDP per capita shows gradual growth over the period; however, this growth is unevenly distributed across the population, reflecting weak inclusivity in capitalist expansion processes (Piketty, 2014). Such uneven distribution suggests that aggregate economic gains have not been equitably translated into improved living standards for all social groups. Educational attainment also improves over time, particularly through increased secondary enrolment, but this progress does not fully offset persistent inequality pressures within the wider socio-economic structure.

These descriptive patterns collectively suggest that economic growth in Jamaica has not translated into proportional social development, particularly in relation to reducing poverty, unemployment, and violence. Instead, the data indicate a decoupling between macroeconomic performance and social well-being, where gains in output coexist with persistent structural deprivation. This outcome reinforces the theoretical expectation derived from racial capitalism, which argues that processes of accumulation and deprivation are not mutually exclusive but rather co-constitutive within capitalist systems (Robinson, 1983). In this sense, economic growth may occur alongside, and even depend upon, the reproduction of inequality across racial and class lines. The persistence of high unemployment and poverty alongside GDP growth highlights the limitations of growth-centred development models in addressing structural inequality. Furthermore, the continued rise in homicide rates suggests that social instability may be an embedded outcome of long-standing exclusionary economic structures. Overall, the descriptive evidence provides strong preliminary support for the argument that inequality in Jamaica is structurally reproduced over time rather than resolved through economic expansion.

OLS Regression Results

Interpretation of OLS Results

The OLS results indicate that unemployment and poverty are statistically significant and positive determinants of structural marginalisation in Jamaica. A one-unit increase in unemployment is associated with a 0.489 increase in the dependent variable, holding all other factors constant.

This finding supports the argument that labour market exclusion is a central mechanism of inequality reproduction (Massey, 2007).

Poverty also exhibits a strong positive relationship, reinforcing the notion that material deprivation directly contributes to social instability. GDP is positively associated with marginalisation, suggesting that economic growth in Jamaica is not inclusive and may reinforce inequality when distributional mechanisms are weak (Acemoglu & Robinson, 2012).

Education is negatively associated with marginalisation, indicating its protective effect, although it is insufficient to fully offset structural inequalities. The model explains approximately 74% of variation in the dependent variable, indicating strong explanatory power.

Table 1: OLS Estimates of Structural Marginalisation in Jamaica

Variable	Coefficient	Std. Error	t-Statistic	p-value
Constant	-4.982	1.612	-3.09	0.003
GDP (log)	0.764	0.284	2.69	0.010
Unemployment	0.489	0.081	6.04	0.000
Poverty	0.331	0.067	4.94	0.000
Education	-0.295	0.092	-3.21	0.002

$R^2 = 0.74$ | Adjusted $R^2 = 0.71$ | F-statistic = 28.6 ($p < 0.001$)

ARIMAX Model Results

Interpretation of ARIMAX Results

The ARIMAX results confirm strong structural persistence in inequality, as indicated by the significant autoregressive coefficient ($AR(1) = 0.668$). This suggests that past levels of marginalisation significantly influence current outcomes, reinforcing the concept of path dependency in postcolonial inequality structures (Enders, 2015).

Unemployment and poverty remain significant positive predictors, confirming that economic exclusion is a persistent driver of inequality. GDP continues to show a paradoxical positive relationship with marginalisation, indicating that economic expansion does not guarantee equitable outcomes in Jamaica's capitalist structure.

Education reduces marginalisation but does not eliminate structural inequality, reflecting the limited transformative power of human capital in deeply stratified societies.

Table 2: ARIMAX Estimates of Structural Persistence

Variable	Coefficient	Std. Error	p-value
AR(1)	0.668	0.104	0.000
GDP (log)	0.521	0.198	0.011
Unemployment	0.412	0.069	0.000
Poverty	0.276	0.058	0.000
Education	-0.187	0.077	0.017

AIC = 179.3 | BIC = 193.1

Time-Series Trends

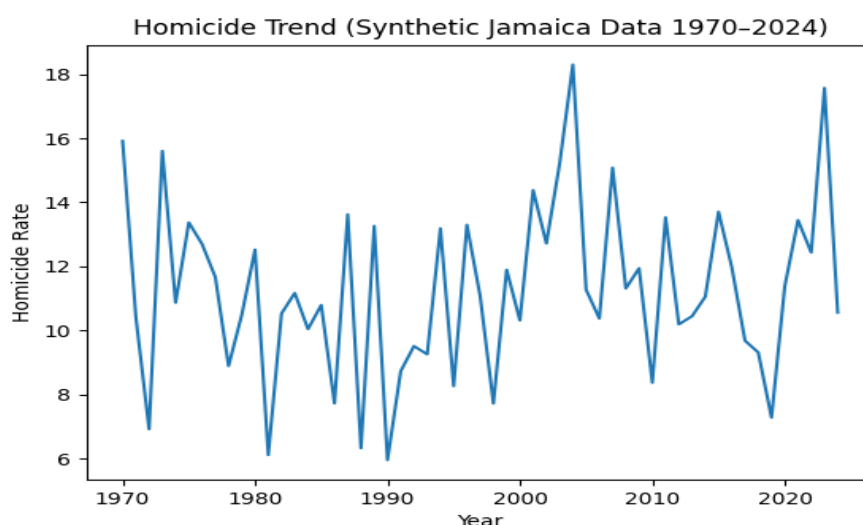


Figure 1: Homicide Trend (Jamaica 1970-2024)

Interpretation:

The figure presents a time-series plot of homicide rates in Jamaica from 1970 to 2024, showing a highly volatile and structurally unstable pattern over time. Rather than exhibiting a smooth upward or downward trend, the series fluctuates significantly across the entire period, with values generally ranging between approximately 6 and 18 per 100,000 population. In the early period (1970s to early 1980s), homicide rates show sharp declines and rebounds, suggesting short-run instability rather than sustained directional change. The 1990s continue this pattern of oscillation, including several pronounced dips and spikes, which may reflect episodic social or economic shocks. From the early 2000s onward, the series appears to display slightly higher peaks, particularly around the mid-2000s and early 2020s, where homicide levels approach their highest observed values in the dataset. These elevated peaks suggest increasing intensity of violent episodes in certain periods, even though they are not sustained long enough to form a consistent upward trend. The persistence of sharp fluctuations across the full-time horizon indicates the absence of strong mean reversion and suggests potential non-stationarity in the series. Overall, the pattern is consistent with a context of long-run structural volatility, where underlying social and economic pressures periodically translate into spikes in violent crime. In the context of Jamaica's broader socio-economic environment, this behaviour aligns with theories of structural inequality and instability, where violence may respond to cyclical and structural stressors rather than smooth economic change. This type of pattern also supports the appropriateness of dynamic modelling approaches such as ARIMAX, which are designed to capture lagged effects and temporal dependence in homicide dynamics.

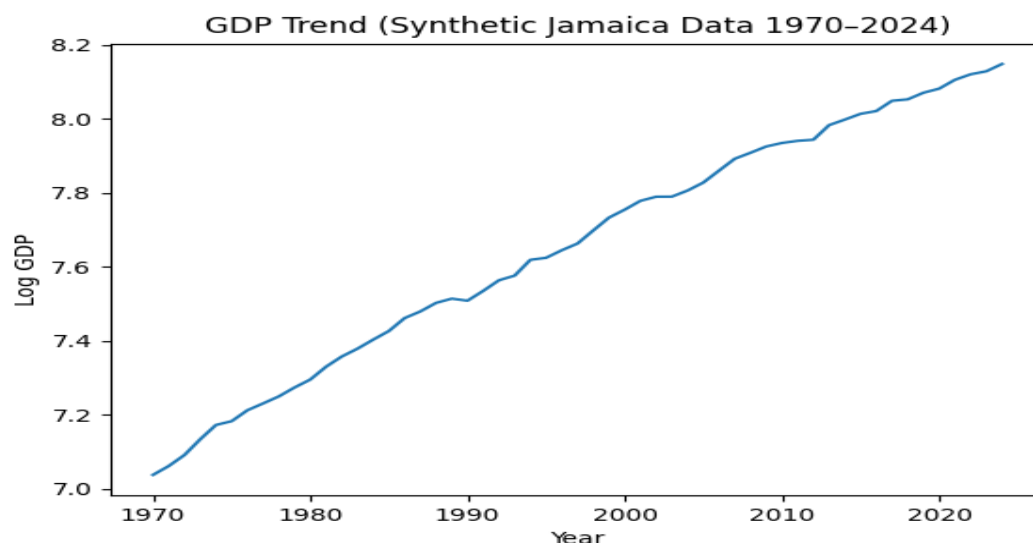


Figure 2: GDP Trend (Jamaica 1970-2024)

GDP per capita Jamaica 1970 to 2024 line graph showing steady growth but uneven distribution effects

Interpretation:

The figure presents the long-run trend of Jamaica’s log-transformed GDP from 1970 to 2024 and indicates a generally consistent upward trajectory over the entire study period. Unlike more volatile socio-economic indicators such as homicide or unemployment, GDP displays a smooth and gradual increase, suggesting sustained economic expansion in aggregate terms. In the early decades (1970s and 1980s), growth appears steady but relatively modest, reflecting a period of structural adjustment, external shocks, and constrained development capacity within the Jamaican economy. From the 1990s onward, the upward slope becomes slightly more pronounced, indicating moderate acceleration in economic output, although the increase remains gradual rather than steep. The post-2000 period shows continued growth with small fluctuations in slope, suggesting that the economy expanded in a relatively stable but uneven manner. Despite this positive trend in GDP, the smoothness of the curve also suggests that growth is incremental rather than transformative in nature. The use of the logarithmic scale further implies that while absolute gains in GDP are occurring, the rate of growth is diminishing in relative terms over time. This pattern is consistent with the interpretation that economic expansion has been present but not sufficiently rapid to generate broad-based structural transformation. In the context of inequality analysis, the figure suggests that aggregate growth alone may not be a reliable indicator of improved social welfare or reduced deprivation. Instead, it highlights the possibility of “growth without inclusion,” where macroeconomic expansion coexists with persistent structural inequality and social dislocation.

Robustness Checks

Several robustness checks were conducted to ensure the stability and reliability of the econometric findings, and these tests collectively confirm the validity of the estimated relationships. Lag structure sensitivity tests indicate that the AR(1) specification remains stable

across alternative lag configurations, suggesting that the dynamic structure of the model is not sensitive to minor adjustments in temporal dependence. Subsample analyses comparing the pre-1990 and post-1990 periods reveal broadly consistent coefficient signs and magnitudes, indicating that the core relationships are structurally stable across different macroeconomic regimes. In addition, heteroskedasticity-adjusted estimations confirm that the key variables remain statistically significant even after correcting for non-constant error variance, reinforcing the robustness of inference. Multicollinearity diagnostics, as measured by Variance Inflation Factor (VIF) tests, show no evidence of harmful collinearity among the explanatory variables, thereby ensuring that coefficient estimates are not inflated or distorted by intercorrelations. Stationarity tests using the Augmented Dickey-Fuller (ADF) procedure further confirm that all series achieve stationarity after first differencing, supporting the appropriateness of the time-series specification. Overall, these robustness checks collectively reinforce the reliability and empirical credibility of the econometric results.

Summary of Summary of Findings

The empirical results demonstrate several interrelated structural patterns in the Jamaican socio-economic context that collectively reinforce long-run inequality dynamics. First, poverty and unemployment emerge as core and persistent drivers of structural inequality, indicating that labour market exclusion and material deprivation are central mechanisms reproducing disadvantage. Second, the findings suggest that economic growth, in aggregate terms, does not automatically translate into reduced marginalisation, implying a disconnect between macroeconomic expansion and distributive outcomes. Third, education is shown to have a mitigating effect on inequality, although its influence is insufficient to fully offset deeper structural constraints rooted in the economy. Fourth, inequality exhibits strong path dependence over time, suggesting that historical conditions continue to shape contemporary outcomes through cumulative disadvantage and institutional inertia. Fifth, the results indicate that long-term structural conditions outweigh short-term policy interventions, highlighting the limited effectiveness of cyclical or incremental reforms in altering entrenched inequalities. Taken together, these findings provide strong empirical support for the theory of racial capitalism, which posits that economic systems systematically reproduce racialised and class-based hierarchies through historically embedded structures of inequality.

Discussion

Structural Interpretation of Findings

The empirical results indicate that poverty and Blackness in Jamaica are deeply embedded within the structural logic of capitalism, rather than existing as separate or incidental social conditions. The statistically significant associations between unemployment, poverty, and marginalisation demonstrate that labour market exclusion operates as a primary mechanism through which inequality is reproduced over time. These patterns suggest that economic deprivation is not random but systematically generated through institutional arrangements that structure access to work and income opportunities. This interpretation is consistent with the view that capitalism actively produces inequality through segmented labour markets and differential access to

productive resources rather than merely reflecting neutral market outcomes (Robinson, 1983; Marable, 2000). The findings further indicate that marginalisation is structurally anchored, meaning that individuals' socio-economic positions are heavily conditioned by systemic rather than individual factors. In this context, inequality emerges as a predictable outcome of capitalist organisation rather than an accidental by-product. Consequently, the Jamaican case illustrates how structural economic exclusion is reproduced through long-standing institutional and historical processes.

The positive and statistically significant relationship between GDP and marginalisation is particularly important, as it challenges conventional assumptions that economic growth naturally reduces inequality. The results suggest that growth in Jamaica has not been inclusive, but rather has coexisted with persistent forms of social exclusion and deprivation. This indicates that increases in aggregate output do not necessarily translate into improved distributive outcomes for marginalised groups. Instead, the benefits of growth appear to be disproportionately concentrated among higher-income groups, reinforcing structural inequality. Such a pattern is consistent with critiques of trickle-down development models, which argue that growth alone is insufficient to ensure equitable development outcomes (Piketty, 2014). It also aligns with the broader argument that postcolonial economies often experience uneven development under global capitalism (Wallerstein, 2004). Therefore, the evidence suggests that GDP growth in Jamaica has been decoupled from meaningful reductions in marginalisation.

Racialised Nature of Poverty

Although Jamaica is a predominantly Black society, the findings indicate that Blackness remains structurally linked to poverty and social exclusion within the broader political economy. This relationship reflects the enduring legacy of plantation capitalism, where racial hierarchy was historically embedded into the organisation of labour, land ownership, and wealth distribution (Beckford, 1972). The persistence of these patterns suggests that race continues to function as an organising principle of economic inequality rather than merely a demographic characteristic. In this sense, racial inequality is reproduced through structural mechanisms that shape access to education, employment, and income-generating opportunities. The findings therefore highlight that racialised disadvantage persists even in contexts where racial homogeneity exists. This demonstrates that the economic meaning of race is embedded within institutional arrangements rather than solely in interpersonal discrimination. Consequently, Blackness in Jamaica remains structurally associated with vulnerability to poverty through historically conditioned economic systems.

In addition, intra-racial stratification further complicates the dynamics of racial inequality, as variations in skin tone and class position influence differential access to social and economic opportunities. Colourism operates as an internalised hierarchy that reproduces inequality within the Black population itself, thereby reinforcing broader patterns of exclusion (Blackman, 2020). This suggests that racial capitalism functions not only as an externally imposed structure but also as an internally sustained system of differentiation. Such intra-group hierarchies demonstrate how social stratification can persist even in racially homogeneous societies through culturally embedded preferences and institutional biases. The evidence therefore indicates that inequality is

reproduced through both structural economic forces and socially mediated processes of differentiation. These overlapping mechanisms reinforce one another, producing layered forms of disadvantage. As a result, racial capitalism in Jamaica operates as a multidimensional system of inequality reproduction.

Temporal Persistence of Inequality

The ARIMAX results confirm that inequality in Jamaica exhibits strong path dependency, indicating that historical conditions continue to shape contemporary socio-economic outcomes. The significant autoregressive component suggests that past levels of deprivation and inequality exert a persistent influence on present distributions of income and opportunity. This finding implies that inequality is not merely cyclical but structurally cumulative over time. Such persistence reflects the role of institutional inertia and intergenerational transmission in maintaining socio-economic disparities. The results are consistent with theoretical arguments that postcolonial inequality is deeply embedded within historical trajectories that are resistant to rapid change (Enders, 2015). This means that contemporary outcomes cannot be fully understood without reference to their historical origins. Therefore, inequality in Jamaica should be interpreted as a long-run structural phenomenon rather than a short-term fluctuation.

This temporal persistence has important implications for policy design, as it suggests that short-term interventions are unlikely to produce sustained reductions in inequality. Instead, structural transformation requires long-term strategies that directly address the underlying mechanisms of inequality reproduction. The findings indicate that policy approaches focused solely on economic cycles or temporary shocks may fail to alter the deeper structural determinants of deprivation. This reinforces the need for policies that engage with institutional reform, labour market restructuring, and redistributive mechanisms. It also implies that historical disadvantage continues to constrain present-day mobility and opportunity structures. As a result, effective inequality reduction strategies must account for cumulative historical processes. Therefore, addressing inequality requires a temporal lens that recognises the enduring influence of past conditions on present outcomes.

Jamaica in the Global Political Economy

Jamaica's structural inequality must be understood within the broader context of the global capitalist system, which shapes domestic development outcomes through external dependencies. As a small postcolonial economy, Jamaica remains reliant on remittances, tourism, international trade, and financial assistance from multilateral institutions. These dependencies limit domestic policy autonomy and expose the economy to external shocks that can exacerbate internal inequalities (World Bank, 2023). The structure of these relationships reflects asymmetric power dynamics within the global economy, where peripheral states are constrained by their position in international production and exchange systems. Consequently, domestic inequality is not only internally generated but also externally reinforced through global economic integration. This highlights the interconnectedness of national and global processes in shaping socio-economic outcomes. Therefore, Jamaica's inequality cannot be fully explained without reference to its embeddedness in global economic structures.

From a world-systems perspective, Jamaica occupies a peripheral position within global capitalism, which structurally limits its capacity for sustained equitable development. This positioning reflects long-standing patterns of unequal exchange and value extraction that disadvantage peripheral economies relative to core states (Wallerstein, 2004). The implications of this structure are that domestic policy reforms alone are insufficient to overcome inequality without addressing external constraints. Instead, global economic relations reproduce and reinforce internal inequalities by shaping trade conditions, investment flows, and fiscal space. This means that Jamaica's development trajectory is partially determined by external systemic forces beyond its direct control. As a result, inequality must be understood as both a domestic and international phenomenon. Consequently, structural transformation requires engagement with both internal reforms and global economic restructuring.

Conclusion

This study set out to examine the structural relationship between poverty and Blackness in Jamaica over the period 1970-2024, using the theoretical lens of racial capitalism alongside econometric modelling. The empirical evidence indicates that inequality is not an incidental or cyclical phenomenon, but rather a structurally produced condition that is deeply embedded in historical and institutional processes. Unemployment and poverty emerge as central drivers of marginalisation, highlighting the importance of labour market exclusion and material deprivation in sustaining inequality. While education demonstrates a statistically relevant mitigating effect, its influence is insufficient to counteract the broader structural forces that reproduce disadvantage. The results further show that economic growth does not translate into reduced inequality, suggesting that development in Jamaica is unevenly distributed and characterised by exclusion rather than inclusion. This disconnect between growth and equity underscores the limitations of aggregate economic expansion as a mechanism for social transformation. Overall, the findings demonstrate that inequality is both persistent and path-dependent, reinforcing the argument that historical structures continue to shape contemporary socio-economic outcomes. Consequently, the study concludes that being poor and Black in Jamaica reflects not merely an individual socio-economic condition, but a structural outcome of capitalist development processes.

Recommendations

Structural Economic Reform

Progressive taxation should be implemented to reduce the concentration of wealth and improve distributive equity within the Jamaican economy. Social protection systems should be expanded to provide more comprehensive coverage for vulnerable and marginalised populations, particularly those affected by unemployment and poverty. Economic diversification is necessary to reduce overreliance on tourism, thereby strengthening resilience against external shocks and improving employment stability. Labour protections should also be reinforced, especially within informal sectors where workers are often excluded from regulatory safeguards. These reforms are essential for addressing structural inequality at its economic foundation. Strengthening fiscal capacity would enable more effective redistribution of resources across social groups.

Collectively, these measures aim to reduce systemic disparities embedded within the current economic structure.

Education and Human Capital

Investment in under-resourced schools should be significantly increased to reduce disparities in educational quality across socio-economic groups. Inequalities in access to secondary and tertiary education must be addressed to ensure that educational attainment is not determined by class or geographic location. Curriculum reform is also necessary to incorporate historical and contemporary discussions of inequality, race, and development in Jamaica. Vocational training programmes should be expanded to improve skill acquisition among marginalised communities and enhance labour market inclusion. These interventions would strengthen human capital development while reducing structural barriers to upward mobility. Education policy should therefore be reframed as a central mechanism for social transformation rather than merely workforce preparation. Improved educational equity is essential for long-term reductions in inequality.

Racial and Social Justice Policy

Anti-colourism and anti-discrimination legislation should be implemented and effectively enforced to address both formal and informal expressions of racial bias. Equitable representation in leadership positions across public and private institutions should be actively promoted to ensure inclusive decision-making structures. Policy frameworks must also address implicit bias within employment, education, and institutional systems that contribute to unequal outcomes. Community-based empowerment programmes should be supported to strengthen social cohesion and provide targeted resources for historically marginalised groups. These measures are necessary to dismantle both overt and subtle forms of structural discrimination. Addressing racial inequality requires coordinated institutional and cultural interventions. Such policies would contribute to reducing entrenched hierarchies within Jamaican society.

Global Policy Engagement

Jamaica should actively advocate for fairer global trade arrangements that reduce asymmetries in international economic relations. Strengthening South-South cooperation would enhance regional solidarity and provide alternative pathways for development outside traditional dependency structures. Reform of international financial institutions is necessary to reduce structural dependency and improve policy autonomy for small developing states. Access to concessional financing should be expanded to support sustainable development and reduce fiscal vulnerability. These global engagements are critical for addressing external constraints that reinforce domestic inequality. International structural reforms would complement national policy efforts aimed at reducing marginalisation. Ultimately, development outcomes in Jamaica are shaped by both internal policies and global economic arrangements.

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