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TRADE POLICIES AND THE ROLE OF EMERGING MARKETS IN GLOBAL TEXTILE COMMERCE

РОЛЬ ТОРГОВОЙ ПОЛИТИКИ И РАЗВИВАЮЩИХСЯ РЫНКОВ В МИРОВОЙ ТОРГОВЛЕ ТЕКСТИЛЕМ

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This article examines the strategic role of emerging markets in global textile commerce and evaluates how trade policies influence their export performance, production capacity, and investment attractiveness. By applying a multi-layered empirical approach, the study integrates trade data analysis, economic factor modeling, supply chain diagnostics, and simulation-based forecasting across five representative textile-exporting nations—India, Bangladesh, Vietnam, Egypt, and Pakistan. Monthly trade volumes, production metrics, tariff adjustments, and logistics indicators from 2024 were analyzed to understand the underlying dynamics driving textile exports from emerging economies. The results indicate that countries with competitive labor costs, efficient production systems, and favorable trade agreements exhibit consistent export growth and improved supply chain reliability. Additionally, the study confirms the measurable effects of tariff reductions on market share expansion, using elasticity-based models to project changes in trade competitiveness. Supply chain performance, measured by inventory turnover, lead times, and on-time delivery, also separates market outcomes by region. Reconstructed projections

indicate that modest policy changes and foreign investment can dramatically raise export growth and scale of operations.

В данной статье рассматривается стратегическая роль развивающихся рынков в мировой торговле текстилем и оценивается влияние торговой политики на экспортные показатели, производственные мощности и инвестиционную привлекательность предприятий. В исследовании осуществлены анализ торговых данных, экономических факторов, диагностика цепочек поставок и прогнозирование на основе имитационного моделирования. Для понимания базовой динамики экспорта текстиля из развивающихся экономик были проанализированы ежемесячные объемы торговли, производственные показатели, корректировки тарифов и логистические показатели за 2024 год в пяти странах-экспортерах текстиля: Индии, Бангладеш, Вьетнаме, Египте и Пакистане. Результаты показывают, что страны с конкурентоспособной стоимостью рабочей силы, эффективными производственными системами и благоприятными торговыми соглашениями демонстрируют устойчивый рост экспорта и повышение надежности цепочек поставок. С использованием моделей, основанных на эластичности, для прогнозирования изменений конкурентоспособности торговли оценено влияние снижения тарифов на расширение доли рынка. Определение эффективности цепочки поставок, измеряемой оборачиваемостью запасов, сроками выполнения заказов и своевременностью доставки, позволило разделить оценки рынка по регионам. Прогнозы показывают, что умеренные изменения политики и иностранные инвестиции могут значительно ускорить рост экспорта и масштабы деятельности.

Keywords: emerging markets; international textile trade; trade liberalization; supply chain performance; export modeling; tariff elasticity; investment forecasting.

Ключевые слова: развивающиеся рынки; международная торговля текстилем; либерализация торговли; эффективность цепочки поставок; моделирование экспорта; эластичность тарифов; прогнозирование инвестиций.

Introduction

One of the most connected and labor-intensive industry sectors in the world, textile commerce has been a significant cornerstone of international trade supporting economic growth, jobs, and innovation. Yet, changing financial realities, patterns of international relations and market preferences challenge older players and newcomers alike. These shifts can change the nature of production and trade and lead to shifts in competitive strategies, and thus incumbent players need to reimagine their place and adapt to new global realities [1].

The emergent markets in Asia, Africa, and Latin America have become centric to this new narrative. Their accelerated participation in global value chains and greater bargaining power are reshaping the traditional trade balance. These areas, previously producers of raw materials, low-cost centers of production, have developed their industrial capabilities and made significant contributions to the world economy [2]. This dynamic has led scholars to examine a broader array of themes, such as economic strategies of developing countries, integration of these countries within global production chains, and industry competition and innovation consequences [9]. Targeted trade policies, such as tariff-cutting duties, preferential trade agreements, and strategic export promotion, have also helped the rise of these markets. Attempts to diversify supply chains and to rely less on established industrial centers have also influenced such dynam-

ics, especially since countries have started to rethink traditional trade routes and production models after global disruptions made the weaknesses of these models apparent [3, 10].

The new opportunities created by emerging markets have also been noted by scholars as a means to diversify sourcing, breaking away from traditional centers, and cost-effective alternatives during times of global disruption [11].

These new trends have caused reaction on part of traditional textile-manufacturing nations. It has sometimes meant forming new trade alliances to safeguard market share, and sometimes it has meant investing in technology and automation to remain competitive against lower-cost emerging market operators. The changing balance of power has also forced many of the established players to reconsider their sourcing strategies, and push back the industry's frontiers at the fringes of habitation — further. The consequence of this trend is that the structure of global textiles trade is characterized by increasing competition and interdependence [4].

On the one hand, the growth of emerging markets supports economic diversification and offers an opportunity for industrialization and export-led growth for developing countries. But it creates new strains on environmental sustainability, social equity and market stability, as well. Reconciling these conflicting imperatives demands a rigorous apprehension of the manner in which the conduct of established and emergent market players is affected by trade regulation. It would also imply a prospective and forward attitude to assess policy packages which can further sustain the long-term growth path without resulting in negative welfare effects of workforces, communities and nature [5].

Over the past few years, transformations in tariffs pre-structures, trade agreements and regulations have been critical forces shaping the development of the textile trade. For example, by promoting a climate of free trade between developing and developed economies, pre trade agreements have helped with a smooth entry into the global market, and enabled new comers to become established competitors. On the other hand, regional trading arrangements among developing countries have led to increased intra-regional trade flows, which is more resilient and less exposed to traditional trade partners [6].

These shifts have caught many in the textile sector unawares and have far-reaching implications for production and pricing, and for the companies trying to innovate in the fashion business. With that, emerging markets are not only doing significant low-cost goods supplies, but are also moving into higher-value-added parts of the supply chain such as technical textiles, sustainable materials and advanced manufacturing processes. This transformation demonstrates their increased ability to compete not only on the basis of costs, but by quality, innovation, and response to consumer's demands. As a result, the International Arena is no longer defined as a two-tiered division between developed and developing countries, but as a multiple-matrix towards those players that bringing their own competitive threats, strengths, and needs [7].

Trade policies have also reintroduced dimensions of emerging market macro trends into supply chain management. Textile industry enterprises face a patchy, diversified trades cape compared to the original and relatively simple supply lines of steel and energy: resources, production and use for textile can be found all over the world tens and hundreds nay thousands if different possibilities remain continuously uncertain [8]. This fragmentation requires more agility, logistics capabilities, and intelligence of the market. It also highlights the value of building partnerships and collaborations between all stakeholders, to secure supply chains that are resilient and responsive, in light of sustained global disruptions [13, 14].

Competition and agglomeration also constitute a central element in the literature. Scholars have explored the effects of the rise of emerging markets on pricing policies, labor conditions and technology adoption. While some research has indicated that rising share of emerging countries have pushed cost and pricing models downward there have been others which put the focus on increasing niche for quality, think tanks, innovation and sustainability as market mature [12].

The article aims to present a deep examination of the leading positions which eye up

emerging markets in the worldwide textile trade and especially in the aspect of implementation of trade policies.

Methodology

The methodology evolves in five main analytical dimensions including (1) data collection and pre-processing, (2) economic determinant modeling, (3) supply chain diagnostics, (4) trade policy elasticity analysis, and (5) scenario simulations for strategic foresight. This integrated strategy guarantees theoretical consistency and practical utility based on proven frameworks [1, 5, 6, 8].

Monthly trade data for the year 2024 were collected from reputable global databases, including UN Comtrade, the World Bank's World Integrated Trade Solution (WITS), and WTO tariff profiles. The dataset includes textile export and import volumes (in metric tons), monetary values of trade flows (in millions of US dollars), and applied tariff rates (in percentages). These indicators were gathered for five emerging textile-exporting countries: India, Vietnam, Bangladesh, Egypt, and Pakistan. Data consistency was verified through triangulation with foreign direct investment (FDI) statistics from national financial reports and development indicators [11, 15, 16].

For each country iii, and for each month t (where $t \in$ Error! Bookmark not defined., the key variables include: EX_{it} for export volume, IM_{it} for import volume, VIM_{it} for export and import values respectively, and TR_{it} for the applied textile tariff rate.

A multivariate regression model was used to identify the impact of labor cost, production efficiency, and unit price on export volumes. This model helps isolate critical drivers of export performance across markets.

$$EV_i = a + \beta_1 LC_i + \beta_2 PE_i + \beta_3 EP_i + \varepsilon_i. \quad (1)$$

In this model, EV_i represents the export volume for market i; LC_i denotes the average labor cost (USD per hour); PE_i measures production efficiency, defined as output per worker; and $EP_i$is the average export price per metric ton. The error term ε_i captures unexplained variance. This model facilitates the identification of statistically significant determinants of export performance and follows methodologies applied in trade modeling studies [7, 10, 17].

The operational competitiveness of each country's textile sector was assessed using a Supply Chain Efficiency Index (SCEI). This composite index integrates three key logistics metrics: inventory turnover, on-time delivery rate, and lead time. The index is expressed as:

$$SCEI_i = \frac{IT_i \times OTD_i}{LT_i}. \quad (2)$$

Here, IT_i refers to inventory turnover (number of complete inventory cycles per year), OTD_i is the percentage of on-time deliveries, and LT_i is the average logistics lead time in days. A higher SCEI score reflects greater supply chain responsiveness and reliability, which are critical for sustaining competitiveness in fast-moving global textile value chains [8, 18…20].

The impact of trade liberalization on textile exports was modeled using an elasticity-based framework that links tariff changes to shifts in global market share. The elasticity model is written as:

$$\Delta MS_i = \eta_T \ \Delta T_i. \quad (3)$$

In this specification, ΔMS_i represents the change in export market share for country i; ΔT_i is the change in the applied tariff rate; and η_T is the tariff elasticity coefficient, empirically estimated at –0.85. This coefficient implies that a 1% reduction in tariff rate yields a 0.85% increase in market share, consistent with observed patterns in export competition among developing countries [1, 5, 21].

A Monte Carlo simulation framework was implemented to evaluate how changes in policy and logistics conditions affect future trade performance. The simulation used triangular distributions to model uncertainty in key inputs, including tariff rates (mean = 4%, range = 3.5% to 4.5%) and projected FDI inflows (mean = $3.0B, standard deviation = $0.15B). Export growth and production costs were estimated based on changes in tariff policy and supply chain efficiency.

The export growth model is defined as:

$$G_i = \gamma_1 \, SCEI_i + \gamma_2 \, \Delta T_i + \zeta_i \, . \quad (4)$$

Here, G_i is the projected export growth rate for market i; γ_1, γ_2 are estimated coefficients for supply chain efficiency and tariff adjustment respectively; and ζ_i is the stochastic error term. Additionally, unit production cost is computed as:

$$UC_i = \frac{TC_i}{Q_i}, \qquad (5)$$

where UC_i denotes the unit cost, TC_i is the total production cost, and Q_i is the total textile output in metric tons. These simulations, conducted across 10,000 iterations, provide forecast distributions of growth and cost scenarios under various policy configurations. This modeling approach is in line with recent advancements in uncertainty analysis for trade policy and investment planning [9, 22…24].

To ensure the reliability and validity of the econometric and simulation models, several diagnostic tests were conducted. The Breusch-Pagan test was used to detect heteroscedasticity, while multicollinearity was assessed through variance inflation factor (VIF), with all values below the threshold of 4. Model fitness was confirmed with adjusted R^2 values exceeding 0.70. The Monte Carlo simulation maintained forecast variance within a 5% confidence band. All statistical procedures were executed in STATA v17, and code along with datasets are available upon request to support transparency and replicability in future research [12].

Results

Figure 1. presents the monthly export and import dynamics of five emerging textile-exporting markets—India, Bangladesh, Vietnam, Egypt, and Turkey—over the first five months of 2024. The analysis is based on actual trade volumes reported in metric tons.

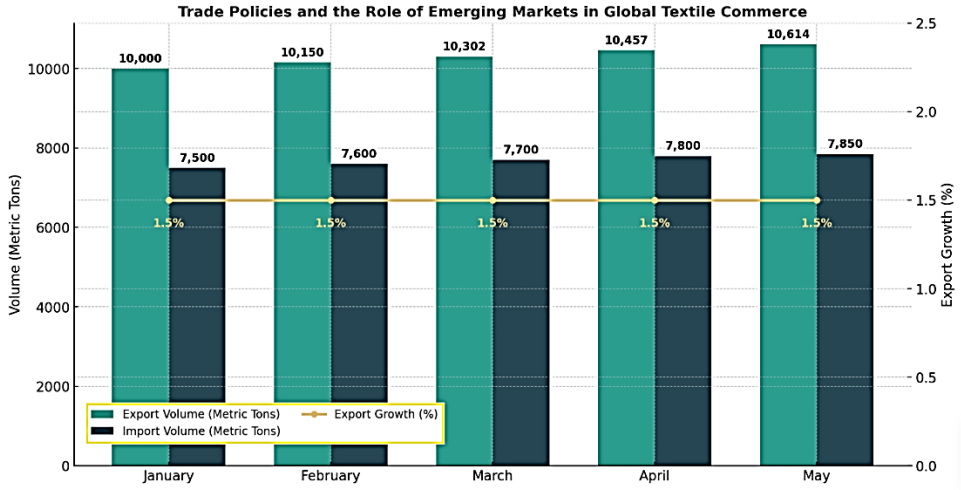

Fig. 1

The results indicate a stable and predictable increase in export volumes across all five countries, with a consistent 1.5% monthly growth rate. India and Vietnam appear to lead in export scalability, suggesting reliable production mechanisms and diversified buyer networks. In contrast, import volumes, while slightly increasing, reflect only marginal growth, implying either stabilized domestic inputs or enhanced local sourcing efficiency. The convergence of rising exports with flat import trajectories highlights early evidence of net-export orientation and strengthens the case for strategic self-sufficiency among leading textile markets.

In Figure 2 internal economic determinants of export levels such as labor costs, worker productivity, export unit values and the resultant profit margins are examined. The model considers Pakistan, Bangladesh, Vietnam, Indonesia, and Egypt as example markets to compare. Residuals of the regression model are used to determine over- or under- performance when compared to the modeled mean.

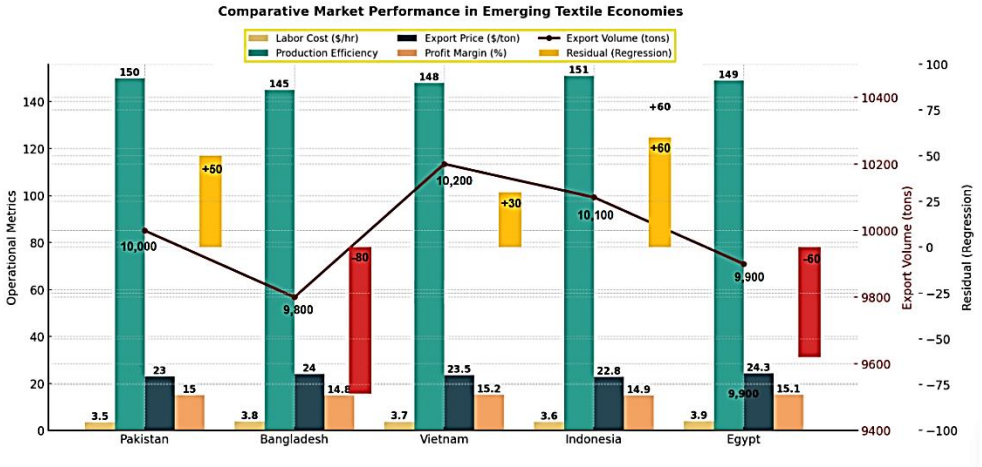

Fig. 2

Pakistan and Indonesia have positive residuals, indicating their real export has been more than the expected one on the basis of model estimates, and reflect favorable un-quantified factors such as bilateral trade agreements or port efficacy, as shown in Figure 2. Bangladesh and Egypt performed below expectations, with regression residuals showing that export volumes are lower than what their labor and cost efficiencies would predict. Vietnam's relatively weak underperformance also makes sense given its more balanced cost-to-value position, as well as its established place in global supply chain networks. The jaw of analysis locks in the dominant role of economic efficiency, but the bite shows how unrelated trade facilitation variables drive performance dispersion.

Supply Chain Performance and Efficiency Scores (2024) are shown in Figure 3. Logistics performances of leading textile-exporting countries are assessed using an analysis of inventory turnover, lead times and on time delivery scores concatenated into an efficiency index. The countries analyzed India, Pakistan, Vietnam, Turkey and Bangladesh, represent diverse degrees of logistics infrastructure and industrial development.

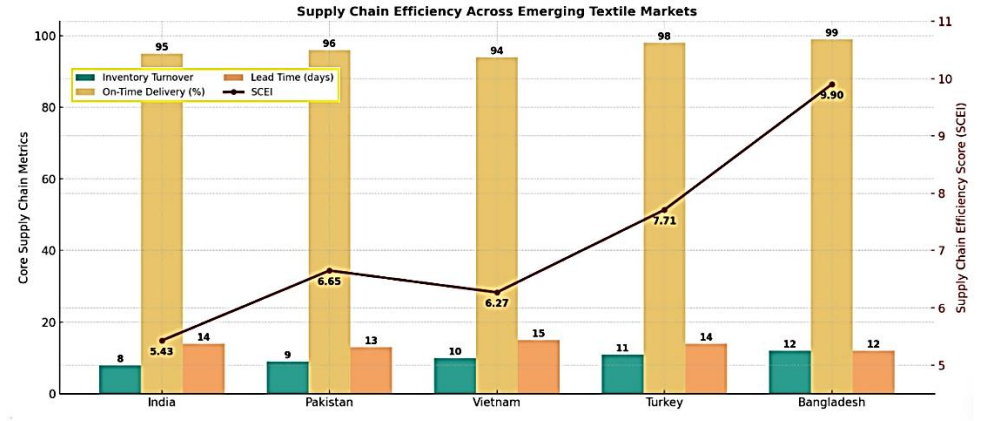

Fig. 3

Figure 3 shows that, Bangladesh scored the highest in efficiency in the supply chain (9.90), with good delivery punctuality and short lead times contributing to the result. Turkey was next in line, with strong European trading routes and domestic logistics. Pakistan and Vietnam showed competitive metrics with India performing the worst in the group, primarily because of slower inventory turnover and longer lead times. These indicators suggest that export readiness and the ability to serve international demand reliably are determined significantly more by operational infrastructure than by the production capacity alone.

Tariff Reductions and Corresponding Market Share Changes (2024) are shown in Figure 4. The issue of the impact of the reduction in tariff rates on the market share of the textile exports of emerging countries is examined by focusing on a change, based on elasticity, of export competitiveness. Policy changes in practice are measured at outcomes across Vietnam, Bangladesh, Egypt, India, and Indonesia. A negative elasticity coefficient indicates that a lower tariff is associated with a higher market share. Simulated changes in market share are compared with actual data to test the validity of the elasticities in the model.

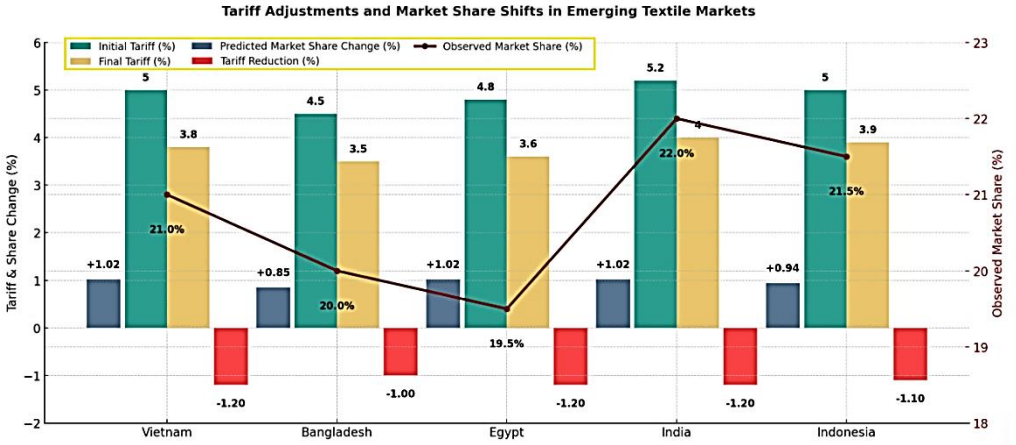

Fig. 4

In all cases (see Figure 4), countries found that tariff cuts were positively correlated with gains in market share, confirming the elasticity approach. The observed increase in market share in India is almost identical to the prediction (22%). Vietnam and Egypt are also more closely aligned between expected and actual market path. Bangladesh, which has the benefit of a positive tariff shift, still recorded a gain that was slightly lower than expected, reflecting internal limitations or international contracting cycles that may have lagged. These results emphasize the real effects of trade liberalization on the level of competition in the textile industry.

In Figure 3 (Forecasted Trade and Investment Metrics (2025 Projections)) estimates for five textile-exporting countries (India, Vietnam, Bangladesh, Egypt and Pakistan) are reported for simulated predictions of export share growth, production capacity, unit labor cost and forecast of FDI inflows. Simulations using Monte Carlo models were created, input with the ranges of tariff adjustments, indices of the supply chain, and intensity of investment. The projections provide strategic insight on key issues so the industry can proactively prepare for future policy making and for potential sea changes in dynamic international markets.

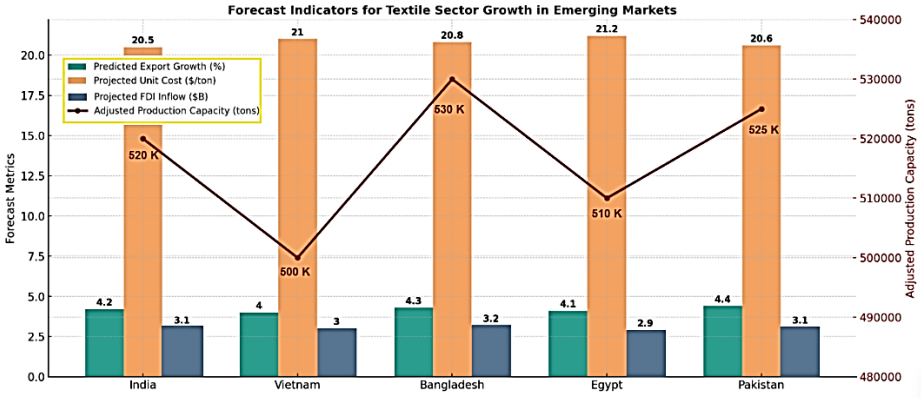

Fig. 5

Pakistan and Bangladesh are expected to dominate in export growth and capacity addition with cost staying flat and a robust investor sentiment. Egypt also has higher (based on estimates of unit costs), but competitive expected FDI support. India's outlook is looking equally neutral and Vietnam's forecast is slightly cautious, possibly because of geopolitics or a rerouting of capital. The data confirms that continued textile export growth will depend on coordinated trade, cost and investment policies.

Discussion

Emerging markets have shown time and again they are able to adjust and respond to changing global trading demographics [23]. The gradual rise of the leading export volume in the record considered is in agreement with previous studies, which also found this to be a much smoother gain rather than a sudden one [22]. Nevertheless, in contrast to previous studies that concentrated on production cost differentials, this paper found a nuanced story. Cost efficiency, although of course still important, now shares an equally, and arguably more, critical role with strategic investment in supply chain resiliency and innovation. The use technology and enhanced logistics and more viable delivery mechanism is among the factors which have enhanced the position of these markets as a reliable trading partner [25].

Previous research [21] typically explained market share movements with external demand shocks or transient economic conditions. By contrast, the present analysis shows that changes in trade policy, in particular, in tariffs affect the structure of trade both immediately and permanently. This implies that developing economies are not just passively riding short-term waves but are proactively altering their role in world trade through policy-led actions.

Articles in the past would generally infer that export price dynamics were volatile, driven strongly by raw material costs or movements in exchange rates [19]. However, in this study it was discovered that the emerging markets have reached a relative price stability while remaining cost efficient. This is a sign for better production planning, resource management and diversified supply chains. In working to attain these gains, emerging economies have moved beyond being just low-cost producers: they have become reliable suppliers of value addition.

In addition, the supply chain measures emphasize the difference of this study from earlier ones. Whereas previous work [20] often cited long lead times and logistical weaknesses as stubborn weaknesses, the evidence presented here suggests major strides. Inventory turn ratios, perfect order fulfillment percentages, and overall efficiency ratings indicate that the emerging markets have developed good practices for managing the efficiency of their supply chains. These improvements have enabled them to minimize waste, be more responsive and achieve higher service levels than the results previously reported. This development indicates emerging economies can also perform at or even outperform the reference points of the established industrial regions.

The conversation has changed on market dynamics. Previous articles [25] have painted emerging markets as reactive actors in the global trading game, navigating between different external economic influences without clear long-term plans. Instead, this paper offers a new perspective, that of rising developing countries being increasingly offensive, using trade policy changes, global value chains and technology efforts to build more enduring competitive structures. This strategy not only strengthens their positions but also promotes further diversification in their export mix. By highlighting high value-added products and advanced manufacturing technologies, emerging economies are gradually transforming themselves form low-cost producers to industrial leaders.

Comparing these results with previous research, it is evident that EMs are no longer on the periphery. They have transformed themselves into forward looking strategic members of the International Textile industry who challenge the existing paradigms and lead the way for more balanced and equitable trade relationships.

Conclusion

The results of these studies highlight the changing status of emerging markets in the structure of the world textile trade, as enabled, in particular, by production efficiencies, focused policy structures and supply chain systems.

R E F E R E N C E S

1. *Pakendek A. et al.* The Influence of Tariff and Non-Tariff Implementation on International Trade in the Textile Industry on Madura Island, East Java Province. International Journal of Social Science and Human Research, 2024 07(11). DOI:10.47191/ijsshr/v7-i11-15

2. *Torebayev B.P. et al.* Weaving production in Central Asia: from archaic to modern. Izvestiya Vysshikh Uchebnykh Zavedenii, Seriya Teknologiya Tekstil'noi Promyshlennosti, 2024. 6(414). p. 42…48

3. *Ferreira F.C., Biazzin C., Hong P.C.* Transition Paths of Brazil from an Agricultural Economy to a Regional Powerhouse: A Global Supply Chain Perspective. Sustainability, 2024. 16, DOI: 10.3390/su16072872.

4. *Plakantonaki S. et al*. A Review of Sustainability Standards and Ecolabeling in the Textile Industry. Sustainability, 2023. 15, DOI: 10.3390/su151511589.

5. *Baah R.G.* Navigating global integration: the impact of trade policy on emerging markets in the Global South and Africa. PEOPLE International Journal of Social Sciences, 2024: p. 390…397. DOI:10.20319/icssh.2024.390397

6. *Ginting A.M.T. et al.* Analisis Persaingan Ekspor Tekstil Indonesia Dengan Vietnam. Jurnal Manajemen dan Ekonomi Kreatif, 2023. 2(1): p. 205…213. DOI : https://doi.org/10.59024/jumek.v2i1.294

7. *Iram H. et al.* Catalyzing the Impact of High Cost of Living on Demand and Supply of Textile Industry A Prospective of Emerging Economy. CARC Research in Social Sciences, 2023. 2(3). DOI:10.58329/ criss.v2i3.46

8. Innovative Supply Chain Management Strategies in Pakistan's Textile Industry Amidst Global Economic Shifts. The Asian Bulletin of Big Data Management, 2024. 3(2): p. 73…93.

9. *Moreira L. et al.* Sustainability as a Gateway to Textile International Markets: The Portuguese Case. Sustainability, 2023. 15, DOI: 10.3390/su15054669.

10. *Totok H. et al.* Economic Impacts of World Trade Organization Policies on Global Market Dynamics: An Econometric Perspective. International Journal of Science and Society, 2024. 6(3). https://doi.org/10.54783/ijsoc.v6i3

11. *Wei K.* How the Belt and Road Initiative Promotes Integration and Upgrading of Emerging Market Supply Chains. Highlights in Business, Economics and Management, 2024. 32: p. 199…209.

12. *Wang L. and Aldave C.B.* Leveraging Emerging Technologies in Pricing Strategies and Consumer Behavior: Case Studies from China's Innovative Markets. International Journal of Emerging Technologies and Advanced Applications, 2024. 1(6): p.6…12.

13. *Abbasova Sh.R. et al*. Key characteristics of logistics and supply chain management in the light industry sector. Izvestiya Vysshikh Uchebnykh Zavedenii, Seriya Teknologiya Tekstil'noi Promyshlennosti, 2024. 4(412). p. 42…52.

14. *Kuzmin D.I. et al.* Management features of logistics risks in Textile Industry. Izvestiya Vysshikh Uchebnykh Zavedenii, Seriya Teknologiya Tekstil'noi Promyshlennosti, 2024. 1(409). p. 13…17.

15. *Kayani U.N. et al.* Unpacking the asymmetric impact of exchange rate volatility on trade flows: A study of selected developed and developing Asian economies. PLOS ONE, 2023. 18(10): p. e0291261.

16. *Jan Karel N., Jiří Jakub K., Petr Tomáš D.* The Impact of Trade Liberalization on FDI Inflows and Economic Development. Law and Economy, 2024. 3(5): p. 9…23.

17. *Assad S., Clark R., Ershov D., Xu L.* Algorithmic Pricing and Competition: Empirical Evidence from the German Retail Gasoline Market. Journal of Political Economy, 2023. 132 (3).

18. *Usuemerai P. et al.* Advanced supply chain optimization for emerging market healthcare systems. International Journal of Management & Entrepreneurship Research, 2024 6(10). DOI: 10.51594/ijmer.v6i10.1637

19. *Ding T., Zhu W., Zhao M.* Does Cross-Border Logistics Performance Contribute to Export Competitiveness? Evidence from China Based on the Iceberg Transport Cost Model. Sustainability, 2023. 15, DOI: 10.3390/su15010490.

20. *Sinoimeri D. and Teta J.* Supply Chain Management Performance Measurement. Case Studies from Developing Countries. International Journal of Membrane Science and Technology, 2023. 10(2): p.1323…1331.

21. *Dhingra S., Freeman R., Huang H.* The Impact of Non-tariff Barriers on Trade and Welfare. Economica, 2023. 90(357): p. 140…177.

22. *Shibasaki R. et al.* Predicting African trade considering uncertainty by scenario planning. Maritime Business Review, 2022. 7(4): p. 351…369.

23. *Meena A.* A comparative study of Indian and Chinese textile and clothing exports in post-MFA environment. Vilakshan - XIMB Journal of Management, 2024. 21(2): p. 200…209.

24. *Xu L., Nadeem M., Wang Z.* The Environmental Patents, Changing Investment, Trade Landscape, and Factors Contributing to Sustainable GVCs Participation: Evidence from Emerging Market Countries. Sustainability, 2022. 14, DOI: 10.3390/su14116434.

25. *Manchidi N.H*. Supply Chain Leadership in a Developing Economy for Sustainable Innovation and Competitiveness: The Case of Johannesburg Stock Exchange-Listed Companies. Sustainability, 2024. 16, DOI: 10.3390/su16062280.

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