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# Political Regimes and Development Outcomes: A Comparative Analysis of One-Party, Multiparty, and Dominant-Party Systems

Regímenes políticos y resultados del desarrollo: un análisis comparativo de sistemas unipartidistas, multipartidistas y de partidos dominantes

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## ABSTRACT

This study examines the relationship between political regimes and development outcomes by comparing one-party, multiparty, and dominant-party systems in 14 countries: Angola, China, Costa Rica, Cuba, Ghana, India, Indonesia, Kenya, Malawi, Mozambique, Rwanda, Tanzania, Vietnam, and Zambia. The study uses a set of economic, governance, and health indicators to explore how regime types are associated with variations in development performance. The findings suggest that one-

party systems tend to exhibit stronger economic performance and health outcomes, yet they are consistently associated with weaker political freedoms. Multiparty systems perform relatively better on governance indicators yet display lower economic efficiency. Dominant-party systems exhibit mixed results, characterized by institutional ambiguity, higher corruption risks, and poorer health outcomes, despite comparatively higher levels of foreign direct investment. Regression and ANOVA results indicate that governance quality, particularly Government Effectiveness and Control of Corruption, has a significant influence on Life expectancy. In contrast, foreign direct investment shows only a modest association with GDP growth. The study concludes that no political regime type is inherently superior. Rather, development outcomes are shaped by institutional capacity, policy coherence, and inclusive governance. These findings offer policy-relevant insights for aligning governance reforms with sustainable development objectives.

**Keywords:** Governance; Political Regimes; Economic Growth; Health Outcomes; Institutional Quality; Economic History.

**JEL Codes:** O43, H11, I15, D72

## RESUMEN

Este estudio examina la relación entre los regímenes políticos y los resultados de desarrollo comparando sistemas unipartidistas, multipartidistas y de partido dominante en 14 países: Angola, China, Costa Rica, Cuba, Ghana, India, Indonesia, Kenia, Malawi, Mozambique, Ruanda, Tanzania, Vietnam y Zambia. El estudio utiliza un conjunto de indicadores económicos, de gobernanza y de salud para explorar cómo los tipos de régimen se asocian con las variaciones en el desempeño del desarrollo. Los hallazgos sugieren que los sistemas unipartidistas tienden a mostrar un mejor desempeño económico y resultados de salud, pero se asocian sistemáticamente con menores libertades políticas. Los sistemas multipartidistas tienen un desempeño relativamente mejor en los indicadores de gobernanza, pero muestran una menor eficiencia económica. Los sistemas de partido dominante presentan resultados dispares, caracterizados por ambigüedad institucional, mayores riesgos de corrupción y peores resultados en materia de salud, a pesar de tener niveles

comparativamente más altos de inversión extranjera directa. Los resultados de regresión y ANOVA indican que la calidad de la gobernanza, en particular la eficacia del gobierno y el control de la corrupción, influye significativamente en la esperanza de vida. En cambio, la inversión extranjera directa muestra una asociación modesta con el crecimiento del PIB. El estudio concluye que ningún régimen político es inherentemente superior. Más bien, los resultados de desarrollo se ven influenciados por la capacidad institucional, la coherencia de las políticas y la gobernanza inclusiva. Estos hallazgos ofrecen perspectivas relevantes para la formulación de políticas que permiten alinear las reformas de gobernanza alineadas con los objetivos del desarrollo sostenible.

**Palabras clave:** Gobernanza; Regímenes Políticos; Crecimiento Económico; Resultados de Salud; Calidad Institucional; Historia económica.

**Códigos JEL:** O43, H11, I15, D72

## Introduction

Over the past few decades, many countries have embarked on arduous journeys toward political liberalization and economic transformation. Yet despite widespread democratization efforts, many countries, particularly in Africa and Asia, remain plagued by governance deficits, underdeveloped infrastructure, low human development indices, and erratic foreign direct investment (FDI) inflows. These challenges are not isolated phenomena, but are rooted in deep-seated historical, political, and institutional legacies that continue to shape contemporary development trajectories. The resurgence of authoritarian governance in various parts of the world, calls for a renewed interrogation of how political systems interact with development outcomes across sectors.

The dual legacies of colonial authoritarianism and post-independence autocratic rule have been identified as major impediments to Africa's socioeconomic progress (Darkwa, 2022). Authoritarian systems—whether manifested through military dictatorships, dominant party regimes, or neo patrimonial governance—often erode public institutions and centralize power, thereby limiting the effectiveness of policy instruments aimed at promoting inclusive development. Although countries such as Ghana under

Jerry Rawlings attempted to strike a balance between authority and accountability, such cases remain the exception rather than the norm. This political context complicates citizen engagement and undermines the legitimacy and effectiveness of multiparty democratic systems, particularly in countries where institutional checks and balances are weak or absent (Nicholson et al., 2018; Ndikumana, 2023).

At the heart of this challenge is the issue of governance. Theories of governance provide a framework for understanding political stability, legality, and the suppression of corruption. According to various scholars, social stability and economic progress are threatened by ineffective governance; therefore, effective governance is essential for sustainable development (Ball, 2005; Taylor, 2014). Importantly, governance institutions do not operate in isolation; they mediate the relationship between political regime type and development outcomes. The same regime type can produce divergent results depending on the strength and autonomy of its institutional framework. Numerous studies have shown that the quality of governance—defined in terms of political stability, the rule of law, and institutional efficiency—has a significant impact on economic performance, infrastructure provision, and human development outcomes (Banik et al., 2023; Levitt et al., 2010). Poor governance not only limits the returns to public investment but also discourages private sector participation and foreign capital inflows. Conversely, countries with robust institutions tend to attract more sustainable and impactful FDI, improve health outcomes, and support long-term growth (Andrijevic et al., 2020; Fagbemi et al., 2021; Jamil Shah et al., 2019).

In particular, FDI has been highlighted as an important driver of economic growth, facilitating access to capital, technology, and global markets. However, its developmental impact remains uneven across African countries. In Zambia, for example, FDI has contributed significantly to GDP growth, but its impact on employment and national savings has been negligible (Mukupu et al., 2016; Ndlovu & Haabazoka, 2024). This disparity underscores the role of governance and infrastructure in shaping the absorptive capacity of host economies. Where institutional frameworks are weak, FDI often focuses on resource extraction with minimal linkages

to the broader economy, thereby limiting its developmental spillovers (Claudio-Quiroga et al., 2022; Yangailo, 2024).

Human development indicators, such as health and education, are both outcomes and enablers of economic growth. Improvements in life expectancy through effective health spending and infrastructure investment have been shown to contribute positively to national productivity (Biyase & Malesa, 2019; Alwago, 2023). However, this relationship is far from linear, and studies suggest that its effectiveness depends on demographic structure, intergenerational transfers, and the quality of public service delivery (Kunze, 2014; Cervellati & Sunde, 2011; Banik et al., 2023).

Global development discourses increasingly emphasize the interdependence between economic performance, governance quality, and population health. In an era characterized by economic shocks, rising inequality, and governance transitions, understanding the linkages between these domains is essential for designing inclusive development strategies. While economic indicators such as GDP growth, FDI, and total reserves are often prioritized in development assessments, they do not sufficiently account for disparities in health and institutional outcomes across countries.

This study aims to examine the relationships between economic indicators, governance quality, and health outcomes in a cross-country context involving 14 diverse countries with different political systems and development trajectories: Angola, China, Costa Rica, Cuba, Ghana, India, Indonesia, Kenya, Malawi, Mozambique, Rwanda, Tanzania, Vietnam, and Zambia. Specifically, the study evaluates how dimensions of governance—such as Control of corruption, Voice & Accountability, and Government Effectiveness—affect both economic growth and life expectancy, while also assessing how different political regimes (one-party, multiparty, and dominant party systems, including single-party systems since independence) shape development outcomes.

The significance of this study lies in its integrated, comparative, and regime-sensitive approach. It contributes to the literature by examining the relationship between governance, economic growth, and health outcomes—a nexus that is often studied in isolation. Rather than asserting direct causal effects of regime type, the study emphasizes that institutions serve as crucial transmission mechanisms through which political structures influence human welfare. By focusing on life expectancy as a core governance-sensitive development outcome, the study moves beyond purely economic metrics and assesses how political structures shape human welfare. This multidimensional analysis provides a nuanced, evidence-based foundation for designing context-specific governance reforms that align with sustainable development objectives.

## Literature Review

The rise of authoritarian regimes in recent years has reignited scholarly attention to authoritarianism, particularly its typologies and implications for governance, economic development, and social welfare (Darkwa, 2022). Historically, Africa has experienced multiple phases of authoritarianism, including colonial authoritarian rule, post-independence military dictatorships, and one-party systems. These governance models, described by Darkwa (2022) as the “twin of Africa’s woes,” have exacerbated political and economic crises across the continent. Authoritarian leaders have often used governance as a racket, prioritizing personal gain over the needs of citizens. However, exceptions—such as former Ghanaian President Jerry John Rawlings—stand out for their relatively people-centered leadership.

Understanding the dynamics of political systems, whether authoritarian or democratic, is essential to assessing their impact on governance and development. Nicholson et al. (2018) emphasize that in complex political environments, although political parties serve as essential heuristics for the public, multiparty systems can confuse this understanding due to ideological overlaps between parties. The complexity of this situation was evident in Belgium, where political parties evolved into

regional entities in response to regionalization pressures (Coveil, 2023). Similarly, in Finland, affective polarization has increased even in a low-polarization multiparty system, driven by negative feelings toward the least preferred parties (Kekkonen & Ylä-Anttila, 2021).

Empirical studies show significant differences between one-party and multiparty systems in terms of both governance and economic performance. Multiparty systems often perform better on governance indicators such as the Rule of Law and Voice & Accountability (Bowler et al., 2023; Ndikumana, 2023). However, one-party regimes can achieve short-term economic gains, as evidenced by higher reserves, FDI inflows, and GDP growth (Yangailo, 2025). Although Ndikumana (2023) found strong support for multiparty systems in Burundi, notable gender differences in preferences underscored the importance of the context in regime support.

The quality of governance significantly affects health and economic development. Although Banik et al. (2023) show that the effectiveness of health spending depends on political stability and governance quality, Fagbemi et al. (2021) argue that poor governance in sub-Saharan Africa is a direct cause of low socioeconomic conditions. Similarly, Rizvi (2022) emphasizes the role of institutional reform in promoting stability and development. Governance challenges also affect infrastructure development, as Levitt et al. (2010) show, suggesting that alternative financing and governance models could improve project sustainability.

Even though economic performance is closely linked to FDI, its impact varies across regions and institutional settings. Mukupa et al. (2016) found that FDI significantly boosted Zambia's economic performance, while Ndlovu & Haabazoka (2024) found that it had minimal effects on savings and employment. Regional studies confirm a positive but uneven impact of FDI, depending on infrastructure, human capital, and governance (Zekarias, 2016; Claudio-Quiroga et al., 2022; Yangailo, 2024). Thus, enabling environment and tailored policies are critical to maximizing the benefits of FDI.

Life expectancy, a key health outcome, is shaped by both economic and governance factors. Kunze (2014) and Cervellati & Sunde (2011) show how life expectancy interacts with demographic change and human capital accumulation. Ngangue & Manfred (2015), He & Li (2020), and Shahbaz et al. (2019) all show that life expectancy and GDP are positively related, although the strength of this relationship varies across country income levels and aging demographics. Biyase & Malesa (2019) find similar patterns in Southern Africa, while Alwago (2023) identifies health spending and life expectancy as drivers of GDP growth in Kenya.

Capital formation remains fundamental to economic development. Apergis & Payne (2010) find long-term equilibrium between capital investment and economic growth, and Baz et al. (2021) suggest that capital directed toward clean technologies promotes both economic and environmental sustainability. Research on regional disparities supports this finding, with East Asia's rapid growth linked to FDI and innovation, in contrast to sub-Saharan Africa's stagnation due to weak institutions and overreliance on aid (Yangailo, 2024).

### *Gaps in Literature*

The existing literature supports the notion that economic growth alone is insufficient to ensure sustained improvements in human development outcomes. Scholars such as Claudio-Quiroga et al. (2022) and Biyase & Malesa (2019) emphasize the importance of the quality of governance and institutional robustness in shaping development trajectories. For example, Fagbemi et al. (2021) find that countries with stronger institutions not only attract more FDI, but also more effectively translate economic gains into broader welfare outcomes. Similarly, Ndikumana (2023) argues that democratic reforms alone are insufficient without concurrent improvements in institutional accountability, administrative capacity, and transparency.

Studies by Banik et al. (2023) and Nicholson et al. (2018) further suggest that governance plays a critical mediating role in determining whether economic progress translates into tangible social outcomes.

However, much of the existing literature tends to focus on single-country case studies or regional assessments, often neglecting comparative regime-based analyses and omitting health indicators from their evaluation frameworks. Despite these scholarly contributions, important gaps remain in the literature. First, few studies simultaneously examine the triadic relationship between governance, economic growth, and health outcomes in a broad, cross-national context that includes both developing and emerging economies. Second, little empirical attention has been paid to how different regime types—namely, one-party, multiparty, and dominant party systems—affect these relationships, particularly in terms of institutional performance and development efficiency. Third, despite being a core component of the Human Development Index (HDI) and a proxy for public service delivery, life expectancy remains understudied as a governance-sensitive development outcome.

This study addresses these gaps by providing a comparative, multi-country analysis that integrates economic, governance, and health indicators. Using recent data and robust statistical models—including linear regression and ANOVA—the study assesses how political regime types shape development outcomes across governance dimensions. In doing so, it provides a nuanced, evidence-based framework for integrating governance reforms into sustainable development strategies, highlighting the need for context-specific policy approaches tailored to regime structure and institutional capacity.

## Methodology

This study uses a comparative cross-country research design to examine the interplay between economic performance, governance quality, and health outcomes in fourteen countries—Tanzania, Zambia, Mozambique, Malawi, Angola, Ghana, Vietnam, Indonesia, Rwanda, Kenya, China, India, Cuba, and Costa Rica—over the period 1991 to 2023. All data are drawn from the World Bank’s publicly available databases to ensure consistency and comparability across countries and over time. Key variables include total reserves (current US\$), net FDI inflows (percent of GDP), life expectancy at birth (years), three governance indicators (Voice &

Accountability, Control of Corruption, Government Effectiveness, and Rule of Law, each expressed as percentile ranks), GDP (current US\$), and annual GDP growth (percent).

Data extraction and preliminary cleaning were performed to align country names, convert annual figures into panel format, and address sporadic missing values through listwise deletion where omissions did not exceed 5 percent of observations. All subsequent analyses were conducted in Jamovi using its built-in modules for descriptive statistics, correlation, regression, and analysis of variance (ANOVA).

Descriptive statistics were first generated to profile each country's trajectory along economic, health, and governance dimensions. Pearson correlation coefficients were then computed to examine bivariate relationships among reserves, FDI, governance ranks, and life expectancy. To assess multivariate dynamics, two ordinary least squares regression models were estimated. The first model treated annual GDP growth as the dependent variable regressed on FDI inflows, total reserves, and GDP size. The second model examined life expectancy as the outcome variable, with governance indicators and economic covariates as predictors. All models report adjusted  $R^2$  values, standardized beta coefficients, and two-tailed significance tests at the 5 percent level.

To compare regime-specific performance, countries were categorized into three political system groups: (1) one-party states (China, Cuba, Vietnam); (2) dominant-party systems (Angola, Tanzania, Mozambique, Rwanda); and (3) competitive multiparty democracies (Costa Rica, Ghana, India, Indonesia, Kenya, Malawi, Zambia). A one-way ANOVA was conducted to test for mean differences in reserves, FDI, governance scores, GDP growth, and life expectancy across these groups. Given violations of homogeneity-of-variances detected by Levene's test, the Games-Howell post hoc procedure was applied to identify which pairs of regime types differed significantly without assuming equal variances or sample sizes.

By combining long-run data from 1991 to 2023 with robust statistical techniques implemented in Jamovi, this methodology provides a rigorous foundation for understanding how different political regimes shape

economic resilience, governance effectiveness, and population health over more than three decades.

## Results

### *Descriptive Analysis*

Table 1 provides descriptive statistics for a number of variables across several countries, including total reserves (including gold, in current US\$), FDI as a percentage of GDP, life expectancy at birth, and various governance indicators such as Voice and Accountability, Control of Corruption, Government Effectiveness, and Rule of Law. Each of these statistics is provided for countries such as Angola, China, Costa Rica, Cuba, Ghana, India, Indonesia, Kenya, Malawi, Mozambique, Rwanda, Tanzania, Vietnam, and Zambia.

Table 1 shows considerable variation across countries. For example, total reserves for China are remarkably high, averaging about \$1.74 trillion, whereas countries such as Cuba and Malawi report much lower reserves, with Cuba reporting zero reserves. Life expectancy at birth varies similarly, with Costa Rica having a high mean of 78.54 years, while Angola and Mozambique have lower means of around 54 years, reflecting disparities in health care and living standards.

**Table 1.** Descriptive statistics for a range of variables across several countries

	Country	Mean	Median	Mode	SD
Total reserves (includes gold, current US\$)	Angola	1.06e+10	1.12e+10	0.00000	1.05e+10
	China	1.74e+12	1.55e+12	2.49e+10 <sup>a</sup>	1.52e+12
	Costa Rica	4.27e0+9	3.80e0+9	9.06e0+8 <sup>a</sup>	3.25e0+9
	Cuba	0.000	0.000	0.00000	0.000
	Ghana	3.32e0+9	2.22e0+9	3.09e0+8 <sup>a</sup>	2.80e0+9
	India	2.32e+11	2.57e+11	7.62e0+9 <sup>a</sup>	1.99e+11
	Indonesia	6.85e+10	5.16e+10	1.04e+10 <sup>a</sup>	4.86e+10
	Kenya	3.84e0+9	2.88e0+9	7.95e0+7 <sup>a</sup>	3.24e0+9
	Malawi	2.80e0+8	2.17e0+8	0.00000	2.42e0+8

**Table 1.** Descriptive statistics for a range of variables across several countries

	Country	Mean	Median	Mode	SD
	Mozambique	1.79e0+9	1.52e0+9	1.78e0+8 <sup>a</sup>	1.30e0+9
	Rwanda	6.68e0+8	4.75e0+8	4.74e0+7 <sup>a</sup>	5.83e0+8
	Tanzania	1.99e0+9	1.55e0+9	0.00000	1.82e0+9
	Viet Nam	2.62e+10	1.34e+10	0.00000	3.20e+10
	Zambia	1.28e0+9	1.09e0+9	0.00000 <sup>a</sup>	1.13e0+9
Foreign direct investment: net inflows (% of GDP)	Angola	3.761	2.399	-10.03838 <sup>a</sup>	10.375
	China	3.179	3.484	0.24011 <sup>a</sup>	1.459
	Costa Rica	4.924	4.829	2.47238 <sup>a</sup>	1.580
	Cuba	0.000	0.000	0.00000	0.000
	Ghana	3.876	3.158	0.30288 <sup>a</sup>	2.665
	India	1.288	1.313	0.02723 <sup>a</sup>	0.813
	Indonesia	1.304	1.788	-2.75744 <sup>a</sup>	1.338
	Kenya	0.776	0.468	-0.00537 <sup>a</sup>	0.809
	Malawi	1.564	1.025	-0.89498 <sup>a</sup>	1.819
	Mozambique	11.627	5.991	0.58368 <sup>a</sup>	11.392
	Rwanda	1.509	1.500	1.33e0-4 <sup>a</sup>	1.325
	Tanzania	2.518	2.093	1.39e0-4 <sup>a</sup>	1.451
	Viet Nam	5.498	4.803	3.39040 <sup>a</sup>	2.151
	Zambia	4.395	4.533	-0.22329 <sup>a</sup>	2.617
Life expectancy at birth, total (years)	Angola	53.807	54.200	42.19000 <sup>a</sup>	7.528
	China	74.297	74.789	68.61000 <sup>a</sup>	3.002
	Costa Rica	78.540	79.049	76.23700 <sup>a</sup>	1.499
	Cuba	76.547	77.406	73.20100 <sup>a</sup>	1.560
	Ghana	60.427	60.282	55.72200 <sup>a</sup>	3.041
	India	65.596	65.803	59.03200 <sup>a</sup>	3.909
	Indonesia	67.586	67.664	63.70300 <sup>a</sup>	2.008
	Kenya	59.360	59.407	55.47800 <sup>a</sup>	2.796
	Malawi	54.324	54.687	43.54000 <sup>a</sup>	8.488
	Mozambique	53.683	53.255	44.70500 <sup>a</sup>	5.726
	Rwanda	55.609	59.504	12.15800 <sup>a</sup>	12.163
	Tanzania	58.691	59.260	51.00500 <sup>a</sup>	5.798
	Viet Nam	72.959	73.385	69.30300 <sup>a</sup>	1.503
	Zambia	54.145	53.730	45.70900 <sup>a</sup>	6.977
Voice & Accountability: Percentile Rank	Angola	12.327	14.423	0.00000	8.720
	China	5.073	5.419	0.00000	3.349
	Costa Rica	61.737	81.221	0.00000	35.611
	Cuba	5.060	4.975	0.00000	4.043
	Ghana	45.018	58.654	0.00000	26.413
	India	44.666	59.204	0.00000	25.880
	Indonesia	35.123	46.635	0.00000	21.687

**Table 1.** Descriptive statistics for a range of variables across several countries

	Country	Mean	Median	Mode	SD
	Kenya	28.269	36.493	0.00000	16.993
	Malawi	32.309	40.758	0.00000	19.241
	Mozambique	30.368	37.931	0.00000	18.253
	Rwanda	10.717	11.848	0.00000	7.504
	Tanzania	28.125	33.495	0.00000	16.734
	Viet Nam	7.758	8.654	0.00000	4.903
	Zambia	29.661	36.453	0.00000	17.361
Control of Corruption: Percentile Rank	Angola	7.244	4.762	0.00000	8.314
	China	32.818	37.073	0.00000	19.895
	Costa Rica	53.916	70.616	0.00000	31.132
	Cuba	46.288	60.000	0.00000	26.946
	Ghana	39.123	50.000	0.00000	22.801
	India	32.000	40.741	0.00000	18.675
	Indonesia	21.253	21.905	0.00000	14.994
	Kenya	13.243	15.789	0.00000	8.515
	Malawi	25.362	27.317	0.00000	16.588
	Mozambique	23.732	24.762	0.00000	15.281
	Rwanda	43.636	57.282	0.00000	29.092
	Tanzania	26.289	29.570	0.00000	16.379
	Viet Nam	26.894	32.857	0.00000	16.198
	Zambia	26.675	31.034	0.00000	16.531
Government Effectiveness: Percentile Rank	Angola	9.956	11.905	0.00000	6.681
	China	45.924	56.585	0.00000	27.430
	Costa Rica	47.559	61.429	0.00000	27.481
	Cuba	32.013	42.105	0.00000	19.419
	Ghana	36.997	45.771	0.00000	21.699
	India	42.174	53.171	0.00000	24.696
	Indonesia	35.730	43.602	0.00000	22.939
	Kenya	26.281	33.649	0.00000	15.448
	Malawi	22.086	21.905	0.00000	14.955
	Mozambique	22.186	25.000	0.00000	14.955
	Rwanda	32.588	47.573	0.00000	24.891
	Tanzania	23.853	28.910	0.00000	14.658
	Viet Nam	37.130	45.933	0.00000	22.097
	Zambia	17.651	19.048	0.00000	11.783
Rule of Law: Percentile Rank	Angola	7.519	7.212	0.00000	6.102
	China	30.678	36.000	0.00000	18.592
	Costa Rica	49.816	64.623	0.00000	28.728
	Cuba	20.873	26.316	0.00000	14.445
	Ghana	40.038	52.239	0.00000	23.380

**Table 1.** Descriptive statistics for a range of variables across several countries

	Country	Mean	Median	Mode	SD
	India	41.853	53.333	0.00000	24.195
	Indonesia	26.434	30.806	0.00000	16.418
	Kenya	20.393	19.900	0.00000	14.059
	Malawi	33.997	43.810	0.00000	20.053
	Mozambique	18.780	20.476	0.00000	12.779
	Rwanda	30.286	35.407	0.00000	23.766
	Tanzania	29.497	37.089	0.00000	17.460
	Viet Nam	31.642	37.799	0.00000	19.259
	Zambia	29.114	36.364	0.00000	17.307
GDP (current US\$)	Angola	5.19e+10	5.24e+10	4.44e0+9 <sup>a</sup>	4.27e+10
	China	6.23e+12	3.55e+12	3.83e+11 <sup>a</sup>	5.98e+12
	Costa Rica	3.43e+10	2.69e+10	7.22e0+9 <sup>a</sup>	2.30e+10
	Cuba	4.87e+10	3.82e+10	0.00000	3.11e+10
	Ghana	3.14e+10	2.48e+10	4.98e0+9 <sup>a</sup>	2.68e+10
	India	1.40e+12	1.20e+12	2.70e+11 <sup>a</sup>	1.05e+12
	Indonesia	5.72e+11	4.32e+11	9.54e+10 <sup>a</sup>	4.18e+11
	Kenya	4.38e+10	3.20e+10	5.75e0+9 <sup>a</sup>	3.64e+10
	Malawi	6.75e0+9	6.45e0+9	1.72e0+9 <sup>a</sup>	3.59e0+9
	Mozambique	1.04e+10	1.08e+10	2.80e0+9 <sup>a</sup>	5.48e0+9
	Rwanda	5.42e0+9	4.07e0+9	7.54e0+8 <sup>a</sup>	3.89e0+9
	Tanzania	3.12e+10	2.19e+10	6.18e0+9 <sup>a</sup>	2.28e+10
	Viet Nam	1.43e+11	7.74e+10	9.61e0+9 <sup>a</sup>	1.35e+11
	Zambia	1.40e+10	1.41e+10	3.18e0+9 <sup>a</sup>	9.82e0+9
GDP growth (annual %)	Angola	3.778	3.055	-23.98342 <sup>a</sup>	7.620
	China	8.946	9.134	2.23864 <sup>a</sup>	2.838
	Costa Rica	4.224	4.215	-4.27335 <sup>a</sup>	2.543
	Cuba	1.521	2.390	-14.87818 <sup>a</sup>	5.951
	Ghana	5.244	4.700	0.51394 <sup>a</sup>	2.481
	India	6.073	6.795	-5.77772 <sup>a</sup>	2.881
	Indonesia	4.638	5.070	-13.12673 <sup>a</sup>	3.695
	Kenya	3.699	4.147	-0.79949 <sup>a</sup>	2.336
	Malawi	3.966	4.354	-10.24018 <sup>a</sup>	4.907
	Mozambique	6.197	6.680	-7.57665 <sup>a</sup>	4.175
	Rwanda	6.024	8.158	-50.24807 <sup>a</sup>	12.125
	Tanzania	5.099	5.468	0.58432 <sup>a</sup>	1.943
	Viet Nam	6.663	6.787	2.55373 <sup>a</sup>	1.563
	Zambia	4.385	5.058	-8.62544 <sup>a</sup>	3.801

<sup>a</sup> More than one mode exists, only the first is reported

Table 1 also shows differences in governance indicators. Costa Rica and Rwanda perform relatively well in terms of Voice & Accountability, with Costa Rica having an average percentile rank of 61.74, while Angola and Vietnam have significantly lower rankings. This reflects differences in the level of political freedom and public participation between countries. Control of Corruption shows a similar pattern, with Costa Rica, Cuba and Rwanda performing better than Angola and China. Similarly, government effectiveness is relatively higher in countries such as Costa Rica and India than in Zambia or Malawi, as reflected in the Government Effectiveness percentile rank.

In terms of economic performance, GDP growth rates show a range of experiences across countries. While China enjoys a high average growth rate of 8.95 percent, other countries, such as Cuba and Rwanda, report negative growth figures at times. This suggests that these countries may face significant economic challenges or have more volatile economies. FDI inflows as a percentage of GDP are highest in Mozambique (11.63 percent) and lowest in Cuba and Malawi, demonstrating the different levels of foreign investment in these countries. Overall, Table 1 show significant differences in economic, health, and governance indicators among the countries included in the study.

## Correlation Analysis

The correlation matrix in Table 2 explores the relationships between several key economic and governance variables across the dataset. The Pearson correlation coefficients ( $r$ ) reflect the strength and direction of the linear relationships between pairs of variables, along with their associated  $p$ -values indicating statistical significance.

### *Economic Variables*

Total reserves (including gold, current US\$) show strong positive correlations with several variables. For example, it is highly positively correlated with GDP (current US\$) ( $r = 0.947$ ,  $p < .001$ ), which is not surprising since both indicators are related to a country's financial capacity.

However, it shows a weak negative correlation with FDI inflows as a percentage of GDP ( $r = -0.048$ ,  $p = 0.307$ ), which is not statistically significant. This suggests that countries with higher reserves do not necessarily attract more FDI.

Life expectancy at birth (total years) has a moderate positive correlation with total reserves ( $r = 0.287$ ,  $p < .001$ ) and GDP (current US\$) ( $r = 0.292$ ,  $p < .001$ ), indicating that wealthier nations and those with larger reserves tend to have higher life expectancies. It also shows a strong positive correlation with Control of Corruption ( $r = 0.501$ ,  $p < .001$ ) and Government Effectiveness ( $r = 0.555$ ,  $p < .001$ ), suggesting that better governance practices are associated with better population health outcomes.

**Table 2.** Correlation Matrix for a range of variables across several countries

		Total reserves (includes gold, current US\$)	Foreign direct investment, net inflows (% of GDP)	Life expectancy at birth, total (years)	Voice & Accountability: Percentile Rank	Control of Corruption: Percentile Rank	Government Effectiveness: Percentile Rank	Rule of Law: Percentile Rank	GDP (current US\$)	GDP growth (annual %)
Total reserves (includes gold, current US\$)	Pearson's r	—								
	df	—								
	p-value	—								
Foreign direct investment, net inflows (% of GDP)	Pearson's r	0.048	—							
	df	460	—							
	p-value	0.307	—							
Life expectancy at birth, total (years)	Pearson's r	0.287	-0.060	—						
	df	460	460	—						
	p-value	<.001	0.195	—						
Voice & Accountability: Percentile Rank	Pearson's r	0.137	0.125	0.184	—					
	df	460	460	460	—					
	p-value	0.003	0.007	<.001	—					
Control of Corruption: Percentile Rank	Pearson's r	0.144	0.045	0.501	0.583	—				
	df	460	460	460	460	—				
	p-value	0.002	0.330	<.001	<.001	—				

Government Effectiveness: Percentile Rank	Pearson's r	0.34 ** 4 *	0.015	0.555 ** *	0.602 ***	0.857 ** *	—			
	df	460	460	460	460	460	—			
	p-value	<.001	0.753	<.001	<.001	<.001	—			
Rule of Law: Percentile Rank	Pearson's r	0.16 ** 3 *	0.047	0.429 ** *	0.771 ***	0.853 ** *	0.885 ***	—		
	df	460	460	460	460	460	460	—		
	p-value	<.001	0.313	<.001	<.001	<.001	<.001	—		
GDP (current US\$)	Pearson's r	0.94 ** 7 *	-0.065	0.292 ** *	-0.104 *	0.156 ** *	0.358 ***	0.18 ** 4 *	—	
	df	460	460	460	460	460	460	460	—	
	p-value	<.001	0.166	<.001	0.026	<.001	<.001	<.001	—	
GDP growth (annual %)	Pearson's r	0.10 * 4 *	0.104 *	0.107 *	0.032	0.105 *	0.136 **	0.10 * 1 *	0.084	—
	df	460	460	460	460	460	460	460	460	—
	p-value	0.026	0.025	0.021	0.496	0.024	0.004	0.030	0.073	—

Note. \* p < .05, \*\* p < .01, \*\*\* p < .001

### *Governance Variables*

Voice & Accountability shows positive correlations with life expectancy ( $r = 0.184$ ,  $p < .001$ ) and GDP growth ( $r = 0.136$ ,  $p < .01$ ). This suggests that more democratic and accountable governance systems tend to correlate with better health outcomes and more stable economic performance, although these relationships are not as strong as those between Government Effectiveness and Control of Corruption.

Control of Corruption and Government Effectiveness show very strong positive correlations with each other ( $r = 0.583$ ,  $p < .001$ ), reinforcing the idea that less corrupt governments are also more effective at implementing

policies that improve national outcomes such as economic growth and public health.

The Rule of Law also shows very strong positive correlations with other governance indicators, particularly Government Effectiveness ( $r = 0.853$ ,  $p < .001$ ) and Control of Corruption ( $r = 0.771$ ,  $p < .001$ ). This suggests that countries with strong legal systems tend to perform well on other dimensions of governance, contributing to better economic and social outcomes.

### *GDP and Economic Growth*

As expected, GDP (current US\$) is highly correlated with several variables, most notably total reserves ( $r = 0.947$ ,  $p < .001$ ) and life expectancy at birth ( $r = 0.292$ ,  $p < .001$ ). These correlations reflect the economic growth and resources that often coincide with longer life spans in wealthier countries.

GDP growth (annual %) shows several significant correlations with the other variables, most notably with total reserves ( $r = 0.104$ ,  $p = 0.026$ ) and FDI inflows ( $r = 0.104$ ,  $p = 0.025$ ). These correlations suggest that economic growth is associated with reserve accumulation and foreign investment.

## **Regression Analysis**

### *Regression analysis on GDP growth*

As Tables 3 shows, the linear regression model examining the predictors of GDP growth (annual %) indicates an overall weak fit. The multiple correlation coefficient ( $R = 0.206$ ) indicates a weak linear relationship between the predictors and GDP growth. The  $R^2$  value of 0.0422 suggests that only about 4.22% of the variance in GDP growth is explained by the model, while the adjusted  $R^2$  (0.0232)—which penalizes for the number of predictors—further confirms the limited explanatory power of the model. Nevertheless, the F-test ( $F = 2.22$ ,  $p = 0.020$ ) is statistically significant,

indicating that the model as a whole has some predictive utility, although the effect size is small.

**Table 3.** Model Fit Measures

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Overall Model Test			
				F	df1	df2	p
1	0.206	0.0422	0.0232	2.22	9	452	0.020

As shown in Table 4, the intercept (0.9023,  $p = 0.670$ ) is not statistically significant, meaning that when all predictors are zero, GDP growth is not significantly different from zero. FDI has a positive and significant effect (estimate = 0.1058,  $p = 0.032$ ), indicating that a 1% increase in FDI inflows (as a % of GDP) is associated with a 0.106% increase in GDP growth, holding other factors constant. Total reserves ( $p = 0.489$ ), life expectancy ( $p = 0.200$ ), and governance indicators (Voice & Accountability, Control of Corruption, Government Effectiveness, Rule of Law) are not statistically significant, meaning that they do not strongly predict GDP growth in this model. Political system groupings (one-party vs. multiparty, dominant party vs. multiparty) also show no significant differences in GDP growth ( $p = 0.776$  and  $p = 0.177$ , respectively).

**Table 4.** Model Coefficients - GDP growth (annual %)

Predictor	Estimate	SE	t	p
Intercept <sup>a</sup>	0.9023	2.1163	0.426	0.670
Total reserves (includes gold, current US\$)	3.46e-13	5.00e-13	0.692	0.489
Foreign direct investment, net inflows (% of GDP)	0.1058	0.0491	2.157	0.032
Life expectancy at birth, total (years)	0.0474	0.0369	1.283	0.200
Voice & Accountability: Percentile Rank	-0.0183	0.0230	-0.798	0.426
Control of Corruption: Percentile Rank	-0.0150	0.0241	-0.621	0.535
Government Effectiveness: Percentile Rank	0.0344	0.0301	1.143	0.254
Rule of Law: Percentile Rank	0.0141	0.0343	0.411	0.681
Group:				
One-Party – Multiparty	-0.3117	1.0966	-0.284	0.776
Dominant-Party Systems – Multiparty	0.9144	0.6762	1.352	0.177

<sup>a</sup> Represents reference level

### *Regression Analysis on Life Expectancy at Birth*

As shown in Table 5, the regression model for life expectancy at birth (total years) shows a good fit. The multiple correlation coefficient ( $R = 0.785$ ) indicates a high linear relationship between the predictors and life expectancy. The  $R^2$  value of 0.616 means that 61.6% of the variance in life expectancy is explained by the model, while the adjusted  $R^2$  (0.608) remains high, confirming that the predictors together have substantial explanatory power. The F-test ( $F = 80.4$ ,  $p < .001$ ) is highly significant, indicating that the model as a whole is a strong predictor of life expectancy.

**Table 5.** Model Fit Measures

Model	R	$R^2$	Adjusted $R^2$	Overall Model Test			
				F	df1	df2	p
1	0.785	0.616	0.608	80.4	9	452	< .001

The intercept (54.8175,  $p < .001$ ) as shown in Table 6 is highly significant, indicating that the baseline life expectancy (when all predictors are zero) is approximately 54.82 years. Voice & Accountability (estimate = 0.1362,  $p < .001$ ) and Control of Corruption (estimate = 0.1021,  $p < .001$ ) have strong positive effects on life expectancy. A 1 percentile rank increase in these governance measures is associated with an increase in life expectancy of 0.136 and 0.102 years, respectively.

Government Effectiveness (estimate = 0.1037,  $p = 0.007$ ) also has a positive and significant effect, although it is slightly weaker. The Rule of Law (estimate = -0.1141,  $p = 0.009$ ) has a negative and significant effect, which is unexpected. This could mean that in some contexts stricter law enforcement does not necessarily improve life expectancy.

Total reserves ( $p = 0.803$ ) and FDI (% of GDP,  $p = 0.134$ ) are not significant, suggesting that they do not strongly influence life expectancy in this model. GDP growth ( $p = 0.200$ ) is also insignificant, indicating that short-term economic growth does not directly predict life expectancy.

One-party (vs. multiparty) systems show a large positive effect (estimate = 14.2878,  $p < .001$ ), meaning that life expectancy is 14.29 years higher in one-party systems than in multiparty systems, holding other factors constant. This could reflect differences in health care investment, stability, or policy continuity in such regimes.

Dominant party systems (vs. multiparty) have a negative effect (estimate = -4.5138,  $p < .001$ ), indicating that life expectancy is 4.51 years lower in dominant party systems compared to multiparty systems. This may suggest that hybrid systems (neither fully authoritarian nor fully democratic) perform worse in terms of health outcomes.

**Table 6.** Model Coefficients - Life expectancy at birth, total (years)

Predictor	Estimate	SE	t	p
Intercept <sup>a</sup>	54.8175	0.7660	71.565	< .001
Total reserves (includes gold, current US\$)	1.58e-13	6.35e-13	0.250	0.803
Foreign direct investment, net inflows (% of GDP)	-0.0938	0.0625	-1.501	0.134
Voice & Accountability: Percentile Rank	0.1362	0.0285	4.771	< .001
Control of Corruption: Percentile Rank	0.1021	0.0303	3.374	< .001
Government Effectiveness: Percentile Rank	0.1037	0.0380	2.730	0.007
Rule of Law: Percentile Rank	-0.1141	0.0433	-2.633	0.009
GDP growth (annual %)	0.0766	0.0597	1.283	0.200
Group:				
One-Party – Multiparty	14.2878	1.2209	11.703	< .001
Dominant-Party Systems – Multiparty	-4.5138	0.8345	-5.409	< .001

<sup>a</sup> Represents reference level

## ANOVA

The Welch's ANOVA results in Table 7 show significant differences between multiparty, one-party, and single-party political systems for most of the variables examined. In particular, life expectancy ( $F = 411.27$ ,  $p < .001$ ) and Voice & Accountability ( $F = 213.55$ ,  $p < .001$ ) show the greatest variation, suggesting that political systems have a profound effect on health outcomes and democratic freedoms. Economic measures such as total reserves ( $F = 27.58$ ,  $p < .001$ ) and GDP ( $F = 31.92$ ,  $p < .001$ ) also differ significantly, while GDP growth ( $F = 2.29$ ,  $p = 0.104$ ) shows no meaningful variation, suggesting that short-term economic performance is less related to regime type.

**Table 7.** One-Way ANOVA (Welch's)

	F	df1	df2	p
Total reserves (includes gold, current US\$)	27.58	2	184	< .001
Foreign direct investment, net inflows (% of GDP)	4.53	2	200	0.012
Life expectancy at birth, total (years)	411.27	2	266	< .001
Voice & Accountability: Percentile Rank	213.55	2	253	< .001
Control of Corruption: Percentile Rank	5.63	2	237	0.004
Government Effectiveness: Percentile Rank	19.72	2	238	< .001
Rule of Law: Percentile Rank	17.27	2	257	< .001
GDP (current US\$)	31.92	2	184	< .001
GDP growth (annual %)	2.29	2	191	0.104

Table 8 reveal stark contrasts among political systems. One-party regimes exhibit the greatest economic capacity, with average total reserves of \$589 billion, far exceeding those of multiparty systems (\$44.8 billion) and dominant party systems (\$3.76 billion). Similarly, one-party systems have the highest levels of GDP, averaging \$2.14 trillion, reinforcing their economic dominance. However, dominant party systems attract the highest levels of FDI at 4.85 percent of GDP, possibly due to selective market liberalization despite weaker governance structures. In contrast, multiparty systems occupy a middle ground economically but tend to perform better on democratic indicators.

The most striking finding is the difference in life expectancy between political systems. One-party states have an average life expectancy of 74.6 years, significantly higher than multiparty (62.85 years) and dominant party systems (55.45 years). This suggests that centralized governance may improve public health outcomes, while dominant party systems—often hybrid regimes—struggle with health outcomes. Governance indicators further differentiate these systems: multiparty regimes score highest in Voice & Accountability (39.54 percentile), while one-party systems suppress political freedoms (5.96 percentile). Interestingly, one-party systems also outperform others in Government Effectiveness (38.36 percentile), suggesting that autocratic efficiency may come at the expense of civil liberties.

**Table 8.** Group Descriptives

	Group	N	Mean	SD	SE
Total reserves (includes gold, current US\$)	Multiparty	231	4.48e+10	1.11e+11	7.29e0+9
	One-Party	99	5.89e+11	1.19e+12	1.20e+11
	Dominant-Party Systems	132	3.76e0+9	6.65e0+9	5.79e0+8
Foreign Direct Investment, net inflows (% of GDP)	Multiparty	231	2.59	2.40	0.158
	One-Party	99	2.89	2.71	0.272
	Dominant-Party Systems	132	4.85	8.66	0.754
Life expectancy at birth, total (years)	Multiparty	231	62.85	9.26	0.609
	One-Party	99	74.60	2.59	0.260
	Dominant-Party Systems	132	55.45	8.39	0.730
Voice & Accountability: Percentile Rank	Multiparty	231	39.54	26.21	1.725
	One-Party	99	5.96	4.30	0.432
	Dominant-Party Systems	132	20.38	16.19	1.409
Control of Corruption: Percentile Rank	Multiparty	231	30.22	22.89	1.506
	One-Party	99	35.33	22.77	2.289
	Dominant-Party Systems	132	25.23	22.67	1.973
Government Effectiveness: Percentile Rank	Multiparty	231	32.64	22.70	1.494
	One-Party	99	38.36	23.70	2.382
	Dominant-Party Systems	132	22.15	18.30	1.593
Rule of Law: Percentile Rank	Multiparty	231	34.52	22.87	1.504
	One-Party	99	27.73	18.06	1.815
	Dominant-Party Systems	132	21.52	18.66	1.624
GDP (current US\$)	Multiparty	231	3.00e+11	6.43e+11	4.23e+10
	One-Party	99	2.14e+12	4.49e+12	4.51e+11
	Dominant-Party Systems	132	2.47e+10	3.04e+10	2.65e0+9
GDP growth (annual %)	Multiparty	231	4.60	3.39	0.223
	One-Party	99	5.71	4.97	0.500
	Dominant-Party Systems	132	5.27	7.50	0.653

### Assumption Checks

**Table 9.** Normality Test (Shapiro-Wilk)

	W	p
Total reserves (includes gold, current US\$)	0.487	< .001
Foreign Direct Investment, net inflows (% of GDP)	0.730	< .001
Life expectancy at birth, total (years)	0.974	< .001
Voice & Accountability: Percentile Rank	0.949	< .001
Control of Corruption: Percentile Rank	0.956	< .001
Government Effectiveness: Percentile Rank	0.952	< .001
Rule of Law: Percentile Rank	0.944	< .001
GDP (current US\$)	0.481	< .001
GDP growth (annual %)	0.750	< .001

Note. A low p-value suggests a violation of the assumption of normality

Normality tests in Table 9 confirm that all variables violate the normality assumption ( $p < .001$ ), justifying the use of Welch's ANOVA. In addition, Levene's test in Table 10 indicates heteroscedasticity for most variables ( $p < .001$ ), with the exception of Control of Corruption ( $p = 0.819$ ).

**Table 10.** Homogeneity of Variances Test (Levene's)

	F	df1	df2	p
Total reserves (includes gold, current US\$)	198.093	2	459	< .001
Foreign direct investment, net inflows (% of GDP)	44.184	2	459	< .001
Life expectancy at birth, total (years)	37.514	2	459	< .001
Voice & Accountability: Percentile Rank	74.257	2	459	< .001
Control of Corruption: Percentile Rank	0.200	2	459	0.819
Government Effectiveness: Percentile Rank	5.951	2	459	0.003
Rule of Law: Percentile Rank	6.209	2	459	0.002
GDP (current US\$)	126.669	2	459	< .001
GDP growth (annual %)	9.954	2	459	< .001

In this scenario, the choice between Tukey's and Games-Howell's post hoc tests depends on the results of the assumption checks, particularly with respect to violations of normality and homogeneity of variances. Tukey's test is usually used when the normality assumption is met and the homogeneity of variances assumption is not violated.

However, since Levene's test shows violations of homogeneity of variances for most variables, Tukey's test may not be the most appropriate choice because it assumes equal variances across groups and its results may not be reliable if this assumption is violated. On the other hand, the Games-Howell test is preferred when the homogeneity of variances assumption is violated and the normality assumption may not be strictly met. Since Levene's test indicates unequal variances for several variables and the Shapiro-Wilk test indicates violations of normality, the Games-Howell test is the better option in this case. It is more robust to both unequal variances and non-normality, making it suitable for this scenario. Therefore, given the assumption violations, Games-Howell should be used for post hoc comparisons as it is better equipped to handle these violations.

#### *Games-Howell Post-Hoc Test*

Table 11 shows that one-party systems exhibit overwhelming economic dominance on key indicators. Their average reserves exceed those of multiparty systems by approximately \$544 billion ( $p < 0.001$ ), and their GDP exceeds that of multiparty systems by \$1.84 trillion ( $p < 0.001$ ). Dominant party systems consistently rank lowest in both reserves and GDP, highlighting their relatively weak economic position compared to the other political systems.

FDI shows a clear pattern across political systems. Dominant party systems attract significantly more FDI than both multiparty systems (2.26% more,  $p = 0.011$ ) and one-party systems (1.96% more,  $p = 0.041$ ). However, there is no significant difference in FDI inflows between one-party and multiparty systems ( $p = 0.602$ ). This trend suggests that one-party regimes may take advantage of selective market liberalization or other investment incentives despite generally weaker governance frameworks.

**Table 11.** Games-Howell Post-Hoc Test Results Across All Variables

Dependent Variable	Comparison Group 1	Comparison Group 2	Mean Difference	p-value	95% CI
Total reserves (current US\$)	Multiparty	One-Party	-5.44×10 <sup>11</sup>	<0.001	(-6.82×10 <sup>11</sup> , -4.06×10 <sup>11</sup> )
	Multiparty	Dominant Party	4.11×10 <sup>10</sup>	<0.001	(2.15×10 <sup>10</sup> , 6.07×10 <sup>10</sup> )
	One-Party	Dominant Party	5.85×10 <sup>11</sup>	<0.001	(4.47×10 <sup>11</sup> , 7.23×10 <sup>11</sup> )
FDI (% of GDP)	Multiparty	One-Party	-0.303	0.602	(-1.47, 0.86)
	Multiparty	Dominant Party	-2.26	0.011	(-3.98, -0.54)
	One-Party	Dominant Party	-1.96	0.041	(-3.82, -0.10)
Life expectancy (years)	Multiparty	One-Party	-11.7	<0.001	(-13.4, -10.0)
	Multiparty	Dominant Party	7.41	<0.001	(5.71, 9.11)
	One-Party	Dominant Party	19.15	<0.001	(17.45, 20.85)
Voice & Accountability	Multiparty	One-Party	33.6	<0.001	(30.2, 37.0)
	Multiparty	Dominant Party	19.2	<0.001	(15.8, 22.6)
	One-Party	Dominant Party	-14.4	<0.001	(-17.8, -11.0)
Control of Corruption	Multiparty	One-Party	-5.11	0.152	(-12.2, 1.98)
	Multiparty	Dominant Party	5.00	0.111	(-1.21, 11.21)
	One-Party	Dominant Party	10.11	0.003	(3.90, 16.32)
Government Effectiveness	Multiparty	One-Party	-5.72	0.107	(-12.7, 1.26)
	Multiparty	Dominant Party	10.5	<0.001	(3.5, 17.5)
	One-Party	Dominant Party	16.2	<0.001	(9.2, 23.2)
Rule of Law	Multiparty	One-Party	6.79	0.012	(1.52, 12.06)
	Multiparty	Dominant Party	13.00	<0.001	(7.73, 18.27)
	One-Party	Dominant Party	6.21	0.031	(0.94, 11.48)
GDP (current US\$)	Multiparty	One-Party	-1.84×10 <sup>12</sup>	<0.001	(-2.21×10 <sup>12</sup> , -1.47×10 <sup>12</sup> )
	Multiparty	Dominant Party	2.75×10 <sup>11</sup>	<0.001	(2.08×10 <sup>11</sup> , 3.42×10 <sup>11</sup> )
	One-Party	Dominant Party	2.12×10 <sup>12</sup>	<0.001	(1.75×10 <sup>12</sup> , 2.49×10 <sup>12</sup> )
GDP growth (%)	Multiparty	One-Party	-1.11	0.111	(-2.47, 0.25)
	Multiparty	Dominant Party	-0.670	0.595	(-3.18, 1.84)
	One-Party	Dominant Party	0.435	0.857	(-2.07, 2.94)

Life expectancy data reveal stark differences between political regimes. Citizens in one-party systems live on average 11.7 years longer than those in multiparty systems ( $p < 0.001$ ) and 19.15 years longer than those in dominant-party systems ( $p < 0.001$ ). Even between multiparty and dominant party systems, the difference is substantial, with multiparty systems outperforming by 7.41 years ( $p < 0.001$ ). These results suggest that health system efficiency and public health outcomes vary significantly by political structure.

Governance measures underscore the strengths of multiparty systems in promoting democratic accountability. On the Voice &

Accountability Index, multiparty systems outperform one-party systems by 33.6 points and dominant-party systems by 19.2 points (both  $p < 0.001$ ). Dominant party systems score significantly lower on Government Effectiveness than both one-party and multiparty systems ( $p < 0.001$ ).

For Rule of Law, multiparty systems again take the lead, outperforming both other systems at the 5% significance level. However, for Control of Corruption, the only significant difference is between one-party and dominant party systems ( $p = 0.003$ ), with multiparty systems showing no significant advantage in this dimension.

Interestingly, GDP growth rates do not differ significantly across political systems, with all comparisons yielding p-values greater than 0.05. In addition, some governance indicators show only marginal or insignificant differences across systems, suggesting that certain dimensions of institutional quality may not be closely linked to political structure.

In a nutshell, each political system has distinct advantages and limitations. One-party regimes dominate in economic indicators and health outcomes but do so with significant restrictions on political freedoms. Multiparty systems offer a more balanced profile, combining moderate economic performance with strong governance and democratic accountability. In contrast, one-party systems generally underperform on most measures, despite their surprising ability to attract higher levels of FDI.

## Discussion

This study examines economic, health, and governance indicators in a diverse group of countries—Angola, China, Costa Rica, Cuba, Ghana, India, Indonesia, Kenya, Malawi, Mozambique, Rwanda, Tanzania, Vietnam, and Zambia—and finds patterns both consistent with and divergent from existing academic literature. The results reveal significant cross-country variation, reflecting the complex

interdependence among economic performance, governance quality, and health outcomes.

Descriptive statistics revealed marked differences in economic indicators. China led the way with an average of \$1.74 trillion in total reserves, in sharp contrast to Cuba, which reported zero reserves, and Malawi, which held only \$280 million, indicating wide variations in macroeconomic stability. Mozambique recorded the highest FDI inflows at 11.63% of GDP, while both Cuba and Malawi attracted minimal foreign investment. These patterns support Yangailo's (2024) observation that FDI tends to be concentrated in resource-rich economies, although its developmental impact is often limited in countries with weak institutional frameworks.

Regression results on GDP growth yielded a model with low explanatory power (adjusted  $R^2 = 0.0232$ ,  $p = 0.020$ ), identifying FDI as the only statistically significant predictor ( $\beta = 0.106$ ,  $p = 0.032$ ). This suggests that while FDI makes a modest contribution to growth, other unaccounted factors—such as the domestic policy environment and global economic dynamics—play a more dominant role. These findings echo the conclusions of Ndlovu & Haabazoka (2024), who argue that the growth effects of FDI are limited in the absence of strong institutional support.

Health outcomes varied considerably across the sample. Costa Rica had the highest life expectancy (78.54 years), while Angola and Mozambique had the lowest (around 54 years). The regression model for life expectancy had substantial explanatory power (adjusted  $R^2 = 0.608$ ,  $p < 0.001$ ), with Government Effectiveness ( $\beta = 0.104$ ,  $p = 0.007$ ), and Control of Corruption ( $\beta = 0.102$ ,  $p < 0.001$ ) emerging as significant predictors. These findings provide empirical support for Biyase & Malesa (2019), who highlighted the role of good governance in translating economic gains into improved health outcomes.

Interestingly, political regime type was a significant determinant of life expectancy. One-party states had significantly higher life expectancy (+14.29 years,  $p < 0.001$ ) compared to multiparty systems, while dominant party regimes underperformed (-4.51 years,  $p < 0.001$ ). These results suggest that centralized government structures may facilitate more effective healthcare, but this interpretation requires caution. Superior health outcomes in one-party systems likely reflect specific institutional features, such as bureaucratic continuity, long-term planning capacity, and sustained health investment. These factors could theoretically be achieved in other regime types with sufficient institutional strength.

The quality of governance varied widely. Costa Rica led in Voice & Accountability (61.74th percentile), while China and Cuba ranked among the lowest (~5th percentile), indicating restricted civic space and limited political freedoms. Rwanda and Costa Rica also performed well in Control of Corruption and Government Effectiveness, while Angola and Kenya had weaker governance indicators. These patterns are consistent with Nicholson et al. (2018), who argue that democratic governance increases institutional legitimacy and public trust.

ANOVA results revealed significant differences between political regimes. One-party systems (e.g., China) had higher total reserves (\$589 billion vs. \$44.8 billion in multiparty systems,  $p < 0.001$ ) and GDP (\$2.14 trillion vs. \$300 billion,  $p < 0.001$ ). In contrast, multiparty systems scored higher on Voice & Accountability (39.54 vs. 5.96 per cent,  $p < 0.001$ ) and Rule of Law, supporting Fagbemi et al.'s (2021) contention that democratization promotes transparency and accountability in governance.

The results highlight a fundamental trade-off that reflects broader theoretical debates in political economy. One-party systems exhibit characteristics that align with state-led development theory. They achieve superior economic and health performance through centralized planning and policy coherence. However, this comes at the expense of

political freedoms and democratic accountability. Conversely, multiparty systems validate democratic theory by enhancing institutional legitimacy and transparency, though they may sacrifice some efficiency for accountability. Hybrid or competitive authoritarian systems, represented by dominant-party regimes, perform poorly on most indicators, illustrating the institutional ambiguity that undermines the efficiency of authoritarian systems and the legitimacy of democratic ones.

These findings support Banik et al. (2023), who argue that sustainable development goes beyond economic growth alone and requires robust governance institutions. Accordingly, policymakers should prioritize institutional reforms—in particular, improving anti-corruption mechanisms and bureaucratic efficiency—rather than focusing narrowly on foreign investment or growth targets. The long-term dividends of good governance far outweigh the short-lived benefits of authoritarian stability or unregulated capital inflows.

This study underscores the multidimensional nature of development in the Global South, shaped by the intersecting dynamics of economic performance, governance quality, and health outcomes. While one-party systems may deliver economic and health dividends, multiparty systems uphold the values of transparency and accountability. The overarching conclusion is that institutional quality is fundamental—without it, neither economic growth nor political liberalization can ensure sustainable development. Future research should examine the specific mechanisms through which governance affects development, particularly in single-party systems, which appear to be the most fragile across indicators.

## **Theoretical and Practical Implications and Recommendations**

This study provides critical insights into how different political systems—one-party, multiparty, and dominant party regimes—shape economic, governance, and health outcomes. It integrates theoretical

perspectives with real-world performance data and offers actionable recommendations tailored to each system. While no regime type is inherently superior across all dimensions, each has distinctive advantages and vulnerabilities. By unpacking these characteristics, this section offers pathways for system-specific reform and highlights cross-cutting lessons to support sustainable development.

## One-Party Systems

### *Theoretical Implications*

The results challenge conventional democratic development theory by showing that one-party systems can outperform in key areas, particularly economic growth and public health outcomes. Centralized authority allows for efficient resource mobilization, coordinated long-term planning, and policy coherence without the delays often associated with electoral competition. These findings support the argument that state-led development models can be effective, especially in rapidly transforming economies. However, this efficiency comes at the cost of political freedoms and civic participation, raising long-term questions about legitimacy, adaptability, and renewal of the social contract.

### *Practical Implications*

One-party systems, as evidenced by China's robust reserves of \$1.74 trillion and average GDP growth of 8.95%, demonstrate strong capacity in economic management and public service delivery. Their centralized health systems also contribute to commendable health indicators, such as a life expectancy of 74.6 years. However, these strengths are offset by governance weaknesses, including low Voice & Accountability scores (e.g., 5.96 per cent), increased corruption risks due to limited checks and balances, and potential stagnation in innovation due to suppressed civic space and intellectual freedom.

### *Recommendations*

To ensure lasting legitimacy and avoid institutional stagnation, one-party regimes should institutionalize accountability mechanisms, such as independent audit bodies and robust anti-corruption agencies. Carefully expanding civic space—through participatory budgeting, citizen advisory councils, and localized forums—can provide controlled avenues for citizen input without undermining political stability. In addition, reducing state monopolies in non-strategic sectors could encourage private-sector innovation and FDI diversification. Investment in human capital, especially in education, digital literacy, and R&D, will be critical to the transition to a knowledge-based economy and to maintaining long-term competitiveness.

## **Multiparty Systems**

### *Theoretical Implications*

Multiparty systems validate core tenets of democratic theory by promoting institutional legitimacy, government accountability, and civic participation. These systems consistently score higher on governance indicators such as Voice & Accountability (39.54 percentile) and Rule of Law (34.52 percentile), reflecting broader participation and institutional checks and balances. However, the analysis also highlights a trade-off: despite their strengths in governance and public legitimacy, multiparty democracies often lag behind one-party states in terms of GDP growth and health service efficiency. This reveals an underlying tension between democratic competition and administrative coherence.

### *Practical Implications*

The benefits of pluralistic governance—such as policy inclusiveness and reduced elite capture—are often offset by practical challenges, including policy inconsistency due to frequent electoral turnover,

sluggish implementation of long-term strategies, and moderate FDI inflows. These weaknesses can impede development and create governance volatility, particularly in fragmented political landscapes or coalition governments.

### *Recommendations*

To mitigate these challenges, multiparty systems should institutionalize national development pacts that ensure policy continuity across electoral cycles. Coalition governance can be strengthened through technical assistance aimed at improving legislative cooperation and coalition-building mechanisms. Public administration reform is essential, particularly in depoliticizing civil service recruitment and improving bureaucratic efficiency through merit-based systems. In addition, streamlining FDI approval procedures and establishing special economic zones can help attract and retain high quality foreign investment without compromising regulatory oversight.

## **Dominant-Party Systems**

### *Theoretical Implications*

Dominant-party systems occupy a hybrid position between authoritarianism and democracy. This study finds that they underperform on both governance and development metrics, supporting the theory that institutional ambiguity weakens both the efficiency typical of authoritarian regimes and the legitimacy of democratic systems. While these regimes attract higher levels of foreign direct investment (4.85% of GDP), they perform poorly in controlling corruption (25.23 percentile) and have lower average life expectancy (55.45 years), suggesting systemic weaknesses in service delivery and equitable development.

## Practical Implications

Although dominant-party regimes benefit from greater political stability than fragmented democracies, they are prone to elite capture, weak opposition, and policy stagnation. The lack of robust political competition often undermines public trust and discourages innovation in governance. Over time, the erosion of institutional independence and political pluralism can degrade development outcomes and reduce responsiveness to citizen needs.

### *Recommendations*

To address these structural issues, dominant-party systems should reform electoral frameworks to ensure fair competition and reduce incumbent advantages. Strengthening independent institutions such as anti-corruption commissions, electoral bodies, and the judiciary must enhance political credibility and administrative fairness. Inclusive governance can be fostered through mechanisms like citizen assemblies, participatory budgeting at local levels, and multi-stakeholder dialogues, which open space for diverse policy input. Economically, these regimes should diversify their production base, reduce overreliance on extractive industries and encourage investment in manufacturing and technology to ensure resilience in the face of commodity price shocks.

## Cross-Cutting Recommendations for All Systems

While regime types differ in structure and ideology, common lessons emerge that can be applied across all contexts. All systems must align governance reforms with development goals such as those outlined in the Sustainable Development Goals (SDGs). For example, anti-corruption efforts, civil service improvements, and judicial independence should directly contribute to better outcomes in health, education, and infrastructure.

Investing in data-driven policymaking is essential. National statistical systems must be strengthened to provide accurate, timely, and disaggregated data that support evidence-based decision-making and enable governments to monitor performance effectively. Regional peer learning should also be promoted through platforms like the African Union or ASEAN, enabling countries to exchange insights on best practices in areas such as healthcare delivery, FDI attraction, and anti-corruption initiatives.

Finally, all regimes must strive to balance short-term growth with long-term stability. Over-reliance on extractive industries or debt-financed infrastructure may yield temporary gains but threatens fiscal and institutional resilience. Instead, durable development requires investment in human capital, sound institutions, and inclusive governance mechanisms that adapt to changing societal needs.

## Summary

No political system is universally superior, each carries distinct trade-offs between efficiency, accountability, and inclusivity. However, targeted reforms can harness the strengths and mitigate the weaknesses of each regime type. One-party systems can maintain economic momentum while cautiously expanding civic engagement. Multiparty democracies should focus on enhancing policy coherence, administrative professionalism, and stability. Dominant-party regimes must clarify the rules of political competition and strengthen institutional independence to avoid stagnation.

Ultimately, the key to sustainable development lies not in regime type alone, but in the quality of institutions, the inclusiveness of governance, and the adaptability of policy frameworks. Policymakers must contextualize reform strategies to reflect national realities while drawing from global lessons to build more resilient, responsive, and equitable systems.

## Limitations and Future Research Directions

This study has several limitations that warrant consideration. First, although the analysis identifies associations, the observational design prevents definitive conclusions about how political regimes directly influence development outcomes. Second, although necessary for comparative analysis, the regime categorization simplifies complex political realities, and variations exist within each category. For example, there are differences between India's vibrant federal democracy and Malawi's more fragile multiparty system. Third, the analysis may be subject to omitting variable bias because historical, cultural, and geographic factors not included in the models could influence both regime persistence and development outcomes. Fourth, reliance on World Bank governance indicators captures perceptions rather than objective realities of governance quality.

Future research should address these limitations by taking a mixed-methods approach that combines quantitative analysis with in-depth case studies to uncover causal mechanisms. Longitudinal designs could better capture how regime transitions affect development trajectories. Research should also explore how variations in subnational governance within different regime types influence local development outcomes. Finally, more nuanced regime typologies that account for degrees of authoritarianism and democratic quality would provide richer analytical insights.

## Conclusion

This study presents a comparative analysis of how governance and political regimes affect economic and health outcomes in a diverse set of emerging and developing countries. By examining the interdependencies among GDP growth, life expectancy, and governance indicators in one-party, multiparty, and dominant party systems, the research confirms that the quality of governance is a key

determinant of development trajectories. One-party regimes demonstrate the capacity for rapid economic gains and health improvements, but often at the expense of civil liberties and long-term adaptability. Multiparty systems maintain participatory governance and transparency, but struggle with inconsistent policy implementation and slower economic transitions. Dominant party regimes, while politically stable and attractive to foreign investors, face entrenched governance challenges that impede sustainable development.

The findings emphasize that effective development policy cannot rely solely on economic expansion or regime type. Rather, it must prioritize institution building, accountability, and citizen participation. Importantly, institutional reforms do not require regime change; improvements in bureaucratic effectiveness, anti-corruption enforcement, and service delivery can be achieved within existing political structures. This offers development practitioners a more pragmatic pathway than calls for fundamental political transformation, particularly in contexts where such transformation is politically unrealistic. Recommendations that cut across different areas, such as strengthening independent institutions, fostering regional peer learning, and investing in data-driven policymaking, are essential to addressing governance deficits and improving development outcomes.

## **Ethical Statement and Declaration**

This study uses only publicly available, aggregated data from the World Bank database. Since no human subjects were involved, no ethical approval was required. The author declares no conflicts of interest. AI-assisted tools were used for grammar checking and language polishing in the preparation of this manuscript, but the conceptualization, research design, data analysis, interpretation, and scholarly argumentation are the original work of the author. All sources are properly cited, and the research adheres to academic integrity standards.

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