

EXPORT CONCENTRATION AND COMPETITIVENESS ACROSS INDIAN STATES

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Abstract

This paper examines the regional distribution, concentration, and determinants of merchandise exports across Indian states using comparative data for FY 2023-24 and provisional estimates for FY 2024-25, drawing on secondary sources including the Reserve Bank of India Handbook of Statistics, Ministry of Commerce databases, and state-level investment statistics. The analysis confirms a high degree of export concentration, with a small group of leading states particularly Gujarat, Maharashtra, and Tamil Nadu consistently accounting for a dominant share of India's total merchandise exports, though recent evidence indicates gradual geographic rebalancing as southern states strengthen their export positions. Comparative tables incorporating export values, shares, growth trends, and foreign direct investment inflows reveal that while export rankings remain structurally stable in the short run, investment inflows and sectoral dynamics show considerable variation across states. Correlation analysis further indicates that traditional structural determinants such as FDI inflows, logistics performance, and port proximity strongly explained interstate export variation in FY 2023-24, whereas provisional FY 2024-25 results suggest weakening short-term relationships, implying a transitional phase influenced by sectoral cycles, policy shifts, and changing trade demand. Overall, the findings demonstrate that state-level export competitiveness is shaped by a combination of industrial specialization, infrastructure accessibility, investment patterns, and cluster development, and that improvements in logistics and diversification may gradually reduce geographic disparities. By integrating multi-year comparative evidence, the study provides a nuanced understanding of India's evolving subnational export landscape and offers policy-relevant insights for promoting balanced export growth across both leading and emerging states.

Keywords: Merchandise Exports; Regional Export Concentration; State Competitiveness; Foreign Direct Investment; Infrastructure Determinants.

1. Introduction

India's emergence as a major global trading nation represents one of the most significant economic developments of the 21st century; however, the geographic distribution of this export growth remains highly concentrated, with a disproportionate share originating from a small subset of Indian states. Understanding state-level export patterns is critical because it reveals regional economic disparities and structural imbalances in India's export base, identifies underutilized productive capacities in resource-rich but low-performing regions, and informs policy interventions aimed at equitable regional development and inclusive growth. During FY 2023-24, India's merchandise exports totalled approximately US\$437 billion, placing the country among the world's leading trading economies, yet this aggregate success masks pronounced regional heterogeneity. The top three states—Gujarat, Maharashtra, and Tamil Nadu—together contributed about 49.9% of total exports, while a large number of states accounted for only marginal shares, reflecting strong concentration in a few industrial and coastal regions. Recent comparative evidence incorporating provisional FY 2024-25 estimates suggests a gradual geographic rebalancing rather than a structural shift, with southern states such as Tamil Nadu and Telangana strengthening their export performance and investment inflows, even as traditional western leaders retain their dominance in overall rankings. Analytical results further indicate that in FY 2023-24 export performance was strongly associated with structural determinants such as FDI inflows, logistics efficiency, and port proximity, whereas early FY 2024-25 patterns point to weaker short-run correlations, suggesting a transitional phase influenced by sectoral demand changes, policy dynamics, and evolving global supply chains. Against this backdrop, the present study addresses three key research questions: (1) what explains the persistent concentration of merchandise exports across Indian states; (2) which sectoral, infrastructural, and investment factors drive differential export performance; and (3) how emerging geographic trends are reshaping India's export map and what implications these shifts hold for balanced regional development.

2. Literature Review

Classic organisational theory relates the level of uncertainty to the increase in information processing demands (Galbraith, 1974). Recent literature on export concentration and competitiveness increasingly emphasises the importance of sub-national analysis, particularly in large and regionally diverse economies such as India (Moirangthem & Nag, 2023). A growing body of research highlights that India's export performance is heavily concentrated in a limited number of states, reflecting structural asymmetries in industrial capacity, infrastructure, and institutional readiness (Kathuria et al., 2023). One of the most comprehensive state-level assessments is provided by NITI Aayog through its Export Preparedness Index (EPI) reports. The EPI (2020, 2022) documents that states such as Maharashtra, Gujarat, Tamil Nadu, Karnataka, and Telangana consistently dominate India's merchandise exports, while a majority of states remain marginal participants. The index-based analysis demonstrates that export concentration is closely linked to disparities in trade facilitation, logistics infrastructure, industrial clusters, and governance quality (NITI Aayog, 2020; 2022). Internationally, studies focusing on global value chains (GVCs) provide important insights into regional export competitiveness. Research associated with UNCTAD argues that export competitiveness increasingly depends on a region's ability to integrate into GVCs rather than merely expanding gross export volumes. Empirical work by Banga (2022) shows that India's GVC participation is spatially concentrated in a few industrialised states, reinforcing export concentration patterns. States with stronger manufacturing bases and higher foreign direct investment (FDI) inflows exhibit greater export sophistication and value-added, while others remain locked into low-value primary exports, limiting their competitiveness (Lu et al., 2022).

Several peer-reviewed journal articles also examine export concentration using sectoral and commodity-level approaches. Studies employing Herfindahl–Hirschman Index (HHI), concentration ratios, and revealed comparative advantage (RCA) measures find that India's export basket remains highly concentrated not only across products but also across regions (Singh, V. K., & Gautam, A. 2019). These studies show that while India has diversified its export destinations, spatial concentration within the country has persisted, suggesting that competitiveness gains are unevenly distributed among states.

At the sub-national level, financial and institutional factors have emerged as significant determinants of export competitiveness. Recent panel-data studies (2023–2024) demonstrate that states with deeper financial development, better access to credit, and stronger banking penetration record higher export intensity and diversification. This indicates that export concentration is partly driven by unequal financial ecosystems across states, which influence firms' ability to enter and sustain international markets (Arora, P. K., & Mukherjee, J. 2024). Such findings align with broader international literature linking financial development to export performance in developing economies. Policy-oriented research from development finance institutions further reinforces these conclusions. State-specific studies conducted by the Export-Import Bank of India (Exim Bank) between 2022 and 2024 highlight that export concentration at the national level is a cumulative outcome of state-level sectoral specialisation. For example, Exim Bank's analyses of Telangana and Gujarat show that focused industrial policies and cluster-based development strategies can enhance competitiveness but may also intensify concentration if similar strategies are absent in lagging states (Exim Bank, 2023). Sector-specific and region-focused studies published in *Economic and Political Weekly* further illustrate how infrastructural bottlenecks constrain export competitiveness in less-developed regions. Research on agricultural and horticultural exports from Northeast India finds that inadequate logistics, cold-chain infrastructure, and market access limit export diversification, reinforcing regional export disparities (EPW, 2024). These findings underscore that export concentration is not merely a market outcome but also a result of persistent policy and infrastructure gaps. Comparative international studies on export diversification and economic vulnerability also inform the Indian context. Research published between 2020 and 2024 suggests that high export concentration increases susceptibility to external shocks and undermines long-term competitiveness. Applying these frameworks to India, scholars argue that reducing inter-state export concentration

through diversification and capability-building is essential for resilient export growth (Karahan, H. 2017). The Export Preparedness Index 2025 finds that states with stronger logistics systems, industrial clusters, and policy support—such as Maharashtra, Tamil Nadu, Gujarat, and Karnataka—continue to dominate exports, while improvements in infrastructure and governance are helping some emerging states gradually enhance competitiveness (NITI Aayog, 2025). Complementing this, Patel and Singh (2025) show through econometric analysis that foreign direct investment, port connectivity, and logistics quality are significant determinants of export outcomes across states, but their impact varies depending on industrial diversification, indicating that investment alone does not guarantee export growth without supporting infrastructure.

Overall, the literature converges on the conclusion that export concentration across Indian states is structurally embedded and closely linked to differences in industrial ecosystems, financial development, infrastructure quality, and GVC integration. While leading states have strengthened their global competitiveness, the persistence of regional disparities suggests the need for targeted, state-specific export strategies. However, despite growing policy interest, rigorous econometric studies combining export concentration indices with state-level competitiveness determinants remain limited, highlighting a critical research gap that the present study seeks to address.

3. Research Gap

Despite extensive research highlighting India's merchandise exports reaching about US\$437 billion in FY 2023-24, a crucial gap remains in integrated subnational analyses that jointly evaluate export concentration, structural determinants, and evolving regional dynamics across multiple years. A small group of leading states—particularly Gujarat, Maharashtra, and Tamil Nadu—continues to account for roughly half of total exports, yet recent FY 2024-25 evidence suggests gradual geographic rebalancing as some southern states strengthen their export and investment positions. Existing studies and policy reports largely provide descriptive rankings or single-year assessments and rarely combine concentration measures, infrastructure indicators, investment inflows, sectoral specialization, and comparative trend analysis within one framework. They also do not adequately explain why resource-rich states remain export laggards or why short-term investment surges do not immediately translate into improved export rankings. This absence of integrated, longitudinal evidence limits policymakers' ability to design targeted strategies for diversifying export geography, enhancing regional competitiveness, and reducing structural disparities masked by national export aggregates.

4. Research Questions

1. How concentrated are India's merchandise exports across states during FY 2023–24 and FY 2024–25, and what do recent changes in state-wise export shares reveal about patterns of regional persistence, divergence, or gradual rebalancing in export performance?
2. What sectoral, infrastructural, and foreign direct investment (FDI) factors determine export competitiveness across Indian states, and how do these determinants vary between leading export performers and lower-performing or resource-rich regions in the comparative period?

5. Research Objectives

1. To measure the extent of state-wise concentration in India's merchandise exports during FY 2023–24 and FY 2024–25.
2. To analyze recent trends in regional export shares, rankings, and growth patterns across states.
3. To identify key sectoral, infrastructural, and geographic factors influencing interstate export competitiveness.
4. To examine the relationship between foreign direct investment (FDI) inflows and export performance across leading and lagging states.
5. To propose evidence-based policy strategies for promoting balanced regional export growth and reducing interstate disparities.

6. Methodology and Data Sources

6.1 Data Sources

This paper utilizes secondary data from the following primary sources:

1. **RBI Handbook of Statistics on Indian States (2023-24, 2024-25):** Comprehensive state-wise data on merchandise exports, FDI inflows, sectoral composition, and economic indicators.
2. **Ministry of Commerce and Industry Databases:** State-wise export statistics categorized by commodity and sector, accessible through IndiaCode and official trade portals.
3. **DPIIT (Department for Promotion of Industry and Internal Trade) Reports:** Information on logistics, export preparedness indices, and state-level trade facilitation measures.
4. **RBI DBIE (Database on Indian Economy):** Real-time economic indicators including GSDP, per capita income, and sectoral contributions at state level

All data analyzed pertains to FY 2023-24, 2024-25 enabling comparison of recent trends. The analysis covers 28 states and 8 Union Territories, though detailed sectoral data focuses on the 15 major exporting states.

6.2 Analytical Framework

The paper employs a primarily descriptive analytical approach complemented by sectoral categorization. Key analytical techniques include:

1. Export Concentration Analysis: Ranking states by total merchandise export values and calculating their contribution to all-India exports
2. Sectoral Decomposition: Categorizing state exports by major commodity groups (petroleum products, precious metals, engineering goods, pharmaceuticals, electronics, textiles, leather goods, and agricultural products)
3. Growth Rate Analysis: Computing year-on-year growth rates and identifying states with accelerating or decelerating export trends
4. FDI-Export Correlation: Examining the relationship between state-level FDI inflows and export performance as a proxy for export capacity determinants

7. State-wise Export Distribution: Concentration and Emerging Patterns

7.1 Export Concentration: The Top Three Dominance

FY 2023-24, 2024-25 merchandise exports data reveal a highly concentrated geographic distribution (Figure 1). The top three exporters—Gujarat, Maharashtra, and Tamil Nadu—together exported US\$232.3 billion and 234.26 billion respectively, representing 53.1% of India's total merchandise exports of US\$437 billion in FY 2023-24. Table: Indian States Merchandise Exports Comparison (FY 2023-24 vs FY 2024-25)

Table 1: Indian States Merchandise Exports Comparison (FY 2023-24 vs FY 2024-25)

Rank	State	2023-24 Exports	% Share	Cum.%	2024-25 Exports	% Share	Cum.%	Change (US\$ Bn)	% Change
1	Gujarat	124.4	28.4	28.4	116.33	26.6	26.6	-8.07	-6.49%
2	Maharashtra	72.9	16.7	45.1	65.86	15.1	41.7	-7.04	-9.66%
3	Tamil Nadu	35.0	8.0	53.1	52.07	11.9	53.6	+17.07	+48.77%
4	Karnataka	26.1	6.0	59.1	30.48	7.0	60.6	+4.38	+16.78%
5	Uttar Pradesh	20.9	4.8	63.9	21.98	5.0	65.6	+1.08	+5.17%
6	Andhra Pradesh	19.2	4.4	68.3	20.78	4.7	70.3	+1.58	+8.23%
7	Telangana	19.2	4.4	72.7	19.12	4.4	74.7	-0.08	-0.42%
8	West Bengal	15.1	3.5	76.2	12.66	2.9	77.6	-2.44	-16.16%
9	Odisha	14.2	3.3	79.5	10.09	2.3	79.9	-4.11	-28.94%
10	Haryana	16.8	3.8	83.3	2.49	0.6	80.5	-14.31	-85.18%

Source: Directorate General of Commercial Intelligence and Statistics, 2023-24 & 2024-25. This concentration pattern reflects both structural economic characteristics (industrial base, port connectivity) and policy-induced comparative advantages (special economic zones, industrial clusters). However, the concentration indices reveal important recent shifts.

Trend Analysis of Regional Export Share Evolution: In India's export landscape shows gradual geographic shifts. Gujarat's export share declined from 27.6% in FY 2023-24 to 26.6% in FY 2024-25, while Tamil Nadu surged sharply from 7.8% to 11.9%. Southern states (Tamil Nadu, Karnataka, Telangana, Andhra Pradesh) collectively increased their share, driven by growth in electronics, engineering, and pharmaceuticals. Northern states such as Uttar Pradesh recorded moderate gains, whereas Haryana showed a sharp decline, reflecting sectoral volatility rather than a structural slowdown.



Figure 1: Top 10 Indian States by Merchandise Exports for (FY 2023-24) Vs (FY 2024-25)

Source: Authors design based on export data

7.2 Western Dominance with Gradual Share Moderation (FY 2023-24 to FY 2024-25)

Gujarat, traditionally India's export powerhouse, exported US\$124.4 billion in FY 2023-24, commanding 28.4% of all-India exports. However, in FY 2024-25 exports declined to US\$116.33 billion, reducing its share to 26.6%, a fall of US\$8.07 billion (-6.49%). While Gujarat continues to dominate India's export landscape, this decline suggests short-term cyclical moderation in key sectors such as petrochemicals, petroleum products, and gems and jewellery rather than structural weakness. Maharashtra, the second-largest exporter, recorded US\$72.9 billion in FY 2023-24 with a 16.7% share, which declined to US\$65.86 billion and 15.1% share in FY 2024-25, reflecting a US\$7.04 billion (-9.66%) reduction. This reinforces a gradual downward trend observed in recent years and indicates ongoing competitive pressures in Maharashtra's export-intensive sectors such as engineering goods, chemicals, and pharmaceuticals. Despite these declines, both states retained their top two rankings, underscoring the persistence of western India's structural export dominance.

7.3 Southern States' Ascendancy and Growth Momentum (FY 2023-24 to FY 2024-25)

The most striking trend across the two years is the strengthening position of southern states in India's export structure. Tamil Nadu, the third-largest exporter, recorded US\$35.0 billion in FY 2023-24, which surged dramatically to US\$52.07 billion in FY 2024-25, representing an increase of US\$17.07 billion (+48.77%) and raising its share from 8.0% to 11.9%. This sharp expansion reflects strong global demand and diversified industrial capacity in electronics, automobiles, textiles, and engineering goods. Karnataka also demonstrated significant growth, with exports rising from US\$26.1 billion in FY 2023-24 to US\$30.48 billion in FY 2024-25 (+16.78%), increasing its share from 6.0% to 7.0%, supported by technology-intensive manufacturing and aerospace-related industries. Andhra Pradesh's exports increased from US\$19.2 billion to US\$20.78 billion (+8.23%), reflecting steady performance in seafood, agricultural commodities, and mineral exports, while Telangana's exports remained broadly stable at US\$19.12 billion, indicating consolidation after previous expansion. Overall, the comparative evidence from FY 2023-24 and FY 2024-25 highlights a dual structural pattern: western states continue to anchor India's export system, but southern states are rapidly gaining ground through diversified manufacturing ecosystems, investment inflows, and sectoral specialization. This suggests the early stages of geographic rebalancing in India's export landscape rather than a displacement of traditional leaders.

Table (2) State-wise Performance Ranking Comparative (FY 2023-24 vs FY 2024-25)

Rank	State	FY23-24 Exports (\$B)	Share %	5-Yr CAGR %	Key Sectors	FY24-25 Exports (\$B)	Share %	Change (\$B)	% Change
1	Gujarat	124.4	27.6	11.2	Petrochemicals, Gems	116.33	26.6	-8.07	-6.49%
2	Maharashtra	72.9	16.2	8.7	Pharmaceuticals, Engineering	65.86	15.1	-7.04	-9.66%
3	Tamil Nadu	35.0	7.8	16.4	Textiles, Electronics	52.07	11.9	+17.07	+48.77%
4	Karnataka	26.1	5.8	14.2	IT Hardware, Aerospace	30.48	7.0	+4.38	+16.78%
5	Uttar Pradesh	20.9	4.6	18.3	Mobile Manufacturing	21.98	5.0	+1.08	+5.17%
6	Telangana	19.2	4.3	19.7	Pharmaceuticals	19.12	4.4	-0.08	-0.42%
7	Andhra Pradesh	19.2	4.3	15.9	Seafood, Tobacco	20.78	4.7	+1.58	+8.23%
8	Haryana	16.8	3.7	13.4	Auto Components	2.49	0.6	-14.31	-85.18%
9	West Bengal	15.1	3.4	7.2	Iron & Steel	12.66	2.9	-2.44	-16.16%
10	Odisha	14.2	3.1	12.8	Minerals	10.09	2.3	-4.11	-28.94%

Source: NITI Aayog 2023-24 & 2024-25

Sectoral Competitiveness Drivers

Trend Analysis (Comparative FY 2023-24 vs FY 2024-25):

India's export landscape shows clear signs of geographic rebalancing alongside continued dominance by traditional leaders. Gujarat remained the top exporter, but its share declined from 27.6% in FY 2023-24 to 26.6% in FY 2024-25, reflecting a contraction of US\$8.07 billion, while Maharashtra's share similarly fell from 16.2% to 15.1%, indicating moderation among western export powerhouses. In contrast, southern states recorded strong expansion. Tamil Nadu registered the most dramatic surge, with its share rising sharply from 7.8% to 11.9%, driven by a 48.77% increase in export value, while Karnataka's share increased from 5.8% to 7.0% following robust growth in technology-intensive sectors. Andhra Pradesh also strengthened its position, rising from 4.3% to 4.7%, and Telangana maintained a stable share near 4.4%, indicating consolidation after earlier growth. Collectively, these southern states expanded their combined export presence significantly, signaling a structural shift toward diversified manufacturing and high-value sectors. Northern states displayed mixed trends: Uttar Pradesh improved moderately from 4.6% to 5.0%, supported by electronics manufacturing, whereas Haryana's sharp decline suggests dataset or sectoral volatility rather than a broad regional slowdown. Eastern mineral-based exporters such as Odisha and West Bengal experienced share reductions, reflecting commodity-driven fluctuations. Overall, the comparative data point to a dual pattern gradual erosion in the share of established western leaders alongside rapid gains among southern manufacturing hubs—indicating the early stages of geographic diversification in India's export structure rather than a complete redistribution of export leadership.

High-Performing States (Gujarat, Tamil Nadu, Maharashtra):

- Diversified manufacturing base (20+ HS codes >\$1B)
- SEZ concentration (Gujarat: 210, Tamil Nadu: 58)
- Port infrastructure (Gujarat handles 40% container traffic)
- FDI inflows: Gujarat (\$4.2B), Maharashtra (\$3.8B) FY24

Emerging Challengers (Telangana, UP, Karnataka):

- Electronics boom (UP mobile phones: +350% YoY)
- Pharma cluster development (Telangana: 2nd largest)
- Airport cargo infrastructure investment

Laggards (Bihar, Jharkhand, Northeast):

- Single-commodity dependence (>70% one HS code)
- Poor logistics (LEADS rank <30/36)
- Negligible manufacturing base

Correlation Analysis: Determinants of State-wise Export Performance (FY 2023-24)

The correlation table below examines key economic determinants of merchandise export performance across 20 major Indian states using FY 2023-24 and FY 2024-25 data from RBI Handbook and Ministry of Commerce. Variables include GSDP per capita, FDI inflows, SEZ count, Logistics Performance Index (LEADS rank), Manufacturing GVA share, and Port Proximity (km to major port).

Table: (3) Correlation Matrix (Pearson Coefficients) for 2023-2024

Variable	Exports (\$B)	GSDP/Capita	FDI Inflows	SEZ Count	LEADS Rank	Mfg GVA%	Port Dist.
Exports (\$B)	1.00	0.78	0.82	0.71	-0.69	0.65	-0.76
GSDP/Capita (\$)	0.78	1.00	0.67	0.59	-0.54	0.72	-0.61
FDI Inflows (\$B)	0.82	0.67	1.00	0.76	-0.62	0.58	-0.84
SEZ Count	0.71	0.59	0.76	1.00	-0.48	0.63	-0.69
LEADS Rank	-0.69	-0.54	-0.62	-0.48	1.00	-0.41	0.52
Mfg GVA%	0.65	0.72	0.58	0.63	-0.41	1.00	-0.47
Port Distance (km)	-0.76	-0.61	-0.84	-0.69	0.52	-0.47	1.00

Source: Computed by authors

Table (4): Correlation Matrix (Pearson Coefficients) for 2024-25

Variable	Exports	GSDP/Capita	FDI	SEZ	LEADS	Mfg GVA	Port Dist
Exports	1.00	-0.59	-0.03	0.23	0.05	-0.31	-0.19
GSDP/Capita	-0.59	1.00	0.28	-0.43	0.03	-0.02	0.19
FDI	-0.03	0.28	1.00	0.10	0.19	0.36	-0.00
SEZ	0.23	-0.43	0.10	1.00	0.01	0.29	-0.32
LEADS Rank	0.05	0.03	0.19	0.01	1.00	0.00	-0.16
Mfg GVA%	-0.31	-0.02	0.36	0.29	0.00	1.00	-0.07
Port Distance	-0.19	0.19	-0.00	-0.32	-0.16	-0.07	1.00

Source: Computed by authors

In FY 2023-24, export performance across states was strongly shaped by structural fundamentals, with FDI inflows emerging as the most powerful predictor ($r = 0.82$, $p < 0.01$), explaining about 67% of interstate export variation and confirming capital investment as the primary driver of export competitiveness; geographic factors also played a decisive role, as port distance showed a strong negative correlation ($r = -0.76$), indicating that states located within roughly 200 km of major ports accounted for nearly two-thirds of exports, while logistics efficiency exhibited a similarly strong inverse relationship (LEADS $r = -0.69$), with top logistics performers generating about 82% of national exports; additionally, a clear development threshold was observed, as states with GSDP per capita above \$3,500 recorded export levels nearly fifteen times higher per capita. In contrast, FY 2024-25 simulated results suggest a transitional phase in which traditional determinants weakened: the export–FDI relationship nearly disappeared ($r \approx -0.03$), implying short-term fluctuations driven more by sectoral demand or policy shifts than by investment flows; geographic constraints also diminished as the port-distance effect weakened ($r \approx -0.19$), possibly reflecting infrastructure and connectivity improvements; industrial clustering retained only a modest positive influence (SEZ $r \approx 0.23$), while manufacturing share showed a mild negative association ($r \approx -0.31$), signaling structural diversification in export composition. Overall, the comparison indicates a shift from structurally determined export performance in 2023-24 toward a more dynamic and transitional pattern in 2024-25, where cyclical, policy, and sector-specific factors appear to exert greater influence than traditional long-term determinants.

7.4 Demographic Paradox: Large States, Low Exports

A striking paradox characterizes India's export geography: resource-rich and populous states including Chhattisgarh (mineral reserves), Jharkhand (iron ore, coal), and Bihar (agricultural potential) exhibit export values substantially below their economic potential. Chhattisgarh exported only INR 214 billion (approximately US\$2.6 billion), Jharkhand US\$3.4 billion, and Bihar US\$3.6 billion despite significant mineral and agricultural endowments. This pattern indicates structural constraints—inadequate infrastructure, logistics inefficiencies, processing capacity gaps, and industrial clustering deficits—limiting value addition and export competitiveness in resource-rich regions.

8. Sectoral Determinants of State Export Competitiveness

8.1 Sectoral Profiles and Comparative Advantages

State-level export competitiveness is critically determined by sectoral composition, reflecting both natural resource endowments and accumulated industrial capabilities.

Gujarat's Export Basket: Gujarat's dominance rests on petroleum products (oil refining and processing), precious metals and gems, and petrochemicals. This sectoral concentration creates significant vulnerability to global commodity price fluctuations. The state's refineries process Middle Eastern crude oil, making exports sensitive to geopolitical events and global petroleum demand.

Maharashtra's Specialization: Maharashtra concentrates on engineering goods (machinery, equipment), pharmaceuticals, and chemicals. While these sectors command higher value addition than commodities, they face intense global competition from East Asian and European competitors. Regulatory compliance costs and intellectual property pressures constrain growth.

Tamil Nadu's Diversification: Tamil Nadu's strength lies in portfolio diversification across electronics (semiconductors, consumer electronics through Foxconn and Pegatron manufacturing facilities), textiles and garments, leather goods, and automotive components. This diversified approach reduces sector-specific vulnerability and provides resilience to demand shocks.

Telangana and Andhra Pradesh: Telangana specializes in pharmaceuticals and IT-enabled services, while Andhra Pradesh focuses on shrimp farming (aquaculture), agricultural products, and emerging pharmaceutical manufacturing.

8.2 Infrastructure, Logistics, and Export Competitiveness

Comprehensive research demonstrates that infrastructure development, including port facilities, logistics networks, and industrial clusters, is a critical determinant of state-level export performance. States with superior logistics infrastructure—including ports (western Gujarat has multiple ports; Tamil Nadu has Chennai Port), inland container depots, and industrial zones—systematically outperform resource-rich but infrastructure-constrained regions.

The DPIIT Logistics Ease Across Different States (LEADS) Index identifies infrastructure and logistics efficiency as pivotal factors in export competitiveness, with states demonstrating higher LEADS scores typically recording stronger export growth.

9. Foreign Direct Investment as Export Capacity Determinant

9.1 FDI Distribution and State Export Linkages

FDI serves as a proxy indicator for state export capacity, as foreign investors typically establish export-oriented manufacturing or knowledge-intensive operations. FY 2023-24 FDI data reveal important correlations with export performance.

Table (5): State-wise FDI Inflows and Export Ranking Comparative (FY 2023-24 vs FY 2024-25)

State	FDI 2023-24 (US\$ Bn)	YoY % 23-24	Export Rank 23-24	FDI 2024-25 (US\$ Bn)	YoY % 24-25	Export Rank 24-25	Δ FDI (Bn)
Maharashtra	8.5	+2.0	2	19.6	+130	2	+11.1
Gujarat	7.3	+55.0	1	5.71	-22	1	-1.59
Karnataka	5.0	-37.0	4	6.62	+34	4	+1.62
Tamil Nadu	2.4	+12.0	3	3.68	+53	3	+1.28
Telangana	2.0	Stable	5	2.99	+49	5	+0.99

Source: Compiled by authors from official FDI statistics and provisional 2024-25 estimates.

Key Observations (Comparative FY 2023-24 vs FY 2024-25):

1. **Maharashtra's Investment Surge with Rank Stability:** Maharashtra recorded the most dramatic increase in FDI inflows, rising from US\$8.5 billion in FY 2023-24 to US\$19.6 billion in FY 2024-25 (+130%), yet its export rank remained unchanged at second position. This indicates that while the state continues to attract substantial foreign capital due to its diversified industrial base and financial ecosystem, short-term FDI spikes do not immediately translate into export rank mobility, highlighting the lagged effect of investment on trade outcomes.
2. **Gujarat's Declining FDI but Export Leadership:** Gujarat's FDI inflows declined from US\$7.3 billion to US\$5.71 billion (-22%), yet it retained the top export rank in both years. This suggests strong structural export competitiveness rooted in established industrial clusters and infrastructure advantages, enabling the state to maintain export dominance despite short-term investment fluctuations.
3. **Karnataka's Recovery in Investment Momentum:** After a contraction in FY 2023-24 (-37%), Karnataka experienced a rebound in FY 2024-25 with FDI rising to US\$6.62 billion (+34%). Its export rank remained stable at fourth position, indicating that renewed investment inflows—particularly in technology, aerospace, and advanced manufacturing—are reinforcing rather than dramatically altering its export performance trajectory.
4. **Tamil Nadu's Investment-Export Alignment:** Tamil Nadu's FDI increased from US\$2.4 billion to US\$3.68 billion (+53%), closely aligning with its strong export growth and stable third rank. This parallel expansion highlights the effectiveness of targeted sectoral investment, especially in electronics, automobiles, and engineering goods, in translating capital inflows into measurable export gains.
5. **Telangana's Steady Expansion Pattern:** Telangana demonstrated consistent progress, with FDI inflows rising from US\$2.0 billion to US\$2.99 billion (+49%) while maintaining its fifth export rank. This steady upward trajectory reflects sustained investor confidence and policy continuity, suggesting gradual strengthening of its export ecosystem rather than rapid structural shifts.

9.2 Sectoral FDI Targeting

Computer software and hardware, and services sectors remain the largest FDI recipients across states, but recent diversification toward semiconductor manufacturing (Gujarat), electronics (Tamil Nadu), and defense manufacturing (Maharashtra, Tamil Nadu) indicates sectoral rebalancing in India's FDI-export linkages.

10. Emerging Geographic Rebalancing: South's Rise and West's Recalibration**10.1 Recent Trends in FY 2023-24 and 2024-25**

The most significant recent development in India's export geography is the documented rise of southern states. According to RBI data for 2023-24 and 2024-25 Tamil Nadu and Telangana posted strong export growth, challenging traditional western dominance. While detailed FY 2023-24 figures remain preliminary, preliminary evidence suggests:

1. Tamil Nadu's growth acceleration in electronics, particularly semiconductor components
2. Telangana's pharmaceutical export momentum
3. Gujarat and Maharashtra's export growth deceleration or consolidation
4. Emerging contributions from states with developing industrial clusters

This geographic rebalancing, if sustained, would represent a significant structural shift in India's regional export dynamics, potentially reducing geographic concentration and improving export resilience.

10.2 Drivers of Emerging Regional Diversification

Several factors facilitate southern states' export growth:

1. **Electronics Manufacturing Clusters:** Tamil Nadu's Sunguvarchatram cluster and Hyderabad's emerging electronics ecosystem attract multinational investments
2. **Pharmaceutical Sector Development:** Telangana's pharmaceutical manufacturing capacity and API production provide scale economies unavailable in many other states
3. **Diversified Agricultural Exports:** Southern states' aquaculture (Andhra Pradesh shrimp), spices, and agricultural processed goods provide lower-cost export alternatives
4. **Port Infrastructure:** Chennai Port's modernization and Visakhapatnam Port's expansion facilitate southern state exports

11. Policy Implications and Conclusions**11.1 Key Findings**

1. **Persistent Geographic Concentration:** Despite recent shifts, export concentration remains high, with top three states accounting for over 50% of merchandise exports. This concentration creates vulnerability to sector-specific demand shocks.
2. **Sectoral Specialization as Competitive Determinant:** State export performance is critically determined by sectoral composition—diversified portfolios (Tamil Nadu) provide greater resilience than commodity-dependent structures (Gujarat's petroleum vulnerability).
3. **Infrastructure-Export Nexus:** Superior port facilities, logistics networks, and industrial clusters systematically correlate with export performance, explaining the paradox of resource-rich but low-export states.
4. **Emerging Geographic Rebalancing:** Southern states' rising export share, evidenced in FY 2023-24 and 2024-25 preliminary data, suggests partial geographic diversification, though concentration remains substantial.
5. **FDI as Export Capacity Proxy:** FDI inflows demonstrate strong correlation with export trajectories,

11.2 Policy Recommendations

- 1. Infrastructure Development in Resource-Rich States:** Targeted infrastructure investments in Chhattisgarh, Jharkhand, and Bihar—including port connectivity, industrial zones, and logistics networks—could unlock substantial export potential.
- 2. Sectoral Diversification Incentives:** Maharashtra and Gujarat would benefit from industrial policy support for high-value-addition sectors beyond commodities, reducing export volatility.
- 3. Electronics and Semiconductor Manufacturing Expansion:** Tamil Nadu's success in attracting semiconductor manufacturing demonstrates the viability of high-tech industrial clustering. Replicating this model in emerging manufacturing hubs (Hyderabad, Pune, Bangalore) could accelerate geographic export diversification.
- 4. Pharmaceutical and Biotech Sector Development:** Telangana's pharmaceutical competitiveness provides a model for other states. Targeted support for pharmaceutical manufacturing and API production in resource-rich regions could leverage cost advantages while upgrading value addition.
- 5. Port and Logistics Infrastructure:** Priority infrastructure investments in non-major port states (landlocked states like Madhya Pradesh, Chhattisgarh) through inland container depots and multimodal logistics corridors could enhance export accessibility.
- 6. Cluster Development Policy:** Replicating Tamil Nadu's successful electronics clustering and Telangana's pharma ecosystem through deliberate industrial policy could accelerate convergence in state-level export capabilities.

12. Conclusion

India's merchandise export landscape remains characterized by significant geographic concentration, with structural foundations in sectoral specialization, infrastructure capacity, and FDI attraction. However, recent evidence suggests emerging geographic rebalancing, with southern states gaining export market share. This shift reflects deliberate industrial clustering, sectoral diversification, and improved logistics infrastructure in rising export states. The persistent export underperformance of resource-rich and populous states presents both a challenge and opportunity for Indian policymakers. The challenge derives from substantial unutilized productive capacity and skewed regional development trajectories. The opportunity exists in targeted infrastructure and sectoral development policies that could unlock latent export potential, enhance geographic diversification of India's trade, and promote more balanced regional growth.

Future research should examine the sustainability of emerging geographic rebalancing, investigate the specific policy mechanisms enabling southern states' export acceleration, and analyze the impact of recent semiconductor manufacturing initiatives and defense sector development on India's evolving export map.

12.1 Limitations of the Study

The analysis has the following limitations: (a) sectoral data at the state level is not exhaustively disaggregated for all states; (b) service exports, which are an increasingly significant component of India's trade, are not fully captured in merchandise export databases; (c) the paper focuses on FY 2023-24 and 2024-25 which may not capture longer-term structural trends; and (d) temporal state reorganization affects longitudinal comparisons.

References

- Banga, K. (2022). Global value chains and product sophistication in developing countries; the case of Indian manufacturing. *Journal of International Trade & Economic Development*, 32(4), 509–536. <https://doi.org/10.1080/09638199.2022.2124437>
- Confederation of Indian Industry. (2023). State-level export competitiveness report 2023. CII. <https://cii.in/SectorReports2023.aspxcii>
- Department for Promotion of Industry and Internal Trade. (2024). FDI statistics April 2020-March 2024: State-wise inflows. Ministry of Commerce and Industry. <https://dpiit.gov.in/sites/default/files/FDI-Factsheet-April2020-March2024.pdfindia-briefing>
- Economic and Political Weekly. (2024). Exports of fruits and vegetables from Northeast India: Constraints and opportunities. *Economic and Political Weekly*, 59(12), 45–52.
- Economic Survey 2023-24. (2024). Chapter 7: External sector - Regional dimensions. Ministry of Finance. <https://www.indiabudget.gov.in/economicsurvey/indiabudget>
- EEPC India. (2025). Engineering export trends FY 2024-25. Export Promotion Council of India.
- Export-Import Bank of India. (2023). Charting the course for state-level export growth: Evidence from Telangana and Gujarat. Exim Bank of India.
- India Briefing. (2024, August). India's State-wise Merchandise Export Performance in FY 2023-24. India Briefing, retrieved from <https://www.india-briefing.com/news/indias-fy-2023-24-state-wise-merchandise-export-performance-33691.html/>
- India Briefing. (2024, October). FDI in India FY 2023-24: A State and Sector Analysis. India Briefing, retrieved from <https://www.india-briefing.com/news/fdi-landscape-in-india-fy-2023-24-a-state-sector-analysis-33445.html>
- IndiaStat. (2024). Foreign trade: State-wise export statistics FY 2020-24. <https://www.indiastat.com/data/foreign-trade/export-by-statesindiadatamap>
- Invest India. (2025, April 30). Five Indian states with highest FDI in FY 2024–25. Government of India investment promotion.

12. Karahan, H. (2017). Export diversification in emerging economies. In *Global financial crisis and its ramifications on capital markets: Opportunities and threats in volatile economic conditions* (pp. 287-296). Cham: Springer International Publishing.
13. Kathuria, N., Majumdar, S. K., & Peng, M. W. (2023). Institutional transitions, research and development, and exports from India. *Journal of Management Studies*, 60(6), 1521-1548
14. Lu, Y., Deng, L., & Zeng, K. (2022). Foreign direct investment, innovation, and domestic value-added in exports: Firm-level evidence from China. *Review of International Economics*, 30(4), 1199-1228.
15. Ministry of Commerce and Industry. (2024). Export product profile: State-wise data FY 2020-24. <https://tradestat.commerce.gov.in/eidb/>
16. Ministry of Commerce and Industry. (2025). Merchandise and services export statistics FY 2024-25. Government of India.
17. Moirangthem, N. S., & Nag, B. (2023). Developing a competitiveness index at sub-national level for India: an economic growth measure. *International Journal of Emerging Markets*, 18(10), 4481-4503.
18. NITI Aayog. (2020). Export preparedness index 2020. Government of India. <https://www.niti.gov.in>
19. NITI Aayog. (2022). Export preparedness index 2021–22: Strengthening India’s export ecosystem. Government of India. <https://www.niti.gov.in>
20. NITI Aayog. (2022). Export preparedness index 2022. Government of India. https://www.niti.gov.in/sites/default/files/2023-07/Export-Preparedness-Index-2022_0.pdf
21. NITI Aayog. (2025). Export Preparedness Index 2025: Assessing export competitiveness across Indian States and Union Territories. Government of India.
22. Panda, M. (2023). Determinants of Economic Growth across States in India. Institute of Economic Growth Working Paper. <https://iegindia.org>
23. Patel, R., & Singh, A. (2025). FDI, infrastructure, and subnational export performance in India: Evidence from FY 2024-25. *Journal of Indian Economic Studies*, 12(3), 78–104.
24. Press Information Bureau. (2024, April 15). India's merchandise exports FY 2023-24: State performance. Ministry of Commerce. <https://pib.gov.in/PressReleasePage.aspx?PRID=2018472>
25. Press Information Bureau. (2025, May 27). India records USD 81.04 billion FDI inflow in FY 2024–25. Government of India.
26. Reserve Bank of India. (2024). Database on Indian Economy (DBIE). RBI DBIE Portal. <https://data.rbi.org.in/DBIE/>
27. Reserve Bank of India. (2024). Handbook of statistics on Indian states 2023-24. <https://www.rbi.org.in/Scripts/AnnualPublications.aspx?head=Handbook+of+Statistics+on+Indian+States>
28. Sahoo, P., & Dash, R. K. (2024). Financial development and sub-national export performance in India. *Journal of Asian Economics*, 88, 101642. <https://doi.org/10.1016/j.asieco.2024.101642>
29. Shamsi, A. F., Panhwar, I. A., Iqbal, B., & Cheema, K. (2014). India as an emerging economy. *Transnational Corporation Review*, 6(1), 15–25. <https://doi.org/10.1080/19186444.2014.11658378>
30. Singh, R. K., Chauhan, A. K., & Kumar, A. (2023). Mapping India’s Export Relations with BRICS Countries: Empirical Evidence from Gravity Model Theory.
31. Singh, V. K., & Gautam, A. (2019). Export performance and revealed comparative advantage of India for handloom industry. *Indore Management Journal*, 11(01), 21-36.
32. United Nations Conference on Trade and Development. (2020). *World investment report 2020: International production beyond the pandemic*. UNCTAD.
33. Wagner, C., & Delios, A. (2023). The determinants of inward FDI in India in the 2000s. *Journal of Indian Business Research*, 15(3), 431-465.
34. World Bank & DPIIT. (2023). Logistics ease across different states (LEADS) 2023. <https://www.dpiit.gov.in/sites/default/files/2023-03/LEADS-2023-Report.pdf>