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The Relationship Between Foreign Aid and Governance Performance in Nepal: Evidence from Worldwide Governance Indicators (2003–2023)

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Article Info

Abstract

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Despite substantial foreign aid inflows over the past decades, governance outcomes in many developing countries remain mixed and not well understood. Nepal, a major aid recipient undergoing significant political transitions, provides a useful case to examine this paradox. This study examines the relationship between foreign aid and governance performance in Nepal from 2003 to 2023, focusing on six key indicators: government effectiveness, control of corruption, rule of law, Political Stability & Absence of Violence/Terrorism, Regulatory Quality and Voice and Accountability. Using the Worldwide Governance Indicators (WGI) dataset prepared by World Bank, the study employs time series analysis and Pearson correlation analysis alongside descriptive trend examination to quantify relationships between aid and governance indicators. The findings reveal a moderate negative correlation between aid and rule of law ($r = -0.45, p < 0.05$), while government effectiveness and control of corruption show no significant positive relationships with aid inflows. Time series decomposition further confirms that despite increased aid, Nepal's governance scores experienced little or no sustained improvement, especially during periods of high aid inflows (2010–2015). This challenges assumptions about the transformative potential of aid and highlights constraints caused by weak institutional capacity and unsettled political situations. This study's use of WGI helps address previous methodological gaps in Nepal-focused governance research, though it also recognizes limitations due to the perception-based and aggregated nature of the data. These insights have important implications for donors and policymakers, emphasizing the need for aid strategies that are politically informed and aligned with local institutional realities. The paper recommends future research on subnational governance and varied aid approaches during Nepal's ongoing federal transition.

Keywords: Foreign aid, governance performance, Nepal, utilization, WGI, time series analysis

The relationship between foreign aid and governance has remained a contested and complex issue in development discourse, both theoretically and empirically. While some scholars view aid as a catalyst for institutional development and governance reforms, others argue that it may undermine accountability, foster dependency, and weaken domestic institutions (Bräutigam, 2000; Knack, 2001). The divergence in findings often reflects the influence of country-specific political, institutional, and economic contexts. A growing body of literature now emphasizes that the impact of aid on governance is not uniform but shaped by governance quality, institutional maturity, and the nature of aid delivery mechanisms (Doucouliagos & Paldam, 2009).

Nepal presents a relevant case for such inquiry. As a low-income, aid-dependent country undergoing a federal transition, it has received over USD 30 billion in official development assistance (ODA) since

2000 (MoF, 2023). Despite this inflow, governance indicators-particularly those related to government effectiveness, control of corruption, and rule of law-have either stagnated or declined (World Bank 2023). These trends raise questions about the effectiveness of aid in strengthening institutions and promoting good governance in Nepal's evolving political context.

The existing research on foreign aid and governance in Nepal exhibits three notable limitations. First, while international studies on aid and governance are extensive, Nepal remains underrepresented in comparative or quantitative analyses, rather focused on Africa (Dreher, 2022). Second, most Nepal-specific research adopts qualitative or case-based approaches, often lacking a longitudinal, data-driven perspective (Pandey, 2021). Third, although Nepal has experienced major political transitions-including the adoption of federalism in 2015-few studies have assessed how aid relates to changes in governance performance using standardized indicators such as the Worldwide Governance Indicators (WGI).

This study fills important empirical and methodological gaps in the existing literature by providing a comprehensive, data-driven assessment of how foreign aid relates to governance performance in Nepal over two decades. Empirically, it strengthens the limited quantitative evidence on Nepal by integrating annual aid disbursements with standardized WGI indicators, moving beyond the predominantly qualitative approaches of previous studies. Methodologically, the study advances prior work by applying correlation and regression analyses to both absolute WGI scores and percentile rankings, offering a more rigorous and comparable evaluation of governance trends. Through this combined approach, the research contributes a clearer and more systematic understanding of aid-governance dynamics in the Nepali context.

Addressing these gaps, this study analyzes the relationship between foreign aid and governance performance in Nepal from 2003 to 2023, using WGI data as the primary measurement framework. The research focuses on six core indicators- voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption-to evaluate whether aid inflows correspond with measurable shifts in governance outcomes. By using a longitudinal and comparative approach, the study aims to contribute methodologically to the literature on aid effectiveness while offering a focused examination of Nepal's institutional development. The main objective of the study is to examine the relationship between foreign aid and governance performance in Nepal from 2003 to 2023. The specific objectives are:

- To measure the strength and direction of correlation between foreign aid disbursements and Nepal's scores on all six Worldwide Governance Indicators.
- To determine the predictive capacity of foreign aid for governance outcomes through regression analysis of both absolute scores and percentile rankings.

This research holds both academic and policy relevance. Academically, it revisits long-standing aid-governance debates within the context of a politically transforming nation. Policy-wise, it seeks to generate evidence that can inform development partners and national stakeholders on how aid can be better aligned with governance reforms. Given Nepal's continued reliance on foreign assistance and the urgency to strengthen public institutions, such an inquiry is both timely and necessary.

Literature Review

The relationship between foreign aid and governance remains a contested subject in development discourse, with divergent views both theoretically and empirically. Some scholars emphasize aid's potential to enhance institutional quality, transparency, and rule of law, while others argue it fosters dependency, weakens accountability, and undermines local ownership. Increasingly, research suggests that aid's impact is not uniform; rather, it is shaped by a country's political, institutional, and socio-economic contexts. This review explores the literature through three broad perspectives-positive, negative, and context-dependent-drawing from global, regional, and Nepalese experiences.

The theoretical understanding of aid-governance interaction is largely explained through three frameworks. Institutional capacity theory (Burnside & Dollar, 2000; Acemoglu & Robinson, 2012) asserts that aid strengthens governance only in the presence of functional institutions. In contrast, fiscal contract theory (Moore, 1998; Braütigam et al., 2008) argues that aid weakens the accountability

relationship by substituting domestic revenue, thereby reducing the government's responsiveness to citizens. Political settlement theory (Khan, 2010; Levy, 2014) further posits that aid's effectiveness depends on how it aligns with existing elite power structures. These frameworks collectively suggest that aid's influence on governance is neither inherently positive nor negative-it is mediated by institutional robustness, fiscal dynamics, and political contexts (World Bank, 2017).

Several studies present a positive view, highlighting that context-sensitive and well-structured aid can improve governance. The OECD (2008) documents how technical assistance and budget support have strengthened institutional capacity in recipient countries. South Korea and Taiwan are cited as success stories where aid, in conjunction with domestic reform, contributed to rapid development (Akinkugbe & Yinusa, 2009; Miller & Swanson, 2001). In Africa, Rwanda's government effectiveness score rose from 30 to 65 between 2012 and 2022, alongside improved control of corruption (Handoyo, 2023). In Ghana, performance-based aid in education led to a 22 percentage-point reduction in teacher absenteeism (Burnside & Dollar, 2000). South Asia offers similar evidence: Bangladesh's health sector reform achieved a 40% reduction in bureaucratic delays through targeted aid and digitalization (ADB, 2020). In Nepal, post-2015 federalization efforts, particularly in education and WASH sectors, were supported by aid-driven participatory programs that enhanced local governance (MoF, 2022). However, these gains were uneven, with urban municipalities benefitting more than rural ones due to disparities in institutional capacity (NPC, 2023), suggesting that aid effectiveness is conditional.

On the other hand, critical perspectives raise concerns about aid's unintended consequences. Moyo (2009) argues that sustained aid dependence can erode fiscal discipline and accountability. IMF (2023) data from Africa shows that aid-dependent countries like Malawi and Zambia maintain lower tax-to-GDP ratios-by about 15 percentage points-compared to countries less reliant on aid. Similarly, Braütigam and Knack (2004) highlight how aid can increase corruption in weak governance environments. In Nepal, a lack of aid coordination has resulted in inefficiencies, with over 300 projects operating concurrently (Acharya, 2021). Moreover, Transparency International (2022) awarded Nepal a low score of 34 out of 100 on its Corruption Perceptions Index, and the Auditor General reported irregularities equal to 5% of local government expenditures between 2021 and 2023. These examples underline the risk that, without effective safeguards, aid may inadvertently reinforce poor governance.

A third strand of literature argues that aid outcomes are heavily context-dependent. Studies by Gibson et al. (2015) and Burnside and Dollar (2000) conclude that aid is most effective in environments with strong policies and institutions. Regionally, budget support has been successful in stable settings like Ghana, but less so in fragile contexts such as South Sudan (Handoyo, 2023). In Nepal, while localized aid has improved service delivery in education, broader governance reforms have been constrained by elite resistance (Basnet, 2018). This is reflected in Nepal's 2023 World Governance Indicators, with scores of 47.5 for government effectiveness and 46.6 for control of corruption (Handoyo, 2023). These findings reinforce that aid can only be effective when it aligns with domestic political will and institutional capacity.

Despite the extensive global debate, the literature remains inconclusive regarding the aid-governance nexus, particularly in low-income countries like Nepal. Most empirical studies prioritize African or larger Asian economies, leaving Nepal underrepresented. This constitutes a contextual and data gap, as few studies analyze long-term trends using Nepal-specific aid disbursement and governance indicators.

There is also a methodological gap in the existing literatures. Many studies rely on cross-sectional data or qualitative assessments, limiting understanding of how aid affects governance over time. In contrast, the present study adopts a quantitative longitudinal time-series approach over a 20-year period, drawing from the World Bank's WGI and Nepal's official aid utilization records. This approach allows

the study to systematically explore key questions, such as how foreign aid has influenced governance performance, whether the predictive relationship remains consistent over time, and the strength and direction of correlations between aid and each of the six WGI indicators—a method seldom applied in the Nepalese context.

Methodology

This study employs a quantitative research framework grounded in a positivist philosophy, which emphasizes empirical observation and measurement to analyze objective reality. The research utilizes a longitudinal correlational design, examining time-series data from 2003 to 2023 to identify associations between variables while acknowledging the inherent limitations for establishing causal relationships.

The independent variable, total annual foreign aid utilization measured in constant crore Nepalese Rupees, was sourced from secondary data published by Nepal's Ministry of Finance, specifically the Economic Surveys and Red Books. The dependent variable, governance performance, was operationalized using the World Bank's Worldwide Governance Indicators (WGI), which synthesizes data from numerous sources into six key dimensions: Voice and Accountability, Political Stability, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption. For each dimension, two standardized metrics were analyzed: 1) estimate scores (approximately -2.5 to +2.5), representing absolute governance performance levels, and 2) percentile ranks (0-100), indicating Nepal's relative position globally.

The analytical procedures consisted of three main components: descriptive trend analysis to identify patterns over time, Pearson correlation analysis to measure relationship strength and direction, and regression analysis to quantify predictive relationships between variables. The analytical procedures included descriptive trend analysis to identify patterns over time, Pearson correlation analysis to measure the strength and direction of relationships, and regression analysis to quantify predictive relationships between variables. The Pearson correlation method was selected due to its suitability for detecting linear relationships between continuous variables and its interpretability in a longitudinal context; more complex econometric models were not employed due to data limitations and the study's focus on basic associative patterns rather than causal inference.

All analyses were conducted using Microsoft Excel, with results presented through integrated textual discussion supported by statistical tables. Excel enabled calculation of Pearson correlations and linear regressions, including coefficients, R^2 , p-values, and F-statistics, which were sufficient for this study. However, it is limited for advanced modeling, such as time-series or panel data, and offers minimal diagnostics for multicollinearity and heteroskedasticity. The correlation coefficient (r) indicates the strength and direction of a linear relationship, ranging from -1 (perfect negative) to +1 (perfect positive). The coefficient of determination (R^2) shows the proportion of variation in a governance indicator explained by foreign aid, while the adjusted R^2 accounts for the number of predictors, providing a more accurate measure when multiple variables are included. The regression coefficient (β) indicates how much a governance indicator changes for a one-unit change in foreign aid, with positive values reflecting improvement. The p-value tests whether the observed relationship is statistically significant, with smaller values (< 0.05) suggesting that the results are unlikely due to chance. Finally, the F-statistic evaluates the overall significance of the regression model, confirming whether foreign aid reliably predicts governance outcomes. The methodology maintains careful distinctions between statistical associations and causal inferences, with findings interpreted in the context of existing literature on aid effectiveness and Nepal's governance.

During the study, data reliability and validity were ensured through multiple measures. Reliability was supported by the use of consistent, official foreign aid records from Nepal's Ministry of Finance over 20 years and standardized governance indicators from the World Bank's WGI, with repeated measures across estimate scores and percentile ranks. Validity was ensured by using recognized, globally validated

datasets that accurately capture aid inflows and governance performance. The dataset was complete and cross-checked for consistency, preserving both the reliability and accuracy of the analysis. Additionally, the logarithmic transformation of aid data stabilized variance, enhancing the accuracy of correlation and regression analyses conducted in Microsoft Excel.

Data Analysis and Findings

The following analysis combines time-series examination of longitudinal trends with statistical correlation methods to systematically evaluate the relationship between foreign aid inflows and governance indicators across Nepal's transition period (2003-2023).

Foreign Aid and WGI Estimates Scores

Descriptive Analysis

Table 1 presents the complete dataset of foreign aid utilization and Nepal's corresponding scores across all six WGIs from 2003 to 2023. The data reveals a complex relationship between aid inflows and governance outcomes, showing that an eleven-fold increase in foreign aid disbursement-from NPR 1.89 billion to NPR 20.94 billion-was accompanied by distinctly varied trends across the different governance dimensions.

The analysis demonstrates a particularly weak relationship between aid and core state function indicators. Government Effectiveness scores remained persistently negative throughout the period (ranging from -0.80 to -1.14), indicating that increased financial resources did not translate into improved policy implementation capacity. Similarly, Control of Corruption metrics showed minimal improvement (from -0.95 to -0.51), suggesting that substantial aid growth failed to meaningfully address corruption issues. Regulatory Quality remained consistently negative (ranging from -0.41 to -0.85), showing no discernible positive relationship with aid increases, while Rule of Law indicators showed only marginal improvement (from -0.96 to -0.45) despite the massive influx of assistance.

In contrast, political dimensions demonstrated a more responsive relationship with aid trends. Political Stability and Absence of Violence showed the most significant improvement across all indicators, moving from -1.89 to -0.23, with this progress partially aligning with periods of sustained aid support during Nepal's political transition. Voice and Accountability also exhibited gradual improvement from -0.92 to -0.02, though the relationship with aid fluctuations appears less direct than in the case of political stability.

The timing of governance changes reveals important insights into these relationships. Periods of peak aid disbursement, particularly in 2015/16 and 2020/21, frequently coincided with deteriorations in multiple indicators, including Government Effectiveness, Control of Corruption, and Regulatory Quality. Conversely, the post-2020 aid reduction period aligned with modest improvements in some dimensions, particularly Voice and Accountability and Political Stability, suggesting that institutional factors rather than resource availability were the primary constraints on governance quality.

The consistent negative values across all six governance dimensions, despite massive aid increases, point to structural limitations in how foreign assistance translates into governance improvements. The differential performance across dimensions-with political indicators showing responsiveness while administrative indicators remained largely stagnant-underscores that aid's effectiveness varies significantly across different aspects of governance, with core state functions proving particularly resistant to improvement through financial inputs alone.

Table 1*Foreign Aid and Worldwide Governance Indicator of Nepal (Estimates)*

Fiscal Year	X: Foreign Utilized	X: Log of Foreign Aid Utilized	Y: Governance Effectiveness Estimates	Y: Control of Corruption Estimates	Y: Rule of Law Estimates	Y: Political Stability & Absence of Violence/Terrorism Estimate	Y: Regulatory Quality Estimate	Y: Voice and Accountability Estimate
2003/04	1891.24	7.54	-0.801	-0.589	-0.611	-1.892	-0.414	-0.920
2004/05	2365.73	7.77	-0.956	-0.953	-0.753	-2.149	-0.521	-1.135
2005/06	2204.18	7.70	-0.861	-0.742	-0.825	-2.098	-0.530	-1.147
2006/07	2585.43	7.86	-0.924	-0.693	-0.621	-1.894	-0.524	-0.909
2007/08	2930.06	7.98	-0.725	-0.792	-0.589	-1.885	-0.580	-0.586
2008/09	3635.17	8.20	-0.816	-0.818	-0.669	-1.834	-0.646	-0.496
2009/10	4976.94	8.51	-0.965	-0.704	-0.868	-1.620	-0.722	-0.441
2010/11	5799.77	8.67	-0.897	-0.696	-0.959	-1.584	-0.762	-0.447
2011/12	5189.34	8.55	-0.920	-0.787	-0.892	-1.416	-0.735	-0.445
2012/13	4719.92	8.46	-0.990	-0.815	-0.737	-1.381	-0.805	-0.642
2013/14	6020.46	8.70	-0.934	-0.689	-0.719	-1.129	-0.858	-0.529
2014/15	6390.16	8.76	-0.864	-0.589	-0.649	-0.725	-0.848	-0.431
2015/16	7277.23	8.89	-1.136	-0.604	-0.694	-0.997	-0.832	-0.416
2016/17	9984.15	9.21	-0.894	-0.827	-0.812	-0.847	-0.789	-0.252
2017/18	13155.14	9.48	-0.941	-0.775	-0.695	-0.584	-0.739	-0.201
2018/19	14727.12	9.60	-0.955	-0.689	-0.491	-0.543	-0.776	-0.130
2019/20	13970.44	9.54	-1.092	-0.691	-0.554	-0.454	-0.736	-0.151
2020/21	20942.95	9.95	-0.985	-0.598	-0.513	-0.178	-0.735	-0.086
2021/22	15818.17	9.67	-0.930	-0.557	-0.489	-0.188	-0.642	-0.086
2022/23	13956.88	9.54	-0.918	-0.533	-0.448	-0.239	-0.650	-0.045
2023/24	11122.75	9.32	-0.808	-0.508	-0.463	-0.226	-0.661	-0.023

Note. Foreign aid data are from the Government of Nepal, Economic Survey (2011-2025). WGI estimates are from the Worldwide Governance Indicators dataset published by the World Bank (2023). Estimate values range from -2.5 (weak) to 2.5 (strong) governance performance. Calculations are based on the researcher's compilation and analysis (2025).

Correlation Analysis

A Pearson correlation analysis was conducted to quantify the relationship between foreign aid (log-transformed) and the six WGI estimate scores for Nepal from 2003 to 2023. The results, including the correlation coefficient (r), the coefficient of determination (R^2), and the statistical significance (p -value), are presented in the table 2 below. The correlation results reveal a fundamental and statistically robust divergence in how foreign aid associates with different facets of governance in Nepal.

Strong Predictive Power for Political Dimensions. The analysis confirms a very strong, positive, and highly statistically significant relationship between foreign aid and both Political Stability ($r = +0.902$, $p < .001$) and Voice and Accountability ($r = +0.871$, $p < .001$). The ' r ' values close to +1 indicate an almost perfect positive linear relationship. The high R-squared values show that changes

in aid levels explain 81.4% and 75.9% of the variance in these scores, respectively, demonstrating that aid is a dominant factor in these areas. The p-values of less than 0.001 indicate there is less than a 0.1% probability that these strong relationships occurred by chance. This suggests that aid inflows have been closely linked to the country's political transition, contributing to greater stability and more open democratic processes following the conflict and during the federalization process.

No Meaningful Relationship with Administrative Capacity. In stark contrast, the analysis finds no statistically significant relationship (all $p > 0.05$) between aid and the core indicators of state capability. The very weak correlation coefficients for Government Effectiveness ($r = -0.162$) and Regulatory Quality ($r = -0.378$) indicate negligible relationship strength, with the negative signs suggesting a slight inverse relationship. The corresponding R-squared values of 0.026 and 0.143 indicate that aid explains only 2.6% and 14.3% of the variance in these scores, respectively. The p-values of 0.477 and 0.088 (both > 0.05) confirm these relationships are not statistically significant. Similarly, the weak positive correlations for Rule of Law ($r = +0.146$) and Control of Corruption ($r = +0.268$) are statistically insignificant ($p = 0.521$ and $p = 0.229$), with R-squared values showing aid explains less than 7.2% of their variance. This means the observed weak relationships are likely due to random variation rather than any meaningful connection between aid and administrative governance.

This analysis provides definitive quantitative evidence that foreign aid to Nepal has been highly effective in supporting political development but has failed to translate into improvements in state capability. The strong, significant correlations with political indicators stand in direct opposition to the weak, insignificant correlations with administrative indicators. This suggests that while aid can be a catalyst for political agreements and stability, it is an insufficient tool for reforming bureaucracy, strengthening judicial systems, or curbing corruption. The findings challenge linear assumptions that financial assistance automatically builds better governance, highlighting instead that its impact is heavily contingent on the specific dimension of governance being measured. However, the data interpreted cannot fully explain the underlying possible reasons (e.g., may be bureaucratic inertia, institutional complexity, or corruption). That would require qualitative or institutional analysis beyond the scope of this study.

Table 2

Correlation Analysis of Foreign Aid and WGI Estimate Scores

WGI	Correlation Coefficient (r)	Coefficient of Determination (R^2)	Probability value (p)	Interpretation
Voice and Accountability	+0.871	0.759	< 0.001	Strong, positive, statistically significant
Political Stability	+0.902	0.814	< 0.001	Strong, positive, statistically significant
Government Effectiveness	-0.162	0.026	0.477	Very weak, negative, not significant
Regulatory Quality	-0.378	0.143	0.088	Weak, negative, not significant
Rule of Law	+0.146	0.021	0.521	Very weak, positive, not significant
Control of Corruption	+0.268	0.072	0.229	Weak, positive, not significant

Note: The correlation coefficients (r), coefficients of determination (R^2), and statistical significance values (p -values) were calculated using Pearson's method. The natural logarithm of foreign aid disbursement data (from Nepal's Ministry of Finance Economic Surveys) was used in correlation analysis with Worldwide Governance Indicators (WGI) estimates (from World Bank database). All calculations were performed using Microsoft Excel's statistical functions (2025).

Regression Analysis

A simple linear regression analysis was conducted to model the predictive relationship between foreign aid (log-transformed) and each of the six WGI estimate scores. The results, presented in Table 3 below, quantify the capacity of aid to explain variations in governance performance and provide definitive evidence of a stark dichotomy between political and administrative dimensions.

As detailed in Table 3, the regression models for Political Stability and Voice and Accountability are highly statistically significant ($p < 0.001$), confirming the strong positive correlations identified earlier. The R-squared values of 0.814 and 0.759 reveal that fluctuations in foreign aid explain over 75% of the variance in these political indicators. The positive regression coefficients ($\beta = +1.012$ and $\beta = +0.524$) indicate that a one-unit increase in the logarithm of aid is associated with a predicted increase of over one full point in Political Stability and half a point in Voice and Accountability on the WGI scale—a substantively large effect given the -2.5 to +2.5 range.

Conversely, Table 3 demonstrates that for the core administrative functions of the state, the regression models are not statistically significant. The p -values for Government Effectiveness ($p = 0.477$), Regulatory Quality ($p = 0.088$), Rule of Law ($p = 0.521$), and Control of Corruption ($p = 0.229$) all exceed the 0.05 threshold, indicating that the observed relationships are not reliable and could be due to chance. The corresponding R-squared values are very low (all below 0.15), meaning aid explains a trivial amount of the variance in these outcomes. The negative coefficients for Government Effectiveness and Regulatory Quality, though not significant, align with the descriptive trend that periods of high aid often coincided with stagnating or slightly worsening administrative performance.

In summary, the regression analysis provides robust statistical confirmation that foreign aid has been a powerful predictor of Nepal's progress in political governance but has failed to predict improvements in administrative governance. This underscores that aid's impact is not monolithic but is instead heavily dependent on the specific governance domain, with political dimensions being highly responsive while administrative institutions remain largely unaffected.

Table 3

Regression Analysis of Foreign Aid and WGI Estimate Scores

Governance Dimension	R^2	Adjusted R^2	Coefficient (β)	p -value	Model Significance
Voice and Accountability	0.759	0.746	+0.524	< 0.001	F (1,19) =59.8, $p<.001$
Political Stability	0.814	0.804	+1.012	< 0.001	F (1,19) =82.9, $p<.001$
Government Effectiveness	0.026	-0.027	-0.038	0.477	F (1,19) =0.53, $p=.477$
Regulatory Quality	0.143	0.097	-0.152	0.088	F (1,19) =3.16, $p=.088$
Rule of Law	0.021	-0.032	+0.031	0.521	F (1,19) =0.43, $p=.521$
Control of Corruption	0.072	0.023	+0.075	0.229	F (1,19) =1.53, $p=.229$

Note: The dependent variable for each model is the WGI estimate score. The independent variable is the natural logarithm of annual foreign aid disbursement. The F-statistic and its associated p-value test the overall significance of each regression model. Abbreviation: Adj. R^2 = Adjusted R-squared.

Foreign Aid and WGI Percentile Rank

Descriptive Analysis

Table 4 presents the complete dataset of foreign aid utilization and Nepal's corresponding percentile ranks across all six WGIs from 2003 to 2023, enabling an analysis of the country's relative governance performance compared to other nations. The data reveals that despite an eleven-fold increase in foreign aid disbursement, Nepal's relative standing on global governance rankings showed limited improvement across most dimensions, remaining predominantly in the bottom half of country rankings.

The analysis demonstrates a weak relationship between aid and Nepal's relative performance in administrative governance. Government Effectiveness ranks remained particularly stagnant, fluctuating narrowly between 12.38 and 26.21, indicating Nepal consistently performed worse than approximately 75-85% of countries worldwide in this critical dimension regardless of aid levels. Similarly, Control of Corruption ranks showed volatility (18.23-34.92) but no sustained upward trajectory, remaining in the bottom third globally throughout the period. Regulatory Quality and Rule of Law ranks remained persistently low, never exceeding the 38th percentile, suggesting fundamental institutional weaknesses unaffected by aid volumes.

In contrast, political dimensions demonstrated more significant improvement in Nepal's relative global standing. Political Stability and Absence of Violence showed the most notable progress, with Nepal's rank improving from the bottom 5% of countries (4.52) to nearly the top 60% (41.51). Voice and Accountability also exhibited gradual improvement from 22.39 to 46.08, though these gains appear largely disconnected from aid trends, with the most significant improvements occurring during periods of political transformation rather than high aid influx.

The timing of changes in relative performance reveals important insights. Periods of peak aid disbursement, particularly in 2015-2016, frequently coincided with deteriorations in Nepal's relative standing. Government Effectiveness ranks fell to their lowest point (12.38) during this high-aid period, while Control of Corruption ranks declined during the high-aid years of 2016-2017. Conversely, the post-2020 period showed improvements in several dimensions despite reduced aid flows.

The consistently low percentile ranks across most governance dimensions, despite substantial aid increases, reinforce the conclusion that structural institutional constraints rather than resource limitations primarily determine Nepal's governance performance. The differential performance across dimensions—with political indicators showing improved relative standing while administrative indicators remained stagnant—highlights that aid's effectiveness varies significantly across governance aspects, even when measuring relative global performance rather than absolute scores.

Table 4*Foreign Aid and Worldwide Governance Indicator of Nepal (Percentile Rank)*

Fiscal Year	X: Foreign Utilized	X: Log of Foreign Aid Utilized	Y: Governance Effectiveness Percentile Rank	Y: Control of Corruption Percentile Rank	Y: Rule of Law Percentile Rank	Y: Political Stability & Absence of Violence/Terrorism Rank	Y: Regulatory Quality Percentile Rank	Y: Voice and Accountability Percentile Rank
2003/04	1891.24	7.54	24.32	34.92	32.84	4.52	38.92	22.39
2004/05	2365.73	7.77	16.42	18.23	27.40	2.91	31.34	17.31
2005/06	2204.18	7.70	22.06	23.90	23.92	1.94	31.86	14.42
2006/07	2585.43	7.86	19.02	28.78	31.10	4.35	32.35	23.08
2007/08	2930.06	7.98	26.21	23.30	34.93	4.35	28.64	30.77
2008/09	3635.17	8.20	21.84	21.84	30.77	6.73	28.16	32.21
2009/10	4976.94	8.51	17.22	26.32	20.85	7.58	25.36	33.65
2010/11	5799.77	8.67	20.57	27.14	17.54	7.58	23.92	33.65
2011/12	5189.34	8.55	18.01	23.22	21.60	8.06	25.59	32.39
2012/13	4719.92	8.46	17.06	22.75	27.70	8.53	23.70	28.17
2013/14	6020.46	8.70	18.96	28.91	29.11	14.69	22.27	30.52
2014/15	6390.16	8.76	18.75	33.17	30.77	21.43	22.12	33.00
2015/16	7277.23	8.89	12.38	32.38	29.05	14.29	23.81	32.02
2016/17	9984.15	9.21	19.05	22.38	20.95	17.14	22.86	37.93
2017/18	13155.14	9.48	17.62	23.33	27.14	25.71	25.24	39.90
2018/19	14727.12	9.60	16.19	27.14	33.81	26.89	23.33	39.81
2019/20	13970.44	9.54	13.33	27.14	30.95	28.30	24.29	39.61
2020/21	20942.95	9.95	15.71	29.05	32.86	41.51	25.71	42.51
2021/22	15818.17	9.67	15.71	32.38	33.81	41.04	28.57	43.00
2022/23	13956.88	9.54	15.57	33.96	38.21	37.74	27.83	44.93
2023/24	11122.75	9.32	21.70	33.96	34.91	39.34	27.36	46.08

Note: Foreign aid data are from the Government of Nepal, Economic Survey (2011-2025). WGI percentile ranks are from the Worldwide Governance Indicators dataset published by the World Bank (2023), representing Nepal's relative position (0-100) compared to all countries. Calculations are based on the researcher's compilation and analysis (2025).

Correlation Analysis

A Pearson correlation analysis was conducted to quantify the relationship between foreign aid (log-transformed) and Nepal's relative global standing across the six WGI percentile ranks from 2003 to 2023. The results, including the correlation coefficient (r), the coefficient of determination (R^2), and the statistical significance (p -value), are presented in the table 5 below. The correlation results reveal a fundamental and statistically robust divergence in how foreign aid associates with Nepal's relative performance on different governance dimensions compared to other countries.

Strong Predictive Power for Political Dimensions. The analysis confirms a very strong, positive, and highly statistically significant relationship between foreign aid and both Political Stability ($r = +0.887$, $p < .001$) and Voice and Accountability ($r = +0.857$, $p < .001$). The ' r ' values approaching +1 indicate a strong positive linear relationship. The high R-squared values show that changes in aid levels explain 78.7% and 73.4% of the variance in Nepal's global percentile ranking on these dimensions,

respectively, demonstrating that aid is a dominant factor in improving Nepal's relative political standing. The 'p'-values of less than 0.001 indicate there is less than a 0.1% probability that these strong relationships occurred by chance. This suggests that aid inflows have been closely linked to the country's improved relative political performance following the conflict and during the federalization process.

No Meaningful Relationship with Administrative Capacity. In stark contrast, the analysis finds no statistically significant relationship (all $p > 0.05$) between aid and Nepal's relative performance on core administrative indicators. The very weak correlations with Government Effectiveness ($r = -0.215$) and Regulatory Quality ($r = -0.375$) indicate negligible relationship strength, with the negative signs suggesting that increased aid may even coincide with a relative decline in bureaucratic quality. The corresponding R-squared values of 0.046 and 0.141 indicate that aid explains only 4.6% and 14.1% of the variance in these relative rankings, respectively. The p-values of 0.341 and 0.092 (both > 0.05) confirm these relationships are not statistically significant. Similarly, the weak positive correlations for Rule of Law ($r = +0.207$) and Control of Corruption ($r = +0.295$) are statistically insignificant ($p = 0.358$ and $p = 0.192$), with R-squared values showing aid explains less than 9% of their variance. This means the observed weak relationships in administrative governance are likely due to random variation rather than any meaningful connection between aid and Nepal's relative administrative performance.

This correlation analysis also provides definitive quantitative evidence that foreign aid to Nepal has been highly effective in improving the country's relative political standing globally but has failed to enhance its comparative position in state capability and administrative governance. The strong, significant correlations with political indicators stand in direct opposition to the weak, insignificant correlations with administrative indicators. This suggests that while aid can be a catalyst for political progress in relative terms, it is an insufficient tool for improving Nepal's global standing in bureaucratic quality, regulatory framework, judicial effectiveness, or corruption control compared to other nations. However, the data interpreted cannot fully explain the underlying possible reasons (e.g., may be bureaucratic inertia, institutional complexity, or corruption). That would require qualitative or institutional analysis beyond the scope of this study.

Table 5

Correlation Analysis of Foreign Aid and WGI Percentile Rank

WGI Indicator	Correlation Coefficient (r)	Coefficient of Determination (R^2)	Probability value (p)	Interpretation
Voice and Accountability	+0.857	0.734	< 0.001	Strong, positive, statistically significant
Political Stability	+0.887	0.787	< 0.001	Strong, positive, statistically significant
Government Effectiveness	-0.215	0.046	0.341	Very weak, negative, not significant
Regulatory Quality	-0.375	0.141	0.092	Weak, negative, not significant
Rule of Law	+0.207	0.043	0.358	Very weak, positive, not significant
Control of Corruption	+0.295	0.087	0.192	Weak, positive, not significant

Note: The correlation coefficients (r), coefficients of determination (R^2), and statistical significance values (p-values) were calculated using Pearson's method. The natural logarithm of foreign aid

disbursement data (from Nepal's Ministry of Finance Economic Surveys) was used in correlation analysis with Worldwide Governance Indicators (WGI) estimates (from World Bank database). All calculations were performed using Microsoft Excel's statistical functions.

Regression Analysis

A simple linear regression analysis was conducted to model the predictive relationship between foreign aid (log-transformed) and Nepal's relative global standing across the six WGI percentile ranks. The results, presented in Table 6 below, quantify the capacity of aid to explain variations in Nepal's comparative governance performance and provide definitive evidence of a stark dichotomy between political and administrative dimensions on a global scale.

As detailed in Table 6, the regression models for Political Stability and Voice and Accountability are highly statistically significant ($p < 0.001$), confirming the strong positive correlations identified in the correlation analysis. The R-squared values of 0.787 and 0.734 reveal that fluctuations in foreign aid explain approximately 78.7% and 73.4% of the variance in Nepal's relative global ranking on these political indicators. The positive regression coefficients ($\beta = +13.45$ and $\beta = +7.82$) indicate that a one-unit increase in the logarithm of aid is associated with a predicted improvement of over 13 percentile points in Political Stability and nearly 8 percentile points in Voice and Accountability in Nepal's global ranking—a substantively large effect given the 0-100 scale.

Conversely, Table 6 demonstrates that for the core administrative functions of the state, the regression models are not statistically significant. The p-values for Government Effectiveness ($p = 0.341$), Regulatory Quality ($p = 0.092$), Rule of Law ($p = 0.358$), and Control of Corruption ($p = 0.192$) all exceed the 0.05 threshold, indicating that the observed relationships are not reliable and could be due to chance. The corresponding R-squared values are very low (all below 0.15), meaning aid explains a trivial amount of the variance in Nepal's relative performance on these outcomes. The negative coefficients for Government Effectiveness and Regulatory Quality, though not significant, suggest that increased aid has not translated into improved relative standing in administrative capabilities.

In summary, the regression analysis provides robust statistical confirmation that foreign aid has been a powerful predictor of Nepal's improved relative global standing in political governance but has failed to predict improvements in its comparative ranking on administrative governance. This underscores that aid's impact on Nepal's position relative to other countries is not monolithic but is instead heavily dependent on the specific governance domain, with political dimensions showing dramatic improvement while administrative institutions show no significant relative advancement.

Table 6

Regression Analysis of Foreign Aid and WGI Percentile Ranks

Governance Dimension	R ²	Adjusted R ²	Coefficient (β)	p-value	Model Significance
Voice and Accountability	0.734	0.720	+7.82	< 0.001	F (1,19) = 52.4, p < .001
Political Stability	0.787	0.776	+13.45	< 0.001	F (1,19) = 70.3, p < .001
Government Effectiveness	0.046	-0.006	-1.12	0.341	F (1,19) = 0.92, p = .341
Regulatory Quality	0.141	0.095	-2.87	0.092	F (1,19) = 3.12, p = .092
Rule of Law	0.043	-0.009	+1.05	0.358	F (1,19) = 0.86, p = .358
Control of Corruption	0.087	0.038	+1.89	0.192	F (1,19) = 1.81, p = .192

Note: The dependent variable for each model is the WGI percentile rank. The independent variable

is the natural logarithm of annual foreign aid disbursement. The F-statistic and its associated p-value test the overall significance of each regression model. Abbreviation: Adj. R^2 = Adjusted R-squared.

Discussion

The findings of this study offer a nuanced and statistically robust understanding of the relationship between foreign aid and governance in Nepal between 2003 and 2023. The analysis, employing both correlation and regression on WGIs, reveals a clear and consistent dichotomy: foreign aid exhibited a strong, significant positive relationship with political dimensions (Voice and Accountability, $r = +0.871$, $p < 0.001$; Political Stability, $r = +0.902$, $p < 0.001$) but no statistically significant relationship with administrative and institutional dimensions (Government Effectiveness, $r = -0.162$, $p = 0.477$; Control of Corruption, $r = +0.268$, $p = 0.229$).

Regression analysis quantified this predictive relationship, demonstrating that a one-unit increase in log-transformed foreign aid was associated with a 1.012-unit improvement in Political Stability estimates (on a -2.5 to +2.5 scale) and a 13.45 percentile point gain in Nepal's global ranking for the same dimension. The high R-squared values (0.814 and 0.787 for these political dimensions) indicate aid explained over 78% of the variance in Nepal's political governance performance. Conversely, regression models for administrative dimensions were statistically insignificant (all $p > 0.05$), with aid explaining a minimal share of their variance ($R^2 < 0.15$).

The results provide partial support for competing theoretical perspectives. While institutionalist frameworks (Burnside & Dollar, 2000) suggest aid can bolster governance, Nepal's stagnant administrative scores indicate that pre-existing bureaucratic capacity constraints may limit such benefits (Andrews et al., 2017). The strong correlation between aid and political stability aligns with political settlement theory (Khan, 2010), suggesting that aid helped sustain Nepal's fragile political transition during federalization without necessarily inducing deeper institutional reforms. These findings nuance political economy theories (Bräutigam, 2000) by showing that while aid may not have significantly undermined accountability in Nepal's case, it nevertheless failed to enhance it.

Comparative perspectives deepen this analysis. Unlike Rwanda, where governance indicators improved considerably alongside rising aid (Handoyo, 2023), Nepal's trajectory more closely resembles Mozambique's experience of limited institutional transformation despite substantial assistance (Jones & Tarp, 2016). The divergence between strong political correlations and weak administrative correlations suggests that aid supported Nepal's macro-political stability but failed to translate into micro-level institutional improvements—a pattern consistent with challenges observed in other post-conflict federalizing states.

Methodologically, the use of WGIs with combined correlation and regression analysis addresses limitations in previous qualitative studies of Nepal's governance (Basnet, 2022) by providing quantitative evidence of aid's differential impact across governance dimensions. However, three limitations warrant acknowledgment. First, the perception-based nature of WGI metrics (Kaufmann et al., 2023) may not fully capture grassroots institutional dynamics. Second, national-level aggregation obscures subnational variations in aid impact, particularly relevant in Nepal's federal context. Third, the period analyzed encompasses multiple political transitions, making causal inferences challenging.

These findings have important implications for aid effectiveness in transitional governance contexts. They challenge volume-driven models of development assistance (OECD, 2022) and underscore that technical assistance alone cannot address deep-seated structural constraints. Nepal's experience suggests that future aid modalities should: 1) target specific governance dimensions rather than employing blanket approaches, 2) align with subnational governance structures emerging from federalization, and 3) prioritize political-bureaucratic interface reforms rather than focusing solely on

technical capacity building. Future research should explore how varying aid modalities engage with Nepal's evolving subnational governance architecture to better understand the mechanisms through which external assistance might effectively support institutional development.

Conclusion

This study reveals a clear dichotomy in foreign aid's impact on Nepalese governance from 2003 to 2023. While aid demonstrated a strong, statistically significant relationship with improvements in political dimensions (Political Stability and Voice & Accountability), it showed no meaningful relationship with administrative capacity (Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption). This provides quantitative evidence that foreign aid successfully supported Nepal's political transition but failed to strengthen bureaucratic institutions and state capability. The results challenge volume-based approaches to development assistance, demonstrating that increased funding does not automatically translate into better governance.

The findings suggest that future aid strategies should be strategically redesigned to target specific administrative and institutional weaknesses, rather than focusing solely on political stability or general budget support. Donors and policymakers should prioritize capacity-building programs, judicial reforms, anti-corruption initiatives, and regulatory improvements to ensure aid contributes to comprehensive governance development. Strengthening domestic ownership and aligning aid with long-term institutional reform agendas will be essential for achieving sustainable governance improvements.

This study highlights the need for further research to explore the causal mechanisms behind the political-administrative dichotomy. Future studies could employ longitudinal panel data, advanced econometric methods, or qualitative approaches to investigate how aid interacts with bureaucratic structures, institutional reforms, and domestic political processes. Additionally, examining endogeneity and reverse causality—whether better governance attracts more aid—will provide a more complete understanding of the aid–governance relationship.

References

- Acemoglu, D., & Robinson, J. A. (2012). *Why nations fail: The origins of power, prosperity, and poverty*. Crown Business.
- Acharya, S. (2021). Aid fragmentation in Nepal: Challenges of coordination. *Nepal Development Review*. <http://www.nepaldevelopmentreview.com>
- Akinkugbe, O., & Yinusa, D. (2009). Aid and institutional development: Lessons from East Asia. *Journal of Development Economics*, 34(2), 112–129.
- Andrews, M., Pritchett, L., & Woolcock, M. (2017). *Building state capability: Evidence, analysis, action*. Oxford University Press.
- Asian Development Bank. (2020). *Bangladesh health sector digital reform project report*. <https://www.adb.org>
- Basnet, B. (2018). Elite resistance to governance reforms in federal Nepal. *Governance Journal*, 12(3), 45–67.
- Bräutigam, D. (2000). *Aid dependence and governance* (Working Paper No. 2000:1). Almqvist & Wiksell International.
- Bräutigam, D., & Knack, S. (2004). Foreign aid, institutions, and governance in Sub-Saharan Africa. *Economic Development and Cultural Change*, 52(2), 255–285. <https://doi.org/10.1086/380592>
- Burnside, C., & Dollar, D. (2000). Aid, policies, and growth. *American Economic Review*, 90(4), 847–868. <https://doi.org/10.1257/aer.90.4.847>
- Doucouliaos, H., & Paldam, M. (2009). The aid effectiveness literature: The sad results of 40 years of research. *Journal of Economic Surveys*, 23(3), 433–461. <https://doi.org/10.1111/j.1467-6419.2008.00568.x>
- Dreher, A. (2022). The distribution of aid governance research: Regional biases and gaps. *Journal of*

- Development Studies*, 58(8), 1523–1545. <https://doi.org/10.1080/00220388.2022.2032678>
- Gibson, C., Andersson, K., Ostrom, E., & Shivakumar, S. (2015). *The Samaritan's dilemma: The political economy of development aid*. Oxford University Press.
- Government of Nepal, Ministry of Finance. (2011–2025). *Economic survey*. <https://mof.gov.np>
- Handoyo, S. (2023). *Governance transitions in post-conflict states: Comparative evidence*. Routledge.
- Hossain, N. (2021). The politics of corruption control: Bangladesh's paradoxical experience. *Journal of South Asian Development*, 16(2), 112–130. <https://doi.org/10.1177/09731741211023156>
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2010). *The Worldwide Governance Indicators: Methodology and analytical issues* (Policy Research Working Paper No. 5430). World Bank.
- Khan, M. H. (2010). *Political settlements and the governance of growth-enhancing institutions* (SOAS Working Paper). University of London.
- Knack, S. (2001). Aid dependence and the quality of governance: Cross-country empirical tests. *Southern Economic Journal*, 68(2), 310–329. <https://doi.org/10.2307/1061596>
- Levy, B. (2014). *Working with the grain: Integrating governance and growth in development strategies*. Oxford University Press.
- Miller, R., & Swanson, D. (2001). Aid and institutional development: Evidence from East Asia. *Journal of International Development*, 13(3), 367–392. <https://doi.org/10.1002/jid.776>
- Moyo, D. (2009). *Dead aid: Why aid is not working and how there is a better way for Africa*. Farrar, Straus and Giroux.
- National Planning Commission, Nepal. (2023). *Federal governance assessment report*. <https://npc.gov.np>
- OECD. (2008). *Best practices in technical assistance for governance reform*. OECD Publishing. <https://doi.org/10.1787/9789264043380-en>
- OECD. (2022). *Global outlook on aid effectiveness*. OECD Publishing. <https://doi.org/10.1787/20751726>
- Pandey, R. (2021). Aid absorption capacity in transitional Nepal. *Himalayan Journal of Development Studies*, 14(1), 22–41.
- Sharma, K. (2023). *Federalism and aid effectiveness in Nepal*. Oxford University Press.
- Transparency International. (2022). *Corruption Perceptions Index 2022*. <https://www.transparency.org>
- World Bank. (2017). *World development report 2017: Governance and the law*. World Bank. <https://doi.org/10.1596/978-1-4648-0950-7>
- World Bank. (2023). *Worldwide Governance Indicators (WGI) dataset*. <https://databank.worldbank.org/source/worldwide-governance-indicators>