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Cross-Regional Variations in Political Turbulence Across Emerging Economies: Examining the Consequences for Macroeconomic Expansion

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Abstract

The present research explores how governmental volatility shapes output expansion trajectories within emerging market economies, with particular emphasis on geographical heterogeneity. Applying the Method of Moments Quantile Regression (MMQR) technique to a heterogeneous cross-country dataset spanning nearly three decades (1996-2023), this analysis incorporates distributional characteristics encompassing both central tendency and dispersion parameters. Empirical evidence demonstrates that governmental uncertainty substantially constrains output expansion across emerging markets, with particularly detrimental consequences observable in Asian and Sub-Saharan territories. Meanwhile, transitional European economies exhibit comparable adverse patterns, though these relationships fail to achieve conventional statistical thresholds. Consequently, the deleterious ramifications of governmental volatility appear relatively attenuated within European transitional economies compared to their Asian and African counterparts. Furthermore, governance effectiveness demonstrates negligible direct associations with macroeconomic expansion throughout these geographical clusters. Nevertheless, robust institutional frameworks prove instrumental in preserving governmental continuity, thereby cultivating favorable conditions for sustained output advancement. Accordingly, this investigation advocates for strengthening governance mechanisms in ways that facilitate macroeconomic prosperity. Additionally, by highlighting the critical importance of reducing governmental uncertainty, the research offers actionable recommendations for establishing stable political climates that support durable economic advancement.

Keywords: *Governmental Volatility; Macroeconomic Expansion; Emerging Markets; Cross-Regional Heterogeneity; Panel Quantile Methodology*

Introduction

Sustained macroeconomic expansion remains a paramount objective for emerging market economies striving to elevate living conditions, alleviate poverty incidence, and accomplish long-term developmental milestones. Nevertheless, the trajectory toward persistent output growth frequently encounters obstacles stemming from diverse political, societal, and governance-related determinants. Within this constellation of factors, governmental volatility has surfaced as a pivotal element capable of either accelerating or impeding economic advancement (Alesina & Perotti, 1996; Aisen & Veiga, 2013). Governmental instability encompasses an extensive array of manifestations, spanning regime transitions, civil disturbances, policy ambiguity, and institutional fragilities, each exerting substantial influence over capital allocation choices, resource distribution patterns, and aggregate economic outcomes.

The interconnection between governmental turbulence and macroeconomic performance has attracted considerable scholarly scrutiny within empirical investigations. Prior research has predominantly concentrated on establishing inverse correlations between political disruptions and economic indicators, with conclusions indicating that instability dampens investment appetite, interrupts productive activities, and generates uncertain conditions unfavorable for extended-horizon economic strategizing (Barro, 1991; Jong-a-Pin, 2009). Notwithstanding these findings, the strength and characteristics of this relationship demonstrate marked variation across geographical regions, mirroring the heterogeneous political, economic, and governance configurations prevalent among emerging economies.

Despite the voluminous scholarly output addressing this subject matter, multiple lacunae persist within existing literature. Initially, the preponderance of investigations has approached emerging economies as a uniform aggregate, disregarding the pronounced cross-regional disparities existing across political configurations, institutional architectures, and economic compositions. Subsequently, conventional econometric frameworks have frequently proven inadequate in capturing the distributional consequences of governmental volatility spanning different echelons of economic expansion. Additionally, the function of governance quality as an intermediating element within the instability-growth relationship remains insufficiently examined within regional analytical frameworks.

This investigation addresses these scholarly gaps by scrutinizing how governmental volatility influences macroeconomic expansion within emerging economies while explicitly incorporating cross-regional variations. Specifically, the research concentrates on three principal geographical clusters: Asia, Africa, and Europe (encompassing transitional European nations). Through deployment of the Method of Moments Quantile Regression (MMQR) methodology, which accommodates both locational and distributional effects within heterogeneous panel configurations, this study furnishes a more sophisticated comprehension of how governmental instability shapes economic expansion across the conditional distribution.

This investigation delivers threefold scholarly contributions. First, it furnishes empirical documentation regarding cross-regional heterogeneity within the governmental volatility-economic expansion nexus, generating insights essential for geographically-tailored policy formulation. Second, through MMQR methodology deployment, the research captures conditional distributional consequences of governmental instability, illuminating how impacts fluctuate across distinct quantiles of economic performance. Third, the investigation scrutinizes how governance quality moderates the adverse ramifications of governmental volatility, advancing understanding of how institutional frameworks function as protective mechanisms against political disruptions.

The subsequent sections are structured as follows. Section 2 elaborates the theoretical underpinnings and synthesizes relevant scholarly literature. Section 3 delineates data sources and analytical methodology. Section 4 presents empirical outcomes and interpretive discussion. Section 5 concludes with policy prescriptions and avenues for subsequent research.

Literature Review

Conceptual Framework

The theoretical underpinnings connecting governmental volatility with macroeconomic expansion derive from multiple interconnected analytical frameworks. Endogenous growth paradigms, as articulated by Romer (1990) and Lucas (1988), accentuate the significance of human capital formation, technological advancement, and knowledge externalities in propelling sustained economic expansion. Governmental instability disrupts these growth catalysts by generating uncertainty that diminishes investment in educational infrastructure, innovative endeavors, and tangible capital assets.

The institutional economics perspective, championed by North (1990) and Acemoglu et al. (2005), provides an alternative analytical lens for comprehending the instability-growth interconnection. According to this viewpoint, economic outcomes are fundamentally conditioned by institutional quality governing property entitlements, contractual enforcement, and political accountability mechanisms. Governmental volatility erodes these institutional structures, precipitating elevated transaction expenditures, diminished investment motivations, and suboptimal resource deployment.

Political economy scholarship further elucidates the transmission mechanisms linking instability with economic performance. Alesina and Tabellini (1989) constructed theoretical models demonstrating how political ambiguity induces suboptimal fiscal arrangements, as administrations confronting potential displacement may pursue excessive borrowing or inefficient expenditure patterns. Correspondingly, the rent-extraction framework proposed by Tullock (1967) and elaborated by Murphy et al. (1991) posits that governmental volatility amplifies opportunities for corrupt practices and rent-seeking behaviors, channeling resources away from productive utilization.

Empirical Evidence Review

The empirical scholarship examining governmental volatility and macroeconomic expansion has generated substantial documentation supporting an inverse association between these constructs. The foundational contribution by Barro (1991), utilizing cross-national regression methodology, established that governmental instability, operationalized through revolutionary events, coups, and political assassinations, substantially diminishes economic expansion. Subsequent investigations have refined these conclusions employing diverse instability metrics and progressively sophisticated econometric approaches.

Aisen and Veiga (2013) executed comprehensive panel analysis encompassing 169 nations from 1960 to 2004, establishing that elevated governmental instability correlates with reduced GDP expansion. Their conclusions demonstrated robustness across alternative specifications and instability operationalizations. Jong-a-Pin (2009) deployed factor-analytic techniques to construct multidimensional instability indices, demonstrating that exclusively regime-level instability, rather than alternative instability manifestations, significantly influences economic expansion.

Geographically-focused investigations have illuminated consequential variations within the instability-growth relationship. Fosu (1992, 2002) concentrated specifically on Sub-Saharan territories, establishing that governmental instability has exerted particularly severe consequences on economic expansion within this region, attributable to interactions with fragile institutional structures and ethnic heterogeneity. Analogously, research on Asian economies (Campos & Nugent, 2002) has demonstrated that instability impacts vary according to developmental stage and institutional quality.

Contemporary scholarship has commenced exploration of distributional consequences of governmental volatility utilizing quantile regression methodologies. Siddique et al. (2016) applied quantile regression techniques to examine the instability-growth nexus across income strata, establishing that adverse effects are more pronounced among lower-income nations. Nevertheless, these investigations have incompletely accommodated the panel structure of underlying data and cross-regional heterogeneity.

Hypotheses Development

Grounded in the theoretical and empirical literature synthesized above, this investigation examines the following hypotheses:

H1: Governmental volatility exerts significant negative influence on macroeconomic expansion within emerging market economies.

H2: The magnitude of governmental volatility's adverse impact on economic expansion demonstrates significant variation across geographical regions (Asia, Africa, and Europe).

H3: Governance quality moderates the relationship between governmental volatility and macroeconomic expansion.

Methods

Data Sources and Sample Construction

This investigation employs panel data configurations encompassing emerging market economies distributed across three geographical clusters: Asia, Africa, and Europe. The analytical timeframe extends from 1996 through 2023, yielding 28 annual observation periods. Sample period selection reflects data accessibility constraints, particularly regarding governmental instability and governance quality metrics from the World Bank's Worldwide Governance Indicators (WGI) database, which commenced in 1996.

Emerging economy classification adheres to World Bank income categorizations, incorporating nations designated as low-income, lower-middle-income, and upper-middle-income economies. The finalized sample encompasses 87 emerging economies: 32 Asian nations, 42 African nations, and 13 European transitional economies. Nations exhibiting excessive data gaps were excluded to preserve analytical reliability.

Variable Operationalization

The outcome variable is macroeconomic expansion, operationalized as annual growth rate of real per-capita GDP (constant 2015 USD). This metric enjoys widespread application within scholarly literature and captures temporal changes in average living standards within national economies. Data originate from World Development Indicators (WDI) repository.

The principal explanatory variable is governmental volatility, operationalized utilizing the Political Stability and Absence of Violence/Terrorism indicator from World Bank's Worldwide Governance Indicators. This index captures perceptions regarding governmental susceptibility to destabilization or unconstitutional overthrow, encompassing politically-motivated violence and terrorism. Index values span approximately -2.5 (elevated instability) to 2.5 (elevated stability), with lower values signifying heightened instability.

Governance quality is operationalized as a composite index constructed from four WGI components: Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption. This composite metric captures overall governance and institutional framework quality within each national economy.

The investigation incorporates several control variables aligned with growth literature conventions: trade integration (exports plus imports as GDP percentage), inflation rate (annual consumer price index change), foreign direct investment inflows (GDP percentage), gross capital formation (GDP percentage), human capital (Human Development Index), and demographic growth rate.

Table 1: Variable Operationalization and Data Sources

Variable	Operationalization	Source	Anticipated Direction
GDP Expansion	Annual per-capita real GDP growth rate	WDI	-
Governmental Volatility	Political Stability index (inverted)	WGI	(-)
Governance Quality	Composite governance indicators	WGI	(+)
Trade Integration	(Exports + Imports) / GDP	WDI	(+)
Price Inflation	Annual CPI percentage change	WDI	(-)

FDI Inflows	Foreign direct investment (GDP %)	WDI	(+)
Capital Accumulation	Gross capital formation (GDP %)	WDI	(+)

Note: WDI = World Development Indicators; WGI = Worldwide Governance Indicators.

Econometric Strategy

This investigation deploys the Method of Moments Quantile Regression (MMQR) approach developed by Machado and Santos Silva (2019) for estimating governmental volatility impacts on macroeconomic expansion. The MMQR methodology offers multiple advantages relative to conventional panel approaches and standard quantile regression techniques.

Initially, MMQR accommodates individual-level coefficient heterogeneity while incorporating fixed effects, proving essential given the diverse economic and political configurations characterizing emerging economies. Subsequently, unlike fixed effects quantile regression approaches capturing exclusively locational shifts, MMQR permits both location and scale parameters of conditional distributions to vary with explanatory variables.

The MMQR specification can be formalized as:

$$Yit = \alpha i + X'it\beta + (\delta i + Z'it\gamma)Uit \quad (1)$$

where Yit denotes macroeconomic expansion for economy i at period t; αi captures individual-specific fixed effects; Xit represents the explanatory variable vector encompassing governmental volatility and controls; β denotes location parameters; Zit represents scale variables; γ captures scale parameters; and Uit is the normalized error term with zero mean and unit variance.

For geographical analysis, the model undergoes separate estimation for Asian, African, and European emerging economies to capture cross-regional heterogeneity. Additionally, interaction specifications incorporating governmental volatility and regional indicators are included within pooled models to formally evaluate regional differences.

Results and Discussion

Descriptive Statistics

Table 2 displays descriptive statistics for the aggregate sample and regional subsamples. Mean GDP expansion across all emerging economies reaches 3.42%, exhibiting substantial variation. Asian emerging economies demonstrate the highest mean expansion rate (4.56%), followed by African economies (3.21%) and European transitional economies (2.87%).

The governmental volatility index reveals pronounced regional disparities. African economies exhibit the highest mean instability levels (-0.82), followed by Asian economies (-0.54) and European transitional economies (-0.31). Governmental volatility standard deviation is likewise highest for African economies, indicating greater intra-regional heterogeneity in political conditions.

Table 2: Descriptive Statistics by Geographical Region

Variable	Full Sample	Asia	Africa	Europe	Std. Dev.
GDP Expansion (%)	3.42	4.56	3.21	2.87	4.18
Governmental Volatility	-0.58	-0.54	-0.82	-0.31	0.89
Governance Quality	-0.47	-0.42	-0.68	-0.26	0.72
Trade Integration (%)	78.34	92.45	67.21	85.67	35.62
Observations	2,436	896	1,176	364	-

Note: Values represent means except final column displaying full sample standard deviations.

Primary Estimation Results

Table 3 presents primary MMQR estimation results for the aggregate emerging economy sample. Results are reported across five quantiles (10th, 25th, 50th, 75th, and 90th) to capture distributional consequences of governmental volatility on macroeconomic expansion. Governmental volatility coefficients are negative and statistically significant across all quantiles, corroborating Hypothesis 1 that governmental instability constrains economic expansion within emerging economies. Effect magnitudes vary across quantiles, with larger negative impacts observable at lower quantiles. Specifically, at the 10th quantile, one-unit governmental volatility increases associate with 1.23 percentage point GDP expansion decreases, whereas at the 90th quantile, the impact registers -0.67 percentage points.

Table 3: MMQR Estimation Results - Aggregate Sample

Variable	Q10	Q25	Q50	Q75	Q90
Governmental Volatility	-1.234***	-0.987***	-0.845***	-0.723***	-0.672**
	(0.187)	(0.156)	(0.143)	(0.168)	(0.234)
Governance Quality	0.234	0.187	0.156	0.123	0.098
	(0.198)	(0.167)	(0.154)	(0.145)	(0.187)
Trade Integration	0.018***	0.015***	0.012***	0.010**	0.008*
	(0.004)	(0.003)	(0.003)	(0.004)	(0.004)
Observations	2,436	2,436	2,436	2,436	2,436

*Note: Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.10.*

Cross-Regional Analysis

Table 4 displays regional analysis results at median quantile (Q50). Findings reveal substantial heterogeneity regarding governmental volatility impacts on macroeconomic expansion across Asian, African, and European clusters, supporting Hypothesis 2. For Asian emerging economies, governmental volatility coefficient registers -0.956 with statistical significance at the 1% threshold. African emerging economies exhibit the largest negative impact, with coefficient of -1.124, significant at the 1% threshold. Conversely, European transitional economies display negative but statistically insignificant coefficient (-0.312).

Table 4: Regional MMQR Estimation Results (Q50)

Variable	Asia	Africa	Europe
Governmental Volatility	-0.956***	-1.124***	-0.312
	(0.178)	(0.156)	(0.287)
Governance Quality	0.187	0.134	0.245
	(0.189)	(0.167)	(0.234)
Observations	896	1,176	364

*Note: Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.10.*

Governance Quality's Mediating Function

A noteworthy finding indicates that governance quality's direct effect on macroeconomic expansion is positive yet statistically insignificant across all specifications. Nevertheless, auxiliary regression results demonstrate governance quality exerts strong positive and statistically significant effects on governmental stability across all regions. One-unit governance quality improvements associate with 0.67-unit governmental stability enhancements for the aggregate sample.

These findings suggest governance quality may not directly stimulate macroeconomic expansion, yet performs crucial intermediary functions by fostering governmental stability. Enhanced institutional frameworks reduce political uncertainty, strengthen legal foundations, and generate more predictable policy environments, collectively contributing to governmental continuity.

Robustness Verification

Multiple robustness assessments were executed to validate primary findings. Initially, alternative governmental volatility operationalizations were deployed, including ICRG political risk indices. Results maintain qualitative consistency. Subsequently, analysis was replicated across alternative sample periods. Additionally, instrumental variable quantile regression addressed endogeneity concerns. IV results corroborate the negative governmental volatility-economic expansion relationship.

Interpretive Discussion

Empirical findings advance understanding of the complex interconnection between governmental volatility and macroeconomic expansion within emerging economies. The cross-regional heterogeneity documented carries substantial implications for comprehending transmission mechanisms through which governmental instability shapes economic performance. The particularly severe African impacts are attributable to resource dependency, ethnic heterogeneity, and fragile institutional architectures.

Conclusion

This investigation has scrutinized how governmental volatility influences macroeconomic expansion within emerging economies, with particular attention to cross-regional variations. Deploying the Method of Moments Quantile Regression approach on panel data encompassing 87 emerging economies spanning 1996-2023, the analysis has yielded several consequential findings.

Initially, governmental volatility exerts significant negative influence on macroeconomic expansion across emerging markets, with impacts varying across the conditional expansion distribution. Economies experiencing lower expansion rates demonstrate heightened vulnerability to governmental instability's adverse consequences.

Subsequently, negative impact magnitudes vary substantially across geographical regions. African emerging economies experience the most severe expansion penalties from governmental volatility, followed by Asian economies. European transitional economies exhibit negative yet statistically insignificant impacts.

Additionally, while governance quality demonstrates negligible direct effects on macroeconomic expansion, it performs crucial functions in promoting governmental stability. This finding underscores institutional development's importance as a pathway toward establishing stable political environments conducive to sustained expansion.

These findings carry several policy prescriptions. For African and Asian emerging economies, addressing governmental volatility should constitute a priority within economic development strategies. This requires investments strengthening democratic institutions, enhancing governance quality, and constructing mechanisms for peaceful conflict resolution.

The investigation highlights institutional development's significance as a long-term strategy promoting both governmental stability and macroeconomic expansion. Policymakers should concentrate on strengthening legal foundations, reducing corrupt practices, enhancing regulatory quality, and improving governmental effectiveness.

Notwithstanding limitations, this investigation contributes substantively to understanding the political economy of development. By documenting cross-regional heterogeneity within the instability-expansion relationship and highlighting governance quality's mediating function, findings furnish a more sophisticated foundation for policy interventions targeting sustainable economic advancement within emerging economies.

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