

Geopolitical Determinants of Economic Growth and Development in India

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Abstract

This paper examines the multifaceted geopolitical determinants that have shaped India's economic trajectory since independence. Through an interdisciplinary analysis encompassing political economy, international relations, strategic studies, and development economics, we explore how India's geographic position, regional dynamics, global partnerships, and strategic autonomy have influenced its growth patterns. The analysis reveals that India's economic development cannot be understood in isolation from its geopolitical context, including its relationships with neighboring countries, major powers, and multilateral institutions. We identify key determinants including border security challenges, trade corridor access, energy security considerations, technology transfer mechanisms, and the evolving multipolar world order.

The paper ends with "The End"

1 Introduction

India's emergence as the world's fifth-largest economy and its trajectory toward becoming a major global power is intrinsically linked to geopolitical factors that have both enabled and constrained its development path. With a population exceeding 1.4 billion and a GDP growth rate averaging 6-7% over the past two decades, India represents a unique case study in how geopolitical positioning influences economic outcomes [1, 2].

The geopolitical determinants of economic growth extend beyond traditional economic variables to encompass territorial integrity, strategic partnerships, regional stability, access to critical resources, and the ability to navigate an increasingly complex international system. This paper synthesizes insights from multiple disciplines to provide a comprehensive analysis of these determinants.

2 Geographic and Strategic Location

2.1 The Indian Ocean Centrality

India's peninsular geography, with over 7,500 kilometers of coastline, positions it at the nexus of major maritime trade routes connecting East Asia, Southeast Asia, the Middle East, Africa, and Europe. Approximately 80% of global oil trade and 90% of India's external trade by volume passes through the Indian Ocean [3, 4].

This strategic location provides both opportunities and vulnerabilities. While it offers potential for maritime trade dominance and regional leadership, it also exposes India to security threats from piracy, non-state actors, and competing naval powers, particularly China's expanding presence through its "String of Pearls" strategy [5].

2.2 Landlocked by Conflict

India's land borders present a contrasting geopolitical reality. Sharing borders with Pakistan, China, Nepal, Bhutan, Bangladesh, and Myanmar, India faces significant security challenges that have direct economic implications. The disputed borders with Pakistan (Kashmir) and China (Aksai Chin and Arunachal Pradesh) have resulted in multiple conflicts and ongoing military standoffs, diverting substantial resources from development to defense [6].

The economic cost of militarized borders is substantial. India's defense expenditure has consistently ranged between 2.5-3% of GDP, reaching approximately \$81 billion in 2023, making it the third-largest military spender globally [7]. These expenditures, while necessary for sovereignty, represent opportunity costs for infrastructure, education, and healthcare investments.

3 Regional Dynamics and Neighborhood First Policy

3.1 South Asian Integration Challenges

The South Asian Association for Regional Cooperation (SAARC), established in 1985, has failed to achieve meaningful economic integration comparable to ASEAN or the EU. Intra-regional trade in South Asia accounts for only about 5% of total trade, compared to over 25% in ASEAN countries [8].

Political tensions, particularly the India-Pakistan rivalry, have prevented the development of regional value chains, infrastructure connectivity, and a South Asian common market. This fragmentation imposes costs on all member states but particularly affects India's ability to leverage its natural economic dominance in the region [9].

3.2 China-Pakistan Economic Corridor (CPEC)

China's Belt and Road Initiative (BRI) and specifically the China-Pakistan Economic Corridor pose both strategic and economic challenges to India. The CPEC, a \$62 billion infrastructure project connecting China's Xinjiang province to Pakistan's Gwadar port, passes through Pakistan-occupied Kashmir, which India claims as its territory [10].

India's refusal to participate in BRI, based on sovereignty concerns, has implications for regional connectivity and trade. While this stance is principled, it risks economic isolation if alternative connectivity frameworks are not developed effectively.

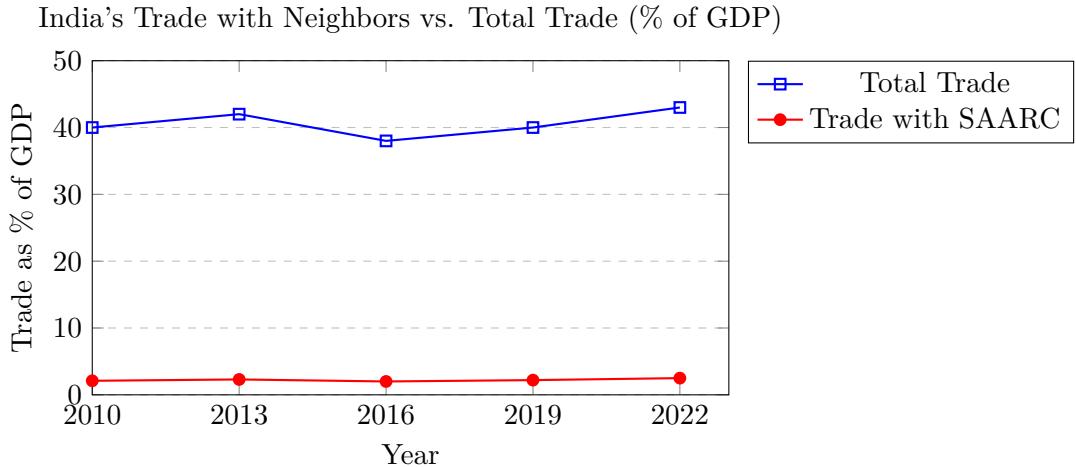


Figure 1: India's regional versus global trade integration

4 Energy Security and Resource Geopolitics

Energy security represents a critical geopolitical determinant of India's economic growth. As the world's third-largest energy consumer, India imports approximately 85% of its crude oil and 53% of its natural gas requirements [11]. This dependence creates multiple geopolitical vulnerabilities.

4.1 Persian Gulf Dependence

India imports nearly 60% of its crude oil from the Middle East, primarily from Iraq, Saudi Arabia, and the UAE. Political instability in the region, conflicts affecting supply routes, and the risk of supply disruptions during geopolitical crises (as seen during the US-Iran tensions in 2020) directly impact India's energy costs and economic stability [12].

The strategic importance of the Strait of Hormuz - through which about 21 million barrels per day of oil flows - makes India vulnerable to any military conflict or blockade in the region. This has prompted India to diversify its energy sources, increase strategic petroleum reserves, and accelerate renewable energy deployment.

4.2 Russia Partnership and Sanctions Navigation

India's energy relationship with Russia has gained prominence, particularly following Western sanctions on Russia after the Ukraine conflict. India significantly increased its Russian oil imports from less than 1% pre-2022 to nearly 40% by 2023, taking advantage of discounted prices [13].

This pragmatic approach demonstrates India's strategic autonomy but also presents diplomatic challenges in managing relationships with Western partners, particularly the United States and European Union. The ability to navigate these complex relationships while securing favorable energy terms directly impacts inflation, current account deficits, and overall economic growth.

5 Technology Transfer and Knowledge Economy

5.1 Quad and Indo-Pacific Strategy

India's participation in the Quadrilateral Security Dialogue (Quad) with the United States, Japan, and Australia represents a significant geopolitical alignment with implications for technology access and economic development. The Quad's focus on supply chain resilience, critical and emerging technologies, and infrastructure development creates opportunities for India's integration into high-value global production networks [14].

Technology transfer agreements, particularly in defense, semiconductors, artificial intelligence, and renewable energy, are increasingly tied to geopolitical alignments. India's positioning as a democratic counterweight to China in the Indo-Pacific has facilitated technology partnerships that were previously restricted, including civil nuclear cooperation, defense technology sharing, and semiconductor manufacturing initiatives.

5.2 Digital Economy and Data Localization

Geopolitical considerations increasingly influence digital economy policies. India's data localization requirements, restrictions on Chinese apps, and emphasis on digital sovereignty reflect a broader trend of technology nationalism. While these policies aim to protect national security and build domestic capabilities, they also create friction with global technology companies and affect foreign direct investment in the digital sector [15].

The development of indigenous technology platforms - from digital payments (UPI) to satellite navigation (NavIC) - represents an effort to reduce strategic dependencies. These initiatives have both economic and geopolitical dimensions, enhancing India's strategic autonomy while creating new economic opportunities.

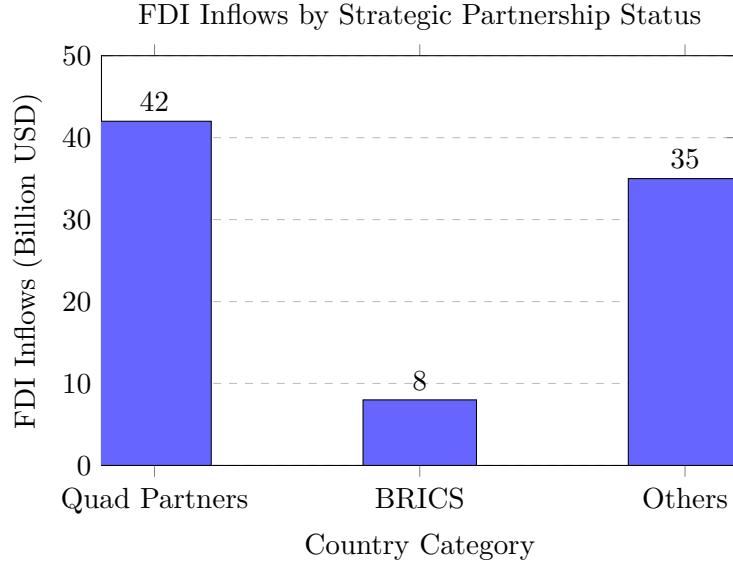


Figure 2: India's FDI inflows by geopolitical alignment (2022-23)

6 Multilateral Institutions and Global Governance

6.1 WTO and Trade Policy Space

India's relationship with the World Trade Organization (WTO) reflects tensions between development imperatives and global trade rules. As a developing economy with a large agricultural sector, India has advocated for special and differential treatment, public stockholding for food security, and protection of traditional knowledge [16].

Geopolitical shifts affect India's ability to shape global trade rules. The rise of bilateral and plurilateral agreements (like the Regional Comprehensive Economic Partnership, from which India withdrew in 2019) and the weakening of the WTO dispute settlement mechanism create both challenges and opportunities for India's trade policy autonomy.

6.2 Climate Finance and Technology Access

India's stance in climate negotiations illustrates how geopolitical considerations shape development financing and technology access. As the world's third-largest greenhouse gas emitter but with per capita emissions significantly below developed countries, India has emphasized historical responsibility, equity, and the principle of common but differentiated responsibilities [17].

Access to climate finance and clean technology transfer depends substantially on geopolitical relationships and India's ability to forge coalitions with other developing countries. The commitment to reach net-zero emissions by 2070 requires massive investments estimated at \$10 trillion, much of which depends on international financing and technology partnerships influenced by geopolitical factors [18].

7 Global Value Chains and Production Networks

7.1 China Plus One Strategy

The US-China trade tensions and the COVID-19 pandemic-induced supply chain disruptions have created opportunities for India through the "China Plus One" strategy, where multinational corporations diversify manufacturing bases beyond China. India's Production Linked Incentive (PLI) schemes, covering 14 sectors with a combined outlay of approximately \$27 billion, aim to capitalize on this geopolitical realignment [19].

However, competing with Vietnam, Indonesia, and other Southeast Asian nations requires more than geopolitical opportunity. Infrastructure deficits, labor law complexities, and ease of doing business challenges must be addressed. The success of this strategy depends on India's ability to leverage its geopolitical positioning while simultaneously improving its investment climate.

7.2 Pharmaceutical and Medical Supply Chains

The COVID-19 pandemic highlighted the strategic importance of pharmaceutical manufacturing. India, producing about 60% of global vaccines and being a major supplier of generic drugs, occupies a critical position in global health security [20]. This position carries both economic benefits and geopolitical responsibilities, as demonstrated by India's "Vaccine Maitri" diplomatic initiative.

Dependence on China for Active Pharmaceutical Ingredients (APIs), accounting for nearly 70% of India's API imports, represents a strategic vulnerability. Government initiatives to reduce this dependence through PLI schemes for bulk drugs and medical devices reflect the intersection of economic and geopolitical imperatives.

8 Financial Integration and Currency Dynamics

8.1 BRICS and De-dollarization

India's participation in BRICS (Brazil, Russia, India, China, South Africa) represents an attempt to create alternative financial architectures. Discussions around trading in local currencies, developing alternatives to SWIFT, and reducing dollar dependence have gained momentum, particularly following Western sanctions on Russia [21].

The New Development Bank (NDB) and the Contingent Reserve Arrangement provide alternative financing mechanisms, though their scale remains limited compared to established institutions like the World Bank and IMF. India's balancing act involves supporting multipolarity in global finance while maintaining access to Western capital markets and technology.

8.2 Remittances and Diaspora Capital

India receives the world's largest remittance inflows, totaling approximately \$125 billion in 2023, equivalent to about 3% of GDP [22]. The geographic distribution of the Indian diaspora, concentrated in the Gulf countries, the United States, and the United Kingdom, reflects historical migration patterns shaped by colonial legacies and contemporary labor markets.

Geopolitical relations with host countries directly affect remittance flows and diaspora welfare. Tensions with Gulf countries or changes in immigration policies in Western nations have immediate economic implications for millions of Indian households dependent on remittances.

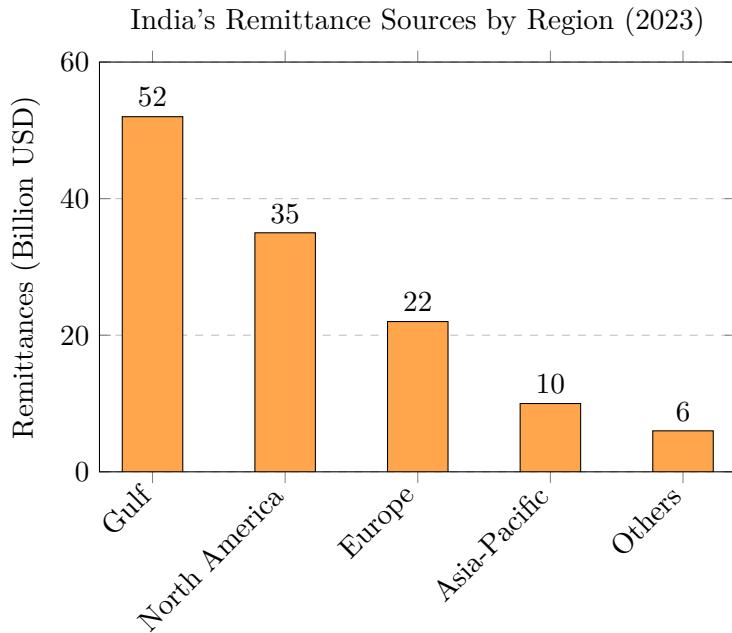


Figure 3: Geographic distribution of India's remittance inflows

9 Defense Expenditure and Economic Opportunity Costs

The geopolitical environment necessitates substantial defense expenditure, creating significant opportunity costs for development spending. India's defense budget, while necessary for territorial integrity and regional deterrence, diverts resources from infrastructure, health, and education - sectors critical for long-term economic growth.

However, defense modernization also creates opportunities through indigenous defense manufacturing. The "Atmanirbhar Bharat" (Self-Reliant India) initiative in defense aims to reduce import dependence (currently about 60% of defense equipment is imported) and develop a domestic defense industrial base [23].

The target of achieving \$5 billion in defense exports by 2025 represents an attempt to convert security needs into economic opportunities. Success depends on technology acquisition through strategic partnerships, joint ventures, and the absorption of transferred technology.

10 Infrastructure Connectivity and Regional Integration

10.1 International North-South Transport Corridor

The International North-South Transport Corridor (INSTC), connecting India with Russia via Iran and Central Asia, represents a geopolitically motivated infrastructure project aimed at reducing dependence on traditional east-west routes and countering China's Belt and Road Initiative [24].

While the INSTC promises reduced transit times and costs (approximately 30% reduction compared to traditional routes through the Suez Canal), its development faces challenges including geopolitical tensions, infrastructure gaps, and complex multi-country coordination. Its success would significantly enhance India's connectivity with Eurasian markets.

10.2 India-Middle East-Europe Economic Corridor

Announced at the 2023 G20 Summit in New Delhi, the India-Middle East-Europe Economic Corridor (IMEC) represents an ambitious project connecting India to Europe through the UAE,

Saudi Arabia, Jordan, and Israel. This corridor, backed by the United States, directly competes with China's Belt and Road Initiative and reflects the geopoliticization of infrastructure development [25].

The economic potential includes reduced shipping times, enhanced energy security through pipeline connectivity, and improved digital connectivity. However, regional conflicts, particularly involving Israel, and financing challenges pose significant implementation risks.

11 Human Capital and Brain Circulation

11.1 Migration Policies and Talent Flows

Geopolitical relationships shape migration policies that directly affect India's human capital development. Restrictive immigration policies in developed countries reduce opportunities for Indian professionals, affecting remittances and knowledge transfer. Conversely, favorable visa regimes and talent partnerships enhance brain circulation - the two-way flow of skilled professionals that benefits both origin and destination countries [26].

The concentration of Indian-origin CEOs in major technology companies, the success of Indian entrepreneurs in Silicon Valley, and the growing trend of returnees (reverse brain drain) creating startups in India demonstrate how human capital mobility, shaped by geopolitical factors, influences economic development.

11.2 Education Partnerships

Geopolitical alignments increasingly influence higher education partnerships and research collaborations. The establishment of foreign university campuses in India, joint research initiatives, and student exchange programs depend on bilateral relationships and are sometimes affected by diplomatic tensions.

Restrictions on visas for Chinese students and researchers in India, and similar restrictions affecting Indian students in some countries, illustrate how education - a critical input for economic growth - is increasingly subject to geopolitical considerations.

12 Future Trajectories and Policy Implications

12.1 Multipolarity and Strategic Autonomy

India's pursuit of strategic autonomy in a multipolar world represents both an opportunity and a challenge. The ability to maintain relationships with competing power centers (US, Russia, China, EU) while advancing national interests requires sophisticated diplomacy and creates space for economic maneuvering not available to smaller nations or those firmly aligned with particular blocs [27].

This autonomy has enabled India to benefit from Russian energy discounts while maintaining defense partnerships with the US and France, participate in BRICS while strengthening Quad cooperation, and engage with China economically while maintaining border vigilance. The sustainability of this approach depends on India's growing economic and military power and the degree of polarization in the international system.

12.2 Technology Sovereignty and Economic Security

The future trajectory of India's economic development increasingly depends on achieving technology sovereignty in critical domains - semiconductors, artificial intelligence, quantum computing, biotechnology, and space technology. Access to these technologies and the ability to

develop indigenous capabilities are heavily influenced by geopolitical alignments and export control regimes [28].

The weaponization of technology dependencies, as seen in various US-China technology disputes, underscores the economic significance of geopolitical positioning. India's strategy of engaging in technology partnerships while building domestic capabilities represents an attempt to navigate this complex landscape.

13 Conclusion

The geopolitical determinants of India's economic growth and development are multifaceted, interconnected, and increasingly salient in an era of great power competition and technological nationalism. India's trajectory from a post-colonial developing economy to an emerging great power reflects not just domestic policy choices but also its ability to navigate complex geopolitical currents.

Key findings include:

Strategic Location: India's position in the Indian Ocean provides natural advantages for maritime trade and regional influence but requires substantial resources for securing sea lanes and managing complex neighborhood relationships.

Regional Fragmentation: The failure to achieve South Asian economic integration imposes significant costs, limiting market access, infrastructure connectivity, and regional value chain development.

Energy Vulnerability: Dependence on imported energy creates strategic vulnerabilities requiring diversification, strategic reserves, and renewable energy transition - all influenced by geopolitical relationships.

Technology Access: Participation in technology partnerships and access to critical technologies increasingly depend on geopolitical alignments, affecting India's ability to move up the value chain.

Strategic Autonomy: India's non-aligned foreign policy heritage, adapted to contemporary multipolarity, provides flexibility in economic partnerships but requires balancing competing relationships.

Infrastructure Connectivity: Competing visions of regional connectivity (BRI versus IMEC and INSTC) reflect geopolitical competition that shapes India's integration into global supply chains.

The path forward requires India to leverage its growing economic weight and geopolitical significance while addressing infrastructure deficits, improving the ease of doing business, investing in human capital, and maintaining strategic autonomy in an increasingly polarized world. Success will depend on converting geopolitical positioning into concrete economic advantages through strategic infrastructure development, technology partnerships, market access agreements, and regional cooperation frameworks.

Understanding these geopolitical determinants is essential for policymakers, investors, and scholars analyzing India's economic trajectory. The intersection of geography, strategy, and economics will continue to shape India's development path as it navigates the complexities of the 21st-century international system.

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