

STRUCTURAL CONSTRAINTS AND ECONOMIC GROWTH: AN INSTITUTIONAL PERSPECTIVE ON DEVELOPING ECONOMIES

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Abstract

This literature review examines the complex relationship between structural constraints, institutional quality, and long-run economic growth in developing economies. Drawing on neoclassical, endogenous growth theory, and institutional economics frameworks, the review synthesizes empirical evidence on how institutional quality shapes economic performance both directly and through moderating effects on other growth determinants. The analysis reveals that institutions play a critical role in determining whether developing economies can overcome structural constraints related to infrastructure deficits, human capital limitations, financial market inefficiencies, and market imperfections. Evidence indicates significant threshold effects, whereby the growth-enhancing impacts of foreign direct investment, trade openness, and financial development are conditional upon achieving minimum institutional quality standards. Regional heterogeneity is pronounced, with institutional effects varying substantially across Sub-Saharan Africa, Asia, Latin America, and the Middle East. The review identifies policy-relevant insights emphasizing the complementarity between institutional reforms and investments in physical and human capital. By integrating theoretical perspectives with empirical findings across multiple contexts, this study contributes to understanding the multi-dimensional pathways through which institutions influence economic development and offers directions for future research on context-specific institutional reforms tailored to varying development stages and regional characteristics.

INTRODUCTION

1.1 Problem Statement and Research Motivation

Economic growth in developing countries remains one of the most pressing challenges in contemporary development economics, with persistent disparities in income levels and growth trajectories across nations raising fundamental questions about the determinants of long-run prosperity (Ghosh & Saha, 2025). While traditional growth theories emphasized factor accumulation and technological progress, mounting evidence suggests that institutional quality

plays a decisive role in shaping economic outcomes, particularly in contexts characterized by significant structural constraints (Tarchoun, 2025). Developing economies face multifaceted challenges including infrastructure deficits, human capital limitations, financial market inefficiencies, and weak governance structures that collectively impede their ability to achieve sustained growth and convergence with advanced economies (Hocini et al., 2025).

The persistence of these structural constraints raises critical questions about the mechanisms through which economies can transition from low-growth traps to sustained development trajectories. Recent empirical work demonstrates that institutional quality not only directly influences economic performance but also conditions the effectiveness of other growth determinants such as foreign direct investment, trade openness, and financial development (Tarchoun & Ghraieb, 2025). This moderating role of institutions suggests that policies aimed at attracting capital flows or liberalizing trade may yield disappointing results in environments characterized by weak governance, corruption, and regulatory inefficiency (Dawood et al., 2025). Understanding these complex relationships is essential for designing effective development strategies that address both institutional deficiencies and structural constraints simultaneously.

1.2 Significance of Institutional Quality in Development Economics

The theoretical foundations for emphasizing institutional quality in economic development have evolved considerably over recent decades. While earlier neoclassical models treated institutions as exogenous background conditions, contemporary frameworks recognize institutions as fundamental determinants of long-run growth through their effects on incentives, transaction costs, and resource allocation efficiency (Liang & Li, 2025). Institutional quality encompasses multiple dimensions including political stability, government effectiveness, regulatory quality, rule of law, control of corruption, and voice and accountability, each potentially influencing growth through distinct channels (Ghosh & Saha, 2025).

Empirical evidence increasingly supports the proposition that institutional quality matters profoundly for economic outcomes in developing countries. Studies examining large cross-country panels find that improvements in institutional indicators are associated with higher growth rates, with effect sizes often exceeding those of traditional factors such as capital accumulation or labor force expansion (Jibir & Sofah, 2025). Moreover, the growth effects of institutional quality appear particularly pronounced in low-income and lower-middle-income economies, where weak institutions

create environments of high uncertainty, elevated transaction costs, and misallocation of resources that severely constrain productive investment and entrepreneurial activity (Okoh, 2024).

1.3 Scope and Objectives of the Review

This literature review aims to provide a comprehensive synthesis of theoretical and empirical research on the relationship between institutional quality, structural constraints, and economic growth in developing economies.

Primary Objectives

It examines the direct effects of institutional quality on economic growth, considering both long-run and short-run dynamics as well as potential non-linearities and threshold effects (Liang & Li, 2025).

It analyzes how institutional quality moderates the growth impacts of other key determinants including foreign direct investment, trade openness, financial development, and human capital accumulation (Ghosh & Saha, 2025).

It explores the nature and implications of structural constraints specific to developing economies and how these constraints interact with institutional factors to shape development trajectories (Silaban, 2025).

The scope of this review encompasses theoretical contributions from neoclassical and endogenous growth models, institutional economics, and political economy perspectives, alongside empirical evidence from diverse methodological approaches including panel data econometrics, instrumental variables estimation, and threshold regression techniques (Dawood et al., 2025). Geographically, the review draws on studies covering Sub-Saharan Africa, South Asia, East Asia and Pacific, Latin America and the Caribbean, and the Middle East and North Africa, recognizing that institutional effects and structural constraints may vary substantially across these regions (Jibir & Sofah, 2025).

1.4 Structure of the Paper

The remainder of this review is organized as follows. Section 2 establishes the theoretical foundations by reviewing the evolution from neoclassical to endogenous growth models and examining how institutional economics provides conceptual

frameworks for understanding the growth-institutions nexus. Section 3 synthesizes empirical evidence on the direct effects of institutional quality on economic growth, examining conditional relationships, threshold effects, and regional variations. Section 4 analyzes structural constraints characteristic of developing economies, including infrastructure deficits, human capital limitations, financial market inefficiencies, and competitive imperfections. Section 5 investigates the moderating role of institutional quality, focusing on how institutions condition the growth effects of foreign direct investment, trade, financial development, and debt. Section 6 discusses policy implications and identifies future research directions. Section 7 concludes.

Theoretical Foundations: Growth Theory and Institutional Economics

2.1 From Neoclassical to Endogenous Growth Models

The theoretical evolution of growth economics provides essential context for understanding the role of institutions in economic development. The neoclassical growth model pioneered by Solow established a framework emphasizing capital accumulation, labor force growth, and exogenous technological progress as the primary drivers of output expansion (Cvetanovi et al., 2019). Under this framework, economies were expected to converge toward steady-state income levels determined by savings rates, population growth, and technology, with institutional factors relegated to the residual or treated as background conditions rather than explicit growth determinants (Nugroho et al., 2019). However, the neoclassical model's prediction of convergence proved inconsistent with persistent income disparities across countries, motivating theoretical refinements that incorporated human capital, increasing returns to scale, and institutional factors (Oughton & Tobin, 2023).

Endogenous growth theory emerged as a response to the neoclassical model's limitations, positing that growth could be sustained indefinitely through internal mechanisms rather than relying exclusively on exogenous technological progress (Grossman & Helpman, 1994). Romer's knowledge-based models and Lucas's human capital frameworks demonstrated

how investments in education, research and development, and innovation could generate increasing returns and sustained growth without diminishing marginal productivity (Otieno & Aduda, 2022). These models provided theoretical foundations for understanding why growth rates differ systematically across countries and why some economies experience prolonged stagnation while others achieve rapid development. Critically, endogenous growth theories created space for institutional factors by emphasizing the importance of property rights protection, contract enforcement, and innovation incentives—all fundamentally institutional in nature (Nugroho et al., 2019).

2.2 Institutional Economics and the New Institutional Perspective

Institutional economics offers a complementary theoretical lens emphasizing that economic outcomes are fundamentally shaped by the formal and informal rules governing economic interactions, property rights structures, and enforcement mechanisms (Pradhan et al., 2022). North's seminal work established that institutions define the incentive structure of economies, with well-functioning institutions reducing transaction costs, mitigating uncertainty, and facilitating productive investment and exchange (Bekana, 2020). From this perspective, persistent underdevelopment in many countries reflects institutional failures that distort incentives, encourage rent-seeking behavior, and prevent efficient resource allocation rather than simply reflecting capital or technology shortages (Author, 2012).

The new institutional economics framework distinguishes between formal institutions (laws, regulations, constitutions) and informal institutions (norms, customs, social conventions), recognizing that both dimensions shape economic behavior and outcomes (Ali et al., 2015). Moreover, institutional quality is conceptualized as multi-dimensional, encompassing not only the content of rules but also their enforcement, the competence and integrity of implementing agencies, and the degree of policy credibility and time consistency (Ghosh & Saha, 2025). This multi-faceted view of institutions has important implications for empirical analysis, suggesting that single indicators or narrowly-defined

measures may fail to capture the complex ways institutions influence economic performance (Liang & Li, 2025).

2.3 Conceptualizing Institutional Quality: Dimensions and Measurement

Measuring institutional quality poses significant methodological challenges given its multi-dimensional nature and the difficulty of quantifying inherently qualitative governance characteristics. Contemporary research commonly employs composite indices drawing on multiple indicators to capture different facets of institutional quality (Ghosh & Saha, 2025). The Worldwide Governance Indicators (WGI) developed by the World Bank represent the most widely-used framework, encompassing six dimensions: voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption (Jibir & Sofah, 2025). Each dimension captures distinct aspects of governance, from citizens' ability to participate in political processes to the quality of public services, policy formulation and implementation, contract enforcement, and prevention of state capture by elites (Okoh, 2024). Alternative measurement approaches include the International Country Risk Guide (ICRG) indicators, which emphasize investment climate factors such as expropriation risk, contract repudiation, and political risk (Dawood et al., 2025). The Economic Freedom Index focuses on dimensions including property rights protection, judicial effectiveness, government integrity, tax burden, and regulatory efficiency (Raies & Mimoun, 2025). While these various indicators are positively correlated, they emphasize different institutional dimensions and may yield varying empirical results depending on which aspects of institutional quality are most relevant for specific economic outcomes or country contexts (Ghosh & Saha, 2025). Principal component analysis techniques are frequently employed to construct composite institutional quality indices that synthesize information across multiple individual indicators, potentially providing more robust measures than any single indicator

alone (Liang & Li, 2025).

2.4 Linking Institutions to Growth: Theoretical Mechanisms

Theoretical frameworks linking institutional quality to economic growth identify multiple transmission mechanisms through which institutions shape development outcomes. First, institutions affect the security of property rights and contract enforcement, directly influencing investment incentives and time horizons for economic decision-making (Bekana, 2020). Where property rights are poorly defined or weakly enforced, economic agents face elevated expropriation risk, reducing incentives for long-term productive investment and biasing economic activity toward short-term extractive activities with limited spillover benefits (Liang & Li, 2025). Second, institutional quality influences the efficiency of resource allocation by affecting the competitiveness of markets, the prevalence of rent-seeking behavior, and the extent of regulatory distortions that misallocate capital and labor toward less productive uses (Ghosh & Saha, 2025).

Third, institutions shape human capital accumulation through their effects on the quality and accessibility of education and health services, as well as the returns to skill acquisition versus rent-seeking activities (Bounahr & Khattab, 2025). Fourth, institutional quality conditions technology adoption and innovation by influencing the protection of intellectual property, the ease of doing business, and the regulatory environment facing entrepreneurs and innovative firms (Fayyaz & Bartha, 2025). Fifth, institutions affect macroeconomic stability through fiscal and monetary policy frameworks, with weak institutions associated with higher inflation, greater output volatility, and increased vulnerability to economic crises (Dawood et al., 2025). Finally, institutional quality influences the effectiveness of external resource inflows including foreign direct investment and development assistance, determining whether such resources finance productive investments or fuel corruption and rent-seeking (Tarchoun & Ghraieb, 2025).

Table 1: Dimensions of Institutional Quality and Measurement Indicators

Dimension	Definition	Key Indicators	Primary Data Sources	Growth Channel
Voice & Accountability	Citizens' ability to participate in selecting government, freedom of expression and association	Electoral processes, civil liberties, media freedom	WGI, Freedom House, Polity IV	Political stability, policy credibility
Political Stability	Likelihood of political instability and politically-motivated violence	Government stability, internal conflict, external conflict	WGI, ICRG, PRS Group	Investment certainty, long-term planning
Government Effectiveness	Quality of public services, civil service competence, policy implementation	Bureaucratic quality, public service delivery	WGI, ICRG, QoG Institute	Resource allocation efficiency
Regulatory Quality	Government ability to formulate and implement sound policies and regulations	Business regulations, trade policy, price controls	WGI, Doing Business, Economic Freedom	Market efficiency, entrepreneurship
Rule of Law	Quality of contract enforcement, property rights, courts, police	Judicial independence, contract enforcement, property rights	WGI, ICRG, Economic Freedom	Investment security, transaction costs
Control of Corruption	Extent to which public power is exercised for private gain	Corruption perception, bribery, state capture	WGI, TI-CPI, ICRG	Resource allocation, public service quality

Institutional Quality and Economic Growth: Empirical Evidence

3.1 Direct Effects of Institutional Quality on Growth

Empirical research examining the direct relationship between institutional quality and economic growth has generated substantial evidence supporting the proposition that institutions matter fundamentally for development outcomes. Cross-country panel studies consistently find that improvements in institutional quality indicators are associated with higher GDP growth rates, with effect sizes that are both statistically significant and economically meaningful (Ghosh & Saha, 2025). Research covering 135 developing countries from 1996-2020 demonstrates that enhancements in government

effectiveness, regulatory quality, and rule of law strengthen economic growth, with institutional effects remaining robust even after controlling for traditional growth determinants such as capital accumulation, human capital, and trade openness (Ghosh & Saha, 2025).

Regional analyses provide nuanced evidence on institutional effects across different developing economy contexts. Studies of Sub-Saharan African economies demonstrate that institutional quality development exerts both direct positive effects on economic performance and indirect effects operating through innovation channels (Bekana, 2020). Research on Asian developing economies reveals that institutional quality and financial development dynamically moderate the debt-growth nexus, with strong institutions reducing adverse debt effects and enabling debt to function as a growth catalyst beyond

identified thresholds (Dawood et al., 2025). Evidence from ECOWAS countries indicates that governance quality critically moderates the external debt-growth relationship, with strong institutions enhancing positive debt effects while weak governance exacerbates downside risks including macroeconomic instability and exchange rate volatility (Jibir & Sofah, 2025).

3.2 Conditional and Threshold Effects

Recent empirical work has moved beyond linear specifications to examine conditional and threshold effects in the institutions-growth relationship, revealing important non-linearities. Studies employing dynamic panel threshold models find that the growth impact of institutional quality varies across different development stages and institutional quality levels (Dawood et al., 2025). For the full sample of Asian developing countries, institutional quality thresholds are estimated at 0.93 on a scale of -2.5 to +2.5, beyond which institutional improvements yield particularly strong growth dividends (Dawood et al., 2025). Disaggregated analyses show that lower-middle-income countries benefit from institutional improvements at a threshold of 0.91, whereas upper-middle-income countries require stricter institutional standards (threshold of 0.85) to leverage development resources effectively for innovation-driven growth (Dawood et al., 2025).

Evidence also indicates that institutional quality conditions the effectiveness of other growth determinants through interaction effects. Research on foreign debt demonstrates that while external debt exerts baseline adverse effects on growth consistent with debt overhang hypotheses, strong institutional structures and developed financial systems reduce these adverse effects significantly (Dawood et al., 2025). Similarly, studies of foreign direct investment reveal that the growth impact of FDI depends critically on host country institutional quality, with three specific dimensions—government effectiveness, regulatory quality, and rule of law—strengthening FDI's contribution to growth (Ghosh & Saha, 2025). This conditional relationship implies that developing countries with weak institutions may struggle to convert FDI inflows into sustained growth

even when successfully attracting foreign capital (Okoh, 2024).

3.3 Regional Variations: Evidence from Different Developing Regions

Regional heterogeneity represents a consistent finding across empirical studies examining institutional effects in developing economies. African economies display distinctive patterns wherein political stability and rule of law exert positive and statistically significant impacts on long-run economic growth, while government effectiveness and regulatory quality surprisingly show negative growth effects in some contexts (Phuc, 2025). This paradoxical result may reflect institutional quality measurement challenges, the presence of country-specific factors, or stage-dependent institutional effects where certain institutional dimensions become growth-enhancing only after achieving minimum development thresholds (Abodunrin et al., 2025).

South Asian and Southeast Asian economies present different institutional dynamics. Research on South Asian countries reveals mixed institutional effects, with institutional quality enhancing growth in certain specifications while showing limited direct impact in others, potentially reflecting the region's heterogeneous institutional landscapes and varying governance quality across countries (Zafar, 2021). East Asian economies, particularly those achieving rapid growth trajectories, demonstrate that institutional quality improvements—especially in regulatory frameworks and rule of law—precede and enable sustained growth episodes (Hocini et al., 2025). Latin American evidence indicates that institutional quality contributes positively to economic growth, but the magnitude of effects varies considerably across countries depending on political economy configurations and historical institutional trajectories (Husnain et al., 2024).

3.4 Long-run versus Short-run Dynamics

The distinction between short-run and long-run institutional effects on growth has important theoretical and policy implications. Autoregressive distributed lag (ARDL) models employed across various country contexts reveal asymmetric temporal dynamics in institutional impacts (Tarchoun &

Ghraieb, 2025). In the short run, institutional quality improvements may show weak or even negative effects on growth, potentially reflecting adjustment costs, policy implementation lags, or temporary disruptions associated with institutional reforms (Abodunrin et al., 2025). For instance, studies of Nigeria find that institutional quality negatively but significantly influences economic performance in the long run, with complex interaction effects between fiscal deficits and institutional quality that vary temporally (Abodunrin et al., 2025).

Long-run analyses employing cointegration techniques and error correction models demonstrate that institutional quality exerts stronger and more consistently positive growth effects over extended

time horizons (Tarchoun & Ghraieb, 2025). Cross-sectionally augmented ARDL methods addressing cross-sectional dependence confirm long-run relationships between institutional quality, economic growth, and various conditioning factors (Jibir & Sofah, 2025). The error correction terms in these models indicate adjustment speeds ranging from 6% to 45% annually, suggesting that short-run deviations from long-run equilibrium relationships are corrected over multi-year periods rather than instantaneously (Tarchoun & Ghraieb, 2025). This temporal pattern implies that institutional reforms may require sustained implementation over prolonged periods before yielding observable growth dividends, creating political economy challenges for reform sustainability.

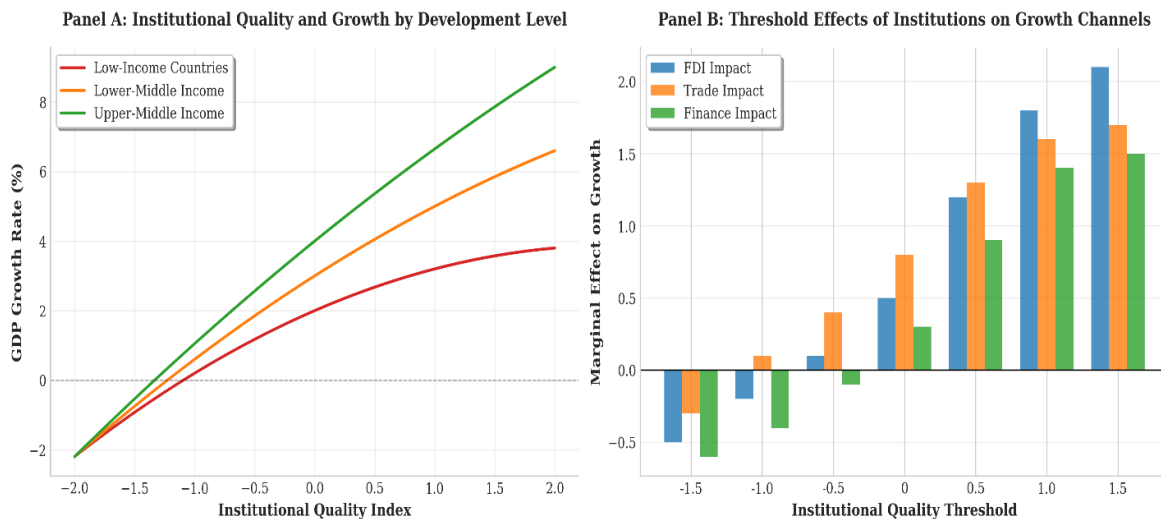


Figure 1: Institutional Quality and Economic Growth Relationships Structural Constraints in Developing Economies

4.1 Infrastructure Deficits and Growth Impediments

Infrastructure deficits represent one of the most significant structural constraints facing developing economies, with profound implications for growth potential and competitiveness. Research examining infrastructure investment impacts across developing countries demonstrates that infrastructure—encompassing transportation networks, energy systems, and telecommunications—is essential for improving connectivity, reducing logistics costs, expanding market access, and fostering economic

development (Silaban, 2025). Quantitative analyses reveal that infrastructure investment, particularly in transportation and energy sectors, significantly enhances economic growth rates in previously isolated or underdeveloped regions (Silaban, 2025). However, the study also identifies that infrastructure investment alone is insufficient; factors including management quality, education levels, and technology availability are crucial complementary inputs for maximizing infrastructure's positive growth impacts (Silaban, 2025).

The infrastructure constraint is particularly binding in regions with low population density, difficult

terrain, or landlocked geography, where transportation costs severely limit market integration and economic specialization (Silaban, 2025). Sub-Saharan African economies exemplify these challenges, with infrastructure gaps most pronounced in power generation capacity, road quality and coverage, and telecommunications infrastructure (Hocini et al., 2025). Evidence indicates that addressing infrastructure bottlenecks through targeted public investment can generate substantial growth multipliers, but these effects are contingent upon complementary investments in human capital and technological capabilities (Silaban, 2025). Moreover, infrastructure development must be accompanied by institutional frameworks ensuring project sustainability, maintenance adequacy, and protection against corruption that diverts resources or compromises construction quality (Meze & I, 2025).

4.2 Human Capital Constraints and Absorptive Capacity

Human capital limitations constitute another critical structural constraint, affecting not only labor productivity directly but also economies' absorptive capacity for new technologies, foreign direct investment, and knowledge spillovers (Lamichhane et al., 2025). Theoretical frameworks emphasizing human capital's role in endogenous growth highlight that education and health investments contribute to economic development through multiple channels including enhanced worker productivity, improved technological adaptation capability, and accelerated innovation (Lazko, 2025). Empirical evidence from developing countries demonstrates that human capital development, measured through educational enrollment rates, average years of schooling, and health indicators, positively influences economic growth, though effect sizes and significance vary across development stages and regional contexts (Mazzaourou, 2025).

Research on South Asian and Southeast Asian economies reveals complex human capital dynamics (Zafar, 2021). While gross fixed capital formation exerts dominant effects on growth, human capital development shows mixed results, with some studies finding statistically insignificant or even negative short-run effects attributable to education quality

deficiencies, skills mismatches with labor market needs, brain drain phenomena, and policy implementation weaknesses (Lamichhane et al., 2025). These findings underscore that mere expansion of educational enrollment or health spending is insufficient; the quality and relevance of human capital investments critically determine whether they translate into productivity gains and growth acceleration (Wang, 2025). Countries achieving successful human capital-led growth typically combine quantitative expansion of education and health systems with qualitative improvements ensuring that skills acquired align with evolving economic structures and technological demands (Lazko, 2025).

4.3 Financial Market Inefficiencies and Credit Constraints

Financial sector underdevelopment and inefficiencies represent pervasive structural constraints in many developing economies, limiting capital mobilization, distorting resource allocation, and impeding entrepreneurship and innovation (Ahiawodzi, 2025). Theoretical models linking financial development to growth emphasize that well-functioning financial systems facilitate savings mobilization, improve capital allocation efficiency, enable risk diversification, and reduce transaction costs associated with lending and borrowing (DawayDucanes & GochocoBautista, 2019). However, empirical evidence reveals complex, often non-linear relationships between financial development and growth in developing country contexts, with financial expansion sometimes associated with adverse growth effects particularly in countries with weak institutions and shallow financial systems (DawayDucanes & GochocoBautista, 2019).

Studies employing dynamic threshold models find U-shaped relationships between financial development and economic growth in developing economies, indicating that financial systems must achieve critical scale and efficiency levels before financial expansion positively affects growth (DawayDucanes & GochocoBautista, 2019). Research covering 77 developing economies during 1984-2013 demonstrates that approximately 50-90% of sampled countries exhibit robustly negative long-run effects of

financial expansion on both manufacturing and services growth, indicating widespread "too little finance" problems likely explained by weak institutions, market failures, and insufficient financial scale to support large-scale investments (DawayDucanes & GochocoBautista, 2019). These findings suggest that financial sector reforms must address not only quantitative indicators like credit-to-GDP ratios but fundamentally improve institutional foundations including creditor rights protection, contract enforcement, financial sector regulation, and supervisory capacity (Hameed et al., 2025).

4.4 Market Structure and Competitive Limitations

Market structure imperfections and competitive constraints constitute additional structural impediments to growth in developing economies. Many developing countries are characterized by concentrated market structures, limited competitive pressures, barriers to entry for new firms, and regulatory frameworks that protect incumbent firms and discourage entrepreneurship (Author, 2025). These structural features reduce allocative efficiency, limit innovation incentives, and enable rent extraction by politically connected firms, ultimately constraining productivity growth and economic dynamism (Sasmal & Sasmal, 2024). Evidence from various developing regions indicates that trade liberalization and regulatory reforms promoting

competition yield positive growth effects, but these benefits are contingent upon institutional quality factors including transparent regulation, impartial enforcement, and control of corruption (Author, 2025).

Research on small and medium enterprise development in developing economies highlights how structural constraints interact with institutional factors to limit entrepreneurial activity and firm growth (Yusof et al., 2025). Financial accessibility limitations, digital transformation barriers, skills mismatches, fragmented institutional support, and narrow market reach collectively suppress innovation, hinder value creation, and slow the transition of SMEs toward higher productivity activities (Yusof et al., 2025). Addressing these constraints requires coordinated interventions across multiple domains including inclusive financing models, targeted digitalization strategies, industry-aligned skills development, streamlined regulatory processes, and diversified market expansion pathways (Yusof et al., 2025). The complex, mutually reinforcing nature of these constraints underscores that piecemeal reforms addressing individual bottlenecks may prove ineffective without complementary actions tackling the broader institutional and structural environment (Wang, 2025).

Table 2: Typology of Structural Constraints in Developing Economies

Constraint Category	Specific Manifestations	Growth Impacts	Conditioning Factors	Policy Priorities
Infrastructure Deficits	Transportation networks, energy capacity, telecommunications coverage	Reduces connectivity, raises logistics costs, limits market access	Geography, population density, public investment capacity	Targeted infrastructure investment, PPPs, maintenance systems
Human Capital Limitations	Low educational attainment, skills mismatches, brain drain, health deficiencies	Lowers labor productivity, limits technology absorption, constrains innovation	Education quality, curriculum relevance, healthcare access	Quality education reforms, vocational training, health system strengthening
Financial Market Inefficiencies	Shallow financial systems, high intermediation costs, credit rationing, weak	Constrains investment financing, misallocates	Creditor rights, regulatory quality, financial	Financial sector deepening, regulatory reforms, institution building

	institutions	capital, limits risk management	institution capacity	
Market Imperfections	Concentrated market structures, entry barriers, weak competition, regulatory capture	Reduces allocative efficiency, limits innovation, enables rent extraction	Competition policy, regulatory transparency, corruption control	Pro-competition reforms, SME support, regulatory streamlining

Institutional Quality as a Moderator: Interaction Effects

5.1 Institutions and Foreign Direct Investment

The relationship between foreign direct investment and economic growth in developing economies is fundamentally conditioned by institutional quality, with extensive empirical evidence demonstrating that weak institutions severely limit FDI's growth benefits while strong institutional frameworks amplify positive spillovers (Ghosh & Saha, 2025). Research covering 135 developing countries from 1996-2020 reveals that enhancements in government effectiveness, regulatory quality, and rule of law strengthen FDI's impact on economic growth, indicating that these specific institutional dimensions are particularly critical for converting foreign capital inflows into sustained development outcomes (Ghosh & Saha, 2025). The study underscores that institutional quality matters more for FDI-led growth in developing countries compared to advanced economies, reflecting the greater vulnerability of developing nations to institutional deficiencies that create uncertainty, elevate transaction costs, and discourage long-term productive investment by foreign firms (Ghosh & Saha, 2025).

Mechanisms through which institutions moderate FDI effects include several channels. First, strong property rights protection and contract enforcement reduce expropriation risks facing foreign investors, encouraging technology transfer and long-term capital commitments rather than short-term speculative flows (Okoh, 2024). Second, effective regulatory frameworks and bureaucratic quality lower the costs of doing business, facilitate firm entry and operations, and enable foreign firms to realize productivity advantages and generate spillovers to domestic enterprises (Ghosh & Saha, 2025). Third, control of corruption ensures that FDI inflows

finance productive investments rather than being diverted through rent-seeking channels that generate minimal economic benefits (Okoh, 2024). Fourth, political stability provides the predictable environment necessary for foreign firms to undertake multi-year investment projects with complex supply chain integrations (Ghosh & Saha, 2025). Empirical evidence consistently supports these theoretical predictions, with interaction terms between FDI and institutional quality variables showing positive and statistically significant coefficients in growth regressions (Ayub et al., 2023).

5.2 Institutions and Trade Openness

Institutional quality similarly conditions the growth impacts of trade liberalization and openness, determining whether expanding international trade generates productivity gains or exacerbates structural vulnerabilities (Ayub et al., 2023). Research employing linear interaction models for 70 developing nations between 1984 and 2021 demonstrates that countries with good institutional environments attract greater benefits through increased trade openness, as strong institutions facilitate technology absorption, reduce trade-related transaction costs, and mitigate risks of trade-induced disruptions (Ayub et al., 2023). The study confirms that high-institution quality countries gain more from multinational corporation presence and trade integration, experiencing fewer problems in absorbing and internalizing new technologies and production methods embodied in traded goods and foreign firm operations (Ayub et al., 2023).

However, empirical evidence also reveals potential negative interaction effects between trade and institutions under certain conditions. Analysis of industrial development and trade openness in developing economies finds that while trade openness provides positive effects on

industrialization and growth, interaction terms between trade and institutional quality show significant negative coefficients, indicating that weak institutions erode the positive effects of trade (Author, 2025). This seemingly contradictory finding suggests complex non-linear relationships whereby trade can benefit growth in well-governed environments but may generate adverse effects including deindustrialization, resource curse dynamics, and inequality increases in contexts with poor institutional quality (Bounahr & Khattab, 2025). The policy implication is that trade liberalization reforms should be sequenced with or accompanied by institutional strengthening efforts rather than pursued in isolation (Author, 2025).

5.3 Institutions and Financial Development

The financial development-growth nexus exhibits strong conditioning by institutional quality, with robust financial systems requiring strong institutional foundations to function effectively and channel resources toward productive uses (Mensah et al., 2025). Studies examining 33 emerging economies from 1996-2020 reveal that FDI inflows, financial development, and institutional quality all have positive effects on economic growth, with these growth effects evidently heterogeneous across countries depending on institutional quality levels (Mensah et al., 2025). Research on African economies demonstrates that initial financial development enhances economic wealth, but beyond thresholds of 0.41 and 1.21, additional financial development reduces economic wealth, suggesting that financial sector expansion in weak institutional environments can generate instability, misallocation, and crisis vulnerabilities (OforiSasu et al., 2025).

Digital finance offers a contemporary dimension to this relationship, with evidence indicating that digital financial technologies positively influence both financial development and economic wealth in African economies (OforiSasu et al., 2025). Critically, increasing levels of digital finance systems amplify the positive linear effect of financial development on economic wealth, suggesting that technological innovations can partially compensate for institutional weaknesses by reducing information asymmetries, lowering transaction costs, and improving financial inclusion (OforiSasu et al.,

2025). However, maximizing these benefits still requires regulatory frameworks that establish optimal financial development levels, emphasizing that institutional reforms complementing digital finance adoption are essential for sustained economic growth (OforiSasu et al., 2025). The moderating effect of institutional quality on finance-growth linkages underscores that financial sector reforms must simultaneously address institutional foundations rather than focusing solely on expanding credit or banking sector penetration (DawayDucanes & GochocoBautista, 2019).

5.4 Institutions and External Debt Management

External debt's impact on economic growth is critically moderated by institutional quality and governance frameworks, with strong institutions enabling countries to utilize debt productively while weak governance exacerbates debt overhang effects and crisis risks (Tarchoun & Ghraieb, 2025). Research employing Cross-Sectionally Augmented ARDL methodology for developing countries from 1990-2023 demonstrates that external debt negatively impacts growth in countries with weak institutions, consistent with debt overhang hypotheses, whereas strong institutions reduce debt's negative impact and can even enable debt to exert positive growth effects (Tarchoun & Ghraieb, 2025). Studies of ECOWAS nations from 2000-2023 confirm that governance quality critically moderates the debt-growth relationship, with strong institutions enhancing positive effects while weak governance exacerbates associated risks including macroeconomic instability and exchange rate volatility (Jibir & Sofah, 2025).

Threshold analyses provide quantitative benchmarks for institutional quality levels necessary to ensure productive debt utilization. Evidence from 32 Asian developing countries indicates that institutional quality must exceed thresholds of 0.91-0.93 (on -2.5 to +2.5 scales) before external debt can function as a growth catalyst rather than impediment (Dawood et al., 2025). Above these thresholds, strong institutional structures characterized by enhanced transparency, strengthened rule of law, and improved fiscal accountability enable debt to act as an impetus for growth, particularly when coupled with developed financial systems that allocate borrowed resources efficiently (Dawood et al., 2025).

These findings have critical policy implications, suggesting that debt sustainability depends not solely on debt-to-GDP ratios but fundamentally on institutional capacity to channel borrowed resources

toward productive investments that generate sufficient returns to service debt obligations while supporting development objectives (Tarchoun & Ghraieb, 2025).

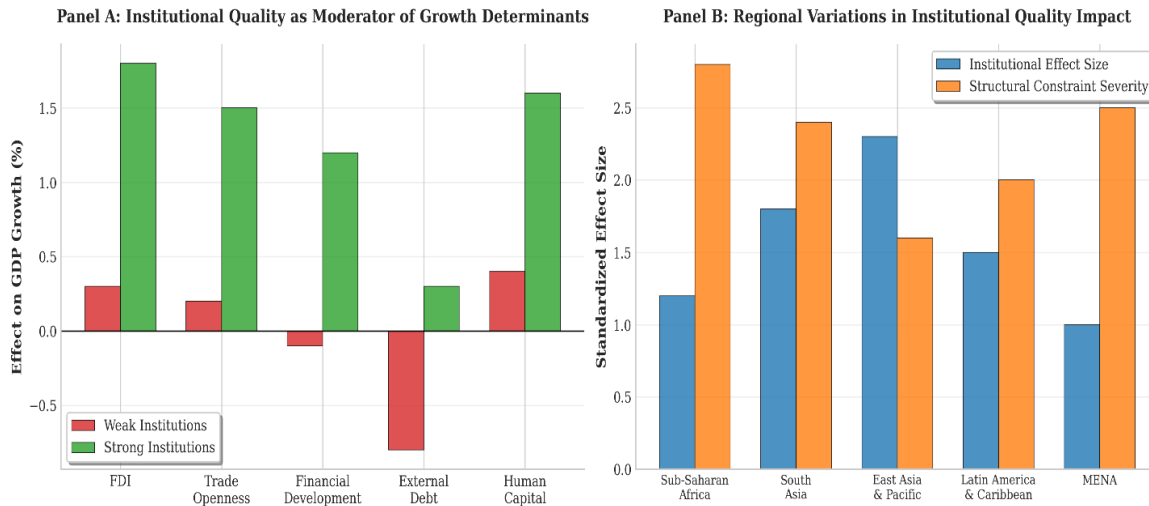


Figure 2: Moderating Effects of Institutional Quality on Growth Determinants Policy Implications and Future Research Directions

6.1 Strengthening Institutional Frameworks: Policy Priorities

The empirical evidence reviewed underscores that strengthening institutional frameworks represents a fundamental policy priority for developing economies seeking to accelerate growth and overcome structural constraints (Ghosh & Saha, 2025). Policy interventions should prioritize multiple institutional dimensions simultaneously rather than focusing narrowly on single governance aspects (Liang & Li, 2025). Specific priorities include enhancing government effectiveness through civil service reforms that improve bureaucratic competence and public service delivery; strengthening regulatory quality by streamlining business regulations, reducing entry barriers, and ensuring transparent and predictable policy implementation; and reinforcing rule of law through judicial reforms that enhance contract enforcement, property rights protection, and legal certainty (Ghosh & Saha, 2025).

Control of corruption emerges as particularly critical given its pervasive negative effects on resource allocation, public service quality, and investor confidence (Jibir & Sofah, 2025). Anti-corruption

strategies should combine preventive measures including transparency requirements, competitive procurement systems, and merit-based recruitment with enforcement mechanisms ensuring accountability for corrupt behavior (Okoh, 2024). Political stability and conflict prevention represent additional priorities, as political uncertainty and violence fundamentally undermine economic decision-making and long-term investment (Jibir & Sofah, 2025). Achieving political stability requires inclusive governance structures, effective conflict resolution mechanisms, and social cohesion policies that address underlying tensions and grievances (Bounahr & Khattab, 2025). Voice and accountability mechanisms, while showing mixed direct growth effects in some studies, remain important for ensuring government responsiveness to citizen needs and preventing policy capture by narrow elite interests (Phuc, 2025).

6.2 Context-Specific Approaches to Institutional Reform

Institutional reform strategies must be tailored to country-specific contexts, development stages, and existing institutional configurations rather than

adopting one-size-fits-all approaches (Dawood et al., 2025). Evidence of threshold effects suggests that reform priorities should differ between low-income countries with very weak institutions and middle-income countries approaching institutional quality thresholds where marginal improvements yield particularly high growth dividends (Dawood et al., 2025). For the poorest developing countries, building fundamental institutional capacities including basic property rights protection, rule of law, and control of corruption takes priority even if growth effects materialize slowly (Abodunrin et al., 2025). For middle-income countries approaching upper-middle income status, institutional reforms emphasizing regulatory quality, government effectiveness, and innovation-supporting frameworks become increasingly critical for sustaining growth and avoiding middle-income traps (Liang & Li, 2025).

Regional context also matters substantially, as institutional effects and optimal reform strategies vary across Sub-Saharan Africa, South Asia, East Asia, Latin America, and the Middle East (Jibir & Sofah, 2025). African economies may benefit particularly from political stability improvements and rule of law strengthening given evidence that these dimensions exert strong positive growth effects in the region (Phuc, 2025). South Asian countries might prioritize government effectiveness and regulatory quality reforms to enhance infrastructure development and human capital utilization (Zafar, 2021). Latin American economies could focus on corruption control and voice and accountability enhancements to address governance challenges that have historically constrained development (Husnain et al., 2024). These region-specific emphases should be informed by detailed political economy analyses identifying binding institutional constraints and feasible reform pathways given existing power structures and political configurations (Wang, 2025).

6.3 Complementarity Between Institutions and Other Development Factors

A key insight from the literature is that institutional reforms should be pursued in tandem with investments in physical infrastructure, human capital, and technological capabilities rather than as alternatives (Silaban, 2025). Evidence demonstrates

that infrastructure investment impacts are maximized when accompanied by strong institutional frameworks ensuring project quality, maintenance, and efficient resource allocation (Silaban, 2025). Similarly, human capital investments yield higher growth returns in contexts with effective institutions that ensure education and health system quality, align skill development with labor market needs, and create economic opportunities for educated workers (Lamichhane et al., 2025). Financial sector development requires institutional foundations including creditor rights protection, contract enforcement, and regulatory capacity to prevent the emergence of financial instability and ensure credit flows toward productive uses (DawayDucanes & GochocoBautista, 2019).

The complementarity between institutions and other growth factors implies that successful development strategies must address multiple constraints simultaneously through coordinated policy packages (Yusof et al., 2025). For instance, policies promoting foreign direct investment should combine investment climate improvements (regulatory streamlining, dispute resolution mechanisms) with infrastructure development ensuring connectivity and reliable utilities, human capital investments providing skilled workforces, and institutional reforms protecting property rights and controlling corruption (Ghosh & Saha, 2025). Trade liberalization strategies should similarly pair tariff reductions and market opening with institutional strengthening that enables domestic firms to adapt to competitive pressures, regulatory frameworks facilitating technology transfer, and social safety nets cushioning adjustment costs (Author, 2025). This integrated approach recognizes that removing individual bottlenecks proves insufficient when multiple binding constraints exist, requiring comprehensive reforms tackling interrelated structural and institutional impediments (Wang, 2025).

6.4 Research Gaps and Future Agenda

Despite substantial progress in understanding institutions-growth relationships, important research gaps remain that warrant future investigation. First, causal identification remains challenging given potential reverse causality wherein successful growth

enables institutional improvements, alongside omitted variable biases if unobserved factors jointly determine institutions and growth (Ghosh & Saha, 2025). While instrumental variables approaches employing historical and geographical instruments have been developed, concerns persist about instrument validity and exclusion restrictions (Liang & Li, 2025). Future research should continue refining identification strategies, potentially leveraging natural experiments, difference-in-differences designs around institutional shocks, and synthetic control methods to strengthen causal inferences (Jibir & Sofah, 2025).

Second, the mechanisms linking institutions to growth require further investigation (Bekana, 2020). While theoretical frameworks identify multiple transmission channels, empirical work providing direct evidence on specific mechanisms remains limited (Liang & Li, 2025). Future research should employ micro-level data examining how institutional quality affects firm-level productivity, entrepreneurship rates, innovation outcomes, and resource allocation efficiency (Fayyaz & Bartha, 2025). Third, political economy research illuminating the determinants of institutional change and reform sustainability deserves greater attention (Wang, 2025). Understanding which political configurations enable successful institutional reforms, how reform coalitions are built, and what factors determine reform persistence versus reversal would provide actionable insights for practitioners designing and implementing governance interventions (Hocini et al., 2025). Fourth, the growing importance of digital technologies and their interactions with institutional quality merits systematic investigation (Pradhan et al., 2022). Research examining whether digital finance, e-governance, and information communication technologies can substitute for or complement traditional institutions would inform technology-oriented development strategies (OforiSasu et al., 2025).

7. Conclusion

This comprehensive literature review has synthesized theoretical and empirical research examining the complex relationships among institutional quality, structural constraints, and economic growth in

developing economies. The analysis demonstrates that institutions play multifaceted roles, exerting direct positive effects on growth while critically moderating the impacts of other key determinants including foreign direct investment, trade openness, financial development, and external debt. Theoretical foundations spanning neoclassical growth models, endogenous growth theory, and institutional economics provide complementary frameworks for understanding these relationships, with contemporary research increasingly emphasizing interaction effects, threshold dynamics, and context-specific heterogeneity.

Empirical evidence reviewed indicates that institutional quality improvements—particularly in government effectiveness, regulatory quality, and rule of law—strengthen economic growth, with effect sizes that are both statistically and economically significant. However, institutional effects exhibit important non-linearities and threshold characteristics, with marginal institutional improvements yielding particularly high growth dividends once countries exceed minimum institutional quality levels. Regional heterogeneity is pronounced, with institutional impacts varying substantially across Sub-Saharan Africa, Asia, Latin America, and the Middle East, reflecting differences in historical trajectories, political configurations, and structural constraints.

Structural constraints including infrastructure deficits, human capital limitations, financial market inefficiencies, and market imperfections represent binding growth impediments in many developing economies. Critically, the growth-constraining effects of these structural bottlenecks are amplified in weak institutional environments, while strong institutions enable economies to overcome or mitigate structural limitations through efficient resource mobilization and allocation. The complementarity between institutional strengthening and investments in infrastructure, human capital, and financial sector development underscores that successful development strategies must address multiple constraints simultaneously rather than pursuing piecemeal reforms.

Policy implications emphasize the importance of tailored institutional reforms recognizing country-specific contexts, development stages, and binding

constraints. While universal principles such as property rights protection, corruption control, and rule of law apply broadly, implementation strategies must adapt to local political economy realities and institutional legacies. The evidence base supports coordinated policy packages combining institutional reforms with complementary investments in physical and human capital, technological capabilities, and macroeconomic stability frameworks. Future research should continue refining causal identification strategies, investigating transmission mechanisms, examining political economy factors shaping institutional change, and analyzing how emerging digital technologies interact with traditional institutional frameworks to influence development trajectories.

In conclusion, this review establishes that institutions matter fundamentally for economic growth in developing countries, not as background conditions but as active determinants shaping the effectiveness of development policies and the conversion of resources into sustained prosperity. Recognizing institutions' central role while acknowledging context-specific variations and complementarities with other growth factors provides a foundation for evidence-based policy design aimed at accelerating development and reducing poverty in the world's most economically vulnerable nations. The evidence synthesized in this review demonstrates that developing economies face a dual challenge: overcoming structural constraints while simultaneously building institutional capacity. Neither challenge can be successfully addressed in isolation, as weak institutions exacerbate structural bottlenecks, and structural deficiencies undermine institutional effectiveness.

The path forward requires sustained commitment to comprehensive reform agendas that recognize the interconnected nature of institutional quality, human capital development, infrastructure investment, and financial sector strengthening (Ghosh & Saha, 2025). Policymakers must resist the temptation to pursue quick fixes or narrow interventions, instead embracing long-term strategies that build institutional foundations capable of supporting sustained growth across multiple development stages (Wang, 2025). International development partners can support these efforts

through technical assistance, capacity building programs, and financial resources that prioritize institutional strengthening alongside traditional infrastructure and social sector investments (Jibir & Sofah, 2025).

Ultimately, the heterogeneity of developing economies means that no single institutional blueprint can be universally applied. Success depends on understanding country-specific binding constraints, identifying politically feasible reform pathways, and sequencing interventions to build reform momentum while managing implementation risks (Dawood et al., 2025). This review provides a comprehensive synthesis of current knowledge on these critical relationships, offering both theoretical insights and empirical evidence to guide the next generation of institutional and development economics research. As developing countries continue their pursuit of sustained prosperity and poverty reduction, the centrality of institutional quality to achieving these objectives cannot be overstated. Future scholarship must continue deepening our understanding of how institutions evolve, how reforms succeed or fail, and how institutional frameworks can be designed to maximize the development potential of resource-constrained economies navigating an increasingly complex global environment.

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