

Export Competitiveness of Indian Manufacturing Firms in the Age of Cross-Border E-Commerce

Dr. D. Paul Dhinakaran, Dr. S. Vijayalakshmi, Dr Suresh M

¹Assistant Professor, Department of Commerce

Jayagovind Harigopal Agarwal Agarsen College (Affiliated to University of Madras) Madhavaram,
Chennai, Tamilnadu- 600060, paulldhinakaranboss@gamil.com

²Assistant Professor (Aided), PG and Research Department of Commere

Arumugam Pillai Seethai Ammal College, Tirupattur, Sivagangai-630211

³Assistant Professor, Faculty of Management,

SRM Institute of Science and Technology (Deemed to be University). Tiruchirappalli

Orcid : <https://orcid.org/0009-0006-2586-4640>

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ABSTRACT

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Indian manufacturing has historically reached foreign markets through a limited set of channels: large buyers, trading houses, export agents, and international distributors. Cross-border e-commerce (CBEC) offers a different route. Online marketplaces, direct-to-consumer storefronts, digital payments, and express logistics let even small and mid-sized manufacturers sell to overseas consumers and small businesses in low-volume, high-frequency transactions. This article examines how CBEC affects the export competitiveness of Indian manufacturing firms. Drawing on trade, channel, and capability theory, it argues that CBEC lowers entry barriers and raises the value of product design, branding, and responsiveness, while exposing firms to new cost, compliance, and logistics pressures that traditional export models hid behind intermediaries. It identifies where Indian firms hold advantages, where they face structural constraints, and which firm-level and policy responses are most promising. The article concludes with a staged framework for firms and a research agenda.

Keywords: Cross-Border E-Commerce, Export Competitiveness, Indian Manufacturing, Msmes, Digital Trade, Logistics, Compliance

1. Introduction

India's manufacturing base is large and varied, ranging from globally integrated automotive and pharmaceutical producers to clusters of small firms making textiles, handicrafts, leather goods, jewellery, spices, engineering components, and home furnishings. Many of these firms have strong production skills but limited direct knowledge of overseas customers. Exports have often flowed through intermediaries who set specifications, own the customer relationship, and capture a large share of the final price.

CBEC changes the structure of this arrangement. A manufacturer in a cluster such as Tiruppur, Moradabad, Jaipur, Surat, or Coimbatore can now list products on a global marketplace or its own

website, accept payment in foreign currency, and ship a parcel to a customer abroad. The same technology that enabled domestic e-commerce has begun to reduce the fixed costs of exporting.

This matters for competitiveness in three ways. First, it widens the set of firms that can export at all. Second, it moves part of the value chain, including brand, pricing, and customer relationship, closer to the producer. Third, it exposes producers to direct comparison with sellers from China, Vietnam, Turkey, and elsewhere on price, delivery speed, and service.

The central question of this article is: *how does CBEC reshape the export competitiveness of Indian manufacturing firms, and what determines whether firms benefit?*

2. Conceptual Background

2.1 Export competitiveness

Export competitiveness is usually understood at three levels. At the national level it reflects factor costs, infrastructure, exchange rates, and trade policy. At the sectoral level it reflects clusters, input access, and technological capability. At the firm level it reflects cost, quality, productivity, delivery reliability, product differentiation, and market knowledge. CBEC mostly acts on firm-level competitiveness, but its success depends strongly on national enabling conditions.

2.2 Heterogeneous firms and export entry costs

Trade theory with heterogeneous firms holds that only the most productive firms export, because exporting involves fixed costs: market research, finding buyers, meeting standards, and managing logistics and payments. If CBEC reduces some of these fixed costs, a wider group of firms can cross the export threshold. This helps explain why small sellers appear in online export data in numbers that traditional export statistics rarely showed.

2.3 Intermediaries, value capture, and the smile curve

In global value chains, value tends to concentrate at the design and branding end and at the distribution and service end, with manufacturing in the middle. Indian firms working as contract manufacturers for foreign brands often sit at the lowest-margin point of this curve. CBEC offers a way to move toward either end by selling under their own brand, or by offering customization and service that commodity producers cannot.

2.4 Dynamic capabilities

Selling online across borders demands capabilities that are rarely developed in manufacturing firms: digital marketing, listing optimization, customer service in foreign languages, return management, and rapid design iteration. The dynamic-capabilities view suggests that firms succeed not because they own particular resources, but because they can sense market signals and reconfigure operations quickly.

3. Channels of Cross-Border E-Commerce for Indian Manufacturers

Indian manufacturers use several overlapping CBEC models:

- **Global marketplaces:** listing on large international platforms, often with platform-provided programs for logistics, payments, and account management. Entry is easy, but sellers face intense price competition and platform dependence.
- **Own-brand direct-to-consumer storefronts:** firms build their own websites, usually on commercial e-commerce software, and acquire customers through search, social media, and influencers. Margins can be higher, but customer acquisition costs fall entirely on the firm.

- **B2B and small-lot digital platforms:** online business marketplaces connect Indian producers with small foreign retailers, designers, and boutique buyers who purchase in modest volumes.
- **Postal and courier exports:** parcels move through the postal network or private express carriers, supported by simplified customs procedures for low-value consignments.
- **Social and community commerce:** sales driven by social media content, diaspora networks, and messaging apps, often for culturally distinctive products.

The choice among them depends on product type, margin structure, brand strength, and the firm's tolerance for logistics and customer-service complexity.

4. Sources of Competitive Advantage for Indian Firms

4.1 Craft, heritage, and differentiation

India's strongest CBEC opportunities often lie in differentiated products rather than commodities: handloom and block-printed textiles, leather goods, jewellery, ayurvedic and wellness products, spices, specialty foods, home décor, and artisanal furniture. These categories benefit from storytelling, provenance, and design, which online channels can communicate directly to the buyer.

4.2 Cost base and cluster ecosystems

India's industrial clusters concentrate suppliers, skilled labour, and subcontractors in a small geography. For CBEC, this supports short production runs, rapid sampling, and flexible assortments. Cluster-based firms can respond to changing demand faster than integrated large producers, which is valuable when online trends move quickly.

4.3 Digital public infrastructure and payments

India's digital public infrastructure, including its identity, payment, and e-commerce initiatives, has built a broad digital habit among firms and consumers. Although much of it is domestic, it has produced a generation of sellers comfortable with online listing, digital invoicing, and platform-based selling, and it supports a growing services ecosystem for exporters.

4.4 Diaspora and cultural markets

A large global diaspora provides an early customer base for Indian food, apparel, religious goods, and cultural products. Diaspora demand can help new sellers build reviews and reputation before expanding to wider audiences.

4.5 Technology and design talent

India's large pool of software, design, and analytics talent can be used to improve product pages, run targeted advertising, analyze data, and design products for foreign tastes, which gives firms a labour-cost advantage in the digital functions that CBEC requires.

5. Structural Constraints

5.1 Logistics cost and reliability

Small parcels shipped abroad face high per-unit costs, variable transit times, and limited tracking compared with competitors in countries with dense express networks and consolidated cross-border shipping. Delivery speed is increasingly a competitive attribute online, and long or uncertain lead times can lead to cancellations and poor reviews.

5.2 Regulatory and compliance complexity

Exporters must navigate customs documentation, export incentive claims, goods and services tax treatment of exports, foreign-exchange rules, and bank reconciliation of small-value payments. Destination markets add their own obligations, such as product safety rules, labelling requirements, and import-duty thresholds. Large firms handle this with specialist staff, but small producers often find it burdensome, especially for returns, which can involve re-import procedures.

5.3 Quality, standards, and trust

Online buyers cannot inspect goods, so reputation signals such as ratings and certifications become critical. Inconsistent quality, imprecise sizing, and weak packaging have hurt Indian sellers' ratings in some categories. Meeting destination-market standards for chemicals, textiles, food, and electronics is a recurring challenge.

5.4 Payments and cash-flow friction

Marketplace payout delays, currency conversion costs, and chargebacks can strain the working capital of small firms. Return-related losses are particularly harmful where products are bulky or low in value.

5.5 Capability and scale gaps

Many manufacturers lack digital marketing skill, English-language content quality, product photography, and customer-service routines. Competing sellers, particularly from East Asia, benefit from mature e-commerce ecosystems, integrated supply chains, and aggressive price competition.

6. How CBEC Changes the Competitive Equation

Compared with traditional export channels, CBEC shifts the basis of competition in four ways.

1. **From relationship-based to reputation-based selling.** Traditional exporting depends on introductions and long-term buyer relationships. CBEC depends on ratings, reviews, search rankings, and advertising efficiency. Firms must build credibility with thousands of anonymous customers rather than a few known buyers.
2. **From large orders to small, frequent orders.** Production planning, packaging, and inventory policy must adapt to low-volume, multi-SKU demand. Firms with flexible production and quick sampling benefit.
3. **From price-taker to partial price-setter.** Own-brand sellers have more control over pricing and positioning, although marketplace competition can still compress margins in commodity categories.
4. **From delayed to rapid feedback.** Reviews and return data reveal product problems almost immediately, allowing continuous improvement if the firm is organized to use it.

The net effect is that competitiveness depends less on lowest unit cost and more on a combination of differentiation, speed, service, and compliance reliability.

7. Firm-Level Strategies

The analysis suggests several strategies that Indian manufacturers can adopt.

- **Choose differentiated categories.** Compete where design, heritage, or quality are visible to the customer and not purely on price.
- **Start with a focused assortment.** A small number of well-supported products often outperforms a broad catalogue with weak content and inconsistent fulfilment.
- **Invest in quality and packaging consistency.** Reviews are a form of capital, and early negative ratings are costly to reverse.

- **Use consolidated or partner logistics.** Aggregators, fulfilment partners, and overseas warehousing can reduce per-parcel cost and delivery time for proven products.
- **Build compliance routines early.** Standard processes for export documentation, product testing, and returns avoid costly surprises as volume grows.
- **Collaborate within clusters.** Shared photography, branding, certification, and logistics services let small firms obtain scale benefits without losing flexibility.
- **Diversify channels.** Combining marketplace sales with an owned storefront and B2B small-lot sales reduces dependence on any one platform.

8. Policy Implications

Policy can strengthen the enabling environment without replacing firm initiative. Priority areas include:

- Simplified, predictable procedures for low-value and high-volume export consignments, including returns and re-imports.
- Better integration between postal, courier, customs, and banking systems so that small exporters can claim incentives and reconcile payments with less friction.
- Support for cluster-level common facilities, such as testing laboratories, certification support, packaging design, and shared digital-marketing services.
- Skill programmes aimed at digital marketing, international e-commerce operations, and destination-market compliance, designed for small manufacturers and women-led enterprises.
- Active trade diplomacy to reduce non-tariff barriers and secure favourable treatment of low-value consignments in major destination markets.
- Data collection that distinguishes CBEC exports from conventional exports, since poor measurement makes it hard to evaluate programmes and target support.

9. A Staged Framework for Firms

Stage 1: Readiness assessment. Evaluate product fit, margin after logistics and platform fees, quality consistency, and compliance requirements for target markets.

Stage 2: Pilot on a marketplace. Use an established platform to test demand with a small assortment, learning about pricing, returns, and customer expectations at limited cost.

Stage 3: Build operational discipline. Standardize quality control, packaging, order processing, and customer service, and introduce metrics for delivery time, return rate, and rating.

Stage 4: Develop owned channels. Add a branded storefront, email and community-building activity, and selected B2B small-lot sales to improve margins and reduce platform dependence.

Stage 5: Scale and integrate. Use order data to guide design and production planning, consider overseas fulfilment for best-selling lines, and explore made-to-order or customized offerings.

10. Limitations and Directions for Future Research

This article is conceptual and does not present original empirical data. Conditions differ widely across sectors, destination markets, and firm sizes, and platform rules, tariff treatment of small parcels, and policy incentives change frequently. Several research questions follow:

- Which firm characteristics, such as size, age, location, and digital capability, best predict successful CBEC entry among Indian manufacturers?
- Does CBEC experience increase firms' later participation in conventional exports, or do the two models remain separate?

- How do logistics cost and delivery-time disadvantages affect Indian sellers' marketplace performance relative to competitors?
- What is the effect of cluster-level shared services on small-firm CBEC outcomes?
- How do changes in destination-market regulation of low-value imports affect Indian sellers across product categories?

11. Conclusion

Cross-border e-commerce is changing how Indian manufacturing firms can compete abroad. It lowers some of the traditional barriers to exporting, allows firms to capture more value through branding and direct customer relationships, and rewards the flexible, design-oriented, cluster-based production that many Indian firms already practise. At the same time, it removes the shelter that intermediaries once provided, exposing producers to global price competition and to the demands of logistics, compliance, and customer service.

The firms most likely to benefit are those that pair differentiated products with operational discipline, invest in reputation and compliance, and use customer data to improve continuously. For policymakers, the task is to reduce the friction that disproportionately burdens small exporters, particularly in logistics, customs procedures, and payment reconciliation, while building the skills and shared infrastructure that let clusters compete as ecosystems. If both firms and institutions respond, CBEC can become a meaningful complement to India's established export channels, and a route to upgrading within global value chains rather than merely joining them at the low-margin end.

References

- [1] Ahn, J., Khandelwal, A. K., & Wei, S.-J. (2011). The role of intermediaries in facilitating trade. *Journal of International Economics*, 84(1), 73–85.
- [2] Bernard, A. B., & Jensen, J. B. (1999). Exceptional exporter performance: Cause, effect, or both? *Journal of International Economics*, 47(1), 1–25.
- [3] Freund, C. L., & Weinhold, D. (2004). The effect of the Internet on international trade. *Journal of International Economics*, 62(1), 171–189.
- [4] Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy*, 12(1), 78–104.
- [5] Goldfarb, A., & Tucker, C. (2019). Digital economics. *Journal of Economic Literature*, 57(1), 3–43.
- [6] Hortaçsu, A., Martínez-Jerez, F. A., & Douglas, J. (2009). The geography of trade in online transactions: Evidence from eBay and MercadoLibre. *American Economic Journal: Microeconomics*, 1(1), 53–74.
- [7] Humphrey, J., & Schmitz, H. (2002). How does insertion in global value chains affect upgrading in industrial clusters? *Regional Studies*, 36(9), 1017–1027.
- [8] Lendle, A., Olarreaga, M., Schropp, S., & Vézina, P.-L. (2016). There goes gravity: eBay and the death of distance. *The Economic Journal*, 126(591), 406–441.
- [9] Melitz, M. J. (2003). The impact of trade on intra-industry reallocations and aggregate industry productivity. *Econometrica*, 71(6), 1695–1725.
- [10] Porter, M. E. (1990). *The competitive advantage of nations*. Free Press.
- [11] Schmitz, H. (1995). Collective efficiency: Growth path for small-scale industry. *Journal of Development Studies*, 31(4), 529–566.
- [12] Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533.