

RESHORING AND NEARSHORING STRATEGIES IN THE APPAREL INDUSTRY: A PRISMA-INFORMED STRUCTURED NARRATIVE REVIEW OF SUPPLY CHAIN RESILIENCE (2015–2025)

Priscila Amorim Grunwald¹

Abstract: After decades of shifting apparel manufacturing to low-cost regions, fashion companies and textile supply chains have been reassessing this strategy in the face of logistical disruptions, tariff volatility, geopolitical risks, and domestic regulatory pressures. This article presents a structured narrative review, informed by the principles of the PRISMA protocol (Preferred Reporting Items for Systematic Reviews and Meta-Analyses), on reshoring (the return of production to the country of origin) and nearshoring (relocation to geographically nearby regions) in the apparel industry, focusing on the factors driving these decisions and the operational and financial outcomes reported. Open-access academic search engines, institutional repositories, and bibliographic aggregators were consulted — since direct access to the proprietary interfaces of databases such as Scopus, Web of Science, and Business Source Complete was not available at the time this article was prepared — supplemented by public policy documents used as contextual material and clearly distinguished from peer-reviewed academic literature. The process resulted in a corpus of only ten core academic studies, published mostly between 2013 and 2026. This is a small and methodologically heterogeneous sample base, which limits the generalizability of the findings, precludes statistical meta-analysis, and should be read as a preliminary qualitative synthesis, not as conclusive evidence. Screening and selection of studies were conducted by a single reviewer (the author), without independent checking by a second assessor — a limitation that qualifies the robustness of the selection process and is detailed in Section 6. The results indicate that reshoring/nearshoring decisions in the apparel sector are rarely driven by a single factor: sourcing process complexity, environmental sustainability, tariff exposure, market

¹ Graduated in Business Administration from Anhembi Morumbi University.

response speed, and adoption of automation technologies appear recurrently as interrelated drivers, while domestic labor cost, regional textile infrastructure shortages, and lack of skilled labor remain the main barriers. Evidence on direct financial outcomes, meanwhile, is scarce and inconsistent, in contrast to operational benefits, which are relatively better documented. The article discusses the practical implications of this evidence for small and medium-sized apparel companies in the United States and points to gaps for future research.

Keywords: reshoring; nearshoring; apparel industry; supply chain; structured narrative review; PRISMA.

Introduction

The textile and apparel industry has undergone, over the past three to four decades, an intense offshoring process, in which production stages were progressively transferred to regions with lower labor costs, especially in Asia. This shift was not an isolated event, but a structural movement sustained by decades of trade liberalization, reduced tariff barriers, and the constant pursuit of margins in an industry historically sensitive to labor costs. This global supply chain model, while reducing unit production costs, also increased brands' exposure to long lead times, low supplier visibility, and vulnerability to logistical disruptions (Gray, Skowronski, Esenduran, & Rungtusanatham, 2013).

This vulnerability, discussed in a relatively abstract way in the supply chain literature during the 2010s, became concrete and visible to the broader public following a succession of external shocks over the following decade: the COVID-19 pandemic dramatically exposed the fragility of global supply chains dependent on a small number of distant manufacturing hubs; the trade war between the United States and China sustainably raised the cost and unpredictability of textile imports; and episodes of logistical disruption — such as the 2021 blockage of the Suez Canal and successive maritime freight crises — reinforced the argument that geographic distance between production and consumption is

itself a source of operational risk, not merely a cost variable.

In recent years, however, a combination of factors has rekindled interest in reshoring (returning manufacturing to the country of origin) and nearshoring (relocating to countries or regions geographically close to the consumer market) strategies. Among these factors are international freight instability, escalating trade tariffs, geopolitical risks, pressures for transparency and sustainability, and public policies aimed at strengthening domestic supply chains — such as Executive Orders 14017 and 14123 in the United States, which address the resilience of national supply chains. Added to these factors is a gradual but perceptible shift in consumer demand: growing segments of buyers, particularly in the United States and Europe, have come to associate domestic or regional production with attributes of transparency, traceability, and labor and environmental responsibility — which turns the origin of manufacturing into a brand-positioning element, not merely an operational cost variable.

The apparel industry occupies a particular position within this broader debate on manufacturing reshoring. Unlike sectors with highly automatable processes, industrial sewing remains, to a large extent, a labor-intensive process, which historically made the wage differential between countries an especially potent driver of the original offshoring — and, by symmetry, an especially persistent obstacle to reshoring. At the same time, the sector is marked by increasingly short fashion cycles, pressure for rapid response to trends (fast fashion), and growing public scrutiny of working conditions in international supply chains, which makes the apparel industry an especially rich — and especially urgent — case for understanding how and why decisions about the geographic relocation of production are being made.

Despite growing practical and media interest in the topic, the academic literature on reshoring in the apparel sector remains fragmented. Whittier (2026), in a recent systematic review on textile and apparel reshoring in the United States, notes that academic studies, industry reports, and government documents are often produced in isolation, without cumulatively building on existing knowledge, which creates gaps in understanding the actual drivers, barriers, and outcomes of these

strategic decisions. Much of the foundational reshoring literature — Gray et al. (2013), Fratocchi et al. (2016), Foerstl, Kirchoff, and Bals (2016) — addresses the phenomenon at a multi-industry level, without specific attention to the structural particularities of the apparel sector; and the sector-specific literature that does exist (Hasan, 2018; Fratocchi & Di Stefano, 2019; Pourhejazy & Ashby, 2021) is composed mostly of single case studies or one-off analyses, with little attempt at cumulative synthesis among them.

This fragmentation has a direct practical consequence: managers of small and medium-sized apparel companies — who, unlike large fashion conglomerates, rarely have in-house market research teams or dedicated strategic consulting — struggle to locate and interpret this scattered literature when assessing whether, when, and how a reshoring or nearshoring strategy makes sense for their own business. Part of the motivation for this article is, therefore, also practical: to bring together in a single synthesis document what is currently scattered across academic journals from different fields, public policy documents, and industry reports — with the clarity necessary, discussed in detail in Section 2, about what this synthesis can and cannot support in terms of methodological robustness.

Given this scenario, this article aims to systematize and synthesize the available academic literature on reshoring and nearshoring specifically applied to the apparel and textile industry, addressing the following research questions:

- RQ1 — What factors motivate apparel companies to adopt reshoring or nearshoring strategies?
- RQ2 — What operational and financial outcomes are reported in the literature as a result of these strategies?
- RQ3 — What barriers and contingency factors are identified as obstacles to implementing these strategies?

Conceptual definitions and terminological scope

Before proceeding, it is necessary to precisely delimit the central terms of this article, since the supply chain literature does not always use them consistently. Offshoring refers to the transfer of production stages to another country, typically motivated by cost differentials, regardless of the geographic distance involved. Reshoring, also called backshoring by part of the literature (Fratocchi et al., 2016; Barbieri et al., 2018), designates the reverse movement: the return of production activities to the contracting company's country of origin, generally after a prior period of offshoring. Nearshoring, in turn, refers to the relocation of production to a country or region geographically close to the final consumer market, but not necessarily to the company's country of origin — as in the case of American brands that shift production from Asia to Central America and the Caribbean under the CAFTA-DR framework, remaining outside the United States but considerably closer to the consumer market.

This distinction is relevant because not all reshoring/backshoring literature treats nearshoring as a separate category; some authors use “reshoring” as an umbrella term encompassing any relocation toward the market of origin, whether domestic or regional. In this article, the operational distinction between the two phenomena was maintained, as reflected in the eligibility criteria (Section 2.3), precisely to allow the discussion of barriers and outcomes (RQ2 and RQ3) to differentiate, whenever the literature permits, between effects attributable to full domestic production and effects attributable to regional proximity without a return to the country of origin. Related terms such as onshoring (used by some authors as a strict synonym for reshoring) and more recent concepts such as friend-shoring (relocation to politically and economically aligned countries, not necessarily geographically close) appear sporadically in the public policy literature consulted as contextual material (Section 3.5), but did not constitute an independent search criterion in this protocol, as they fall outside the specific scope of apparel reshoring/nearshoring defined in the research questions.

The article is structured as follows: Section 2 describes the methodological protocol adopted, including the rationale for classifying this work as a structured narrative review and the

methodological quality assessment applied to the corpus; Section 3 presents the results organized by research question, with a cross-study synthesis and a subsection dedicated to grey literature; Section 4 discusses the findings in light of the context of small and medium-sized apparel enterprises (SMEs), including differences among sector subsegments; Section 5 explores practical implications; Section 6 acknowledges the study's limitations; Section 7 proposes a future research agenda; Section 8 concludes the article; and, before the References, the author's Conflict of Interest Declaration and two appendices are presented — an adapted PRISMA compliance checklist and a cross-study synthesis matrix.

Method

Note on the methodological classification of this work

This study is presented as a structured narrative review, informed by the principles of the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines, and not as a systematic review *stricto sensu*. This labeling choice is deliberate and reflects an honest assessment of the process employed itself: a systematic review is distinguished from a narrative review precisely by the reproducibility and auditability of the search and selection process, which presupposes, among other elements, a PRISMA flow diagram with complete numerical counts at each stage (records identified, duplicates removed, exclusions by title/abstract and by full text, with reasons) and independent screening checking by at least two reviewers. Neither of these two conditions was fully satisfied in this work, as detailed in Sections 2.4 and 6. The PRISMA protocol was used here as a structural reference and methodological inspiration — not as a certification seal for the method.

Search strategy and databases consulted

The search was structured to reflect the indexing scope of the Scopus, Web of Science, and

Business Source Complete databases, using terms equivalent to those employed on those platforms. Since direct access to the proprietary interfaces of these databases was not available at the time this article was prepared, the search was conducted through open-access academic search engines, institutional repositories (including DigitalCommons, PMC, and ResearchGate), and bibliographic aggregators (including RePEc), using equivalent search strings. This limitation is acknowledged in Section 6 and should be considered when interpreting the scope of the corpus.

The search strings combined three blocks of terms, joined by Boolean operators: (1) terms related to the phenomenon — “reshoring” OR “backshoring” OR “nearshoring” OR “onshoring”; (2) terms related to the sector — “apparel” OR “textile” OR “clothing” OR “garment” OR “fashion”; and (3) terms related to the object of analysis — “supply chain” OR “manufacturing” OR “production” OR “sourcing”. An example of a complete string is: (“reshoring” OR “backshoring” OR “nearshoring”) AND (“apparel” OR “textile” OR “garment”) AND (“supply chain” OR “manufacturing”).

An additional protocol gap is noted here: the exact date the search was executed was not systematically documented during the original preparation of this article. This is an omission recognized as a methodological flaw, since the content indexed by search engines and academic repositories changes over time, which can affect the reproducibility of the results. Future reviews replicating this protocol should record and explicitly report the date(s) the search(es) were executed.

As a complement to the string search in databases and repositories, an informal snowballing strategy (reference scanning) was also employed, in which the reference lists of studies already identified as relevant — particularly the systematic review by Whittier (2026), with 45 sources, and that of Barbieri et al. (2018), with broad driver mapping — were inspected for additional potentially eligible works. It was this complementary scanning, and not just the direct string search, that made it possible to locate niche studies such as the single case of Hasan (2018), published in a lower-indexed sector journal. As with the other stages of the selection process, snowballing was conducted by a single reviewer, without systematic recording of the number of references inspected or independent checking — a limitation already flagged in Section 2.1 and revisited in Section 6.

Eligibility criteria

Studies were included if they: (a) explicitly addressed reshoring, backshoring, or nearshoring; (b) had a sectoral focus on the apparel, textile, or fashion industry, or presented findings on labor-intensive manufacturing clearly transferable to that sector; (c) were available in English; and (d) had been published or remained academically relevant during the period 2013–2026, extending the initially established 2015 cutoff to include Gray et al. (2013), consistently cited as a foundational reference in virtually all subsequent studies reviewed. Studies whose focus was exclusively offshoring (with no mention of reshoring or nearshoring), studies on supply chain sustainability with no direct relation to geographic relocation decisions, and advertising or promotional material with no analytical basis were excluded.

Study selection

The screening process identified a set of potentially relevant records from the searches described. It must be acknowledged, with transparency, that the exact numbers of records identified, duplicates removed, and exclusions made by title/abstract and by full text — with their respective reasons — were not systematically recorded during the original process. This absence of numerical counts precludes the reconstruction of an auditable PRISMA flow diagram and is the main reason why this work is classified as a structured narrative review, rather than a systematic review in the full sense of the term (see Section 2.1). Future reviews should re-execute this protocol with complete numerical recording at each stage.

Although the numerical totals are not available, it is possible to qualitatively describe the exclusion patterns observed during screening, which offers the reader some additional transparency about the process, even without replacing an auditable flow diagram. Three exclusion patterns were

particularly recurrent: (i) records addressing offshoring or general international sourcing strategy with no mention whatsoever of the return or geographic relocation of production; (ii) records on supply chain sustainability in the apparel sector — an adjacent topic frequently indexed with similar terms — but with no direct relation to geographic relocation decisions; and (iii) records that mentioned reshoring only in passing, as an illustrative example within discussions of other supply chain topics, without treating it as the central object of analysis. These three patterns, although not quantified, were consistent enough to shape the eligibility criteria described in Section 2.3.

Additionally, screening and reading of titles/abstracts and full texts were conducted by a single reviewer (the author), without independent checking by a second assessor. The absence of cross-checking is a recognized source of selection bias in literature reviews and constitutes a relevant limitation of this work, also discussed in Section 6. After full reading of the remaining records to confirm eligibility, ten core academic studies were included in the qualitative synthesis, complemented by public policy documents and industry reports used as contextual material and not as primary empirical evidence — a distinction revisited and expanded in Section 3.5.

Data extraction and synthesis

For each of the ten included studies, the following elements were manually extracted, organized in a supporting spreadsheet not published as a formal appendix to this article: (a) identification (author, year, title); (b) methodological design and size or scope of the sample/corpus analyzed; (c) geographic and sectoral context; (d) main reshoring/nearshoring drivers reported; (e) main barriers and contingency factors reported; (f) presence or absence of quantitative financial evidence; and (g) peer-review status. This extraction did not follow a standardized, pre-registered form — another difference from the rigor expected of a full systematic review — but was sufficient to organize the thematic synthesis presented in Section 3 and the cross-synthesis matrix in Appendix B.

Given the methodological heterogeneity of the included studies — which combine conceptual

articles, literature reviews, a single case study, a quantitative survey, and a multi-criteria analysis — a thematic narrative synthesis was chosen, organized around the three research questions, rather than a statistical meta-analysis, which would not be methodologically appropriate for a corpus of this size and heterogeneity.

Methodological quality assessment of included studies

In response to the editorial recommendation that studies with very different methodological designs not be treated with the same narrative weight, a simplified evidence-level classification was applied to each included study, inspired by criteria commonly used in tools such as CASP (Critical Appraisal Skills Programme) and MMAT (Mixed Methods Appraisal Tool) — namely, robustness of the research design, breadth of the sample base or scope of sources analyzed, and peer-review status. This is not a formal, complete application of either of these tools, but a simplified qualitative adaptation, sufficient to signal to the reader that a single case study (Hasan, 2018) and a systematic review with 45 sources (Whittier, 2026) do not support the same degree of generalization, even though both contribute legitimately and complementarily to the thematic synthesis.

The “Evidence level” column in Table 1 summarizes this classification into three levels (Low / Moderate / High), with due flagging, in the case of Whittier (2026), that it is academic grey literature (a major paper not published in a peer-reviewed journal — see Section 3.5), included because it was, at the time this article was prepared, the only work identified with thematic and geographic scope coinciding with that of this review (U.S. textile and apparel reshoring) and for employing a PRISMA-inspired methodology across a broad base of 45 sources.

To make this assessment more transparent and granular than the three-level classification alone allows, Table 2 disaggregates the quality appraisal into four distinct criteria, applied individually to each study: clarity of research objectives, adequacy of the methodological design to the proposed objective, transparency of data collection and analysis, and breadth of the sample base or scope of sources. Peer-review status is reported separately, as it is not properly an internal quality criterion of

the study, but a relevant attribute for interpreting its weight in the synthesis.

Table 2. Methodological quality assessment disaggregated by criterion (simplified classification, adapted from CASP/MMAT)

Study	Clear objectives	Design adequate to objective	Methodological transparency	Sample/scope breadth	Peer-reviewed
Gray et al. (2013)	Yes	Partial (conceptual)	Partial	N/A (not empirical)	Yes
Fratocchi et al. (2016)	Yes	Yes	Partial	Moderate	Yes
Foerstl, Kirchoff & Bals (2016)	Yes	Yes	Partial	Moderate	Yes
Hasan (2018)	Yes	Yes (for n=1)	Yes	Low (n=1)	Yes
Barbieri et al. (2018)	Yes	Yes	Yes	High	Yes
Fratocchi & Di Stefano (2019)	Yes	Yes	Yes	High	Yes
Ancarani et al. (2019)	Yes	Yes	Yes	High (n=495)	Yes
Chakraborty et al. (2021)	Partial	Partial (opinion-based)	Partial	Low	Yes
Pourhejazy & Ashby (2021)	Yes	Yes	Yes	Moderate (n=1 + DEMATEL)	Yes
Whittier (2026)	Yes	Yes	Yes	High (45 sources)	No (grey lit.)

Legend: Yes = criterion fully met; Partial = criterion partially met or met with caveats; No = criterion not met or not applicable to the study design. Qualitative classification prepared by the author, without independent checking by a second assessor (see Section 6).

Overview of the included corpus

Table 1 presents the ten core studies included in the synthesis, organized by author, focus, method, geographic context, and evidence level (simplified classification, see Section 2.6).

Table 1. Studies included in the review, with simplified evidence-level classification

Author(s) / Year	Study focus	Method	Geographic context	Evidence level (simplified)
Gray, Skowronski, Esenduran & Rungtusanatham (2013)	Conceptual definition of the reshoring phenomenon and research agenda for supply chain	Conceptual article	Generic (multi-industry)	Low (conceptual, no primary empirical data)
Fratocchi et al. (2016)	Interpretative framework of manufacturing reshoring motivations	Literature review + database analysis (UnivAQ)	Europe (multi-industry)	Moderate (review + secondary data)
Foerstl, Kirchoff & Bals (2016)	Drivers of reshoring/insourcing and future research agenda	Literature review	Multi-industry	Moderate (narrative review)
Hasan (2018)	Case study of reshoring in leather manufacturing in North Carolina	Single case study	United States	Low (n = 1; not generalizable, though rich in depth)
Barbieri, Ciabuschi, Fratocchi & Vignoli (2018)	Mapping of 66 reshoring drivers identified in the literature	Systematic review	Multi-industry	High (broad-scope systematic review)
Fratocchi & Di Stefano (2019)	Literature review on manufacturing reshoring in the fashion sector	Systematic literature review	United Kingdom / Europe (apparel)	High (systematic review, direct sector focus)
Ancarani, Di Mauro & Mascali (2019)	Relationship between backshoring and Industry 4.0 technology adoption	Quantitative survey (495 initiatives)	Europe (multi-industry)	High (quantitative evidence, broad sample)
Chakraborty, Kabir, Hoque & Das (2021)	Position on the rise/decline of U.S. textile-apparel reshoring	Comparative position article	United States	Low (opinion/comparative, no primary data)
Pourhejazy & Ashby (2021)	Reshoring decision criteria (cost, complexity, sustainability) via fuzzy DEMATEL	Case study + multi-criteria analysis (DEMATEL)	United Kingdom (apparel)	Moderate (single case study, robust analytical method)
Whittier (2026)*	Synthesis of drivers and barriers of U.S. textile-apparel reshoring (2010–2026)	Systematic review (PRISMA), 45 sources	United States	Moderate-High (broad scope; *academic grey literature, not peer-reviewed)

* Whittier (2026) is academic grey literature (undergraduate/major capstone paper, DigitalCommons@URI), not published in a peer-reviewed journal. See inclusion rationale in Section 2.6 and discussion in Section 3.5.

Results

RQ1 — Factors motivating reshoring and nearshoring in the apparel industry

A recurring finding among the reviewed studies — although based on a reduced corpus of ten studies and therefore to be read as indicative, not as a definitive conclusion — is that reshoring decisions are rarely explained by a single factor. Barbieri, Ciabuschi, Fratocchi, and Vignoli (2018), in a systematic review that broadly mapped the manufacturing reshoring literature, identified 66 distinct drivers cited in the literature, evidencing the heterogeneity of the reasons that lead companies to reconsider offshoring decisions. Fratocchi et al. (2016) proposed an interpretative framework that classifies these motivations as either correcting previous managerial errors or as deliberate strategic decisions, subdivided between changes in the company's internal and external environment.

In the specific context of apparel, Pourhejazy and Ashby (2021), in a case study of the British industry using fuzzy DEMATEL multi-criteria analysis, found that supply process complexity was the criterion with the greatest potential impact on the financial outcomes of the reshoring decision, closely followed by environmental sustainability, which had a strong influence on cost efficiency as a historical driver of the original offshoring decisions. This finding, derived from a single case study, suggests — without generalizing — that in the apparel sector, operational and environmental considerations frequently outweigh cost alone as a decision factor.

The systematic review by Fratocchi and Di Stefano (2019), specifically dedicated to reshoring in the fashion industry, reinforces this pattern by showing that brands in the sector have increasingly sought to realign business models focused on the brand and the customer, also restoring corporate heritage values — as illustrated by the case of Burberry, used as empirical reference in the study. Ancarani, Di Mauro, and Mascali (2019), in a quantitative survey of 495 relocation initiatives in Europe, found that backshoring is associated with the adoption of Industry 4.0 technologies, especially when the company's priority is high quality and reduced non-conformity costs — a finding that is relevant, and based on a relatively more robust sample than the other studies in the corpus, for the

argument that automation and digitalization have been reducing part of the cost disadvantage of domestic manufacturing.

Whittier (2026) — academic grey literature, discussed in more detail in Section 3.5 — identified tariff exposure, supply chain risk, sustainability demands, and consumer interest in transparency as the main drivers of the textile and apparel reshoring movement in the United States between 2010 and 2026. Chakraborty, Kabir, Hoque, and Das (2021), in a comparative position article with no primary data of their own, highlight the growing demand for “Made in USA” products among American retailers and consumers as an additional pressure factor, coupled with rising offshore production costs.

These drivers can be organized into two broad theoretical families, although the reviewed literature does not explicitly formalize this distinction. The first is close to what transaction cost economics literature would call efficiency-oriented motivations: supply complexity (Pourhejazy & Ashby, 2021), lead time and visibility (Whittier, 2026), and the adoption of automation as a way to reduce the labor cost differential (Ancarani et al., 2019) fall within this family, insofar as they seek to reduce coordination costs and the operational risk of the extended chain. The second is close to motivations oriented toward legitimacy and market positioning: environmental sustainability, brand heritage (Fratocchi & Di Stefano, 2019), and consumer demand for “Made in USA” (Chakraborty et al., 2021) respond less to a direct cost logic and more to institutional and reputational pressures. Fratocchi et al. (2016) had already suggested, in their interpretative framework, a similar structural distinction by separating reshoring as correction of managerial error from reshoring as deliberate strategic decision — and the findings synthesized here are compatible with this reading, even though they are derived from a small corpus and have not been statistically tested.

It is worth noting that none of the ten included studies formally tests the interaction between these two families of drivers — that is, whether efficiency and legitimacy motivations reinforce each other, compete for budgetary priority within the company, or operate independently. This is an explicit gap in the current literature, not a conclusion this article can offer from the available synthesis; it is

revisited as a future research recommendation in Section 7.

Reported operational outcomes and the financial evidence gap

The reviewed studies report, mostly qualitatively, operational benefits associated with reshoring and nearshoring, including reduced lead time, greater supply chain visibility, better quality control, and greater capacity to respond to demand changes. Whittier (2026) synthesizes these findings, pointing to shorter lead times, improved environmental oversight, and strengthened supplier relationships as benefits recurrently cited in the textile and apparel reshoring literature.

It is important to be explicit about what the data actually support: direct financial evidence associated with reshoring and nearshoring in the apparel sector is scarce, inconsistent, and, in practice, nearly nonexistent in quantitative terms in the reviewed corpus. This is not a secondary limitation, but the main weak point of this body of evidence, and this is why the title of this section avoids the affirmative formulation “financial outcomes are reported,” adopted in an earlier version of this text, replacing it with a statement more faithful to the reality of the data. Gray et al. (2013), in one of the first conceptual articles on the topic, already warned that much of the literature available at the time was conceptual, lacking quantitative evidence that would allow definitive conclusions about the net financial impact of reshoring — a limitation that, according to Pourhejazy and Ashby (2021), persists in more recent literature focused on the apparel sector.

Hasan (2018), in a single case study of a leather manufacturing company in North Carolina — and, therefore, a source of non-generalizable evidence, albeit rich in descriptive depth — describes how business model innovation, not merely process technology innovation, was decisive in making domestic manufacturing financially viable in that specific case. This suggests, as a hypothesis to be tested by future research with a larger sample base, that the financial outcomes of reshoring may depend heavily on complementary strategic decisions, such as brand repositioning, reduction of intermediaries, and product differentiation, and not solely on geographic relocation itself.

One possible reading — and it is important to note that this is the author’s interpretive reading, not a direct finding of any individual study in the corpus — is that the scarcity of quantitative financial evidence does not necessarily stem from the absence of real financial return, but from the methodological difficulty of isolating the specific effect of geographic relocation from other changes that typically accompany it (automation, brand repositioning, process redesign). This difficulty of causal attribution is a structural limitation of the object of study itself, not just of the reviewed corpus, and helps explain why even broader systematic reviews, such as Whittier’s (2026), with 45 sources, do not report consolidated estimates of average financial return from reshoring in the sector.

From a practical standpoint, this gap has a direct decision-making cost for small and medium-sized enterprises: in the absence of robust sector financial benchmarks, each company is forced to build its own financial viability estimate from internal assumptions, with a heightened risk of excessive optimism or excessive conservatism, absent external references against which to calibrate those assumptions. This observation is revisited in Sections 4 and 5, including the practical implication that any estimate of financial return from reshoring/nearshoring made by an individual company should be treated as an internal projection subject to considerable uncertainty, and not as the application of a consolidated sector parameter.

Barriers and contingency factors

The most frequently cited barriers in the reviewed studies concentrate on three axes: labor cost, production infrastructure, and availability of skilled labor. Whittier (2026) explicitly points to high labor costs in the United States, limited manufacturing infrastructure, and labor shortages as persistent barriers to textile and apparel reshoring in the country. Hasan (2018) had already observed, in his single case study, that apparel manufacturing processes, being labor-intensive, make reshoring financially unviable in the absence of business model innovation.

In the specific case of regional nearshoring to Central America and the Caribbean under

the CAFTA-DR framework, industry reports consulted as contextual material — institutional grey literature, detailed in Section 3.5 — indicate that the region’s limited spinning and weaving capacity, an input required by the “yarn-forward” rule of origin for access to preferential tariff treatment, remains a structural bottleneck that limits the pace of nearshoring expansion, even amid recent private investment in regional production capacity. This bottleneck illustrates a more general point about infrastructure barriers in regional nearshoring: they are frequently not in the sewing or assembly stage itself, which can be relatively quick to expand, but in the earlier stages of the chain — spinning, weaving, dyeing, and finishing — which require capital-intensive investment and longer maturation periods, and are rarely a decision that a single individual company can make, depending instead on coordinated investment at the regional or sectoral level.

Barbieri et al. (2018) and Fracocchi et al. (2016) also highlight that contingency factors — such as company size, how the original offshoring decision was implemented (in-house production versus outsourcing), and sector-specific characteristics — moderate the probability and viability of reshoring, suggesting that there is no universal answer as to when this strategy is advantageous, but rather a case-by-case assessment that must consider multiple interrelated criteria, as also demonstrated by Pourhejazy and Ashby (2021).

An additional contingency factor, mentioned more indirectly in the reviewed literature but relevant to the practical target audience of this article, is the minimum scale of operation necessary to justify investment in automation or specialized labor training. The benefits of Industry 4.0 technology adoption documented by Ancarani, Di Mauro, and Mascali (2019) were observed in a sample of 495 predominantly European, multi-industry relocation initiatives, without specific disaggregation for small apparel producers; there is no direct evidence in the reviewed corpus about the minimum production scale at which this type of investment becomes financially justifiable for a small apparel company — a gap that reinforces the caution recommended in Section 5 against treating automation as a universally accessible solution for SMEs.

Cross-study synthesis of findings

To facilitate a comparative reading of the corpus as a whole, Table 3 cross-references the ten included studies with three synthesis dimensions: presence of reshoring/nearshoring drivers discussed (RQ1), presence of quantitative financial evidence (RQ2), and presence of barriers/contingency factors discussed (RQ3). The table is a visual organization tool for the synthesis already presented in Sections 3.1 to 3.3, not a new independent source of evidence.

Table 3. Cross-synthesis matrix: presence of evidence by research question and by study

Study	RQ1 – Drivers	RQ2 – Financial evidence	RQ3 – Barriers	Note
Gray et al. (2013)	► (conceptual)	—	—	Foundational/definitional
Fratocchi et al. (2016)	►	—	► (contingency factors)	Interpretative framework
Foerstl, Kirchoff & Bals (2016)	►	—	►	Research agenda
Hasan (2018)	►	Qual. (single case)	►	Single case study
Barbieri et al. (2018)	► (66 drivers)	—	► (contingency factors)	Broad mapping
Fratocchi & Di Stefano (2019)	► (brand/fashion)	—	—	Direct sector focus
Ancarani et al. (2019)	► (automation)	Quant. (survey, non-financial)	—	n=495, Industry 4.0
Chakraborty et al. (2021)	► (“Made in USA”)	—	►	Comparative position
Pourhejazy & Ashby (2021)	► (DEMATEL)	Quant. (multi-criteria, non-financial)	—	Case + multi-criteria
Whittier (2026)	► (broad synthesis)	—	►	Grey lit., 45 sources

Legend: ► = topic discussed with some depth in the study; — = topic absent or mentioned only in passing; Qual. = qualitative/descriptive evidence; Quant. = quantitative evidence. No study in the corpus presents robust, consolidated quantitative financial evidence (see Section 3.2).

A horizontal reading of Table 3 confirms the pattern discussed in Section 3.2: none of the ten studies presents robust quantitative financial evidence, and only two (Ancarani et al., 2019, through

a survey, and Pourhejazy & Ashby, 2021, through multi-criteria analysis) present some degree of quantification, though not strictly financial. A vertical reading, in turn, shows that drivers (RQ1) and barriers (RQ3) are discussed more consistently than financial outcomes (RQ2) across virtually the entire corpus — a pattern that is itself a finding of the synthesis, as it signals where the literature has actually concentrated and where a gap remains to be filled by future research.

Complementary evidence from grey literature

This subsection brings together, explicitly and separately from the peer-reviewed academic literature discussed in Sections 3.1 to 3.3, the non-peer-reviewed contextual material used in this article. The typographic separation adopted here seeks to prevent the reader from confusing a peer-reviewed empirical finding with a statement from a government report, industry association, or unpublished academic work.

- United States public policy documents — Executive Order 14017, “America’s Supply Chains” (2021), and Executive Order 14123, which established the White House Council on Supply Chain Resilience (2025) — indicate governmental priority for strengthening domestic supply chains, but do not constitute empirical evidence on reshoring outcomes in the apparel sector specifically.
- Reports from the National Council of Textile Organizations (NCTO) on the CAFTA-DR agreement indicate that nearshoring to Central America and the Caribbean has been encouraged by preferential rules of origin (the so-called “yarn-forward rule”), which grant differentiated tariff treatment to products manufactured with textile inputs originating in the United States or the CAFTA-DR region itself — but, as industry association material, such reports have not undergone peer review and should be read as sector interest positioning, albeit informative.
- Whittier (2026), treated with due prominence throughout this article, is an undergraduate/major capstone paper (DigitalCommons@URI) — that is, academic grey literature, not published in a peer-reviewed indexed journal. It was included in this synthesis because it was,

at the time this article was prepared, the only work identified with thematic and geographic scope coinciding with that of this review, and for applying a PRISMA-inspired methodology across a base of 45 sources. This does not make it equivalent, in evidentiary status, to the peer-reviewed articles cited in the other sections — a distinction the reader should bear in mind when weighing the findings derived from it.

Taken together, this contextual material is useful for situating the regulatory and public policy landscape in which apparel sector reshoring and nearshoring decisions occur, but should not be taken as a substitute for peer-reviewed empirical evidence in this article's conclusions.

Discussion

The synthesis of the reviewed literature — read in light of the reduced corpus of ten studies, the screening process conducted by a single reviewer, and the distinction between peer-reviewed literature and grey literature established in Section 3.5 — indicates that reshoring and nearshoring in the apparel industry should not be understood as binary decisions motivated by cost alone, but as multi-criteria strategic choices involving supply complexity, sustainability, market response speed, technology adoption, and brand considerations. This pattern appears consistently across studies conducted in different geographic contexts — the United Kingdom (Pourhejazy & Ashby, 2021; Fratocchi & Di Stefano, 2019), continental Europe (Fratocchi et al., 2016; Ancarani et al., 2019), and the United States (Hasan, 2018; Chakraborty et al., 2021; Whittier, 2026) — which suggests a degree of transferability of the findings, even though each market presents its own regulatory and infrastructure particularities and the corpus size recommends caution in generalizing.

A second relevant point of discussion is the gap between the relatively well-documented operational benefits (lead time, visibility, quality) and the scarcity of robust financial evidence, discussed in more detail in Section 3.2. This gap is particularly relevant for small and medium-sized apparel companies, which frequently lack in-house analytical capacity to model the financial

return of geographic relocation decisions before implementing them. This reinforces the relevance of specialized operational support interventions — such as supply chain diagnostics and support for implementing domestic or regional production structures — as a way of translating academic literature into decisions applicable at the individual company level. It should be noted, with the transparency required by the Conflict of Interest Declaration at the end of this article, that the author works professionally in providing this type of service, which reinforces the need for the reader to evaluate this conclusion independently and in light of the evidence presented, rather than solely on the author's authority.

The literature also converges in recognizing that infrastructure and skilled labor barriers are not resolved simply by the decision to relocate production; they require parallel investment in process organization, quality control standardization, and workforce training — topics discussed by Hasan (2018), in his single case study, and by Whittier (2026), broader-scope academic grey literature, which connect directly to discussions of lean manufacturing and quality standardization in apparel supply chains.

A fourth point, little explored directly by the individual studies in the corpus but that emerges when they are read together, is the likely heterogeneity of outcomes across different subsegments of the apparel industry. The Burberry case, discussed by Fratocchi and Di Stefano (2019), illustrates a reshoring pattern associated with luxury brands and brand heritage, in which the “Made in” origin has direct market value that can justify price premiums capable of offsetting higher labor costs. The Hasan (2018) case, a mid-sized leather manufacturer in North Carolina, illustrates a distinct pattern, in which financial viability depended on business model repositioning and reduction of intermediaries, without the support of a pre-existing luxury brand premium. Fast fashion, in turn — a segment characterized by extremely short replenishment cycles and end-consumer price sensitivity — is not the direct subject of any of the ten included studies, which constitutes a notable gap, since pressure for market response speed (Whittier, 2026) is, in principle, the strongest operational argument in favor of reshoring/nearshoring, yet no evidence in the corpus allows an assessment of whether this argument

holds up financially in this specific, more price-sensitive segment than the luxury segment.

Compared to the broader literature on general manufacturing reshoring — not specific to apparel — the synthesis presented here is consistent with earlier multi-industry findings (Gray et al., 2013; Foerstl, Kirchoff & Bals, 2016) regarding the multi-criteria nature of the decision, but diverges in emphasis: the multi-industry literature tends to place greater weight on factors such as intellectual property, technically sophisticated quality control, and proximity to R&D as reshoring drivers — factors of limited relevance to apparel manufacturing, which is typically less dependent on process intellectual property and more dependent on direct labor cost. This divergence in emphasis reinforces the argument presented in the Introduction that the apparel industry deserves treatment as a particular case within the broader reshoring debate, rather than a direct application of multi-industry findings.

Finally, the public policy environment described in Section 3.5 — Executive Orders 14017 and 14123, and the CAFTA-DR framework — appears to act more as a facilitator of boundary conditions (reducing tariff uncertainty, creating regulatory preferences) than as a direct determinant of individual reshoring/nearshoring decisions at the company level. None of the ten academic studies in the corpus attributes to these public policy instruments a direct, measured causal role in specific business decisions; the connection between public policy and business behavior in the apparel sector therefore remains a reasonable inference from context, but not an empirically demonstrated finding of the reviewed literature — a distinction that must be carefully maintained by anyone using this article for public policy advocacy purposes.

Practical Implications for Apparel SMEs

For small and medium-sized apparel companies — including emerging brands, ateliers, sewing workshops, and on-demand manufacturers — the findings of this review, drawn from a small corpus that should be interpreted with due caution, suggest several relevant practical implications. Each is presented below with a brief elaboration on how it could be operationalized, without this

constituting an empirically tested prescriptive recommendation — merely a reasonable translation of the literature synthesis into managerial decision language.

- Reshoring or nearshoring decisions should be evaluated based on multiple criteria (cost, supply complexity, sustainability, speed, and quality), not just a direct comparison of labor costs between locations. In practice, this suggests using simple multi-criteria decision matrices — inspired, with appropriate methodological caveats, by the DEMATEL approach of Pourhejazy and Ashby (2021) — rather than a single unit-labor-cost comparison spreadsheet.

- Operational gains (lead time, visibility, quality control) tend to be more predictable and measurable in the short term than net financial return, which depends on business-specific contingency factors and for which the reviewed literature still offers scarce evidence (see Section 3.2). It is recommended that operational gains and financial return be treated as two separate assessment axes, with different measurement horizons, rather than assuming the latter follows automatically from the former.

- The financial viability of reshoring often depends on complementary business model innovation — such as greater control over critical production stages, reduction of intermediaries, and product differentiation — and not merely on the geographic change in manufacturing. Companies that consider reshoring only as a geographic supplier substitution, without rethinking the associated business model, find less support in the reviewed literature for the financial viability of this decision.

- In the case of regional nearshoring under agreements such as CAFTA-DR, the limited availability of certified textile inputs in the region should be factored into planning, as it can restrict access to preferential tariff benefits. Companies that rely on this type of benefit should map, in advance, the supply chain of eligible regional textile inputs, not just final garment-making capacity.

- Investments in process standardization, quality control, and workforce training are complementary — not substitutes — for geographic production relocation decisions. Partnerships with local technical training institutions may be a more viable path for small companies than developing entirely in-house training programs.

- Given the scarcity of consolidated sector financial benchmarks (Section 3.2), any internally developed financial return projection should be treated as an estimate subject to considerable uncertainty, preferably tested through smaller-scale pilot projects before large-scale relocation decisions.

- The adoption of automation (Industry 4.0) should not be assumed to be universally accessible to small companies just because studies such as Ancarani et al. (2019) document its association with backshoring at the multi-industry level; the minimum scale of operation necessary to justify this investment is not established by the reviewed literature specifically for the apparel sector, and should be assessed on a case-by-case basis.

-

Limitations

This study presents important methodological limitations, which must be carefully considered when interpreting its findings.

First, direct access to the proprietary interfaces of the Scopus, Web of Science, and Business Source Complete databases was not available at the time this article was prepared; the search was conducted through open-access academic search engines and institutional repositories using equivalent search strategies, which may have failed to capture studies available exclusively in restricted-access databases. The exact date the search was executed was also not systematically recorded, which partially compromises the reproducibility of the process, since the content indexed by these sources changes over time. It is recommended that future reviews replicate this search with direct access to these databases, recording the execution date, to validate and expand the corpus identified here.

Second, and centrally, the screening and selection process for the studies was conducted by a single reviewer (the author), without independent checking by a second assessor, and without complete numerical recording of records identified, duplicates removed, and exclusions at each stage. For these two combined reasons, this work is presented as a structured narrative review informed by

PRISMA, and not as a systematic review in the strict sense of the term (see Section 2.1). The absence of independent double-checking is a recognized source of selection bias that future reviews should correct.

Third, the relatively small number of academic studies specifically dedicated to reshoring and nearshoring in the apparel sector — only ten, in contrast to the broader literature on general manufacturing reshoring — substantially limits the statistical robustness and generalizability of the conclusions, and precludes meta-analysis, hence the choice of thematic narrative synthesis. This limitation is already flagged in the Abstract, so it is clear from the very first reading of the article.

Fourth, no formal, complete methodological quality assessment tool (risk of bias), such as CASP or MMAT in their full form, was applied; instead, a simplified evidence-level classification was adopted (Section 2.6 and Table 1), sufficient to signal differences in robustness among the studies, but not a substitute for a formal item-by-item risk-of-bias assessment.

Fifth, the methodological heterogeneity of the included studies (conceptual articles, literature reviews, a single case study, a quantitative survey, and a multi-criteria analysis) makes direct comparisons between findings difficult. Sixth, the language restriction to studies published in English may have excluded relevant literature published in other languages, particularly on nearshoring to Latin America.

Finally, as detailed in the Conflict of Interest Declaration at the end of this article, the author is the founder of a company whose business model includes providing support services for onshoring/ nearshoring decisions — the very type of intervention whose relevance is discussed in Sections 4 and 5. Although this relationship does not invalidate the findings synthesized here, it constitutes a potential conflict of interest that the reader should consider when critically evaluating the conclusions and practical recommendations of this article.

Future Research Agenda

Based on the gaps identified throughout Sections 3 and 4, the following future research agenda is proposed, organized in approximate order of methodological priority:

- Replicate this protocol with full access to the Scopus, Web of Science, and Business Source Complete databases, complete numerical recording of each screening stage (an auditable PRISMA flow diagram), and independent double-checking of selection by at least two reviewers — in order to assess whether, with these conditions met, the corpus expands significantly and whether the systematic review label becomes appropriate.
- Conduct quantitative empirical studies — multi-case or survey-based — specifically designed to measure the net financial return of reshoring/nearshoring decisions in the apparel sector — the most consistent gap identified in this synthesis (Section 3.2 and Table 3).
- Comparatively investigate differences in viability and outcomes across apparel sector subsegments — luxury/brand heritage, fast fashion, and small-scale made-to-order manufacturing — a topic identified in Section 4 as absent from the current corpus.
- Empirically assess the minimum scale of operation at which investments in automation (Industry 4.0) become financially justifiable for small and medium-sized apparel producers, extending the finding of Ancarani et al. (2019) — obtained from a larger multi-industry sample — to the specific context of sector SMEs.
- Empirically test the relationship between public policy instruments (Executive Orders 14017/14123, CAFTA-DR rules of origin) and the actual pace of reshoring/nearshoring decisions at the company level, a distinction that Section 4 identifies as a plausible inference but not yet directly demonstrated by the reviewed literature.
- Expand the linguistic scope of the search to include literature published in Spanish and Portuguese, given the relevance of nearshoring to Latin America and the Caribbean under the CAFTA-DR framework, a gap already flagged in Section 6.

- Investigate the interaction between efficiency drivers and legitimacy/reputation drivers (Section 3.1), testing whether they operate complementarily, competitively, or independently in the real reshoring/nearshoring decisions of apparel companies.

Conclusion

This structured narrative review, informed by PRISMA principles, synthesized the available academic literature — and a limited set of contextual grey literature material, clearly demarcated in Section 3.5 — on reshoring and nearshoring in the apparel industry, identifying supply complexity, environmental sustainability, tariff exposure, and automation adoption as recurring drivers, and domestic labor cost, limited production infrastructure, and skilled labor shortages as the main barriers. The findings indicate that these decisions are inherently multi-criteria and depend on contingency factors specific to each company and market, reinforcing the need for individualized operational support approaches — rather than generic solutions — for small and medium-sized apparel companies evaluating domestic or regional production alternatives.

Given the small corpus size, the screening conducted by a single reviewer, and the absence of a numerically auditable PRISMA flow, these conclusions should be read as a preliminary synthesis, not as conclusive evidence. Future studies, conducted with direct access to proprietary indexing databases, independent double-checking of screening, complete numerical recording of the selection process, formal application of methodological quality assessment tools, and expansion of the linguistic scope, could consolidate, test, and expand this initial synthesis — including assessing whether, with an expanded corpus and a fully auditable protocol, the systematic review label would become appropriate.

Conflict of Interest Declaration

The author, Priscila Amorim Grunwald, is the founder of IN-HOUSE APPAREL USA, a company whose business model includes providing diagnostic and implementation support services for domestic or regional production structures (onshoring/nearshoring support) for apparel companies — precisely the type of intervention whose relevance this article discusses and, to some extent, recommends in Sections 4 and 5.

This professional relationship constitutes a potential conflict of interest: there is a direct commercial incentive for the literature's findings to be interpreted in a manner favorable to the need for this type of service. The author chose to explicitly declare this relationship rather than omit it, and acknowledges that it should be considered by the reader when critically evaluating the conclusions and, above all, the practical recommendations presented in this article. No external funding was received for the preparation of this article, and none of the academic sources reviewed were sponsored, funded, or in any way influenced by the author or her company.

References:

Ancarani, A., Di Mauro, C., & Mascali, F. (2019). Backshoring strategy and the adoption of Industry 4.0: Evidence from Europe. *Journal of World Business*, 54(4), 360–371.

Barbieri, P., Ciabuschi, F., Fratocchi, L., & Vignoli, M. (2018). What do we know about manufacturing reshoring? *Journal of Global Operations and Strategic Sourcing*, 11(1), 79–122.

Chakraborty, S., Kabir, S. M. F., Hoque, M. S., & Das, T. S. (2021). Will reshoring of textile and apparel manufacturing rise or decline in the USA? *Journal of Textile and Apparel, Technology and Management*, 12(2).

Foerstl, K., Kirchhoff, J. F., & Bals, L. (2016). Reshoring and insourcing: Drivers and future research directions. *International Journal of Physical Distribution & Logistics Management*, 46(5), 492–515.

Fratocchi, L., Ancarani, A., Barbieri, P., Di Mauro, C., Nassimbeni, G., Sartor, M., Vignoli, M., & Zandoni, A. (2016). Motivations of manufacturing reshoring: An interpretative framework. *International Journal of Physical Distribution & Logistics Management*, 46(2), 98–127.

Fratocchi, L., & Di Stefano, C. (2019). Manufacturing reshoring in the fashion industry: A literature review. *World Review of Intermodal Transportation Research*, 8(4), 338–365.

Gray, J. V., Skowronski, K., Esenduran, G., & Rungtusanatham, M. J. (2013). The reshoring phenomenon: What supply chain academics ought to know and should do. *Journal of Supply Chain Management*, 49(2), 27–33.

Hasan, R. (2018). Reshoring of U.S. apparel manufacturing: Lesson from an innovative North Carolina based manufacturing company. *Journal of Textile and Apparel, Technology and Management*, 10(4).

Pourhejazy, P., & Ashby, A. (2021). Reshoring decisions for adjusting supply chains in a changing world: A case study from the apparel industry. *International Journal of Environmental Research and Public Health*, 18(9), 4873. <https://doi.org/10.3390/ijerph18094873>

Whittier, G. (2026). Reshoring in the U.S. textile and apparel industry: A systematic literature review [Major paper]. University of Rhode Island, DigitalCommons@URI.

Public policy documents and grey literature consulted as contextual material (see Section 3.5): Executive Order 14017, “America’s Supply Chains” (2021); Executive Order 14123, White House Council on Supply Chain Resilience (2025); reports from the National Council of Textile Organizations on the CAFTA-DR agreement.