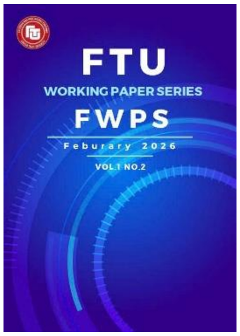

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ẢO TƯỞNG "TÁCH RỜI" TRONG CHUỖI CUNG ỨNG TOÀN CẦU: TRƯỜNG HỢP NGÀNH DỆT MAY

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Tóm tắt

Những khủng hoảng về địa chính trị và gián đoạn chuỗi cung ứng những năm gần đây đã dẫn đến các chiến lược tách rời trong chuỗi cung ứng toàn cầu của ngành dệt may. Tuy nhiên, những nghiên cứu hiện nay chỉ tập trung vào mức độ tái dịch chuyển của các tầng ở hạ nguồn, trong khi chưa xem xét sự phụ thuộc ở tầng thượng nguồn. Bài nghiên cứu này tập trung phân tích liệu nỗ lực tách rời chuỗi cung ứng chỉ xuất hiện như những ảo tưởng hay thực sự đem đến những tác động thực sự. Sử dụng phương pháp nghiên cứu định tính, bài viết này phân tích dữ liệu thứ cấp từ các nguồn tài liệu học thuật, báo cáo nội ngành và các văn bản liên quan đến chính sách của chiến lược tách rời. Bài nghiên cứu chỉ ra rằng đối với những tầng thượng nguồn, như tầng 4 và tầng 3, vẫn có sự tập trung và phụ thuộc cao về nguyên liệu tự nhiên và công nghệ. Kết quả của nghiên cứu chỉ ra rằng tách rời thực chất đòi hỏi một quá trình xây dựng năng lực thượng nguồn dài hạn và tăng cường liên kết mạng lưới chuỗi cung ứng, thay vì chuyển dịch đơn thuần về mặt địa lý.

Từ khóa: tách rời, chuỗi cung ứng toàn cầu, ngành dệt may, friend-shoring

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DECOUPLING ILLUSION IN GLOBAL SUPPLY CHAINS: ANALYSIS OF THE TEXTILE AND GARMENT INDUSTRY

Abstract

Recent geographic tensions and trade disruptions in the previous year have led to decoupling strategies in the global textile and garment supply chains. However, existing studies merely focus on evaluating the relocation level of the downstream tier, without mentioning the upstream tier dependencies. This study aims to assess whether decoupling initiatives appear as only a "decoupling illusion" or bring actual impact. Using a qualitative approach, the paper analyzes both secondary data from academic literature review, industry reports, and documents related to the policy of decoupling. The findings reveal that the upstream Tier, which includes Tier 4 and Tier 3, remains resource-concentrated and technologically dependent. The study concludes that meaningful decoupling requires long-term building of capacity for the upstream, strengthening the network connection rather than moving away alone.

Keywords: decoupling, global supply chain, textile and garments, friend-shoring

1. Introduction

The last decade has seen the emergence of a new trend in the restructuring of global supply chains, driven by the growing threat of geopolitical tensions, trade wars, and pandemic-related challenges. Specifically, the textile and apparel sector's multinational corporations have been pursuing the trend of moving their production activities away from China to other regions, including Southeast and South Asia (Accueil, 2024). This phenomenon has been referred to as decoupling, as it represents the strategic move of companies to minimize their geopolitical risks, labor costs, and challenges.

The relocation of manufacturing activities is highly visible in the downstream value chain, especially in garment assembly. However, upstream activities such as the production of fibers, yarns, fabrics, chemicals, and machinery remain dominated by a small number of countries and continue to be structurally dependent (Fernandez-Stark, Bamber and Couto, 2022a). Therefore, this may create the appearance of decoupling, where production is apparently dispersed over multiple geographies, but underlying system risk is largely unchanged.

Existing research on decoupling and friendshoring primarily focuses on visible downstream relocation, while largely overlooking multi-tier supply chain structures and upstream dependencies. This creates a gap in understanding whether such strategies lead to genuine decoupling or merely symbolic change. This study addresses this gap by examining decoupling through a multi-tier lens in the textile and garment supply chain (Hong, 2002).

This paper examines whether recent decoupling initiatives in the global textile and garment sector reflect a substantive structural transformation of supply chains or merely a geographical relocation of downstream production without reducing upstream dependencies. The study focuses on decoupling initiatives aimed at reducing dependence on China.

To achieve the above objective, this study addresses the following research questions:

Question 1: To what extent do decoupling strategies in the textile and garment sector lead to structural changes across multiple tiers of the global supply chain?

Question 2: How do upstream dependencies constrain the effectiveness of downstream decoupling and relocation initiatives?

Question 3: Does observed decoupling in the textile and garment sector represent substantive risk reduction, or does it create an illusion of supply chain independence?

This study adopts a qualitative approach based on secondary data, synthesizing academic literature, industry reports, and policy documents to analyze decoupling through a multi-tier supply chain lens.

The remainder of this paper is structured as follows. Section 2 develops the theoretical framework. Section 3 presents analysis and discussion. Section 4 discusses the implications, followed by conclusions in Section 5.

2. Theoretical framework

2.1. Multi-tier in the textile and garment industry

A multi-tier supply chain is a complex system, as it extends beyond the focal company, including multiple tiers of suppliers in a hierarchical network. In this network, firms are affected not only by their direct suppliers but also by the indirect upstream suppliers that are far from the final products and actually shape overall system performance (Gong, Jiang and Jia, 2023). Within a multi-tier production system, each tier performs a functionally specialized role, providing essential raw materials for the final product while remaining dependent on upstream materials and downstream demand signals (Gereffi, Humphrey and Sturgeon, 2005a; Mena, Humphries and Choi, 2013).

This multi-tier model creates a visual representation of the entire network beyond Tier 1, enabling the firms to make informed, sustainable decisions, align with their objectives, and meet demands for ethical practices. Moreover, a multi-tier supply chain help business to align with their sustainability goals by reducing risks and enhancing resilience maintenance (Amfori, 2025). However, managing relationships across these multiple tiers poses many challenges to the focal firm, primarily due to power imbalances and cultural distances (Gereffi, Humphrey and Sturgeon, 2005a). Moreover, a multi-tier supply chain requires effective planning and execution beyond the boundaries of single enterprises, making it more difficult to solve the issues that lie outside the company’s direct control (Schorpp, Erhun and Lee, 2018).

Within the textile and garment industry, the use of multi-tiers is commonly used, the classification from tiers 0 to 4 helping categorize and organize the stages of production, sourcing, and distribution. By being divided into tiers, companies, stakeholders, and regulators can manage the complexities of this sector more effectively (Textile Exchange, 2024). The overall process is presented as follows:

Figure 1: The main tiers of the textile and garment industry

Source: Compiled by the author

Tier 4 is the first step in the textile and garment industry process, where raw materials (fossil fuels) and plants (cotton) or animals (wool) are extracted, along with the collection of secondary materials necessary for commodity processing. In Tier 3, all the ingredients collected in Tier 4 will be converted into intermediate products, which are yarn and a state equivalent to it. This stage is highly resource-intensive, which requires a large amount of water and energy. (Muthu, 2020; Megan Doyle, 2022a).

Tier 2 is fabric production, where factories sew the yarn into various types of fabric based on different demands. This tier is defined by technological intensity and quality differentiation, as processes enhance the durability and usability for the upcoming step. In Tier 1, the inputs will be assembled and manufactured to make the finished garments and textile products. This tier is the main connection between the industrial production and market requirements through design translation, production, and operational execution 1 (Lotta Hyppänen, 2023).

Tier 0, the last Tier, functions for all the market activities, including branding, marketing, distribution, and retail coordination. Products will be diversely distributed through retailers, wholesalers, traditional channels, or even digital platforms. These methods enable access for both organizational customers and individual end users (Anita Rachel, 2024).

2.2. Friend-shoring and Near-shoring in Global Supply Chains

Friend-shoring and near-shoring have become important strategic measures in response to increased geopolitical risks in global supply chains. Friend-shoring can be understood as the movement of production and sourcing operations to countries that share political affinities or are trusted from a strategic standpoint, while near-shoring focuses on countries' close geographical location to end markets in order to increase responsiveness and mitigate logistical risks (Thompson, 2025). These measures are often conceptualized as operational instruments to facilitate overall decoupling strategies.

The main driving force for friend-shoring and near-shoring is risk management. Companies aim to minimize risks associated with trade sanctions, export restrictions, regulatory ambiguity, and political disputes by confining supply chains to politically stable and collaborative regions (Javier, 2024). Furthermore, proximity strategies offer advantages in terms of reduced lead times, better coordination, and increased visibility in supply chains, especially in sectors with volatile demand patterns and products with short life cycles, such as textiles and apparel. Beyond risk mitigation, these strategies are also motivated by managerial considerations related to supply chain control and responsiveness. In theory, near-shoring enables tighter coordination between production planning, inventory management, and market signals, which is valuable in fashion-oriented industries where speed-to-market constitutes a key competitive advantage (Jocelyn, Marie-Eve and Richard, 2024). Friend-shoring also reduces uncertainty from difference regulatory regimes and geopolitical alignments, thereby lowering perceived compliance costs across borders (Javorcik *et al.*, 2024).

2.3. Decoupling in Supply Chains

Decoupling in the supply chain can be defined as a strategic move by a firm or a country to minimize economic and production interdependence with targeted regions or countries deemed risky or strategically important (Burkhart, Bode and Peters, 2023). At the firm level, decoupling can be described as an activity aimed at shifting production, as well as restructuring the supply network.

Generally, decoupling is widely used for inventory management where it plays a crucial role in centralizing and buffering a distribution network. A decoupling point, established close to the operational zone, acts as both a strategic distribution hub and a safety buffer that protects the supply chain network from demand shocks. For global supply chain management, decoupling points or nodes also connect supply chain pathways to customer (Steptoe, 2021).

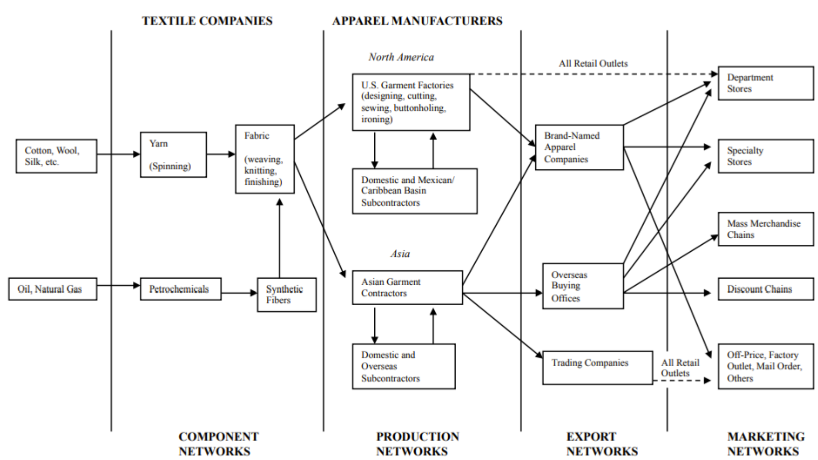
However, it is also important to note that drivers of supply chain decoupling are both political and economic. Rising trade barriers, tariffs, and strategic competition between major economies have pressured firms to reconsider their global sourcing and production strategies (Burkhart, Bode and Peters, 2023). At the same time, globally dispersed supply chains have proven vulnerable to disruptions and rising transportation costs (Knowledge Center, 2024). Together, these factors motivate companies to adopt decoupling strategies as a way to balance risk reduction, operational efficiency, and long-term competitiveness.

Decoupling here is envisioned as a perceptual spectrum, rather than a categorical event, with possibilities spanning from symbolic to actual change. Identifying where strategies are positioned on this scale is critical in determine whether decoupling truly strengthens the supply chain resilience or merely creating an illusion of progress.

2.4. Textile and garment global supply chain

The apparel value chain is organized around five main segments: (1) raw material supply, including: natural and synthetic fibers; (2) provision of components, such as the yarns and fabrics manufactured by textile companies; (3) production networks made up of garment factories, including their domestic and overseas subcontractors; (4) export channels established by trade intermediaries; and (5) marketing networks at the retail level (Gereffi and Fedrick, 2010; Fernandez-Stark, Gereffi and Fedrick, 2011).

The raw materials stage involves the sourcing and transportation of textile inputs and encompasses both the physical movement of materials and the coordination of supply chain activities through specialized technologies and equipment. Following this stage, textile firms and apparel manufacturers convert woven or knitted fabrics, or directly produce garments from yarn, through cutting and sewing processes. The cut-and-sew segment comprises a diverse set of establishments engaged in the production of ready-to-wear apparel as well as customized garments (Nørup *et al.*, 2019). Apparel manufacturers may function as contractors, performing cutting or sewing operations on materials owned by other firms, or as jobbers and tailors producing garments for individual clients. Firms may either procure textile inputs from external suppliers or produce textile components internally. After the manufacturing stage, finished apparel products are distributed and marketed through networks of wholesalers, agents, logistics providers, and other intermediaries that carry out value-adding activities beyond production (Fernandez-Stark, Gereffi and Fedrick, 2011; Fernandez-Stark, Bamber and Couto, 2022b).



Figue 2: Apparel Global value chain

Source: Gereffi & Memedovic, 2003

The companies that develop and sell brand-name products have considerable control over how, when, and where manufacturing will take place, and how much profit accrues at each stage, essentially controlling how basic value-adding activities are distributed along the value chain (Fernandez-Stark, Gereffi and Fedrick, 2011).

From the global value chain of textile and apparel industry, the textile and garment global supply chain could be designed as follow.

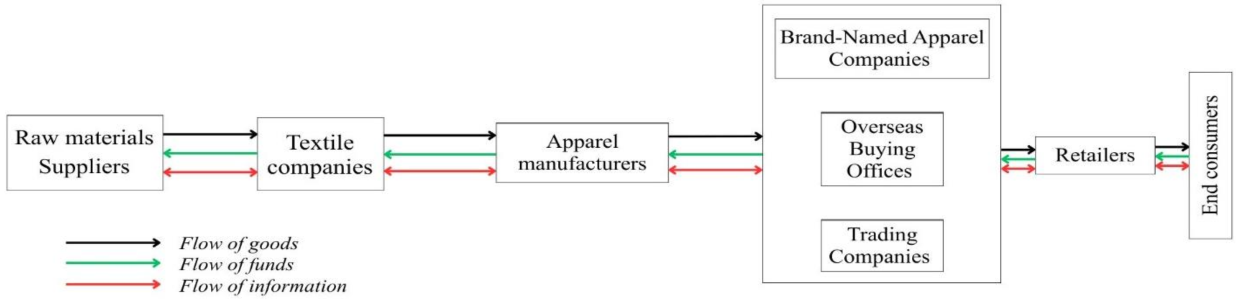


Figure 3: Textile and garment global supply chain

Source: Author's compilation

There are three main flows that could be analyzed in the textile and garment global supply chain: flow of goods, flow of funds and flow of information.

The flow of goods encompasses the physical movement of materials and finished products across stages of production and geography. It begins with upstream sourcing of raw materials such as fiber and yarn, passes through intermediate manufacturing processes including spinning, weaving, dyeing, and finishing, and culminates in apparel assembly and final shipment to retail markets (Seuring, Goldbach and Koplin, 2004; Nørup *et al.*, 2019). In practice, this flow is characterized by multiple cross-border movements of semi-finished goods, reflecting global specialization and fragmentation of production (Nuttle *et al.*, 2000; Gereffi, 2018).

In buyer-driven value chains as apparel, lead firms exert significant control over pricing, payment terms, and risk allocation, often capturing a disproportionate share of value relative to upstream producers (Lam and Postle, 2006; Fernandez-Stark, Gereffi and Fedrick, 2011). Payments originate with end consumers and flow upstream through retailers and focal firms to manufacturers and raw material suppliers. This financial flow is shaped by contractual terms, trade financing arrangements, and buyer power. Efficient working capital management within this flow directly affects supplier viability, investment capacity, and overall supply chain competitiveness (Gereffi, Humphrey and Sturgeon, 2005b; Nguyen, Nguyen and Le, 2025).

The flow of information is critical for visibility, planning, and responsiveness. It includes the exchange of demand forecasts, order specifications, production schedules, quality requirements, and traceability data. In textile supply chains, information transparency remains a management challenge due to complexity and multiple tiers of suppliers. Previous study on traceability highlights the importance of information sharing for risk management, product authentication, and supply chain visibility (Gereffi, Humphrey and Sturgeon, 2005b; Agrawal and Pal, 2019). Control over information flow enables synchronization across tiers, mitigate uncertainties such as demand variability or disruptions, and support strategic decision-making, particularly in the context of digital transformation and traceability initiatives.

3. Analysis and discussion

3.1. Structural analysis of friend-shoring and decoupling across supply chain tiers

3.1.1. Tier 4: Raw Material Extraction & Cultivation

Tier 4 of the textile supply chain encompasses activities related to the extraction and production of raw materials, such as natural cotton cultivation, wood cellulose extraction, and the supply of inputs for synthetic fibers. This is the deepest upstream layer, determining the physical foundation of the entire supply chain (Fashion for Good, 2023).

Partner Structure & Coordination

About the partnership and coordination in Tier 4 of the textile supply chain, the main participants include cotton farmers, wood cellulose extractors, and suppliers of inputs for synthetic fibers such as polyester and nylon. Unlike downstream tiers, the partnership structure at Tier 4 is decentralized and market-based, rather than based on strategic contractual relationships in supply chain management. Global apparel businesses and brands have virtually no direct relationships with Tier 4 suppliers, relying instead on intermediaries, raw material traders, and international commodity markets to access their inputs. This severely limits coordination and the ability to regulate the flow of materials from upstream to downstream, while also weakening the ability to control supply chain risks from a supply chain management (SCM) perspective (Hassler, 2004; Hilletofth and Hilmola, 2008; Saccani, Bressanelli and Visintin, 2023).

Observed Friendshoring / Relocation

Friendshoring and nearshoring strategies are virtually nonexistent in Tier 4, in contrast to the significant shifts seen in garment manufacturing and assembly. The core reason lies in the fact that raw material production is highly dependent on specific natural conditions, resources, and industrial ecosystems, preventing businesses from strategically "shifting" to Tier 4 in the same way as garment factories. For example, cotton production requires specific climate, soil, and water conditions, while raw materials for synthetic fibers depend on petrochemicals and energy sources, which are concentrated in certain regions of the world. Therefore, although garment manufacturing is friendshoring to Vietnam, Bangladesh, or Cambodia, the upstream source of raw materials remains virtually unchanged geographically (Guan *et al.*, 2019; Costa *et al.*, 2020; Saccani, Bressanelli and Visintin, 2023).

Structural Constraints and Dependency

From a structural perspective, Tier 4 is governed by three systemic constraints. First, geographical constraints tie raw material production to resource regions and prevent flexible reconfiguration. Secondly, the commodity nature of textile raw materials means that the supply chain is heavily influenced by macroeconomic factors such as weather, prices, and geopolitics, rather than direct downstream demand. Thirdly, large-scale raw material production and trading centers continue to act as anchors for the entire supply chain (Parrilli, 2016; Megan Doyle, 2022b).

Real-World Evidence

The case of China is a prime example, with the Xinjiang region accounting for approximately 90% of China's cotton production and over 20% of global cotton production (Reuters, 2024). The Vietnamese textile supply chain reinforces the argument for upstream dependence at Tier 4. Although Vietnam has become a major garment manufacturing hub thanks to the friendshoring wave, it still imports a large portion of its inputs, including cotton, synthetic fibers, chemicals, and dyes, primarily from China and other East Asian countries. According to industry reports, domestic raw material supply capacity only meets about a quarter of demand, leaving Vietnam's textile supply chain deeply dependent on upstream sources, particularly China (Le, 2022; Neo, 2025). At the same time, cotton sourced from Xinjiang continues to be present in the global supply chain, despite policy efforts to reduce this dependence, indicating that upstream raw material flows remain tightly linked to traditional hubs (Guan *et al.*, 2019; Reuters, 2024).

3.1.2. Tier 3: Raw Material Processing

Partner Structure & Coordination

At the raw material processing stage, global textile supply chains exhibit a highly asymmetric partner structure, in which processing capacity is geographically diversified but functionally centralized. While multiple countries host processing facilities for fibers, pulp, and chemical intermediates, coordination power remains concentrated among Chinese firms that control critical segments of chemical treatment, purification, and intermediate formulation (Gereffi, 2021; Zhu & Pickles, 2019). These firms operate as system integrators, coordinating upstream extraction inputs with downstream material producers through proprietary process know-how, equipment compatibility, and chemical specifications. As a result, downstream partners depend less on the physical location of processing and more on access to Chinese-controlled processing ecosystems.

Observed Friendshoring / Relocation

Observed friendshoring dynamics at this tier reveal a clear discrepancy between physical relocation and functional decoupling. In response to rising geopolitical risk and environmental regulation, certain processing activities such as labor- and pollution-intensive stages have been partially relocated to Southeast Asia and South Asia, including Indonesia, India, and Vietnam (OECD, 2022). However, this relocation is largely limited to standardized, low-margin processing tasks. Core processing stages that require advanced chemical engineering capabilities, such as viscose solution preparation, polyester intermediate synthesis, and dye precursor formulation, remain overwhelmingly anchored in China. Consequently, while supply chains appear geographically diversified on the surface, their operational backbone continues to rely on Chinese processing inputs and technical capability (Gereffi, 2021).

Structural Constraints and Dependency

Raw material processing in textiles is capital-intensive where efficiency and quality consistency depend on cumulative production experience rather than simple technology transfer. Chinese firms benefit from decades of accumulated tacit knowledge, dense supplier networks for chemicals and machinery, and scale economies that significantly lower unit processing costs. Environmental compliance regimes in alternative locations, while theoretically attractive, often lack the infrastructure and regulatory coherence necessary to support large-scale chemical processing without efficiency losses. Moreover, switching processing partners incurs substantial coordination costs, including recalibration of downstream production lines and requalification of material standards, discouraging buyers from fully exiting Chinese-linked processing networks (Zhu & Pickles, 2019).

Real-World Evidence

Despite the expansion of viscose and polyester processing capacity in India and Indonesia, China continues to account for the majority of global output of textile chemical intermediates and processing inputs. Southeast Asian textile producers import a significant share of their processed inputs from China, even when final material production occurs locally. Major apparel brands such as H&M and Inditex have publicly committed to reducing China exposure at the garment assembly stage, yet their supplier disclosures reveal continued reliance on Chinese-based processors for chemical inputs and intermediate materials. Even when fabrics are produced in Vietnam or Bangladesh, key processed inputs such as treated polyester fibers and dye intermediates are frequently sourced from Chinese firms or Chinese-owned subsidiaries operating abroad (UNCTAD, 2023).

3.1.3. Tier 2: Material Production

Partner Structure & Coordination

At this tier, relationships between material producers and downstream garment assemblers are governed by speed, scale, and quality consistency rather than simple cost considerations. Chinese material producers occupy a central position in this coordination system, supplying a broad range of fabrics from standardized cotton blends to high-performance synthetic textiles while maintaining close operational integration with both upstream processors and downstream assemblers (Frederick & Staritz, 2020).

Observed Friendshoring / Relocation

Friendshoring trends at the material production stage are more pronounced than in upstream tiers, particularly in countries such as Vietnam, Bangladesh, and Cambodia, where fabric production capacity has expanded alongside garment assembly. However, this expansion is uneven and segmented (Fernández - Stark, Bamber and Couto, 2022). Relocated capacity is concentrated in basic fabrics with relatively low technical requirements, while advanced textiles such as functional fabrics, high-density synthetics, and specialized blends remain predominantly produced in China. As a result, even firms that have shifted garment assembly out of China continue to source a substantial share of their materials from Chinese suppliers, creating a hybrid sourcing structure rather than genuine decoupling (OECD, 2022).

Structural Constraints and Dependency

Structural dependency at this tier is reinforced by ecosystem effects that are difficult to replicate outside China. Chinese material producers benefit from clusters that integrate spinning, weaving, finishing, and logistics within geographically proximate zones, enabling rapid turnaround times and high customization flexibility. These clusters reduce coordination friction and inventory risk for global brands, advantages that newer production hubs struggle to match (Macdonald and Whitley, 2011). Additionally, Chinese firms dominate the production of technical and functional textiles used in sportswear, outdoor apparel, and fast-fashion segments, where material performance and innovation are critical. Switching away from these suppliers would require brands to accept higher costs, longer lead times, or lower product differentiation, all of which undermine competitive positioning (Frederick & Staritz, 2020).

Real-World Evidence

Inditex, parent company of Zara, has diversified garment assembly across Vietnam, Bangladesh, and Turkey, it does not internalize fabric production. Instead, it relies on external fabric manufacturers operating under tight specifications and lead-time requirements of fast-fashion cycles (Bag *et al.*, 2024). These suppliers function primarily as execution units, relying on standards and technologies established by Chinese firms to meet volume and speed requirements. In this setting, relocation changes the physical site of fabric manufacturing but does not transfer material decision-making power to non-Chinese producers.

3.1.4. Tier 1: Finished Product Assembly

Partner Structure & Coordination

Tier 1 is the assemblying and manufacturing stage in the textile and garment supply chain, in which intermediate inputs are transformed into finished products (Doyle, 2022). Tier 1 suppliers maintain direct contractual relationship with global brands and retailers, making them the most visible production partners in the supply chain. Their primary role is execution which focusing on cost efficiency, speed, and compliance with buyer specifications.

Coordination at this tier is buyer-driven. While brands in Tier 0 set production schedules, quality standards, and delivery deadlines, Tier 1 firms coordinate upstream with Tier 2 suppliers to secure timely material inputs. Therefore, although Tier 1 firms in charge of managing operational complexity, they only possess limited strategic autonomy. Information sharing is vertical with limited horizontal coordination among Tier 1 suppliers, reinforcing their role as execution nodes rather than decision-makers (Gereffi, Humphrey and Sturgeon, 2005c).

Observed Friendshoring / Relocation

Friendshoring and relocation are most observable at Tier 1 due to the labor-intensive nature of assembly activities. Apparel brands frequently relocate Tier 1 production to politically stable or lower-cost countries to acquire benefits from tariffs, labor costs, or geopolitical tensions. Acording to research from McKinsey, in recent years, production has increasingly shifted to nations including Southeast Asia, South Asia, and parts of Latin America (Magnus, 2024).

This form of relocation exhibit the clearest signs of decoupling through spatial reconfiguration and can be interpreted as a partial decoupling, concentrated primarily at the operational and geographical level. However, this decoupling is limited in scope. Core production practices, requirements, and sourcing instructions imposed by focal firms remain unchanged (Kinkel, 2012). As a result, Tier 1 relocation creates an illusion of system-wide decoupling, while in reality only the most flexible layer of the supply chain undergoes decouple, leaving the key supply chain architecture intact.

Structural Constraints and Dependency

Despite geographic mobility, Tier 1 firms still remain structurally depend on upstream tiers in the supply chain. Value creation is unevenly distributed within upstream activities such as fiber production, spinning, weaving, dyeing, and chemical processing being capital-intensive, technology-driven, and characterized by strong economies of scale. These structural features create high entry barriers and limit the ability of downstream producers to internalize upstream capabilities (Word Trade Organization, 2026).

As a result, Tier 1 assembly operation rely heavily on imported fabrics, yarns, dyes, and chemicals supplied by specialized upstream partners. Relocating Tier 1 production therefore change factory location but does not fundamentally change sourcing structures.

Real-World Evidence

According to WTO in 2023, global apparel exports have become increasingly dispersed, with Vietnam, Bangladesh, India, and Indonesia together accounting for over 35% of world garment exports, compared to less than 20% in the early 2000s (WTO, 2023). Industry analyses further suggest that many global fashion brands are actively diversifying their Tier 1 supplier bases across multiple countries as part of broader risk mitigation and supply chain resilience strategies, rather than relying on single-country sourcing models (McKinsey Global Institute, 2020). Textile Exchange further finds that over 80% of leading apparel brands can trace Tier 1 factories, while traceability falls sharply beyond this tier (Textile Exchange, 2025). These data indicate that decoupling is most measurable and operationally realized at Tier 1, where production locations can be relocated with relatively low structural adjustment.

Firm-level sourcing data reinforce that Tier 1 decoupling is observable through supplier diversification across multiple countries. For instance, Zara sources finished products from a wide portfolio of suppliers including Asia, Europe, Africa and America, with supplier clusters established in countries such as Bangladesh, Vietnam, Cambodia, India and China, reflecting a strategy of geographically distributed Tier 1 production rather than reliance on a single country. Inditex reported that around 98% of its production was concentrated in these clusters, underscoring a deliberate shift to diversify beyond China while maintaining centralized coordination of production standards and compliance (Inditex Annual Report, 2022). Similarly, H&M Group works with over 1,100 Tier 1 factories across Europe, Asia and North America, with significant manufacturing bases in Bangladesh and China alongside emerging hubs in India, Vietnam and Cambodia (H&M, 2025).

3.1.5. Tier 0: Office, Retail, Distribution Centres

Partner Structure & Coordination

Tier 0 represents the downstream focal actors in the supply chain including brand headquarters, retailers, and distribution centers. These entities do not engage in physical manufacturing but play a central role in coordinating the entire supply chain. Tier 0 firms design products, manage branding and marketing, forecast demand, and determine sourcing strategies (Gereffi, 2018b). They maintain direct contractual relationships with Tier 1 manufacturers and indirect influence over others upstream tiers through sourcing specifications and compliance requirements.

Coordination at this tier is also highly centralized and buyer-driven. Tier 0 enterprises can decide production volumes, delivery schedules, quality standards, and sustainability requirements, which communicated upstream through Tier 1 suppliers. Distribution centers further coordinate inventory allocation, order fulfillment, and last-mile logistics, linking production outcomes with consumer markets. As a result, Tier 0 exercises governance power over information, financial, and goods flows, even though does not manufacture products itself.

Observed Friendshoring / Relocation

Friendshoring and relocation initiatives are primarily initiated at Tier 0. Acording to McKinsey, in response to geopolitical risks, trade tensions, and supply disruptions, Tier 0 firms increasingly decide to diversify their Tier 1 supplier base across multiple countries with politically stable or economically aligned. This strategy allows brands and retailers to reduce exposure to risks while maintaining flexibility (Magnus, 2024).

However, relocation at Tier 0 can only be indirect. Offices, retail outlets, and distribution centers themselves are immobile due to market proximity requirements. Instead of that, Tier 0 implements friendshoring by reallocating production orders and adjusting supplier portfolios rather than relocating core downstream infrastructure. This reinforces Tier 0 role as a strategic orchestrator rather than an operational mover within the supply chain.

Structural Constraints and Dependency

Despite having coordination power, Tier 0 firms face structural constraints that limit achieving genuine supply chain decoupling. While they can select supplier and order allocation, Tier 0 actors do not directly own or operate upstream production assets. Their dependence on established material supply ecosystems constrains the extent to which sourcing structures can be reconfigured (Alrosjid, Pujawan and Arvitrida, 2022). Moreover, Tier 0 prioritize speed, cost efficiency, and reliability, which leads to reliance only on proven capabilities upstream production hubs. Even when Tier 1 locations are diversified, Tier 0 firms often approve sourcing arrangements that preserve established material flows to minimize risk.

Real-World Evidence

Real-world evidence indicates that friendshoring at Tier 0 is implemented mainly through centralized sourcing decisions rather than physical relocation of downstream operations. Major apparel brands such as Inditex, H&M, and Uniqlo continue to concentrate headquarters functions, sourcing management, and supply chain planning in Europe or Japan, while reallocating production orders across multiple Tier 1 countries to manage geopolitical and supply risks.

Inditex's Annual Report shows that core purchasing and risk management decisions remain centralized at the headquarters level, despite a geographically dispersed supplier network. At the same time, distribution centers are largely fixed near major consumer markets to ensure speed and reliability (Textile Exchange, 2025). This evidence suggests that Tier 0-led friendshoring enhances coordination flexibility but does not result in structural decoupling of downstream operations.

3.2. Discussion

3.2.1. Decoupling illusion discussion

A multi-tiered analysis of the textile supply chain reveals that the "decoupling from China" process is just the illusion of supply chain restructuring. The evidence of decoupling is mostly presented at Tier 1, where garment manufacturing and assembly operations are being shifted to Vietnam, Bangladesh, or Cambodia, which created illusory perception. At Tier 0, retail and distribution are restructured according to the strategies of focal firms, further reinforcing the perception that the supply chain has become more independent. However, the core upstream tiers maintain a high degree of dependence. At Tier 2, the production of materials such as fabrics and dyeing processes continues to be dominated by China due to highly integrated industrial clusters, economies of scale, cost, and processing speed. Simultaneously at Tier 3, where raw material processing and yarn production take place, operations remain primarily concentrated in China or controlled by Chinese companies due to their superior production capacity. Tier 4 suppliers experience virtually no restructuring, whether through friendshoring or decoupling, due to their complete dependence on sourcing region. From a supply chain management perspective, it could be concluded that current decoupling is merely an illusion, primarily a downstream dispersion, while the upstream dependency structure of the chain remains unchanged.

3.2.2. Policy Expectations vs. Supply Chain Reality

Policy initiatives promoting decoupling, friendshoring, and supply chain diversification are increasingly reflected in concrete trade, industrial, and investment policies. These include the "China+1" strategy endorsed by the United States and the European Union, the EU's Trade Policy Review emphasizing supply chain resilience, and industrial policies such as the U.S. CHIPS and Science Act and the EU's Open Strategic Autonomy agenda, which encourage sourcing from politically aligned or trusted partners (OECD, 2020). In the textile and garment sector, preferential trade agreements, investment incentives, and sourcing guidelines implicitly aim to move assembly activities to alternative production hubs such as Vietnam, Bangladesh, and India. Policymakers assume that relocating downstream manufacturing, particularly Tier 1 assembly, will reduce overdependence on some suppliers, enhance geopolitical resilience, and gradually induce restructuring across upstream tiers of the supply chain.

However, empirical evidence suggests a clear gap between policy expectations and operational realities. While firms have diversified Tier 1 manufacturing locations, upstream activities remain highly concentrated due to capital intensity, technological specialization, and economies of scale (Gereffi, Humphrey and Sturgeon, 2005c). Trade in Value Added (TiVA) data indicate that relocation at the assembly stage does not significantly reduce foreign value-added dependence. Only 36.4% of export value in the textile sector is generated domestically, reflecting high backward participation in global value chains. Vietnam's foreign value-added share reaches 64.2%, compared to just 10.9% in China, highlighting the contrast between downstream-oriented production models and vertically integrated supply systems (Word Trade Organization, 2026).

Industry evidence reinforces this structural pattern. Although global apparel brands increasingly diversify Tier 1 production, upstream material sourcing still remains concentrated. Overall, these findings suggest that policy-driven decoupling primarily results in spatial reconfiguration at Tier 1, creating an illusion of structural change, while upstream dependency remains largely intact.

4. Recommendation

4.1. Firms Needing to Decouple from China

As government policy strengthens trade regulations and requirements, firms face growing exposure to geopolitical disruptions, including the need to relocate production, higher costs, and limited protection (Moradlou *et al.*, 2021). Therefore, to align with policy expectations and enhance the supply chain resilience, firms must address the structural dependency within multi-tier supply chains.

Firstly, decoupling should rather be a phased transformation process, with a clearly stated strategy for short-term, mid-term, and long-term (Gereffi, 2018c). More specifically, short-term strategies should focus on risk preparation and preparation for adaptation, while mid-term strategies focus more on supplier qualification and technological improvement, long-term ones should rather emphasize capability building and ecosystem development, especially strengthening the network between global suppliers. In conclusion, the decoupling should not be the geographical relocation only, but a structural reconfiguration of relations, grounded in governance, coordination, and capability strengthening.

Secondly, firms should decouple knowledge and standards before getting geographic decoupling. Because decision-making power comes from the production know-how (Nurhayati, Rezaei and Tavasszy, 2021), as long as upstream suppliers define how materials are produced and processed, downstream ones still have to depend on them, regardless of the location. Therefore, firms should strengthen detailed knowledge of each stage required, including material specifications, processing requirements, and technological constraint. By internalizing knowledge, firms may reduce their reliance on upstream decisions and enable more effective collaboration with a greater diversity of suppliers, which is essential for creating a resilient supply chain.

Thirdly, completely decouple in a short time from the dominant upstream supplier is unrealistic because of their scale economies and ecosystem advantages. However, a firm may achieve independence by expanding material options through gradual substitution, using recycled fibers and bio-based inputs, which may reduce the reliance on a narrow set of suppliers. While these adjustments may involve higher initial costs, they create flexibility in material sourcing, more diversity in collaboration with suppliers, without sacrificing their operational efficiency in the long run.

4.2. Suppliers in Friendshoring/Relocating Destinations

Suppliers in relocation positions face a strategic request for capacity improvement in core technological and process areas rather than purely functioning as assembly locations, therefore enabling deeper and more sustainable integration into the supply chain (Vargas-Hernández, 2022). Priority must be given to upstream capability upgrading, especially when the dependency mostly relies on the material processing process; however, this improvement must be supported by investments in environmentally compliant infrastructure and regulatory-aligned production systems. Moreover, due to some limitations in the isolated expansion, companies should focus more on a cluster-based model. This cluster should include the development of multiple factories nearby with different specializations in the process, such as spinning, dyeing, finishing, chemical processing, and laboratory testing.

For inputs that remain technologically dependent on Chinese know-how, suppliers should avoid continued reliance on the import and assembly of semi-finished components. Instead, they can apply the decomposition strategy, where complex products are disaggregated into smaller processing stages and functional elements. This enables multi-supplier collaboration and specialization in stages to construct alternative “make” strategies for the intermediate products. Through this approach, dependency reduction becomes a process of structural capability reformation rather than a mere geographical relocation of assembly activities. Moreover, the supplier should also take action to establish a transparent and traceable network, enabling the buyers with trustworthy data on material sourcing, origin, chemical composition, and processing standards across upstream tiers.

5. Conclusion

This research concludes that decoupling in the textile and garment sector represents a nominal geographic reconfiguration rather than a fundamental structural shift. While friend-shoring strategies have successfully shifted Tier 1 assembly to alternative hubs, the analysis reveals that upstream tiers remain heavily dependent on established Chinese ecosystems. Structural constraints in raw material extraction, chemical processing, and fabric production prevent true independence, creating a "decoupling illusion" where operational relocation conceals systemic vulnerability. To address this, firms must transition from simple geographical shifts to deep-tier mapping and long-term capability building, while suppliers in emerging hubs should prioritize cluster-based industrialization and technical decomposition to reduce intermediate dependencies. Ultimately, mitigating global risks requires looking beyond downstream assembly to address the deep-rooted dependencies within the multi-tier production network.

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